PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN

Prepared by

PLANNING PARTNERS

GAPP
architects/urban designers

SMEC
Member of the Surbana Jurong Group

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BERGRIVIER MUNICIPALITY
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ACRONYMS AND ABBREVIATIONS

CBD	Central Business District
DALRRD	Department of Agriculture, Land Reform and Rural Development
EbD	"Enquire by Design"
I&APs	Interested & Affected Parties
MSDF	Municipal Spatial Development Framework
NMT	Non-motorised transport
RSEP	Regional Socio-Economic Programme
SANRAL	South African National Roads Agency Limited
SDF	Spatial Development Framework
VPUU	Violence Protection through Urban Upgrading
WCG	Western Cape Government

1. INTRODUCTION

1.1 Background

The Bergrivier Municipality released its latest Municipal Spatial Development Framework in February 2019 (Bergrivier MSDF, 2019-2024). The Piketberg Gateway and Central Integration Zone Precinct Plan has been identified in the Bergrivier MSDF as a key enabling project / focus area for spatial development and land use management in Piketberg. The study area is shown in **Figure 1** overleaf.

Following on from the findings contained in the Bergrivier MSDF, as well as the work initiated by the Western Cape Government's Regional Socio-Economic Programme (RSEP), the Department of Agriculture, Land Reform and Rural Development (DALRRD) has appointed a multi-disciplinary team to prepare an Urban Upgrading Precinct Plan for Piketberg Gateway and Central Integration Zone (the "Precinct Plan").

1.2 Purpose of the Precinct Plan

A precinct plan serves a vital role in guiding development for catalytic interventions on well located land, reconfiguring space to connect and consolidate the built environment, retrofitting sustainable infrastructure, facilities and public open spaces, and diversifying land use activities (especially livelihood and job creation).

A precinct plan must expand on the local SDF, describing in more detail the development objectives and intentions for the area, as well as principles for urban form, land use, pedestrian links, traffic movement, floor space and environmental management. The elements of a precinct plan are identified in the DALRRD's SDF Guidelines (refer to **Figure 2**), and the Precinct Plan to be prepared for the study area will largely encompass these elements.

The purpose of the Precinct Plan is to *inter alia*:

- describe the approach to the project;
- identify essential built and landscape guiding principles and performance qualities;
- identify the key design informants relating to the study area (as generated in the preceding status quo assessment and analysis, as well as the First Draft Precinct Plan);
- provide a clear development structure and spatial logic for the study area;
- promote land uses and activities that can initiate and support social, spatial and economic integration; and
- identify and detail strategic urban design interventions for the study area (i.e. build on the First Draft Precinct Plan by identifying specific "action projects" and providing further design guidelines for implementation).

The proposals contained in the Precinct Plan to be adopted (following extensive stakeholder engagement) will inform the overall development of the precinct in terms of the medium to long-term strategic interventions required to promote the development of spatially and economically integrated town that is attractive, efficient, convenient, safe and people-oriented. The interventions will also aim to promote urban restructuring, sustainable communities, economic development, poverty alleviation and social cohesion within Piketberg.

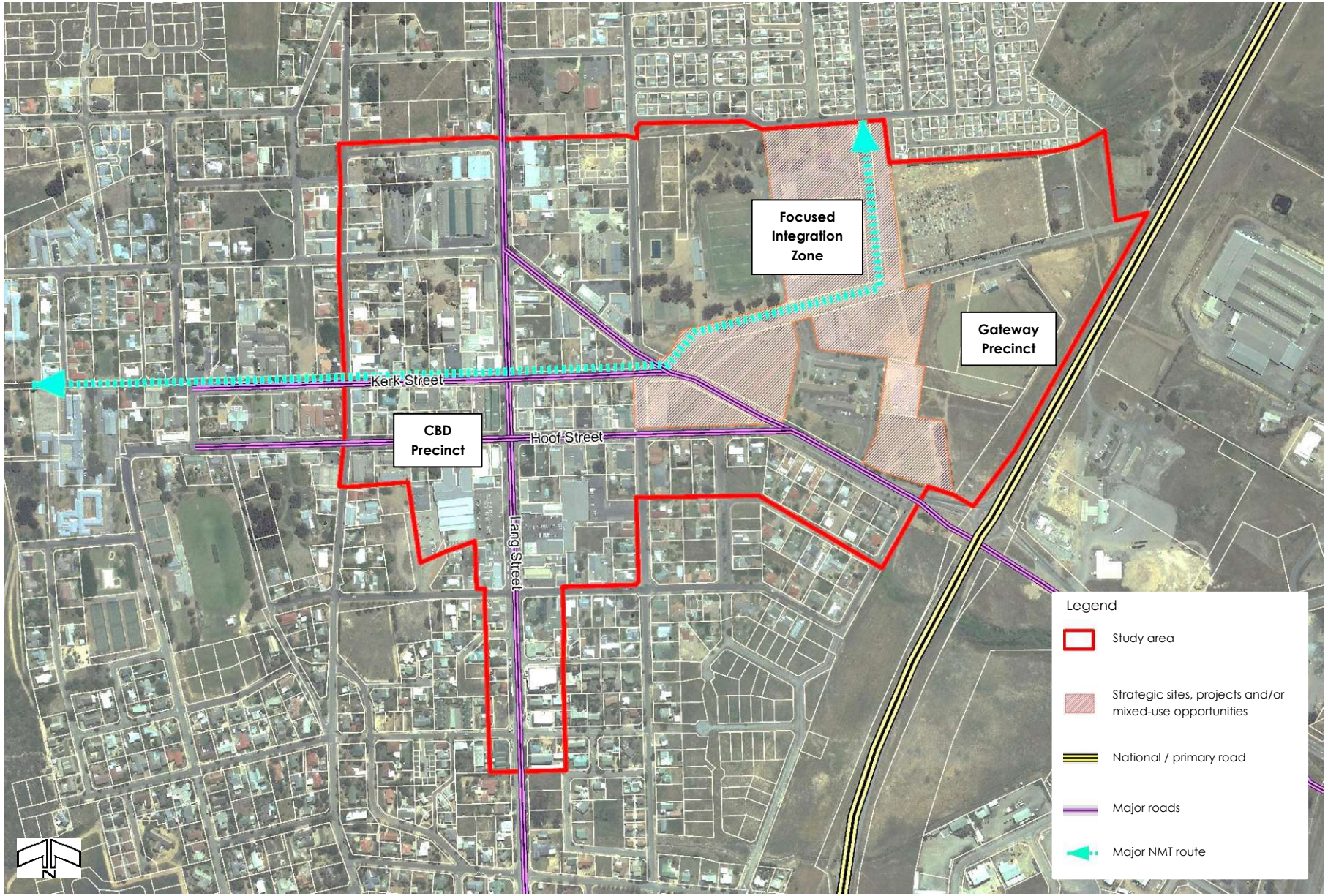


Figure 1: The study area (Source: adapted from the Bergrivier MSDF, 2019-2024)

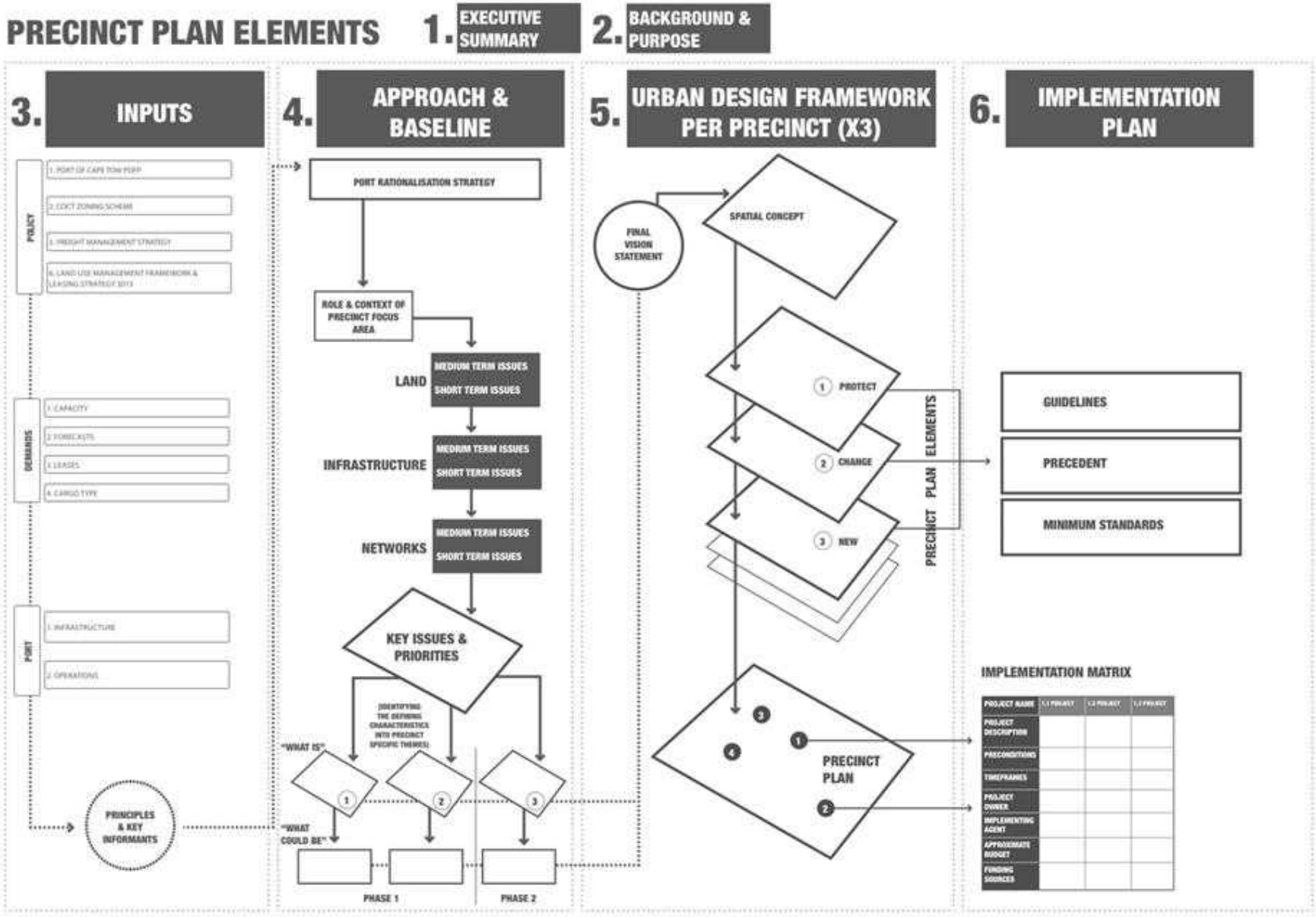


Figure 2: Precinct plan elements (Source: DALRRD's SDF Guidelines)

1.3 Approach

A three-tiered approach will be adopted for this project, *viz.*: design-led, collaborative and pragmatic.

1.3.1 Design-led approach

A design-led approach has been adopted for the project, whereby strong emphasis has been placed on the use of sustainable settlement design best practices, giving priority to the creation of walkable, human scaled, safe neighbourhoods with a strong sense of place. Further, emphasis has been given to the role that landscaping can play in the creation of a high-quality urban environment, with the aim of improving the functional relationship between different land uses and users, as well as the legibility of the street scape and urban environment.

1.3.2 Collaborative approach

The project team is acutely aware that the Precinct Plan must be contextually appropriate and be driven by human needs (i.e. a recognition that the basic function of settlement design is to improve the lives of people and to meet human needs). To this end, a collaboration with key stakeholders in the Piketberg community is imperative.

The project plan encourages active participation of key stakeholders throughout the process. The "Enquiry by Design" (EbD) process sees stakeholders as an integral part of information gathering, vision formulation, design, and ultimately, the implementation of the Precinct Plan. Key stakeholders include nominated representatives from the Bergrivier Municipality and Ward Committee members, as well as the broader Piketberg community.

The most important aspect of employing an 'EbD' process is that the results are co-produced with the stakeholders supported by technical inputs supplied by the project team, rather than by someone telling them what they are going to get at the end of a long process.

The 'EbD' process can unlock development potentials and obstacles quickly. It is a collaborative and creative process that is focused, draws on the stakeholder aspirations, knowledge and experience and is the tool used to drive the planning process.

Stakeholder collaboration is central to the proposed approach, with stakeholder engagement occurring at regular intervals throughout the formulation of the Precinct Plan:

- A "vision & issues" focus group workshop was held with key stakeholders on 27 January 2020 (refer to Section 4 of the Status Quo Assessment and Analysis Report, attached as **Annexure A**, for more background on the Focus Group Workshop).
- The First Draft Precinct Plan was subject to a 30-day formal public commenting period, whereby the public and relevant government departments were invited to submit written comments on the Precinct Plan.
- The initial public participation strategy recommended the following procedures in relation to the First Draft Precinct Plan:
    - advertisements in the local community newspaper;
    - notifications sent to registered Interested & Affected Parties (I&APs) via e-mail / post;
    - two copies of the Precinct Plan to be made available for public viewing in publicly accessible locations (e.g. Municipal Library);
    - posters to be erected in public places; and

- a public open house (scheduled during the 30-day public commenting period) where the proposals will be explained by the professional team.

However, due to constraints resulting from the Covid-19 pandemic, the public participation strategy for the First Draft Precinct Plan was revised to include the following procedures:

- a presentation to the MAYCO via digital video conference;
- notification on the Bergrivier Municipality's website;
- notification on a dedicated Facebook page;
- notification on a dedicated WhatsApp group; and
- posters erected in public places.

- Six submission were received as part of the public participation associated with the First Draft Precinct Plan. A summary of the responses received, as well as the responses thereto, is provided in the Consultation Report (attached as **Annexure B**).
- A Second Draft Precinct Plan was also subject to a 30-day formal public commenting period, whereby the public was invited to submit written comments on the Precinct Plan. Direct engagement with the public was gain restricted by the Covid-19 pandemic, however the public participation process did include the following:

  - a presentation and discussion with the ward committee members of Ward 3 and Ward 4;
  - a presentation to the MAYCO via digital video conference;
  - advertisements in the local community newspaper, *Weslander*;
  - notification on the Bergrivier Municipality's website;
  - notification on a dedicated Facebook page;
  - notification on a dedicated WhatsApp group; and
  - posters erected in public places.

- Eight submission were received as part of the public participation associated with the Second Draft Precinct Plan. A summary of the responses received, as well as the responses thereto, is provided in the Consultation Report (attached as **Annexure B**).
- The Project Team has incorporated, as far as practically possible, the comments received from the public in connection with the First and Second Draft Precinct Plan.

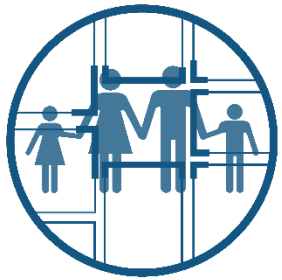
1.3.3 Pragmatic approach

It is imperative that the Precinct Plan makes effective linkages between various scales of planning, as well as between policy and implementation – it must provide tools that enable clear connections between policy objectives and day-to-day land use and development decisions and project implementation across sectors. Land use and urban design guidelines play a large role in creating these connections. Clear and concise guidelines – without being too prescriptive – will therefore be provided that will enable the Bergrivier Municipality to implement the Precinct Plan effectively and efficiently.

2. GUIDING PRINCIPLES AND PERFORMANCE QUALITIES

A number of central spatial principles underpin the design concept of the Precinct Plan, namely:

INCLUSIVE



An inclusive town values the needs of all people equally. It is a town where people feel comfortable being citizens and have equal access to economic opportunities, quality public samenities and spaces, housing and basic services. Spatial integration is a key ingredient in the pursuit of an inclusive town.

WALKABLE

Walkable towns promote a public environment with a people focus rather than a car focus and can lead to addressing many social and economic problems through improved social interaction, enhanced physical fitness and diminishing crime.

FLEXIBLE AND MIXED USE

Positive urban environments allow for a mix of land uses and reflect flexibility in their spatial structures. Flexibility refers to the creation of a spatial structure that can accommodate unexpected demands made upon them over time.

ECONOMICALLY VIBRANT

Towns with vibrant economies are ones that promote inclusive economic activity (from small to large; formal and informal). By creating the conditions for a vibrant economy – which provides for increased economic security and financial sustainability – it is possible to contribute to positive individual and social outcomes.

IDENTITY AND SENSE OF PLACE

When citizens form a strong relationship with a place, then that place becomes a part of who they are — their identity. High quality public spaces can greatly enhance the dignity and pride of citizens, which in turn strengthens their identity and attachement to a place.

SAFETY AND SECURITY

Combating crime and reducing insecurity is essential if development and growth is to occur in citites and towns. Where there is fear, there is no hope. Safety and security is vital for development, investment and access to services and amenities.

3. DESIGN INFORMANTS

3.1 Introduction

The Status Quo Assessment and Analysis Report (attached as **Annexure A**) analyses the site across scales, beginning with the larger regional scale and then moving down into the smaller precinct scale, with the intention of gaining a better understanding of the context of the study area, which in turn makes it possible to formulate design informants for strategic interventions that can improve the performance and functionality of Piketberg.

This section summarises the key findings of the Status Quo Assessment and Analysis Report and concludes by identifying the key design informants relating to the Precinct Plan.

3.2 Key Issues Identified at the Focus Group Workshop

The following key issues were put forward by the stakeholders in attendance at the Focus Group Workshop held on 27 January 2020:

- Lighting and benches are required for Calendula Street and the associated play park;
- Safety measures should be implemented at the open spaces at Calendula Street / Sarel Cilliers Street;
- Seek to optimise the utilisation of open spaces;
- Open spaces should be upgraded for passive relaxation (opportunity for a festival/park) and family outings;
- Protect the CBD and the existing businesses;
- Resolve the conflict between vehicles and pedestrians at the Loop, Kerk and Kloof Straat intersection through re-design;
- Attempt to reroute taxis to reduce conflict with pedestrians in Lang Straat;
- Rehabilitate the entrances and main roads;
- Redesign Lang Straat between Kerk and Die Trek Straat using urban design principles;
- Explore opportunities for business premises in Hoof Street opposite the hospital;
- Improve access to the hospital from Steynville;
- Provide more public toilets; and
- Establish informal trading areas in suitable areas.

Figure 3 spatialises the key issues emerging from the Focus Group Workshop and provides a synthesis of the workshop stakeholders' input into the design process.

3.3 Opportunities and Constraints

Opportunities within the study area are listed below and spatialised in **Figure 4**.

- Piketberg is a relatively small town, with most amenities within a 500m – 1km walking distance;
- The existing sports facilities are in relatively good condition and are well utilised;
- There are a number of new public projects planned within the study area;
- Various parcels of land that have development potential are publicly owned;
- There are strong, well-established pedestrian routes through the study area;
- The numerous heritage buildings and associated heritage route give the town a sense of place;
- The CBD is functioning well, with a reasonable range of retail, business and social amenities on offer serving the community;
- There are established public parks with trees;
- The town enjoys beautiful views to the near and far mountains;
- Public transport facilities provide access opportunities to the surrounding region and agricultural hinterland;
- Lang and Hoof Straat are two active routes and are a strong base for public realm upgrades;

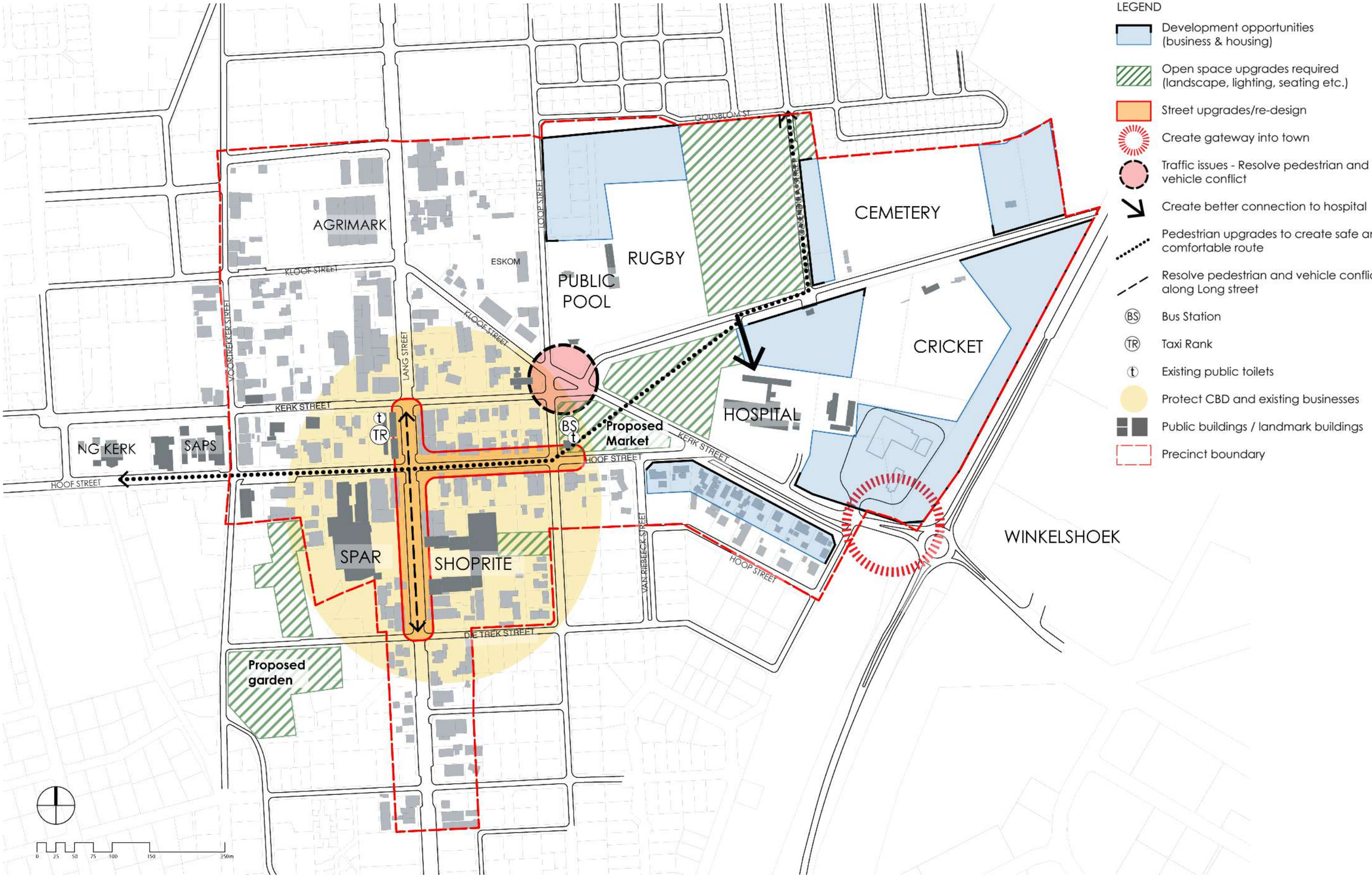


Figure 3: Synthesis of big ideas emerging from the Focus Group Workshop

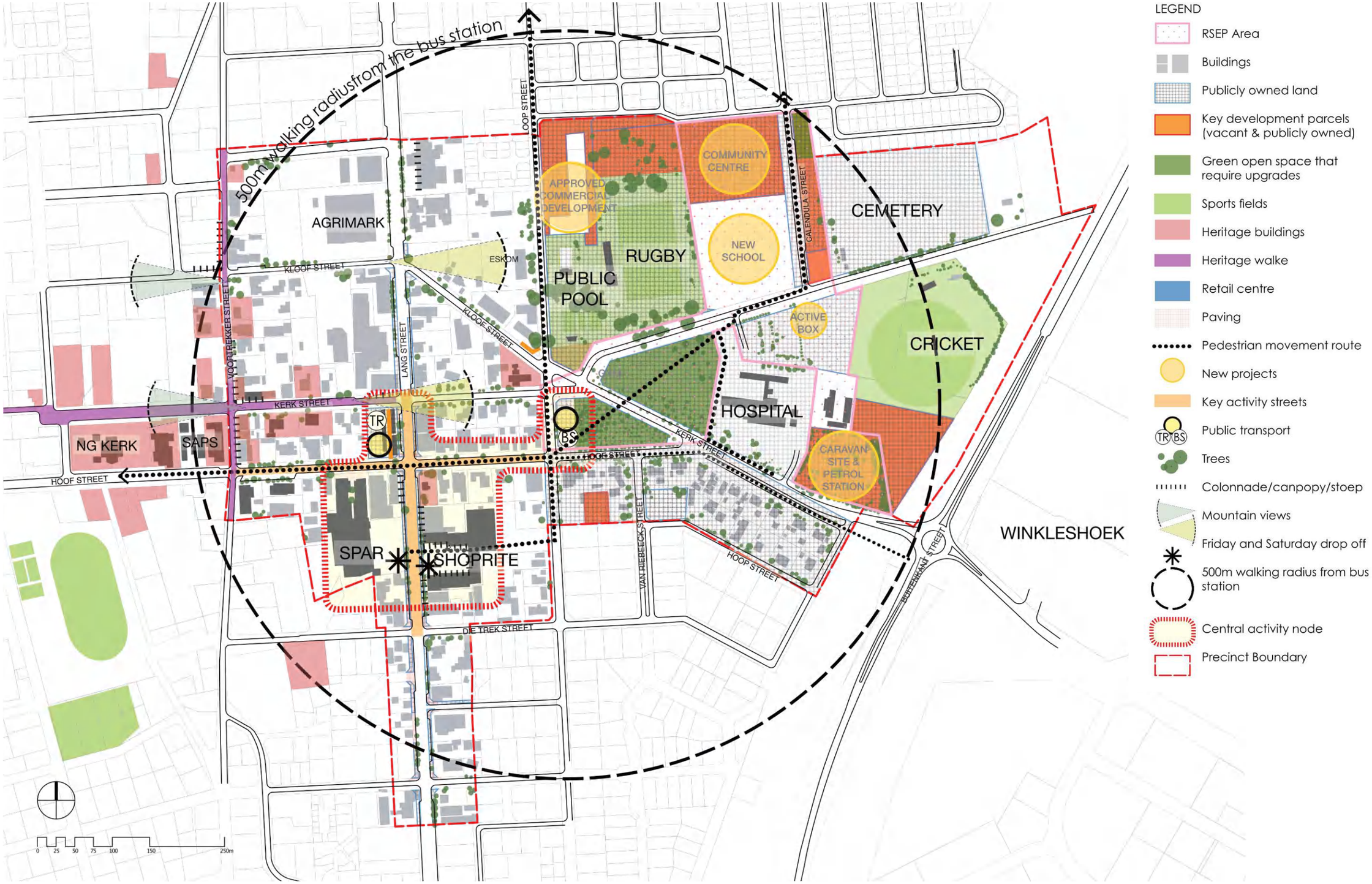


Figure 4: Opportunities within the study area

Figure 5: Constraints within the study area

- The caravan park has recently been sold and the opportunity exists to guide proposals for the site that will enhance the gateway experience to the town.

Constraints within the study area are listed below and spatialised in **Figure 5**:

- The gateway into Piketberg from the N7 is undefined;
- Some of the major streets in the study area are excessively wide, ill-defined and car dominant;
- Large parking lots on key streets, as well as excessive street parking, exacerbate the car dominant feel of the town;
- Pedestrian and vehicles conflict at the confluence of Kloof, Loop and Kerk Straat, as well as crossing the N7;
- The provincial road along Kerk Straat and part of Lang Staat has limitations for pedestrian friendly upgrades;
- There are established truck routes through the centre of town;
- There is a lack of high-quality paving along pathways and sidewalks;
- Overheard telephone lines along Lang Straat, large dustbins and ill-placed signage are contributing to clutter along sidewalks;
- Blank facades along Lang and Loop Straat, as well as solid barriers around the Rhino Park sports complex, are contributing to a harsh atmosphere in the public realm;
- Public parks require lighting, seating and public space upgrades;
- Small street trees providing inadequate shade, especially along Lang Straat;
- Lack of high-quality space for people to wait for transport on weekends; and
- Access to the hospital from the low-income areas in the northern portion of town is limited, particularly for the elderly and disabled.

3.4 Key Informants

Three major overarching spatial issues were identified in the status quo study, these require considered attention and provide the main design informants of the Precinct Plan. They are as follows:

- ***Segregation*** *the existing spatial segregation between areas of Piketberg - wealthy, less wealthy, new residential, industrial and CBD – is prohibitive to spatial integration and social inclusion.*
- ***Fragmentation:*** *there are currently large amounts of vacant land in the study area, which have the effect of spatially separating parts of the town.*
- ***Inactivity:*** *a low-quality public environment with undefined community spaces that have very little surveillance means that the town lacks activity and vibrancy.*

These informants are spatialised in **Figure 6**.

The matrix shown in **Table 1** shows how these three key informants will be addressed in the Precinct Plan in relation to the overarching spatial elements of structure, space / public realm and built form. It is evident that three key conceptual ideas underpin the approach to addressing the informants, viz.: link and connect, consolidate and activate. These three key ideas are further unpacked in Section 4.

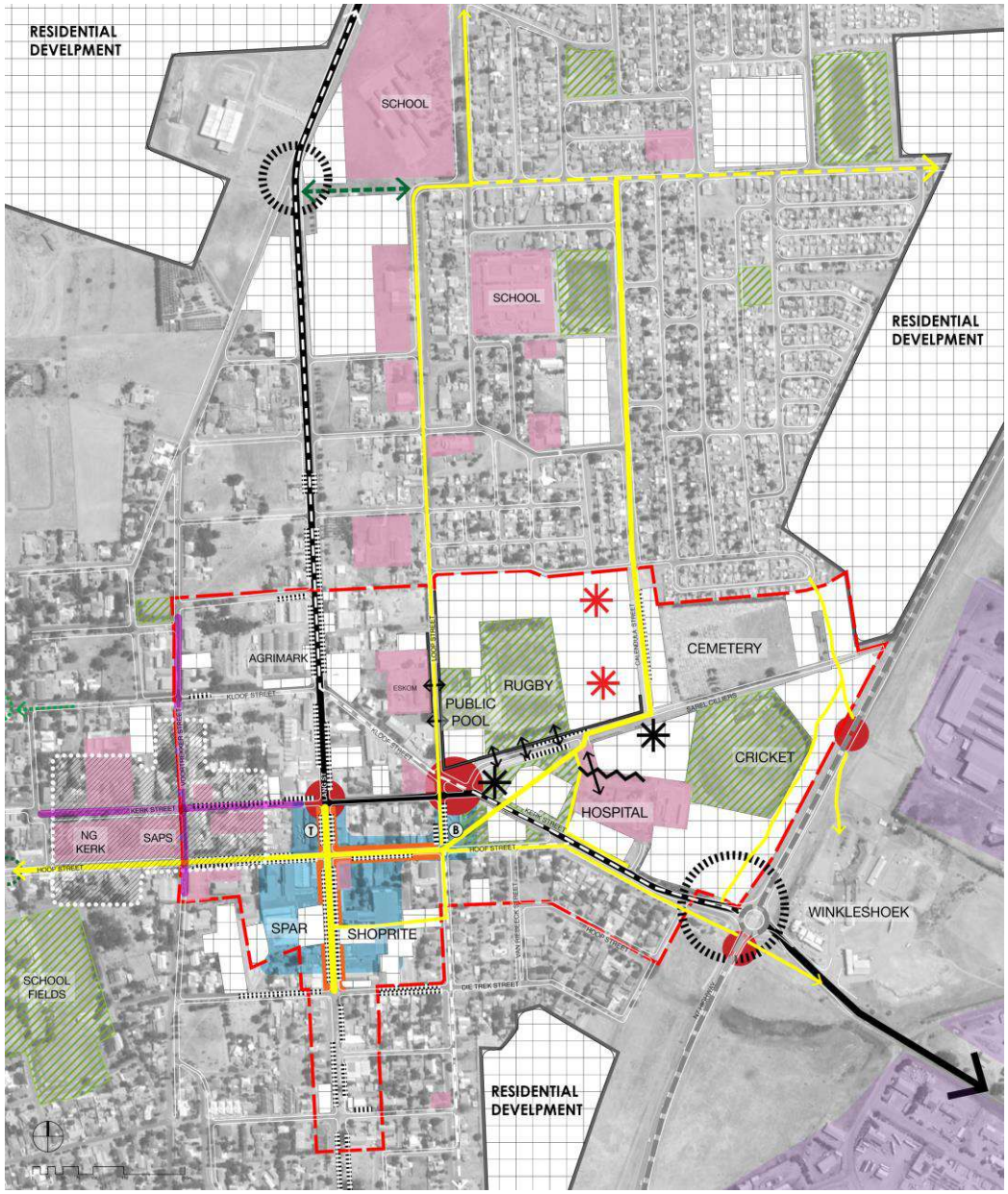


Figure 6: Spatialisation of key informants

Table 1: Key informants matrix

ISSUES / STATUS QUO	KEY IDEAS / APPROACH	STRUCTURE	SPACE / PUBLIC REALM	DEVELOPMENT / BUILT FORM
SEGREGATED		**LINK & CONNECT**		
1. Lack of a clear spatial structure. 2. Spatial segregation (e.g. between wealthy and less wealthy) 3. Lack of a defined gateway into the town from the N7 and the north. 4. Problematic intersection at Loop, Kerk, Hoof and Sarel Cilliers (i.e. pedestrian / vehicular conflict). 5. Limited access to the hospital from the northern residential suburbs. 6. Provincial road (mobility route) and truck route through the centre of the precinct. 7. New residential developments located on the periphery of town. 8. Limited access to the mountain. 9. N7 is a barrier between residential areas and work opportunities.		• Create clear and logical spatial structure by connecting higher order roads / NMT routes (e.g. extend Watsonia Straat to Waterkant Straat and create a pedestrian link across the N7). • Create a central "public heart". • Create a new gateway to Piketberg from the N7 at the Kloof / Hoof Straat intersection. • Create a gateway from the north at the intersection of Waterkant and Lang Straat. • Provide pedestrian access to the hospital from the north or along the newly proposed road. • Realign the Provincial Route along Kloof Straat to avoid the central active area of Lang Straat. • Connect periphery residential developments along structuring routes. • Create clear connecting routes to points of access to the mountain.	• Align public spaces and key places to reinforce structuring routes, with a specific focus on: - the intersection of Sarel Cilliers and Calendula Straat; - the intersection of Hoof, Loop and Kerk Straat; - the intersection of Watsonia and Waterkant Straat; and - along Lang Straat. • Create safe pedestrian crossing of the N7 with well-designed pedestrian bridge. • Create visually complex edge to the N7 to slow down traffic.	• Relocate the proposed Youth Centre to the new central "public heart". • Use new residential development to create and define the northern gateway into the town. • Prioritise the development of the residential infill sites that reinforce the town structure before developing the periphery developments.
FRAGMENTED		**CONSOLIDATE**		
10. Undefined public spaces and streets. 11. Large parcels of well-located vacant land spatially separating areas within the town. 12. Existing and proposed public facilities located within old showgrounds area are scattered and uncoordinated.		• Consolidate the town by creating safe and pedestrian friendly structuring routes linking people to amenities. • Infill vacant land along structuring routes with medium density residential development (e.g. 2 - 3 storeys walk-up apartments).	• Within the central heart gateway to Piketberg, consolidate the exiting public parks to create defined, high quality parks associated with the outdoor gym and Youth Centre and public square associated with the bus station. • Create a public square in association with the active box at the end of Calendula Street. • Define the very wide Lang Straat by widening the sidewalks and including space defining shading elements and new tree planting.	• Consolidate the town by infilling publicly owned, vacant land with residential development and new public facilities. • Consolidate and cluster new and proposed public facilities with public space within the "public heart" of the precinct. • Use infill mixed-use development to define the Active Box surrounding the public space. • Intensify existing development and better define Lang Straat by increasing building height where possible and infilling vacant land. • Ensure the design of the new Youth Centre defines the public space surrounding it.
INACTIVE / POOR QUALITY PUBLIC REALM		**ACTIVATE**		
13. Wide streets with an excessive amount of street parking. 14. Lack of places for people to sit (e.g. wait for transport on weekends). 15. Low quality public environment (e.g. lack of paving, seating, shade elements, sizeable trees). 16. Undefined public spaces with poor surveillance. 17. Blank facades around Rhino Park sports complex along Loop Straat and Sarel Cilliers Straat. 18. Limited public ablutions and storage facilities. 19. Cluttered sidewalks (e.g. bins, signage etc.). 20. Lack of tourist opportunities, despite high heritage value and scenic location.		• Implement public realm upgrades along structuring routes including tree planting, wide sidewalks, seating, pedestrian lighting and appropriate signage. • Celebrate and reinforce the heritage area associated with the 'heritage walk' with public realm upgrades and improved accessibility and wayfinding. • Create a public space for festivals and markets to celebrate the surrounding agriculture and assets of Piketberg (this could occur on the upgraded Lang Straat or within the new "public heart"). • Declutter sidewalks from bins, signage and street furniture. • Provide a clear and coherent wayfinding, signage and street furniture palette;	• Implement public realm upgrades to Lang Straat between Die Trek and Kloof Straat, as well as Hoof Straat between Loop and Voortrekker Straat. • Narrow wide road carriage ways, reduce parallel parking, widen and pave sidewalks, plant new trees, provide more shading and seating elements. • Break down barrier walls around Rhino Park sports complex along Loop Straat and Sarel Cilliers Straat to create a positive interface with the sports facility, thus better integrating it with the town and new "public heart". • Provide places for people to sit and wait in a shady area in a dignified manner at key points within the town.	• Use low walls, visually permeable fencing, passive surveillance and planting to define and secure facilities and spaces. • Ensure new developments have active ground floors that relate to the adjacent streets and public spaces to ensure safely through surveillance. • Provide new public toilets and storage facilities for people's shopping at accessible points within the town.

4. DESIGN VISION AND CONCEPTUAL APPROACH

4.1 Design Vision

The design vision for the Precinct Plan is:

*"To create a **CONNECTED** and **CONSOLIDATED** Piketberg which is centred around a **DIGNIFIED PUBLIC HEART** that is **ACCESSIBLE** to all, providing opportunities for development, recreational and public amenities. A comfortable, **ACTIVATED** and **SAFE** urban environment that provides **OPPORTUNITY** for all citizens, while celebrating the town's unique assets."*

4.2 Conceptual Approach

It became clear through analysis that the spatial problems impacting on the study area could not be fully understood (nor indeed resolved) through actions at the precinct scale alone. Rather, an understanding of the town scale, and particularly the spatial structing elements that impact on the town scale (e.g. the natural system, the movement system and the public institutions), was imperative to identifying symptomatic structural issues which require attention. The implication of this is that consistent thinking across scales is central to the design approach: it is necessary to approach the design problem from the inside out as well as the outside in.

Figure 7 conceptually provides the thinking at the broader town scale. Public realm improvements along major routes and infill development are used to create a legible town, which reads as an integrated whole, within which important institutional buildings reinforce the spatial structure. These institutional buildings are connected to the greatest degree possible through visual axes and physical links. A number of important structuring routes merge at a crossover point in the centre of the town, which is an ideal location for an identifiable 'public heart' for the town and spatial gateway into Piketberg.

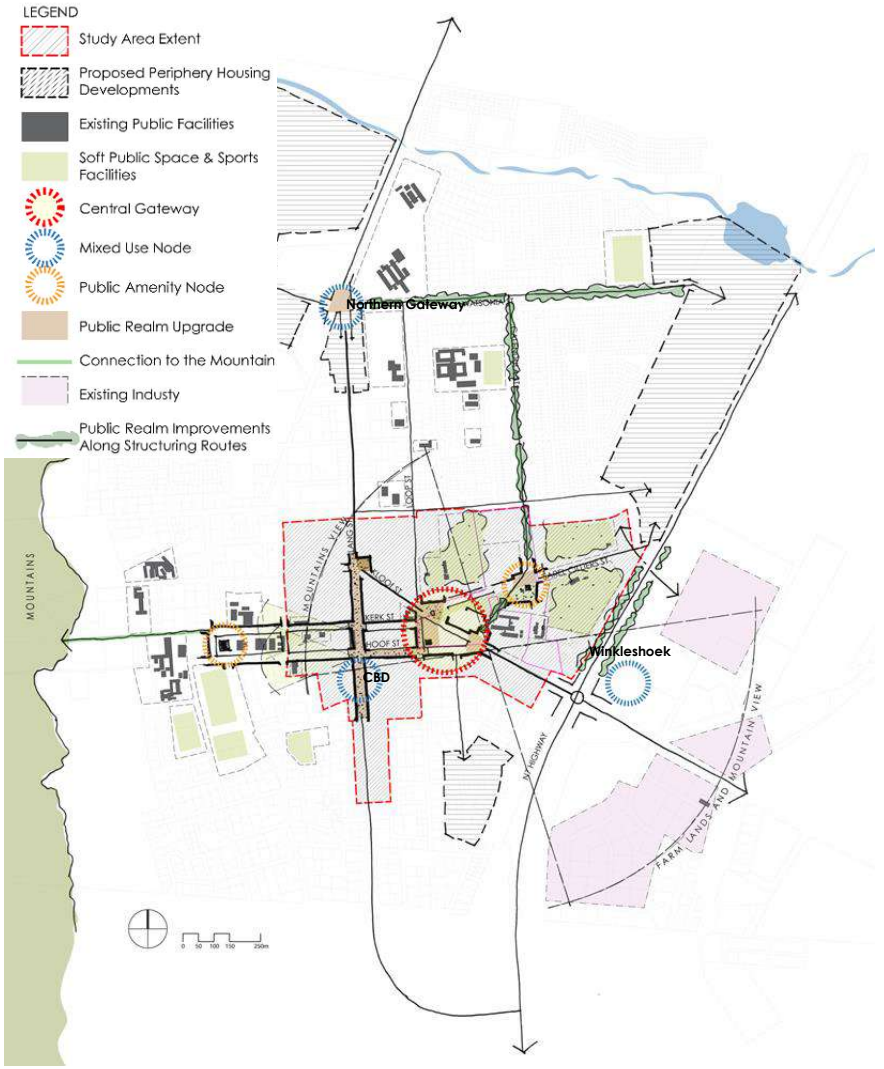


Figure 7: Town concept

The public heart is connected to 3 nodes, namely the CBD, Winkleshoek and a new 'gateway' at the northern end of Loop Straat (the latter of which does not currently exist, but which should be given further design attention in broader planning initiatives).

As indicated in **Table 1**, three key conceptual ideas (viz. link & connect, consolidate and activate) underpin the approach to addressing the key informants of "segregated, fragmented and inactive", and these conceptual ideas are unpacked below.

4.2.1 Link and connect

Figure 8 illustrates the "link and connect" concept, with the following aspects pertinent:

- Create a defined and articulated 'gateway' entrance into Piketberg from the N7.
- Create a clear and connected movement system integrating existing amenities and new residential development.
- Implement changes to existing movement system to reinforce accessibility:
  - close the section of Sarel Cilliers Straat at the intersection of Kloof and Loop Straat in front of the Rhino Park sports complex;
  - create a new street along the western edge of the hospital;
  - extend Watsonia Straat to intersect with Lang Straat;
  - create a formalised pedestrian route from Gousblom Staat to a safe NMT crossing of the N7; and
  - create visually complex edges to the N7 at the entrance to Piketberg to help slow down traffic for NMT crossings.
- Provide public realm upgrades to structuring routes including lighting, tree planting, signage and seating.

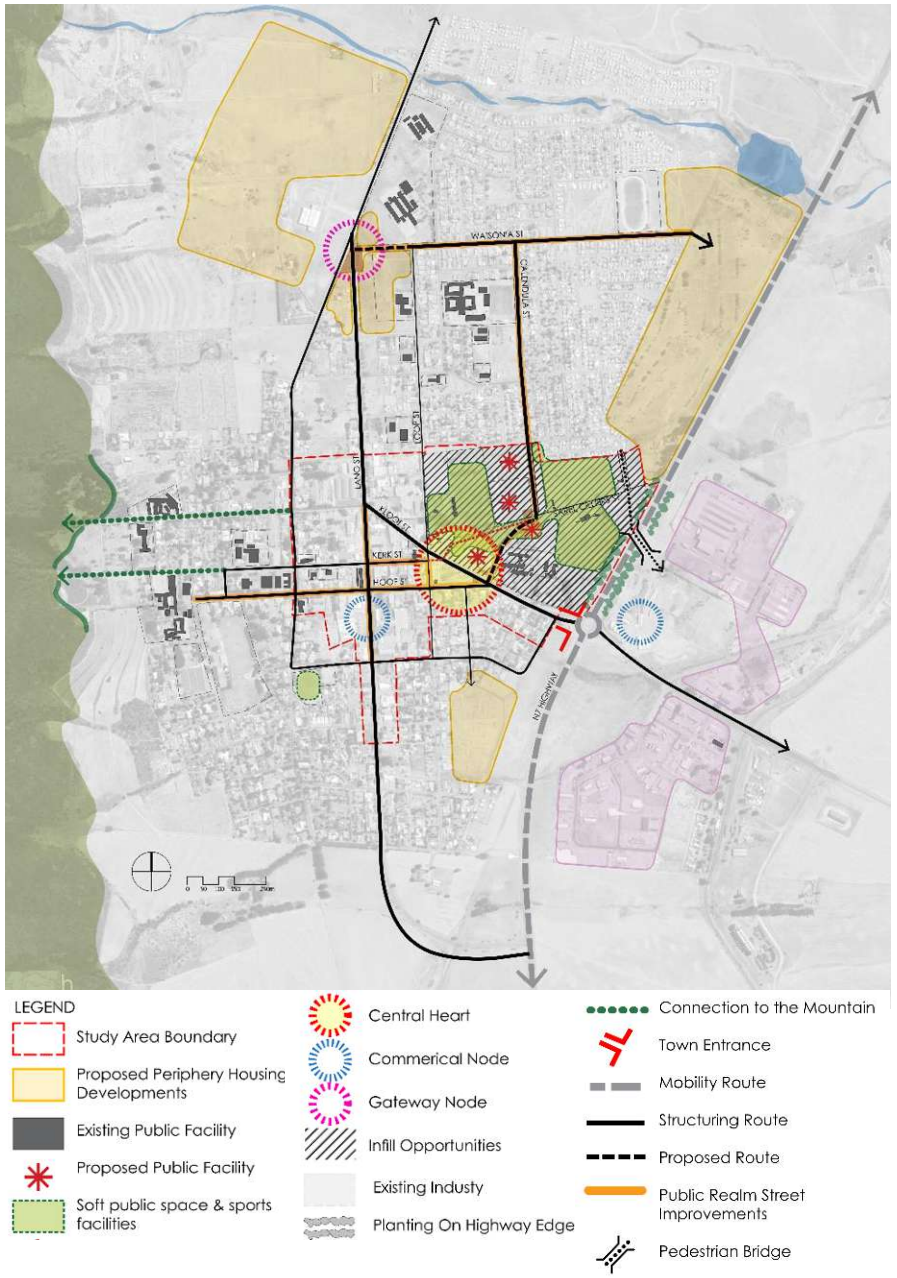


Figure 8: Link and connect

4.2.2 Consolidate

Figure 9 illustrates the "consolidate" concept, with the following aspects pertinent:

- Consolidate the old showgrounds by including new development (e.g. new primary school; mixed-use housing) on vacant, publicly owned land.
- Provide infill development (e.g. mixed-use housing) on vacant land located along structuring routes.
- Use new development to define existing and proposed public open space, sports fields and structuring routes.

4.2.3 Activate

Figure 10 illustrates the "activate" concept, with the following aspects pertinent:

- Create a central heart to Piketberg at the intersection of Loop, Hoof and Kerk Straat, including public facilities and open space.
- Use new facilities or infill development to define and activate public open space.
- Activate and upgrade underutilised green open space.
- Upgrade Lang and Hoof Straat to accommodate pedestrian activity, festivals and markets.
- Celebrate the location and identify of Piketberg:
  - connection and views to mountain; and
  - festival or market championing local produce.
  - improve and enhance heritage assets and heritage walk.
- Provide additional public toilets.

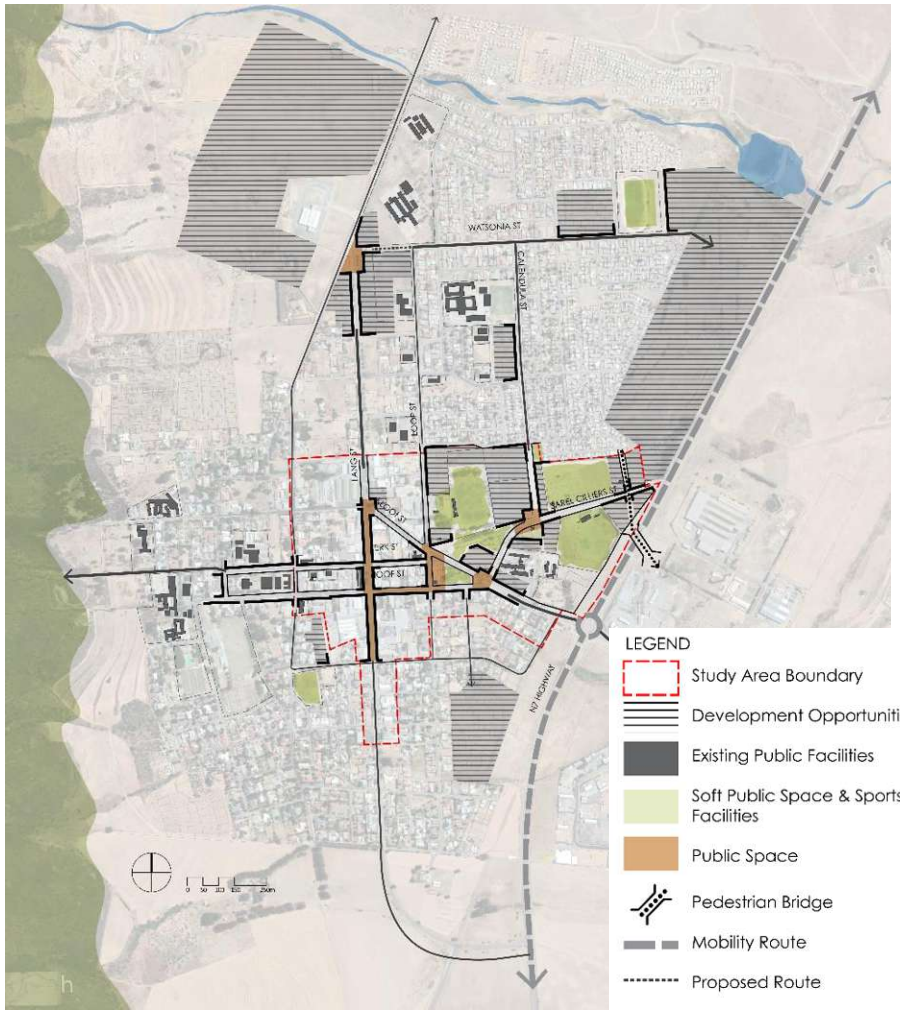


Figure 9: Consolidate

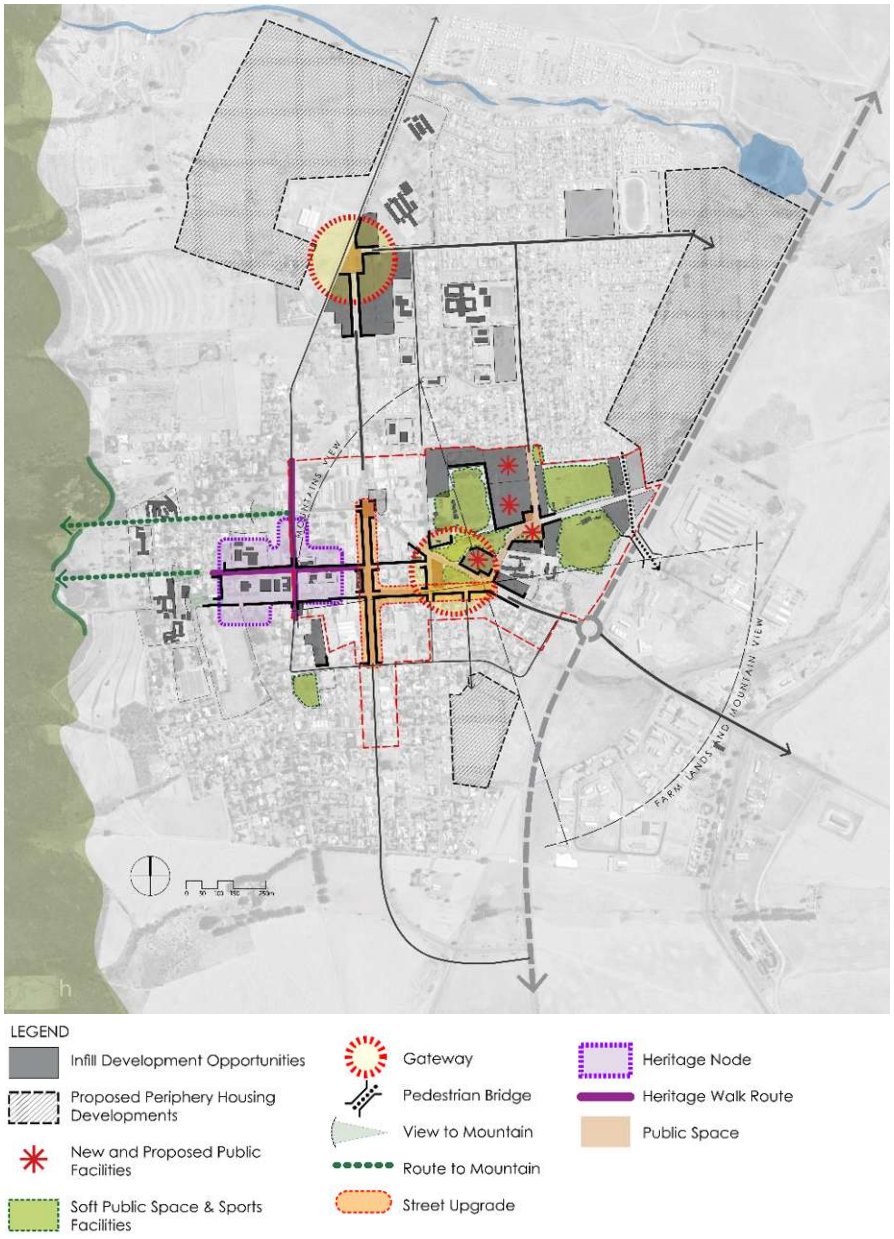


Figure 10: Activate

5. THE PRECINCT PLAN

5.1 Introduction

A systematic approach has been taken to present the proposed Precinct Plan in this section. Firstly, the draft Precinct Plan is introduced, along with the various structuring elements that serve to re-enforce the precinct. Secondly, key focus areas for intervention are identified (the selection of these 'focus areas' is based on the findings of the Contextual Analysis and Assessment Report). Thirdly, each of the focus areas are unpacked in turn, with "action projects" for intervention identified in each focus area, with contextually appropriate precedent assisting where relevant to demonstrate the intention of each project. Finally, a set of urban design guidelines is provided.

5.2 The Precinct Plan

The draft Precinct Plan for the Piketberg Gateway and Central Integration Zone Precinct Plan is shown in **Figure 11**, with conceptual 3D models of the Precinct Plan provided in **Figure 12a** and **12b**. The intention of the conceptual framework is to illustrate the overall development vision for the precinct, as well as to highlight how the elements of urban structure (i.e. movement system, public open space system and public / private land uses) will be enhanced so that they serve to re-enforced the spatial structure of the town of Piketberg. Specific details of these elements of public structure, as they relate to the Precinct Plan, are unpacked as follows:

Movement System

The movement system concept is shown in **Figure 13**. The following aspects are pertinent to the overall Precinct Plan:

- The existing route of the provincial road (i.e. R366) is proposed to be re-routed so that it only traverses Kloof Straat before joining Loop Street (and will no longer follow Hoof Straat before joining Loop Straat).
- Urban design upgrades are proposed for various routes within the precinct, with the intention of improving the pedestrian experience along these routes (e.g. improved paving, lighting, landscaping and seating):
  - Streets: Lang Straat (priority); Hoof Straat; Kerk Straat; Kloof Straat; Calendula Straat; and Sarel Cilliers Straat.
  - Pedestrian routes: along the western edge of the Rhino Park sports complex (i.e. between the sports complex and the new school); between Gousblom Straat and the N7; and crossing the N7.
- The following portions of road are proposed to be closed:
  - Kerk Straat between Loop Straat and Kloof Straat; and
  - Sarel Cilliers Straat between Kloof Straat and the entrance to the Rhino Park sports complex (a cul-de-sac turning circle is proposed outside the entrance of the sports complex).
- The proposed road closures will allow for the upgrade of the Kloof Straat / Loop Straat / Kerk Straat intersection, which is currently hugely problematic for both motorists and pedestrians.
- A new road is proposed to be constructed along the western edge of the Radie Kotze Hospital between Kloof Straat and the Sarel Cillers / Calendula Straat intersection.
- Traffic calming measures to be implemented along the N7 to slow fast moving traffic.

Public Open Space System

The public open space system concept is shown in **Figure 14**. The following aspects are pertinent to the overall Precinct Plan:

- The existing green open spaces in the "central heart" of the town (i.e. Erven 3328 and 4401) are proposed to receive landscape

design attention, potentially including new tree planting, additional lighting and additional seating, as well as a new public amphitheatre – including a stage for performances – to be located in the north-east corner of Erf 4401 (at the new road intersection resulting from the creation of a new road alongside the western edge of the hospital site).

- The portion of Sarel Cilliers Straat to be closed will be consolidated into the existing open space located on Erf 4401 and can potentially accommodate a new skate park.
- A new public facility building is proposed to be located on the south-western portion of the existing green open space at the gateway to Piketberg (i.e. Erf 4401). This building will become a prominent gateway feature at the primary entrance to the town.
- A new gateway feature (e.g. sculpture and/or prominent signage) is proposed on the corner of the open space at the intersection of Kloof Straat and Hoof Straat (i.e. eastern tip of Erf 3328).
- It is proposed that the existing solid wall surrounding the Rhino Park sports complex be demolished and replaced with a visually permeable fence (e.g. ClearVu fence), which will allow for the sports complex and adjacent open space to become an integrated green space.
- Various streets and pedestrian routes will receive urban / landscape design attention, including new tree planting, additional lighting, more seating options and improved paving.

Public and Private Land Uses

The public open space system concept is shown in **Figure 15**. The following aspects are pertinent to the overall Precinct Plan:

- Lang Straat and Kerk Straat already accommodates mixed-use development, including commercial uses, which gives an "activity street" character (especially Lang Straat). Mixed-use development should continue to be encouraged along these streets.
- New public facilities are proposed in the following locations:
  - on Erf 4401 at the Kloof Straat / Hoof Straat intersection (type of facility still to be decided); and
  - along Calendula Straat, north of the proposed school site (Community Centre).
- New public sector led mixed-use development (e.g. shop houses; small scale retail with residential) is proposed at the following locations:
  - framing the "active box";
  - lining the northern edge of Kloof Straat when entering the town from the N7 (i.e. in front of the Radie Kotze Hospital); and
  - lining Loop Straat north of the Rhino Park sports complex.
- New private sector commercial development has been approved to the east of the Radie Kotze Hospital (i.e. at the gateway entrance from the N7), as well as off Loop Straat north of the Rhino Park sports complex.
- New subsidized housing projects (mixed typologies) are proposed to be developed at the following locations:
  - north of the Rhino Park sports complex (along Gousblom Straat / at the intersection of Calendula / Gousblom Straat);
  - along the eastern edge of Calendula Straat;
  - to the east of the existing cemetery; and
  - to the east of the existing cricket oval.

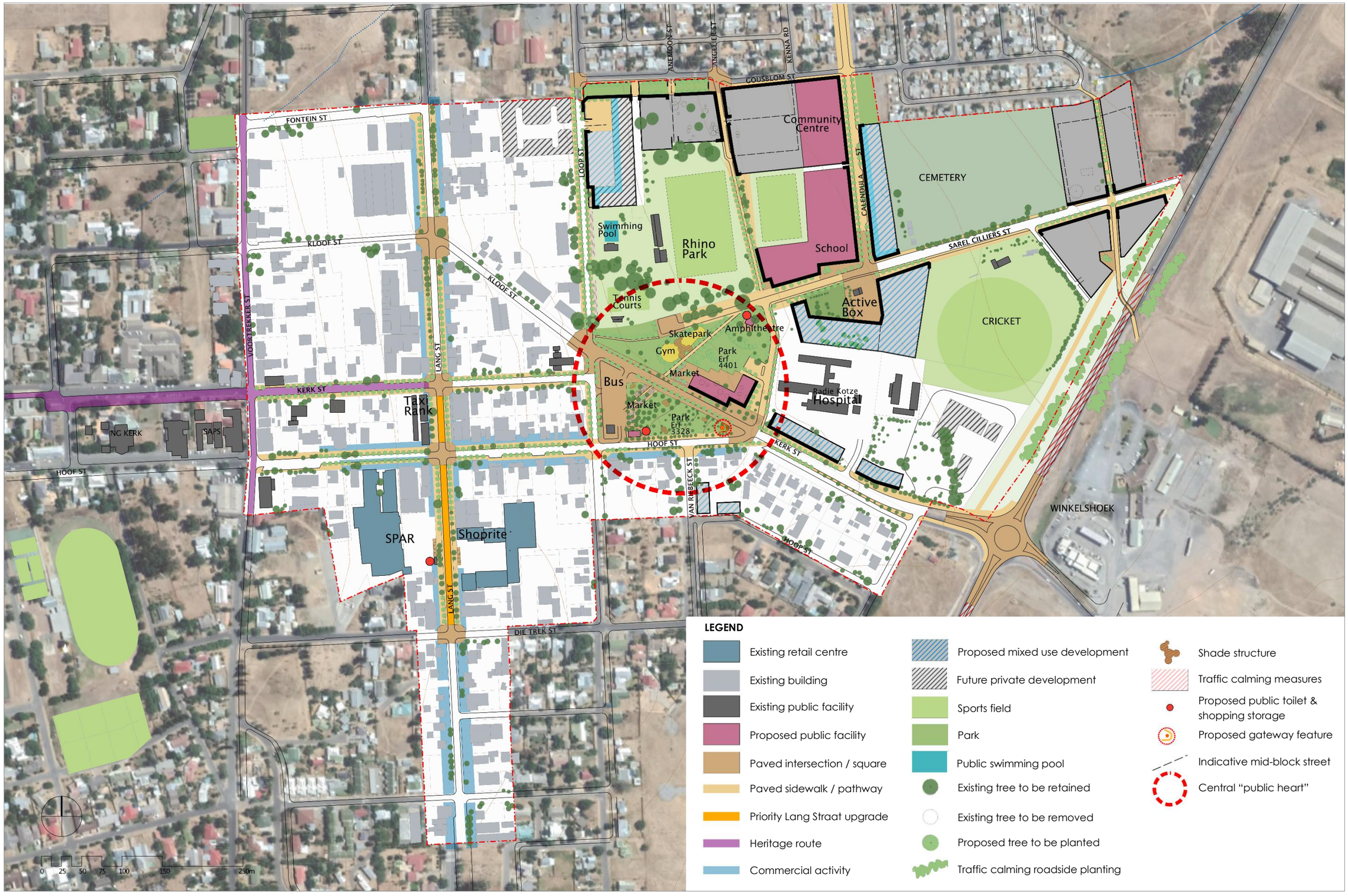


Figure 11: The Precinct Plan

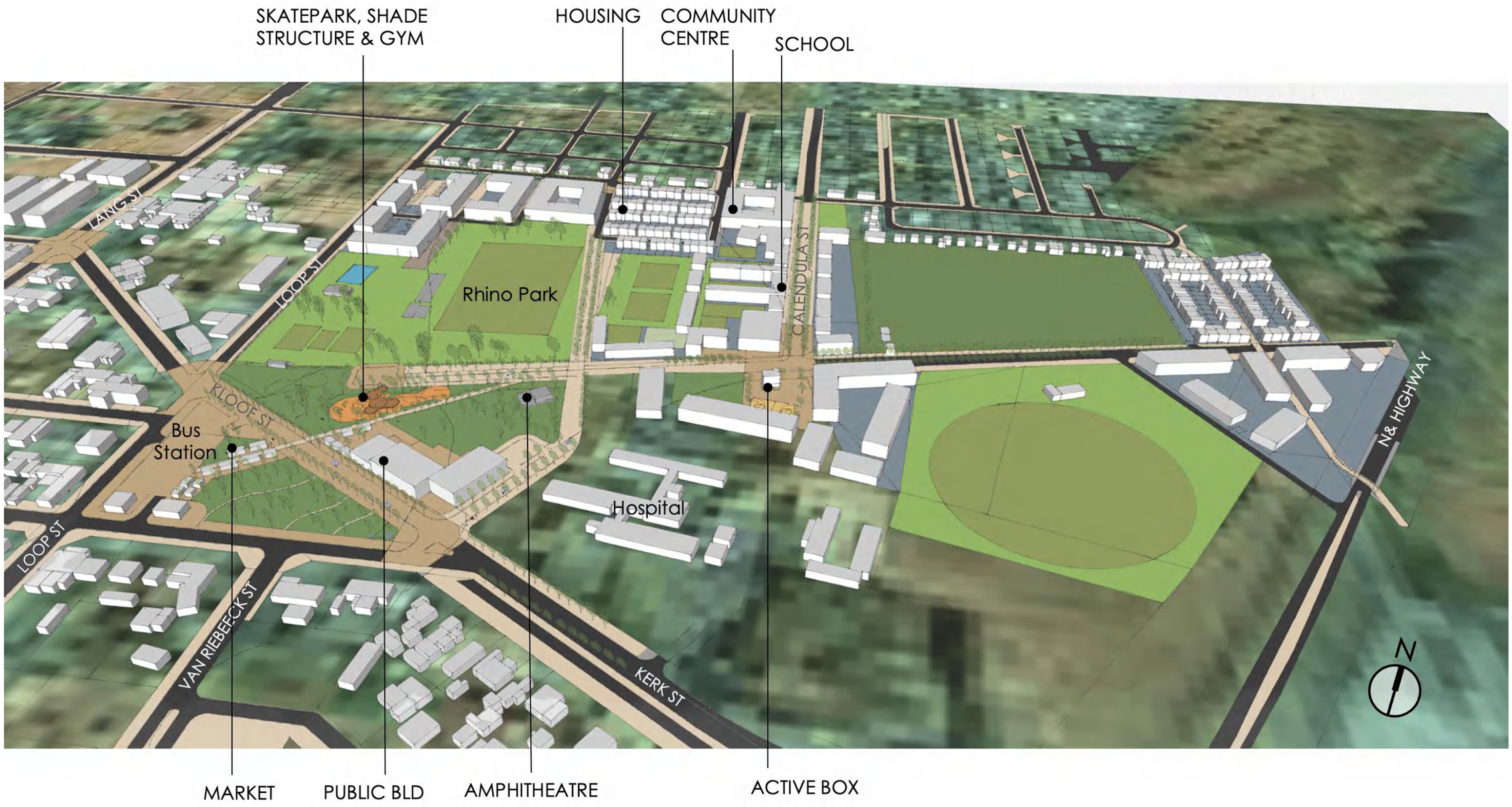


Figure 12a: Conceptual 3D model of the precinct (looking north)

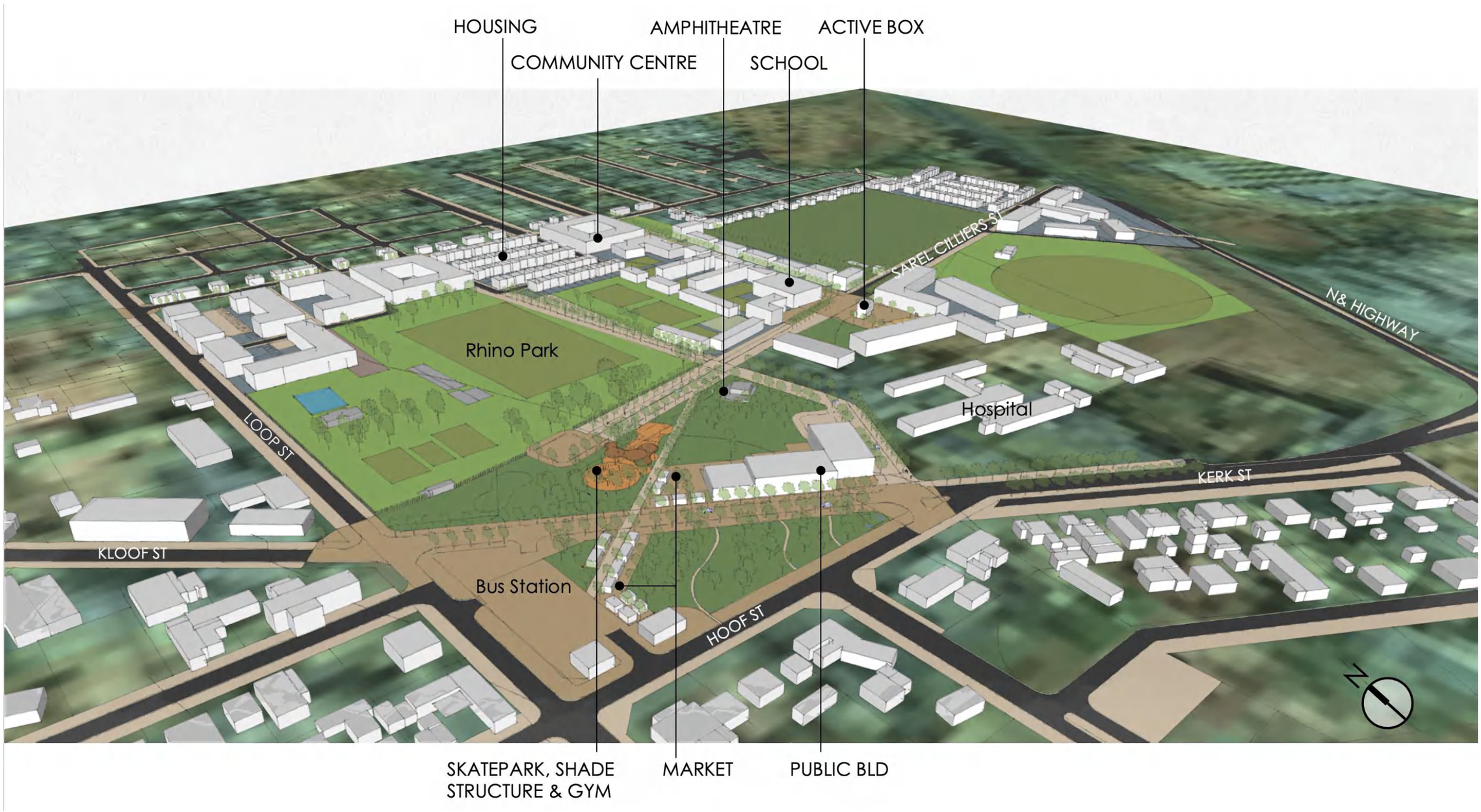


Figure 12b: Conceptual 3D model of the precinct (looking north east)

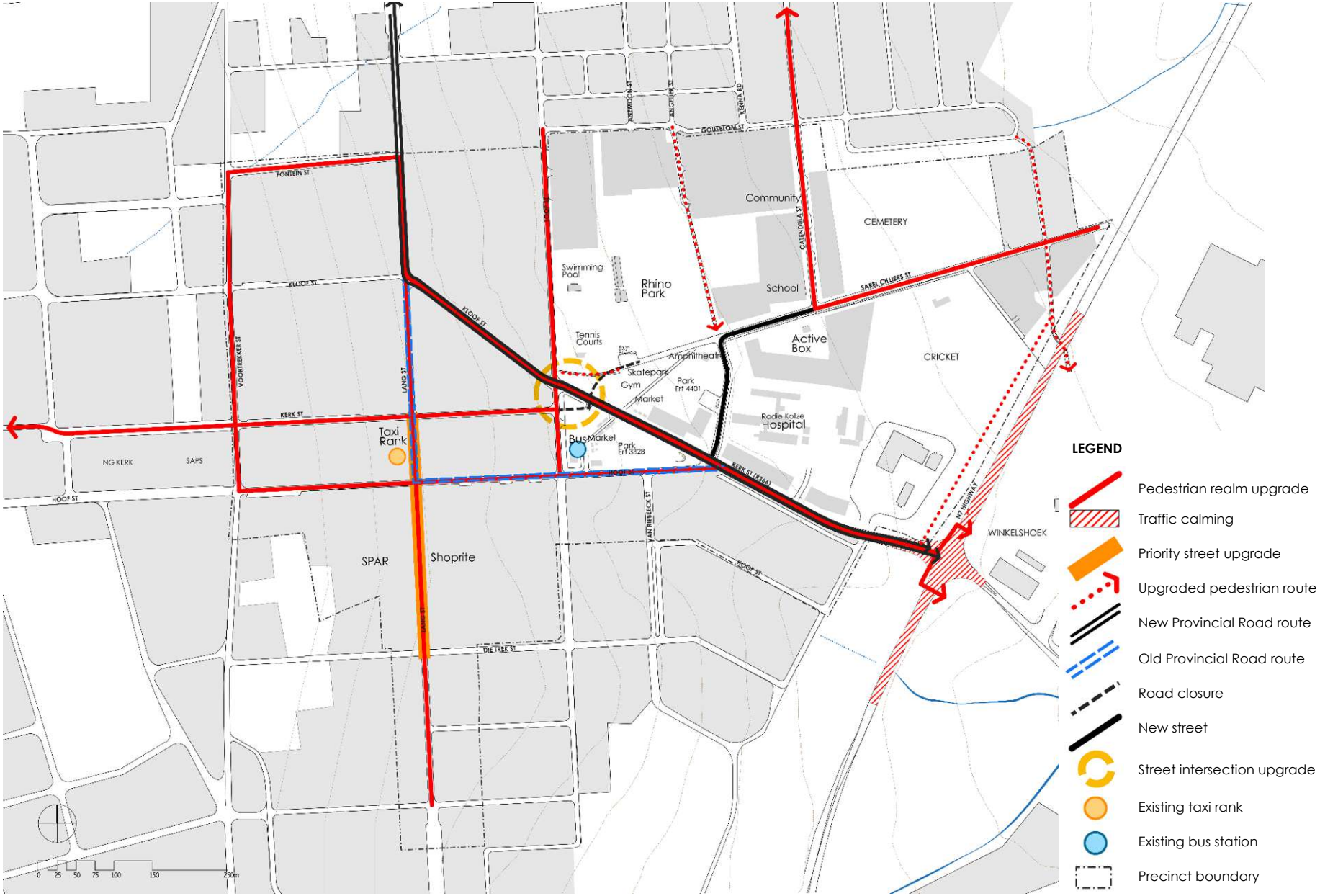


Figure 13: Movement system concept

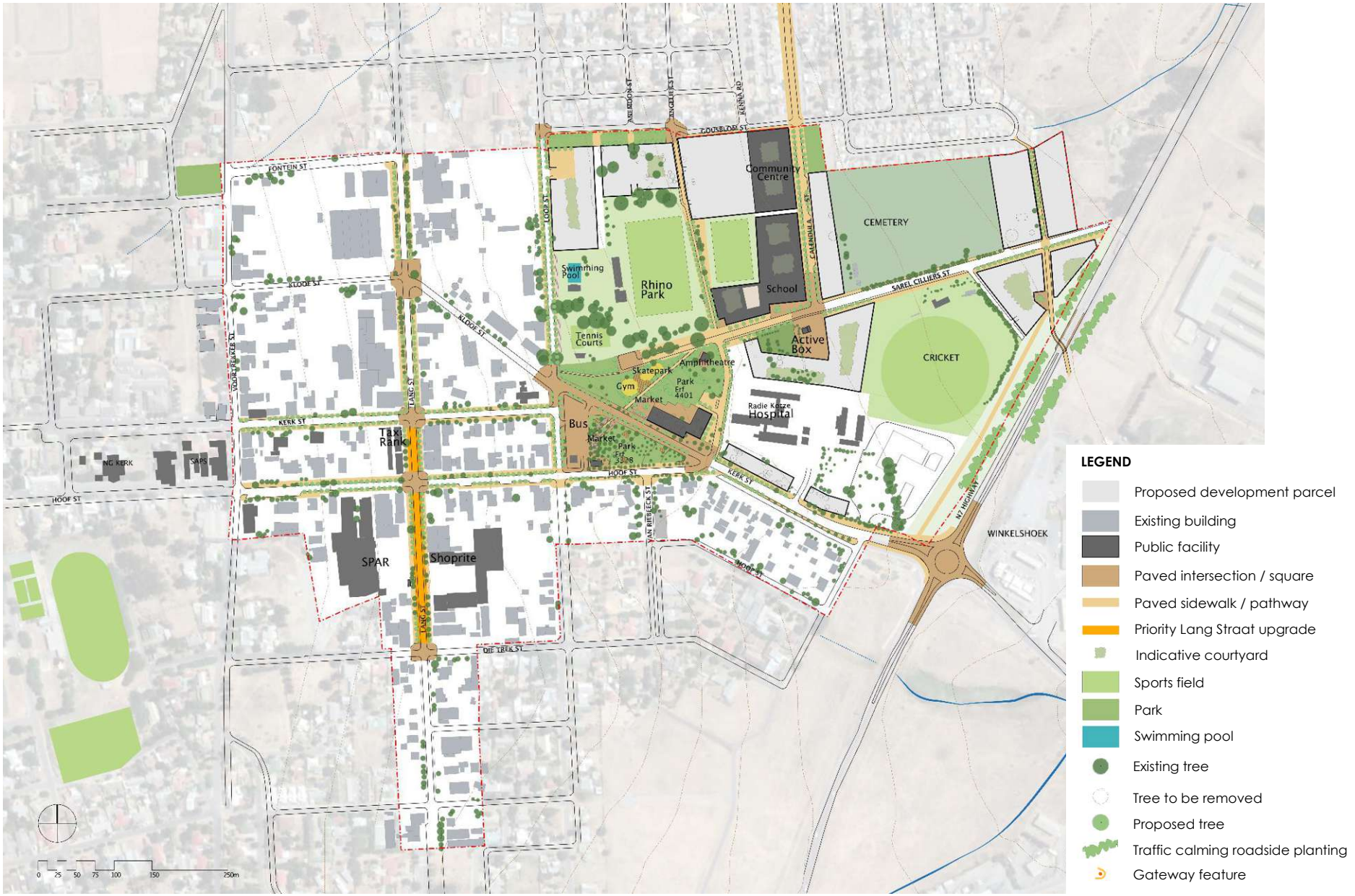


Figure 14: Public open space system concept

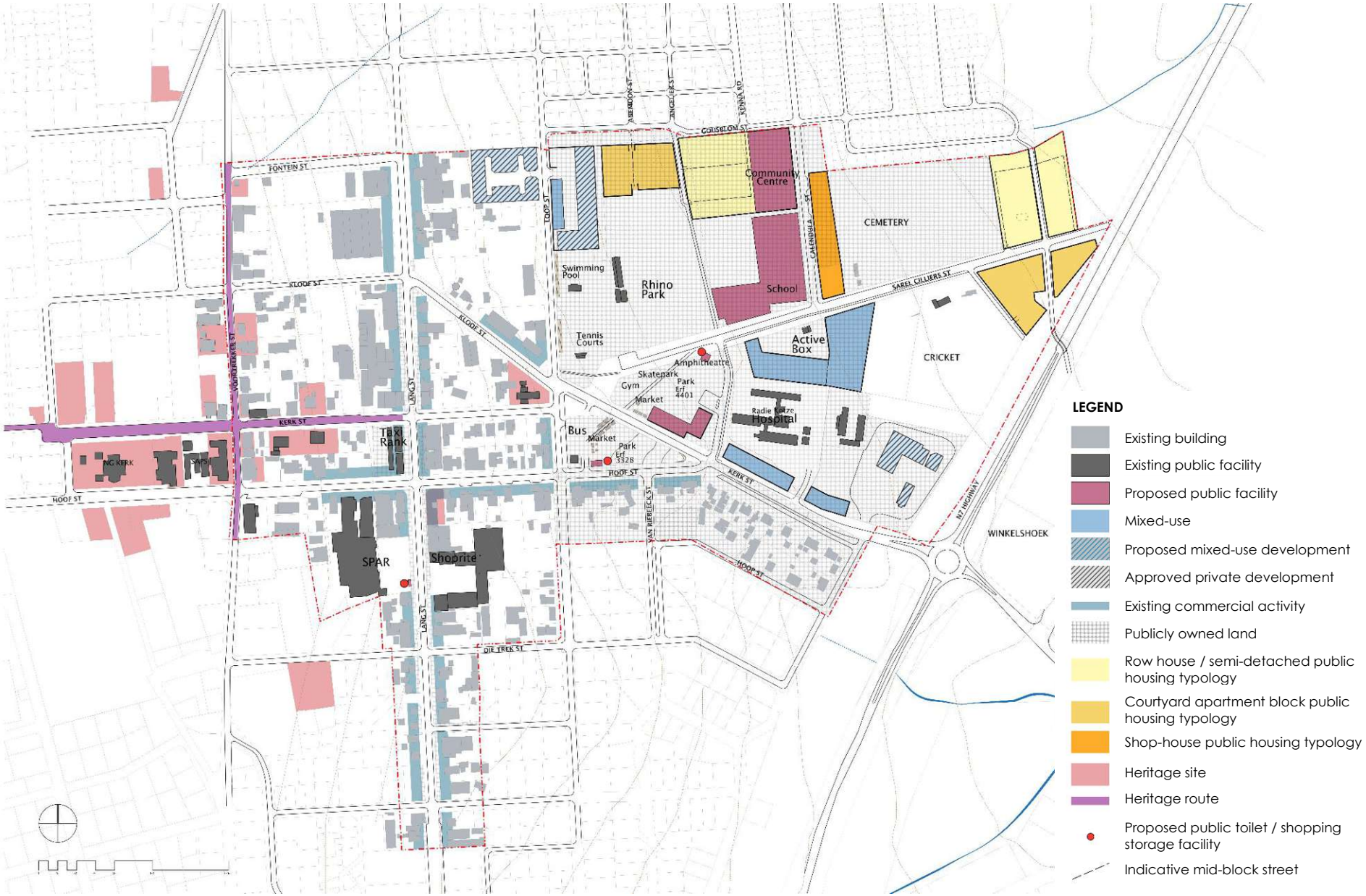


Figure 15: Public and private land use concept

5.3 Focus Areas

5.3.1 Introduction

Six key "focus areas" within the precinct have been identified for interventions / action. The focus areas in context are shown in **Figure 16** and the composite conceptual design for the focus areas is illustrated in **Figure 17**. The individual focus area are (numbers correspond to numbers in figures):

1. CBD urban design upgrade (Lang Straat, Hoof Straat and Kerk Straat upgrades);
2. The central "public heart";
3. Calendula Straat, including the play park in the north and Active Box in the south;
4. Loop Straat and Rhino Park sports complex;
5. Vacant, publicly owned land around the sports complex and along Calendula Straat; and
6. Area between the Cricket oval and the N7.

Each of the focus areas is unpacked in more detail below: the 'problem' is explored (i.e. what aspects of the focus areas are hindering the performance of the town / contributing to a poor urban environment); suggested solutions to tackle the problem are provided (as they relate to the conceptual framework); various urban design "action project" interventions for the respective focus areas are identified; and guidelines for implementation of the interventions are unpacked (including the provision of local and international precedent to show what specific interventions have been proven to work in well performing urban places elsewhere with comparable context).

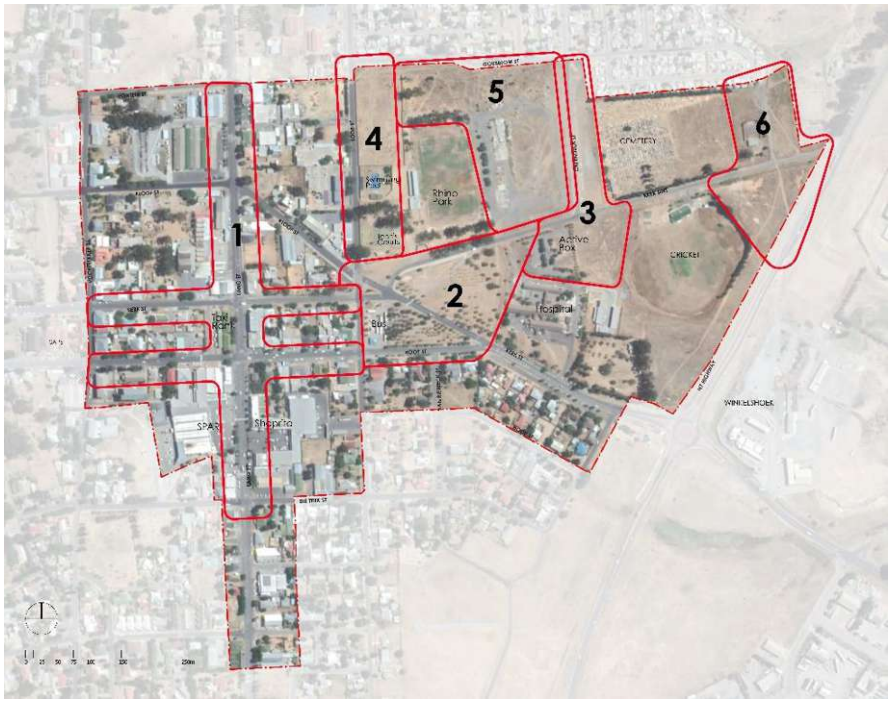


Figure 16: Focus areas in context

It should be noted that the "action project" interventions for each focus area are listed in the recommended order of priority, but projects can be implemented in any order as the need arises. Moreover, it is important to note that not all "action projects" need to be implemented in the short term, but rather the projects can be implemented incrementally over time – the Precinct Plan has been designed to allow for flexibility and can be implemented according to municipal budget, community needs, infrastructure capacity and political continuity.

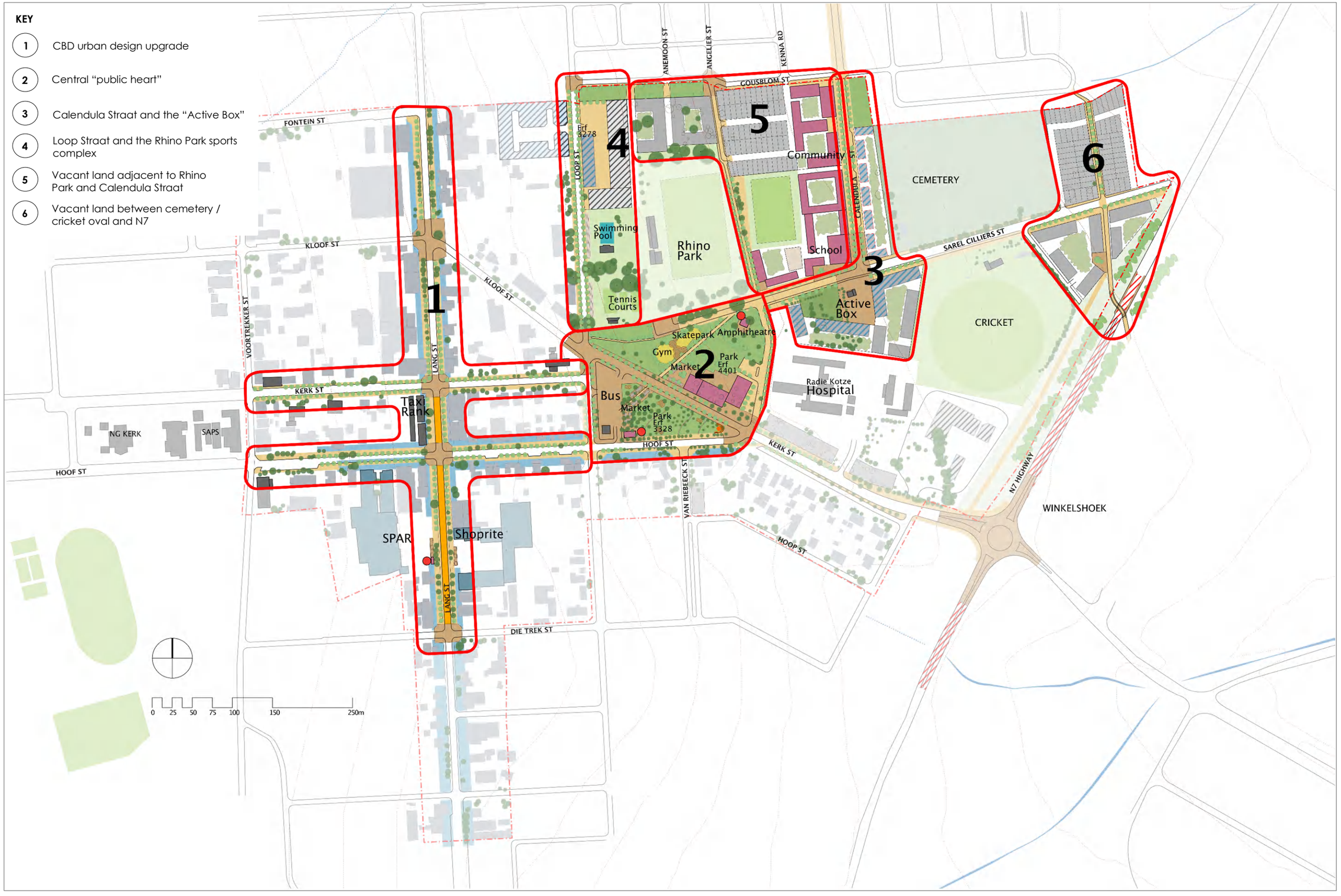


Figure 17: Composite conceptual design for the focus areas

5.3.2 Focus Area 1: CBD urban design upgrade

Focus Area 1 is illustrated in **Figure 18** and includes Lang Straat (between the De Trek Straat and Fontein Straat intersections), Hoof Straat (between the Voortrekker Straat and Loop Straat intersections) and Kerk Straat (also between the Voortrekker Straat and Loop Straat intersections).

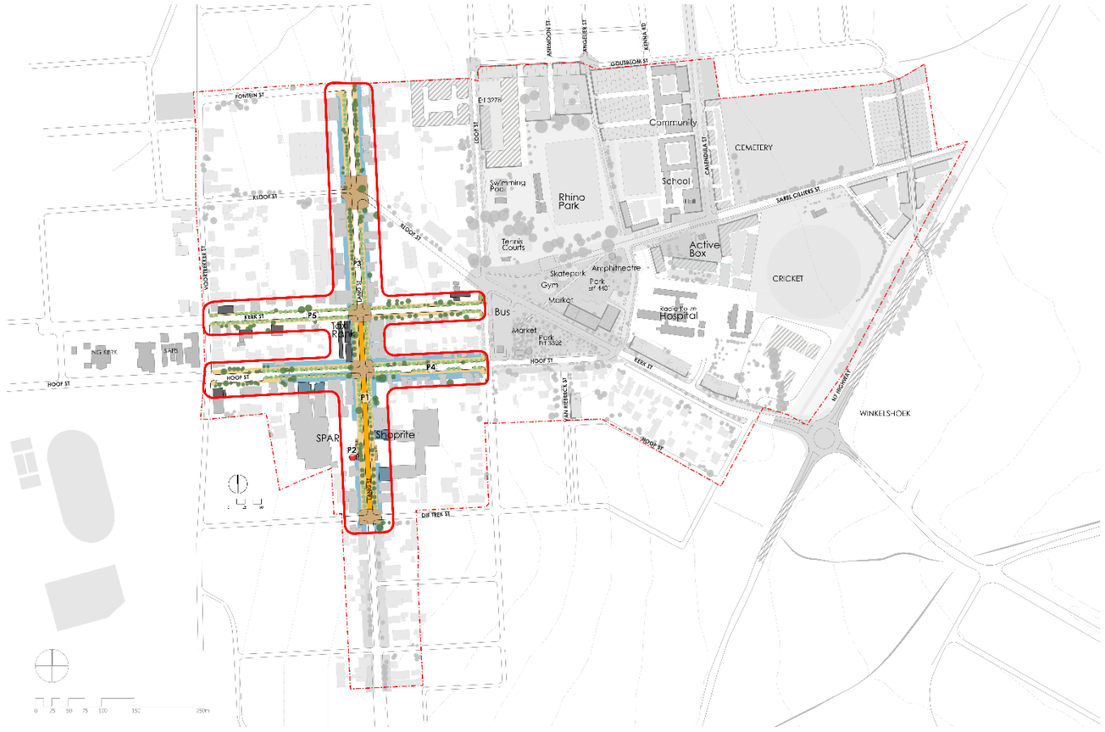


Figure 18: Focus Area 1 within the context of the study area

The problem

The portions of Lang Straat and Hoof Straat within Focus Area 1 accommodate mixed use activity that is fundamental to the successful functioning of the Piketberg CBD. While the assessment and analysis of the precinct revealed that the mixed land use element of the CDB is functioning well, there are still underperforming urban design elements that are preventing the CBD from reaching its full potential, *viz.*:

a. Lang Straat (**Image 1a**), Hoof Straat (**Image 1b**) and Kerk Straat are all wide streets that are dominated by cars with excessive street parking.

b. Buildings and trees lining the street do not adequately 'scale' and spatially define the streets (**Image 1a-b**).

c. A lack of coordinated paving, limited seating opportunities, small trees casting little shade result in a low-quality urban environment (**Image 1c**).

d. Cluttered sidewalks (e.g. bins, signage etc.) result in an uncomfortable pedestrian experience and detract from the aesthetics of the CBD (**Image 1d**).

e. The black concrete signage blocks are bulky and aesthetically unpleasing (**Image 1e**).

Image 1: Lang Straat (a) and Hoof Straat (b) are wide streets that are poorly defined; pavements in the CBD lack coordinated paving and look scrubby as a result (c); pavements in the CBD are cluttered with signage and refuse bins (d); and the black concrete signage blocks are aesthetically unpleasing (e)

The solution

The conceptual design solution for Focus Area 1, as well as the location of individual "action projects", is illustrated in **Figure 19**.

The following solutions are proposed to improve the urban environment along strategic sections of Lang Straat, Hoof Straat and Kloof Straat:

a. Create pedestrian friendly streets by:
   - narrowing the carriageway of the streets;
   - reducing street parking;
   - widening the sidewalks; and
   - implementing public realm improvements (e.g. more tree planting, pedestrian lighting, pavement and street intersection paving and appropriate seating).

b. Scale and define strategic portions of the streets by introducing height elements such as mature trees, as well as incentivizing more intense private development where appropriate.

c. Introduce a cultural event / street festival / market along Lang Straat to activate the street and promote integration amongst communities. The section of Lang Straat between Kerk and Di Trek Straat could be closed to traffic and informal market stalls can set up in the street. The market could even take place at night, which would promote a 12-hour business cycle for local businesses (as opposed to the standard 8 hours). Refer also to sub-section 5.4.

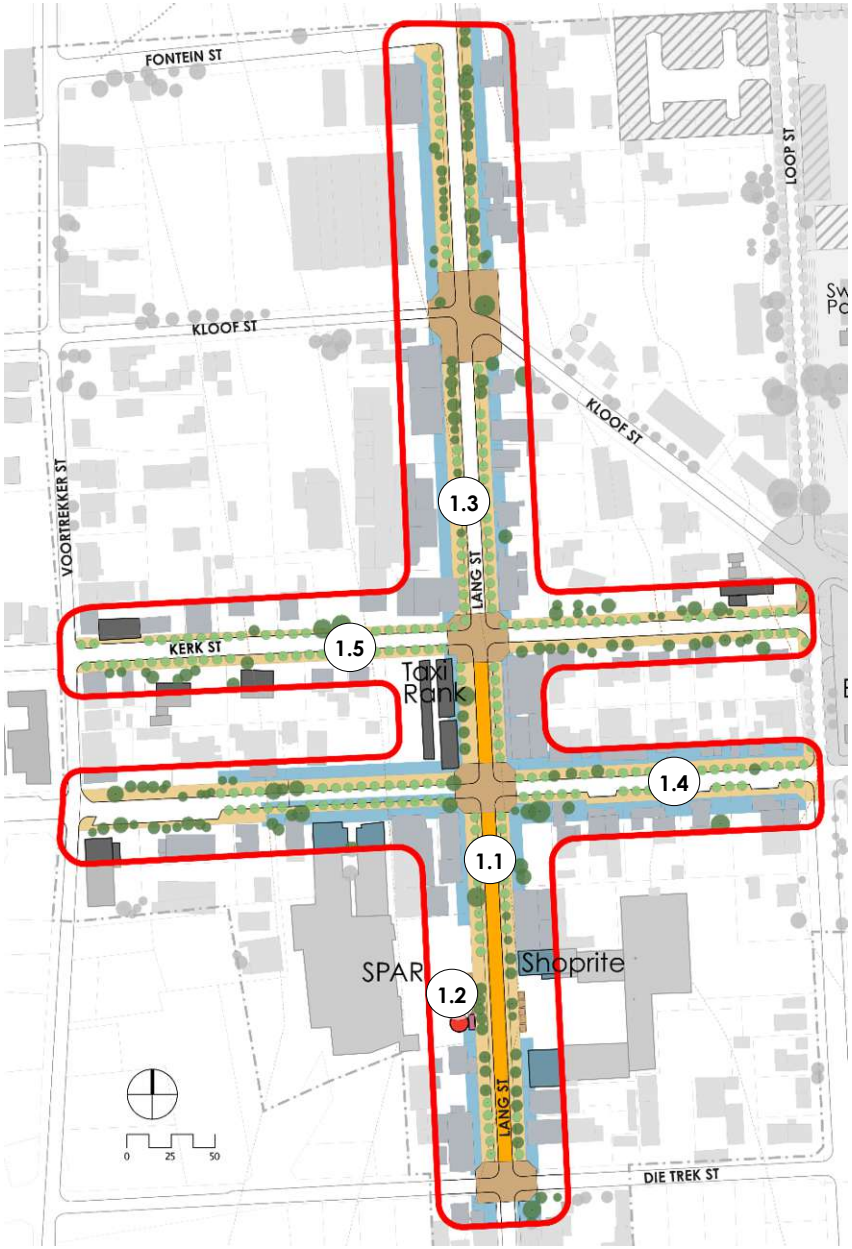


Figure 19: Conceptual design solution for Focus Area 1

Action project interventions

P1.1 & P1.3: Lang Straat urban design upgrade

Lang Straat currently accommodates 2 vehicle lanes in each direction and continuous parallel parking on both sides of the street (total width of the blacktop surface is approximately 20m). Further, the street features narrow pedestrian sidewalks, small trees that provide minimal shade and few seating opportunities.

The main purpose of the Lang Straat urban design upgrade is to make the street more people friendly by improving the pedestrian environment and reducing the dominance of the motor car. The primary ways of achieving this are described below and illustrated in **Figure 20** and **21**, as well as **Image 2**.

- Reduce the road carriageway to 2 lanes (i.e. 1 lane in each direction, except for the section of road in front of the shooping centres, which will remain 4 lanes);
- Convert the obsolete road lanes and parking bays into a combination of pedestrian sidewalks and parking;
- The widened pedestrian sidewalk can include new tree planting (including planter boxes), new seating, lighting and new shading elements.

The proposed upgrade does not have to necessarily be implemented on a permanent basis. Rather, a temporary upgrade can be implemented using removable paint, as well movable planter boxes and other street furniture (a similar example of a temporary upgrade was done in Fortaleza, Brazil, as shown in **Image 3**, with a conceptual illustration of the temporary upgrade shown in **Image 4**). The temporary intervention will enable the redesign to be tested and its impact evaluated (including through a Traffic Impact Assessment), following which more permanent interventions can be designed, budgeted and implemented. It is recommended that Lang Straat be upgraded in two phases: the section between Kerk Straat and Die Trek Straat is priority and should be implemented as the first phase, with the second phase being undertaken between Kerk and Fontein Straat.

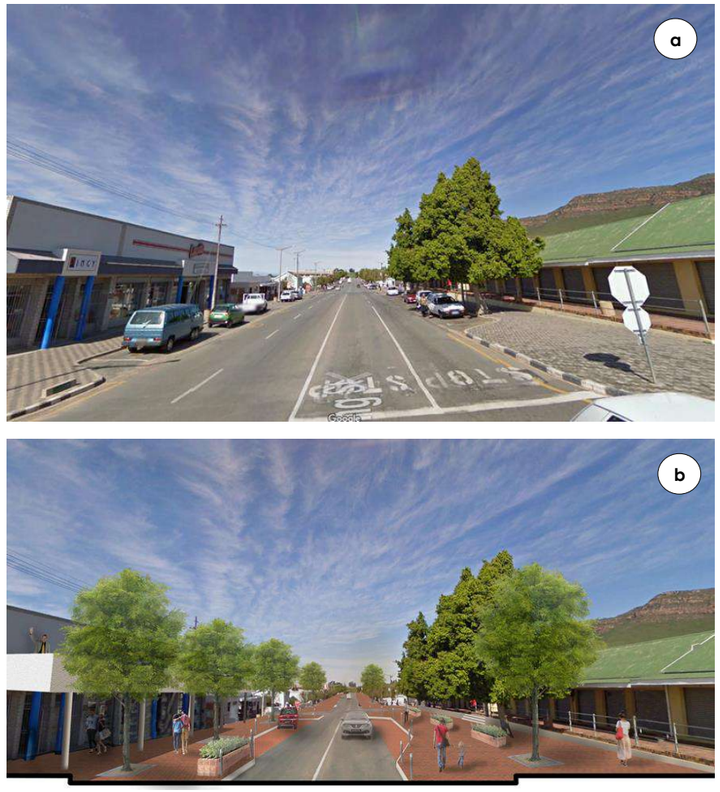


Image 2: Existing view of Lang Straat (a); conceptual illustration of Lang Straat following the proposed urban design upgrade

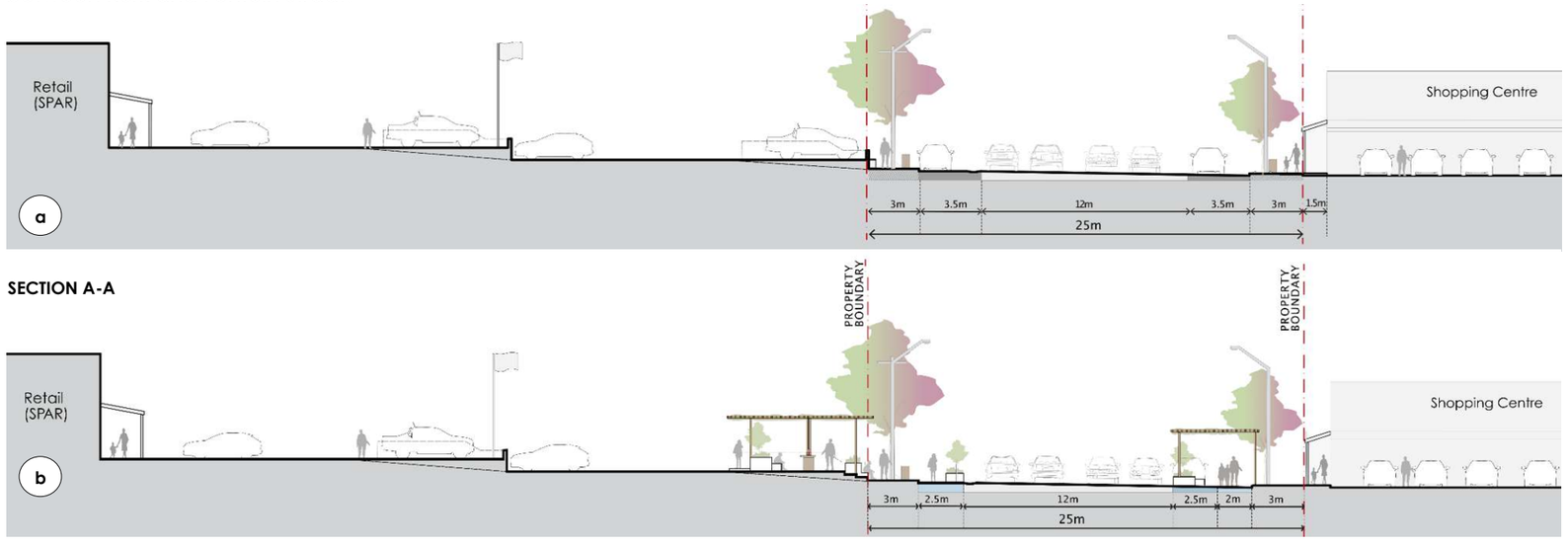


Figure 20: Existing Lang Straat section (a); proposed Lang Straat section, with widened sidewalks, new tree planting and new street furniture (b)

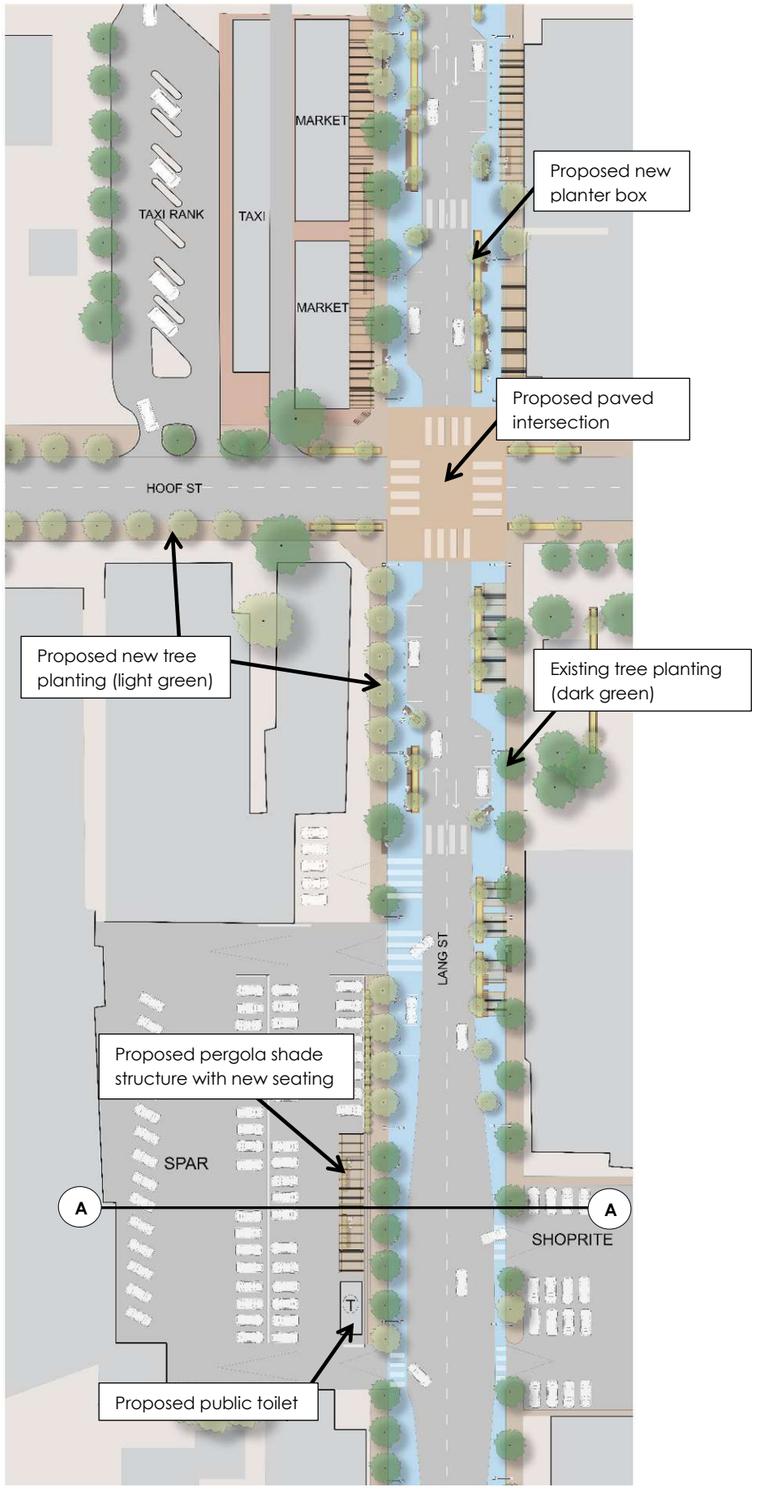


Figure 21: Conceptual design solution for Lang Straat

Image 3: Temporary street upgrades have been successfully undertaken in Fortaleza, Brazil, before (a) and after (b)

Image 4: Existing view of Lang Straat (a); conceptual illustration of Lang Straat following the temporary implementation of urban design measures (b)

P1.2: Public toilet in Lang Straat

Introduce a public toilet and shopping storage facility along Lang Straat in the vicinity of the two shopping centres. A preliminary proposal for the location of this public toilet is shown in **Figure 19** and **Figure 21**. (It is acknowledged that this location is on land currently under private ownership and forms part of the Piquetberg Mall parking area, however it is suggested that the Bergrivier Municipality attempt to negotiate a public-private agreement to facilitate the development of the public toilet in this location).

P1.4: Hoof Straat upgrade

Like Lang Straat, Hoof Straat is currently a very wide street that lacks scale and definition. Further, it has very narrow sidewalks for pedestrians. The proposal is therefore to narrow the street by increasing the width of the sidewalk and reducing the number of parking bays (**Figures 22** and **23**). Scale and shade will be introduced through new tree planting. Additional pedestrian lighting is also proposed.

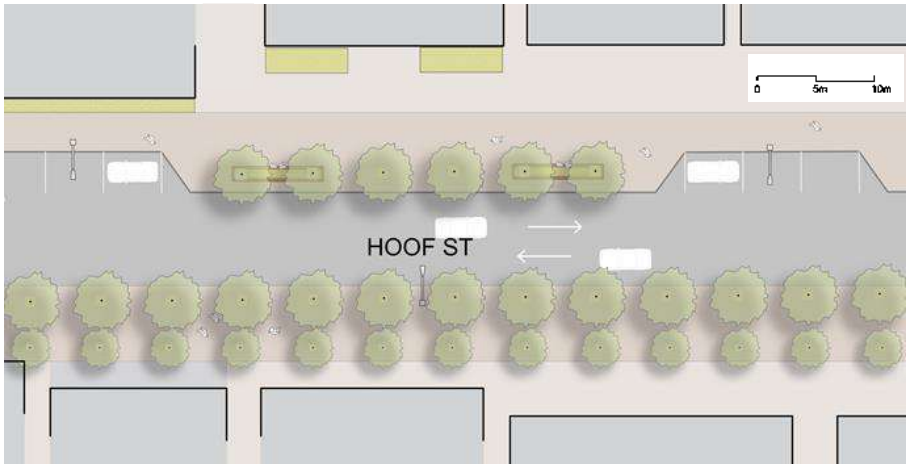


Figure 22: Conceptual design solution for Hoof Straat

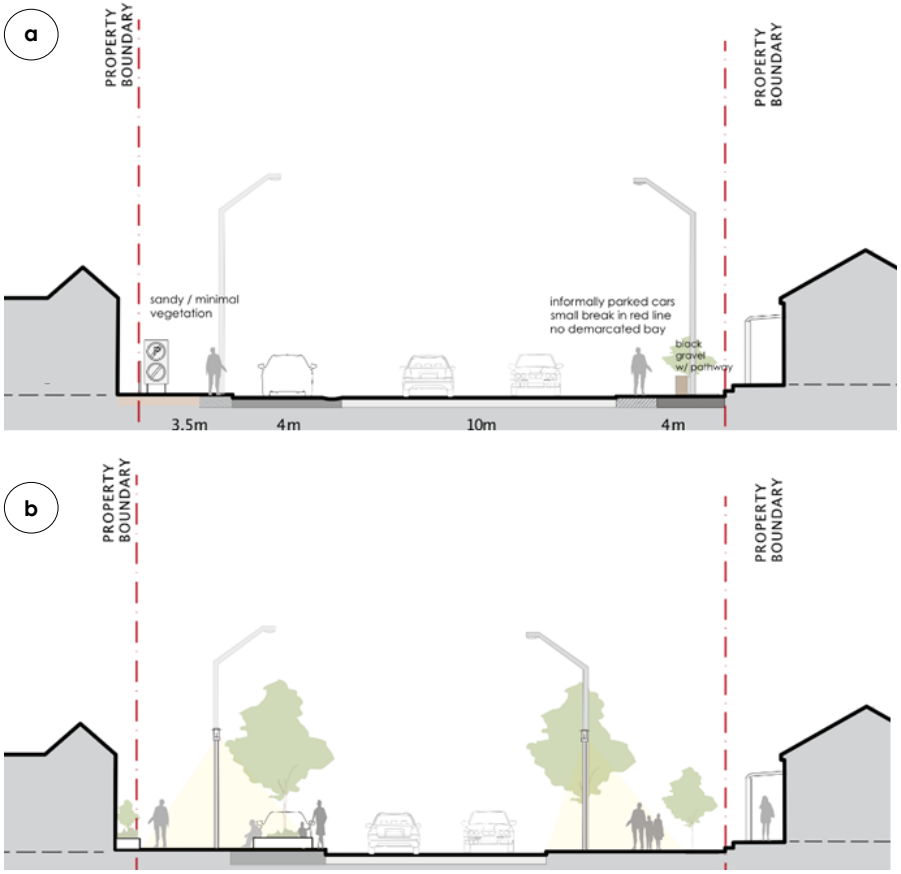


Figure 23: Existing Hoof Straat section (a); proposed Hoof Straat section, with widened sidewalks and new tree planting (b)

P1.5: Kerk Straat upgrade

Kerk Straat, particularly in the heritage node west of Lang Straat, could be improved through urban design upgrade, including additional tree planting, new seating and contemporary wayfinding signage to reinforce the existing heritage route walk in this part of Piketberg.

5.3.3 Focus Area 2: central "public heart"

Focus Area 2 is the open space area located between the Rhino Park sports complex, the Radie Kotze Hospital, Hoof Straat and Loop Straat (including the bus station), as shown in **Figure 24**.

Figure 24: Focus Area 1 within the context of the study area

The problem

The analysis found that although many pedestrians traverse this area as they walk between the lower income residential suburbs and the CBD, it is a largely sterile and uninviting space for people. The following aspects currently characterise this central area of Piketberg:

a. The triangular intersection of Kloof, Kerk, Sarel Cilliers and Loop Straat is convoluted and confusing for both motorists and pedestrians (**Image 5a**).

b. A low-quality public environment (e.g. limited seating and shade elements, sizeable trees etc.) that lacks vibrancy.

c. A lack of passive surveillance, activity and lighting, which results in safety issues (**Image 5b**).

d. Blank facades (i.e. solid walls) around Rhino Park sports complex along Sarel Cilliers Straat (**Image 5c**).

e. The outdoor gym is currently isolated in space and is underutilised because of lack of shade and lighting (**Image 5d**).

Image 5: The intersection of Kloof, Kerk, Sarel Cilliers and Loop Straat (a); low-quality public environment with lack of shade and lighting (b); blank walls around Rhino Park sports complex (c); and the outdoor gym isolated in space (d)

The solution

The central area of the precinct is also the central area of the town: it is a major gateway into Piketberg from the N7; it forms part of an important pedestrian route between the low-income suburbs in the north of the town and the CBD; and it is an important gathering place for people socialising or waiting for busses at the bus station, especially on weekends. Given the area's important role in the structure of Piketberg, as well as its location as an important gateway[1] into the town, it is proposed that this area becomes the central "public heart" of Piketberg.

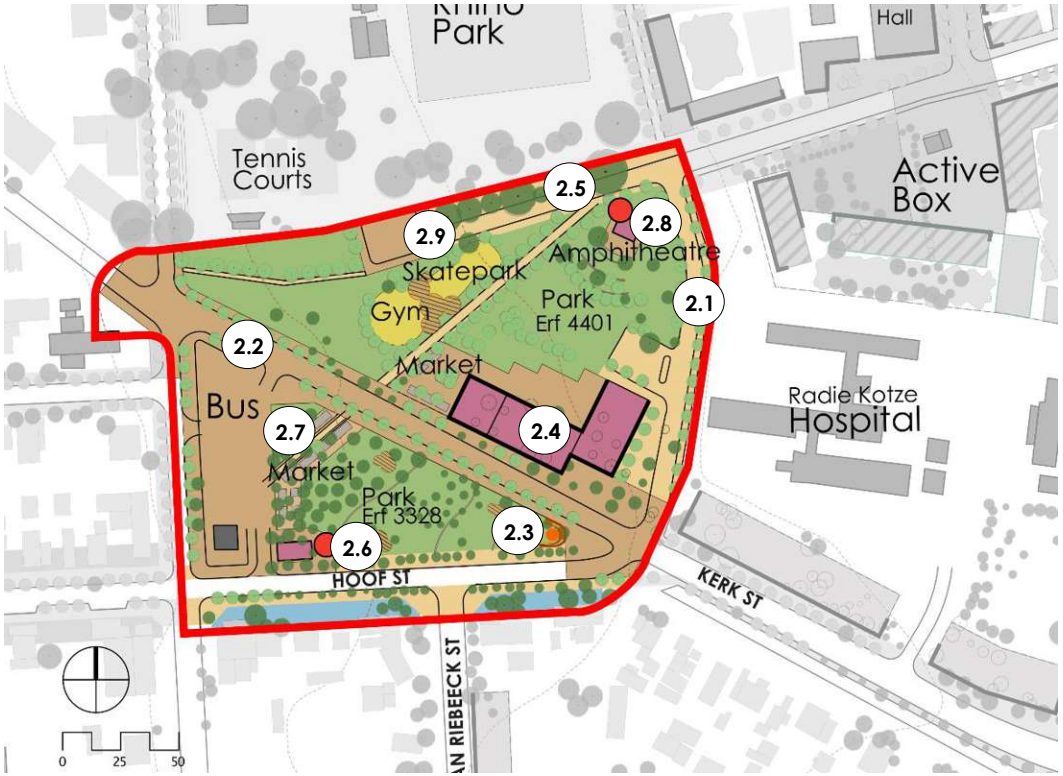


Figure 25: Conceptual design solution for Focus Area 2

To this end, the following interventions are proposed:

a. Restructure existing roads:
   i. Create a new link between Calendula Straat and Kloof Straat on the western side of the hospital; and
   ii. Re-design the existing Kloof, Kerk, Sarel Cilliers and Loop Straat intersection to be more user friendly, with the following actions required:
      - Close the section of Sarel Cilliers Straat in front of the Rhino Park sports complex; and
      - Close the small section of Kerk Straat north of the bus station and consolidate this land into the bus station area.

b. Development of a new public "gateway building" on the south eastern corner of Erf 4401.

c. Consolidate the existing public parks to create high quality public spaces associated with Rhino Park sports complex, the bus station, the outdoor gym and new public "gateway building".

d. Activate the public space with a community amphitheatre and a skate park.

e. Create a permeable boundary edge (at least visually permeable) around Rhino Park sports complex along Sarel Cilliers Straat to create a positive interface between the sports complex and the new "public heart".

[1] A 'gateway' in urban design terms is an important entry point into a place, and they can play a key role in identifying distinct areas. Gateways can significantly contribute to the public realm and create a sense of place and identity. Design mechanisms can be used to accentuate these entry points including *inter alia*: distinct architectural designs (e.g. prominent buildings); special landscape treatment (e.g. tree planting, signage, lighting and street furniture); and public art.

Action project interventions

P2.1: New road link between Sarel Cillers / Calendula Straat and Kloof Straat

If this area of Piketberg is going to become the central "public heart", there needs to be a logical movement system that serves to:

- enhance the spatial structure of the town as a whole;
- reinforce public spaces and public facilities (e.g. improved access to Radie Kotze Hospital);
- promote accessibility; and
- promote spatial integration.

The proposed new road link between Sarel Cilliers / Calendula Straat and Kloof Straat (refer to **Figure 25**) achieves all of the above (especially if implemented along with "action project" P2.2).

New tree planting and new street lighting should be implemented together with this new road link so as to maximise its effectiveness.

P2.2: Kloof, Kerk, Sarel Cilliers and Loop Straat intersection re-design

Implementing the Kloof, Kerk, Sarel Cilliers and Loop Straat intersection as proposed in the design provided in **Figure 26** will have various benefits for the town, *viz.*:

- enhance the spatial structure of the town as a whole;
- improve wayfinding for visitors (the intersection is currently very confusing, especially for motorists);
- improve safety for pedestrians;
- assist to consolidate the open space system in the centre of the town (it is currently fragmented by too many roads); and
- increase the size of the bus depot, which frequently operates at capacity on weekends.

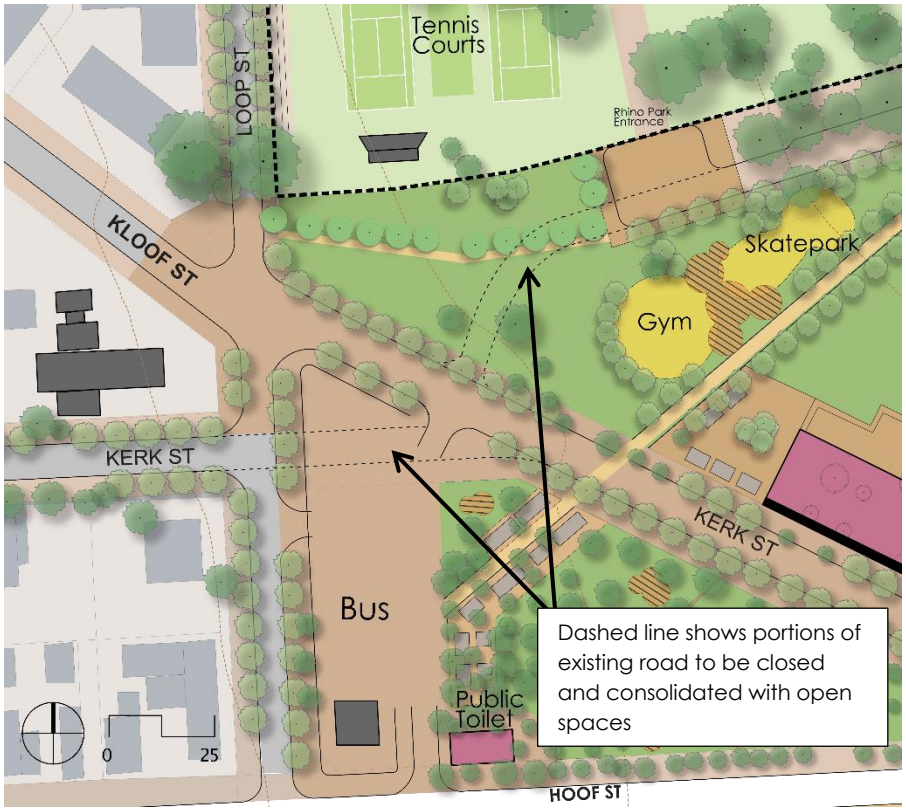


Figure 25: Proposed Kloof, Kerk, Sarel Cilliers and Loop Straat intersection re-design

Part of this "action project" will be to apply to the WCG's Road Transport Department for permission to re-align the existing provincial road (i.e. R366) from the current alignment along Kerk Straat – Lang Straat to a proposed alignment along Kloof Straat – Lang Straat (refer to **Figure 13**). The purpose behind this intervention is to avoid heavy vehicles utilizing Kloof Straat, which is a road identified for mixed-use activity, as well as a busy portion of Lang Straat between the Kerk Straat / Lang Straat intersection and the Kloof Straat / Lang Straat intersection (which is also identified to accommodate more mixed-use activity in the future).

P2.3: Gateway feature on Erf 3328

The gateway to Piketberg needs to announce the arrival into the town, as well as draw in visitors from the N7. Consideration should therefore be given to implementing a new contemporary gateway feature, including signage, on Erf 3328 at the corner of the intersection of Kerk, Kloof and Hoof Straat (refer to **Figure 24**). An example of a contemporary gateway feature is shown in **Image 6**. The design of the new gateway feature for Piketberg can be inspired by local cultural and/or heritage characteristics of the town.

Image 6: A new gateway feature should be installed at the entrance to Piketberg, including contemporary signage welcoming visitors to the town

P2.4: Gateway public building on Erf 4401

A new gateway public building and associated hard landscaping is proposed to be the positioned in the south-western corner of Erf 4401 at the corner of the intersection of Kerk, Kloof and the new road adjacent to Radie Kotze Hospital (refer to **Figure 24**). An example of a successful public gateway building is the Active Box in Harare, Cape Town (**Image 7**). A new building in this location is considered appropriate because it will:

- become a prominent gateway feature when entering Piketberg;
- enhance the spatial structure of the town by reinforcing the central "public heart";
- activate the adjacent public open space; and
- promote access to public services and promote spatial integration.

The use of the proposed building is not prescriptive and can be determined based on public need at the time of procurement.

Image 7: A public building, such as Active Box in Khayelitsha, Cape Town, will be a prominent gateway feature when entering Piketberg

P2.5: Upgrade the interface between Rhino Park and the adjoining public space in the central "public heart"

Solid walls between adjoining public spaces and public facilities is undesirable for the following reasons:

- solid walls promote crime and anti-social behaviour (i.e. they prevent surveillance and therefore provide refuge for villainous characters);
- blank walls are dull and visually uninteresting; and
- solid walls prevent interaction and hinder the relationship between the activities occurring in adjoining spaces.

It is therefore proposed that the solid wall surrounding Rhino Park be replaced with a transparent fence (e.g. Clear-Vu). A successful example of a transparent fence between public spaces is found at the Hout Bay sports precinct in Cape Town (**Image 8**). In addition to installing a transparent fence, other positive urban design upgrades are recommended to occur along the interface between Rhino Park and the adjoining public space in the central "public heart", including new paving, tree planting, lighting and seating (**Image 9**).

Image 8: Permeable fencing surrounding the Hout Bay sports precinct in Cape Town

Image 9: Sarel Cilliers Straat before (a) and after (b) the interface upgrade between Rhino Park and the adjoining public space

P2.6: Public toilet and storage facility near bus depot

It became evident during the analysis stage of the Precinct Plan project that the current public toilet and storage facility at the bus depot is too small and does not have adequate capacity (as evidenced by the provision of temporary toilets alongside the existing building). It is proposed that a new public toilet and storage facility is erected on the green space immediately adjacent to the bus depot (refer to **Figure 24**). This new facility will allow for the conversion of the existing toilet facility at the bus depot for another use, if desirable.

P2.7: Public market

During the public participation processes, the community identified the need for a more permanent public market in Piketberg. There are many benefits to establishing a market in a town such as Piketberg, including:

- increased employment opportunities for local communities;
- enhanced social cohesion amongst local communities;
- strengthening social ties between rural and urban communities; and
- teaching tourists about the culture of the local community.

It is believed that the "public heart" is the most appropriate location for such a market because it is:

a. In a central location within the town (i.e. accessible);
b. Located in close proximity to prominent pedestrian and vehicular movement routes (i.e. highly visible); and
c. Is positioned in close proximity to prominent public amenities / facilities such as the bus station, the outdoor gym and the new gateway building (i.e. it can take advantage of agglomeration).

It is proposed that the market be located adjacent to the bus station, as illustrated in **Figure 24**. If the market is successful and requires expanding, then it could expand across Kloof Straat adjacent to the new gateway building (also shown in **Figure 24**).

An example of a successful market in a small town of the Western Cape is found in Greyton (**Image 10**), which makes use of simple structures made of inexpensive, easily obtained materials (e.g. timber and iron sheet roofing). These structures are durable, but also allow for flexibility to meet the needs of a variety of vendors. The aesthetic of the timber structures is also in keeping with the character of a small rural town.

Image 10: The market in Greyton, which makes use of simple, inexpensive timber structures, is a good example of a successful outdoor market in a small rural town

P2.8: Community amphitheatre

If located and designed correctly, a community amphitheatre can add positive energy to public spaces. Such a facility can host community performances or simply be used by members of the public as a place of relaxation, as is the case in Green Point Park in Cape Town (**Image 11**). The chosen location in the north eastern corner of Erf 4401 (refer to **Figure 24**) is considered ideal not only because it falls at a prominent road intersection (and therefore contributes to reinforcing the spatial structure of the precinct), but also because it will fit the prevailing gradient of the landscape.

Image 11: A well-designed community amphitheatre can add positive energy to the central "public heart" of Piketberg

P2.9: Community skatepark

A recent surge in popularity of skateboarding, especially amongst the youth, has resulted in skateparks becoming practical urban design / landscape architecture features in cities and towns around the world (example shown in **Image 12**). A new community skatepark could be located where Sarel Cilliers Straat is proposed to be closed and consolidated into the public open space (refer to **Figure 22**). A skatepark in this location will activate the space and will also serve to complement the adjacent outdoor gym.

Image 12: Community skatepark's are prominent landscape design features and can assist to activate public spaces

5.3.4 Focus Area 3: Calendula Straat and the Active Box

Focus Area 3 concentrates on Calendula Staat, including the play park at the corner of Gousbloom / Calendula Straat and the new Active Box and associated vacant land at the intersection of Calendula / Sarel Cilliers Straat (refer to **Figure 26**).

Figure 26: Focus Area 3 within the context of the study area

The problem

Although the recent extension of Calendula Straat and construction of the Active Box as part of the RSEP Programme were welcome interventions, there are still issues associated with this part of Piketberg that are negatively impacting on the urban environment, *viz.*:

a. Undefined public spaces and streets, particularly Calendula Straat (**Image 13a**).

b. Safety issues due to lack of passive surveillance, activity and lighting (**Image 13a-b**).

c. Low-quality public environment (e.g. limited seating and shade elements, sizeable trees, pause/rest areas etc.) (**Image 13a-b**).

d. The Active Box is currently located in a sea of space and is not complimented with active public space or enclosed with appropriate development (**Image 13c**).

e. The children's play park is dusty and uninviting.

Image 13: Calendula Straat (a) and the area along Sarel Cilliers Straat to the east of the new Active Box (b) are undefined, lack surveillance and display characteristics of a low-quality public environment; the Active Box is currently located in a sea of space and lacks the required vibrancy (c)

The solution

Calendula Straat has become an important structuring route in Piketberg since the RSEP extension was completed in 2019, not only because it provides an important additional (formal) direct movement link between Steynville and the CBD, but also because it begins to knit together various public facilities and public open spaces. It is therefore important that interventions proposed in the Precinct Plan reinforce this link as a structuring element that begins to integrate the town as a whole. To this end, the following interventions are proposed:

a. Line Calendula Straat with appropriate development (define and activate to reinforce as a structuring route and improve safety), including a new Primary School and Community Centre.

b. Implement public realm upgrades along Calendula Straat, including tree planting, seating, pedestrian lighting and appropriate signage.

c. Create a public square in association with the Active Box at the southern end of Calendula Street.

d. Use infill mixed-use development (e.g. live-work units or public housing combined with small-scale retail) to define the public space surrounding the Active Box.

e. Introduce / augment appropriate landscaping elements in the play park along Calendula Straat.

Figure 27 identifies these interventions, which are expanded on in more detail under the "action project" interventions.

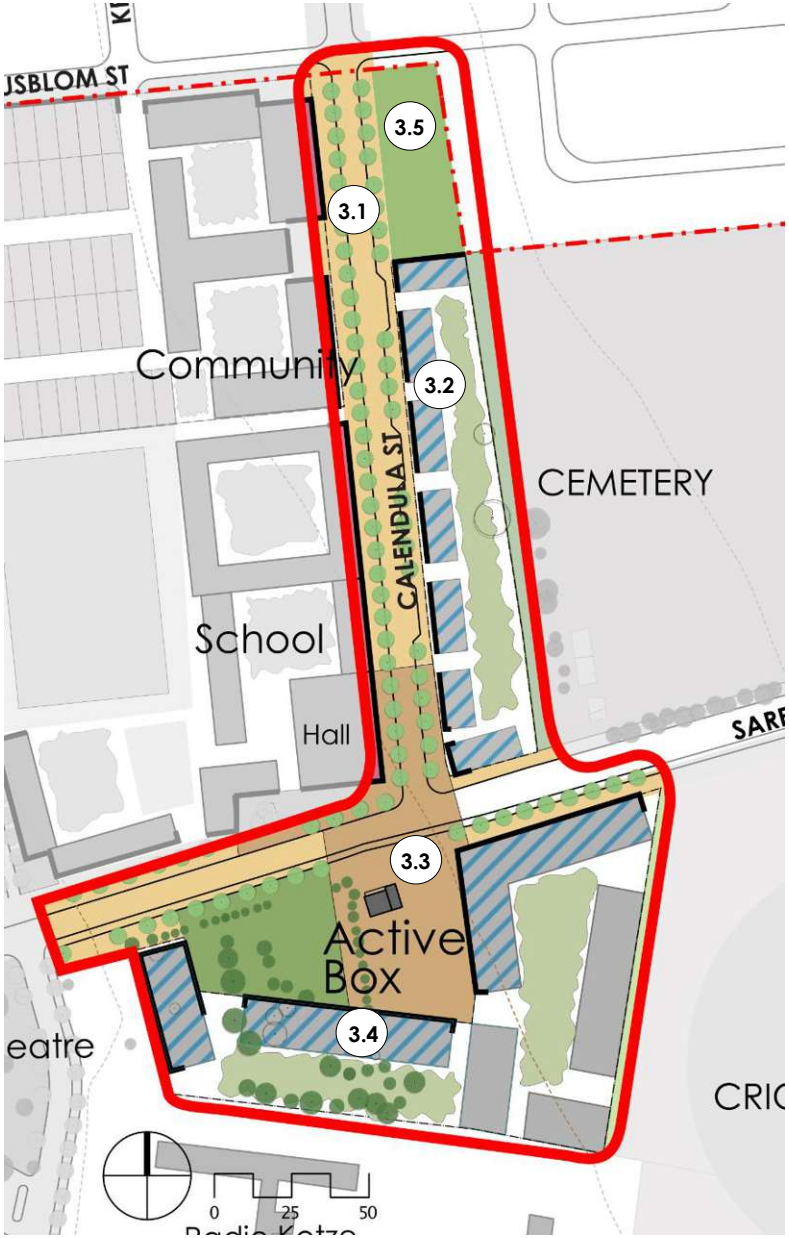


Figure 27: Conceptual design solution for Focus Area 3

Action project interventions

P3.1: Calendula Straat urban design upgrade

The focus group meeting with key project stakeholders revealed that it is currently not safe to walk along Calendula Straat early in the morning or at night because of a lack of lighting. The stakeholders further indicated that the street lacks shading and seating. Therefore, further urban design upgrade of Calendula Straat is proposed to be undertaken, including new pedestrian lighting, tree planting and seating (**Figure 28c**).

P3.2: Mixed-use development along the eastern edge of Calendula Straat

The vacant land along the eastern edge of Calendula Straat is owned by the Bergrivier Municipality. Given that this land is publicly owned and falls along a major structuring route in the precinct, it is recommended that mixed-use development in the form of Live-Work units be developed on this land. Live-Work units are 2-3 storey buildings with residential accommodation on the upper floor and commercial or manufacturing activity on the ground floor. An example of Live-Work units is found in Khayelitsha, Cape Town (**Image 14**). The position of the proposed Live-Works units is illustrated in **Figure 27**. A conceptual render of Calendula Straat following the proposed interventions is shown in **Image 15**.

Reasons why Live-Work units are considered the most appropriate form of development in this location include:

- Calendula Straat is a major movement route between Steynville and the CBD, and therefore generates a lot of foot traffic (this foot traffic will increase further following the development of the Primary School and the Community Centre), which the commercial component of the Live-Work units can benefit from.
- The Live-Work units will provide 24-hour surveillance of Calendula Straat and the public facilities opposite, thus increasing safety and security and reducing the prospect of crime and vandalism.

Image 14: Live-Work units in Khayelitsha, Cape Town

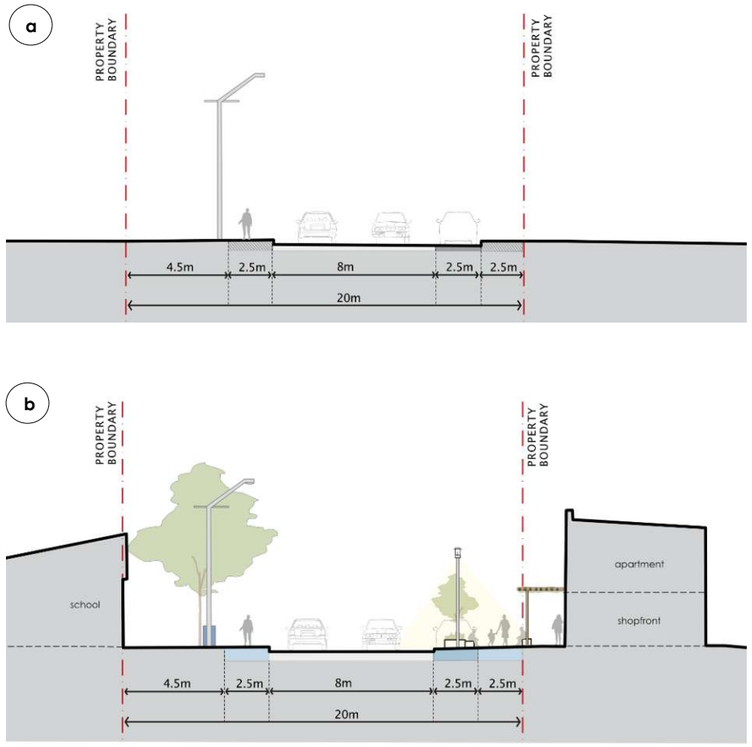
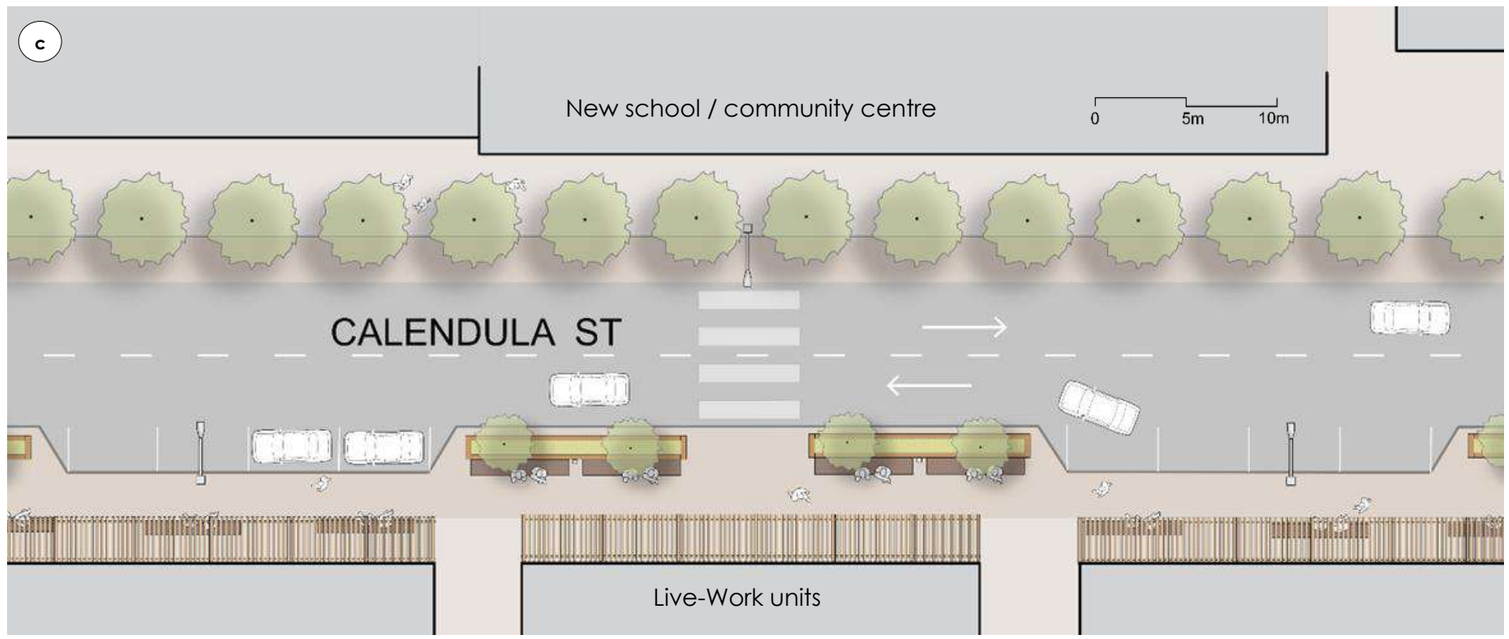


Figure 28: Calendula Straat section before (a) and after (b) the proposed urban design upgrade and associated development; conceptual design solution for the Calendula Straat upgrade (c)

Image 15: Calendula Straat before (a) and after (b) the proposed urban design upgrade and associated development



P3.3: Public realm upgrade surrounding the Active Box

The Active Box was recently development at the southern end of Calendula Straat. While the Active Box is a positive intervention from a community safety standpoint, the current Active Box is sub-optimal because it sits in a sea of space that has not been activated by the uses within the current facility. According to the organization responsible for conceptualizing active boxes and introducing them in South Africa, Violence Prevention Through Urban Upgrading (VPUU), an Active Box performs best when it "creates a positive edge to the street" and "activates buildings and public spaces around it". Further, VPUU state that the impact of an active box is determined by its "strategic location, level of activation and accessibility". While the Active Box in Piketberg is strategically located and accessible, it currently lacks the desired activation to make it successful. With this is mind, it is proposed to upgrade the public space around the Active Box (refer to **Figure 27**) and activate this space by including elements such as a multi-purpose sports court (for example at the Monwabisi Active Box in Cape Town, see **Image 16a**) and quality public spaces where people can safely play, relax and socialize (for example at the Harare Active Box in Harare, Cape Town, see **Image 16b**).

Image 16: Successful Active Boxes include elements that activate the public space around the building, such as multi-purpose sports courts (a) and spaces where people can play, relax and socialize (b)

P3.4: Mixed-use development framing the Active Box

In addition to upgrading the public realm surrounding the Active Box, it is proposed to develop the vacant publicly owned land to the south and east of the Active Box (refer to **Figure 27**). Mixed-use development, including a public toilet, Live-Work units and courtyard apartment blocks (refer to P5.2 & P5.5 in Focus Area 5)are recommended to frame the Active Box and associated public space to promote activity, as well as provide 24-hour surveillance. An example of where Live-Work units have been successfully implemented to define a public space is at Harare Square, Khayelitsha, Cape Town (**Image 17**). The units provide definition to an important public space and also serve to create activity in the space.

Image 17: Live-Work units at Harare Square in Harare, Cape Town provide definition to an important public space (a) and also serve to create an active edge that generates activity and promotes surveillance of the space (b)

P3.5: Upgrade the Calendula Street play park

The existing play park at the corner of Calendula and Gousblom Straat is well located and adds value to overall spatial structure of the precinct. However, this park is currently underperforming because it is inhospitable for children: it is dry, dusty and has no shade. Further, the play equipment is uninspiring. The following upgrades are proposed to improve this playpark:

- introduce a mixture of hard and soft surface treatments, including MasterFibre rubber matting, to increase visual interest and reduce maintenance requirements (example is Green Point Urban Park in Cape Town, **Image 18**); and
- plant more locally indigenous trees for shade;
- introduce new, contemporary play equipment; and
- implement a grey water irrigation system to promote vegetation and grass growth during the hot summer months (greywater could be extracted from the adjacent new development).

Image 18: A mixture of hard and soft surface treatment in children's play parks serves to increase visual interest and reduce maintenance requirements

5.3.5 Focus Area 4: Interface between Loop Straat and the Rhino Park sports complex

Focus Area 4 is located along the section of Loop Straat adjacent to the Rhino Park sports complex, as shown in **Figure 29**.

Figure 29: Focus Area 4 within the context of the study area

The problem

Apart from Calendula Straat, Loop Straat is one of the major movement linkages between Steynville and the CBD. However, this street, especially the section identified in Focus Area 4, is currently very poorly defined, inhospitable to pedestrians and has a low-quality public environment. The following aspects have been identified as being particularly problematic:

a. Privately owned land with development rights for business use at the corner of Loop Straat and Gousblom Straat is vacant and unmaintained (**Image 19a**).
b. Blank facades and solid barrier walls around Rhino Park sports complex along Loop Straat (**Image 19b**).
c. Safety issues due to lack of passive surveillance, activity and lighting.
d. The entrance to the public swimming pool is poorly defined and uninviting to visitors (**Image 19c**).

Image 19: The privately owned land at the corner of Loop and Gousblom Straat is vacant and poorly maintained (a); the blank façade along the section of Loop Straat adjacent to Rhino Park sports complex is a low-quality urban environment, especially for pedestrians (b); the current entrance to the swimming pool (c)

The solution

The following interventions are proposed to upgrade the urban environment along the identified section of Loop Straat:

a. Remove solid barrier walls around Rhino Park sports complex along the interface with the current 'posduif' facility, as well as along Loop Straat to create a positive interface with the sports facility and allow for views inwards.

b. Implement a multi-functional parking court in front of the approved but vacant commercial development along Loop Straat and consider further mixed-use development along the Loop Straat edge so as to define and activate the street, reinforce it as a structuring route and improve safety (refer to **Figure 30**).

c. Implement public realm upgrades, including widening and paving sidewalks, as well as introducing visually permeable fencing along Rhino Park perimeter, tree planting, pedestrian lighting and appropriate signage.

d. Upgrade the access to the public swimming pool.

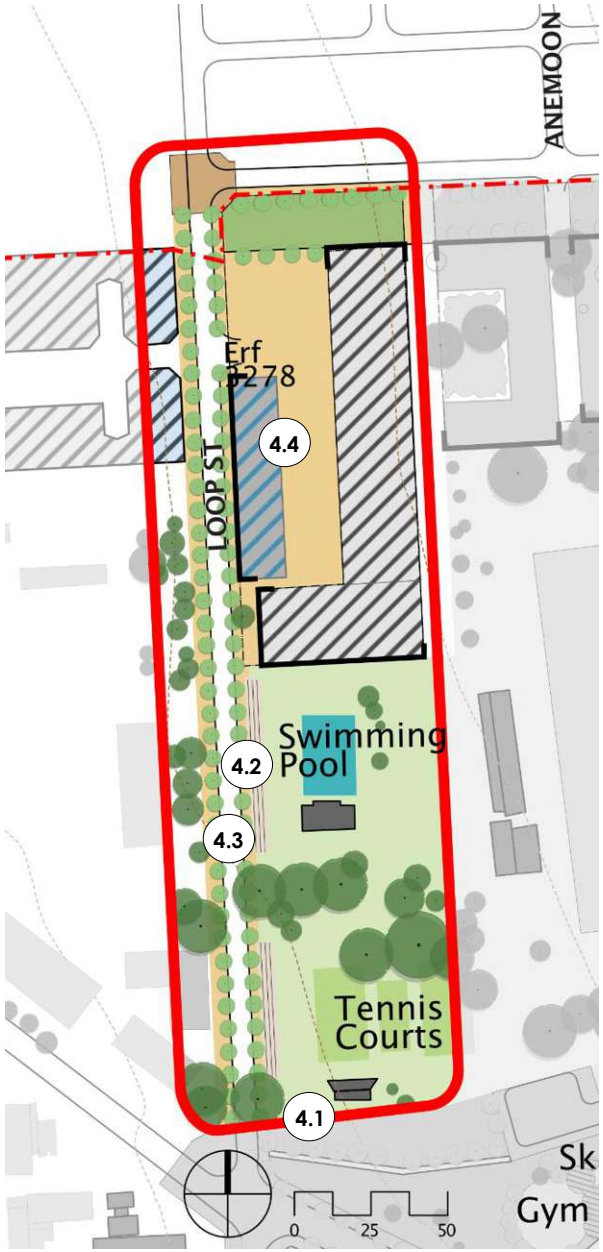


Figure 30: Conceptual design solution for Focus Area 4

Action project interventions

P4.1: Replace solid wall surrounding Rhino Park with transparent fence

The solid wall around Rhino Park is undesirable and should be replaced with transparent fencing (e.g. ClearVu) (refer to P2.5 in Focus Area 2).

P4.2: Upgrade entrance to public swimming pool

The Loop Straat urban design upgrade proposed in P4.1 should be further complimented by an upgrade to the entrance of the public swimming pool, which is currently poorly defined and uninviting to visitors. The upgrade does not have to be elaborate, but rather could be a simple turnstile gate with basic shading and lighting, similar to the example shown in **Image 20**.

Image 20: An example of an entrance gate that could be used at the public swimming pool

P4.3: Loop Straat urban design upgrade adjacent to Rhino Park

The focus group meeting with key project stakeholders revealed that it is currently not safe to walk along Loop Straat in the vicinity of the Rhino Park sports complex because of a lack of street lighting, as well as a lack of surveillance along the street edge. Therefore, further urban design upgrade of Loop Straat adjacent to Rhino Park is proposed to be undertaken, including the replacement of the solid boundary wall around Rhino Park with a new visually transparent fence, new pedestrian lighting, tree planting and paving (**Figure 31** and **Image 21**).

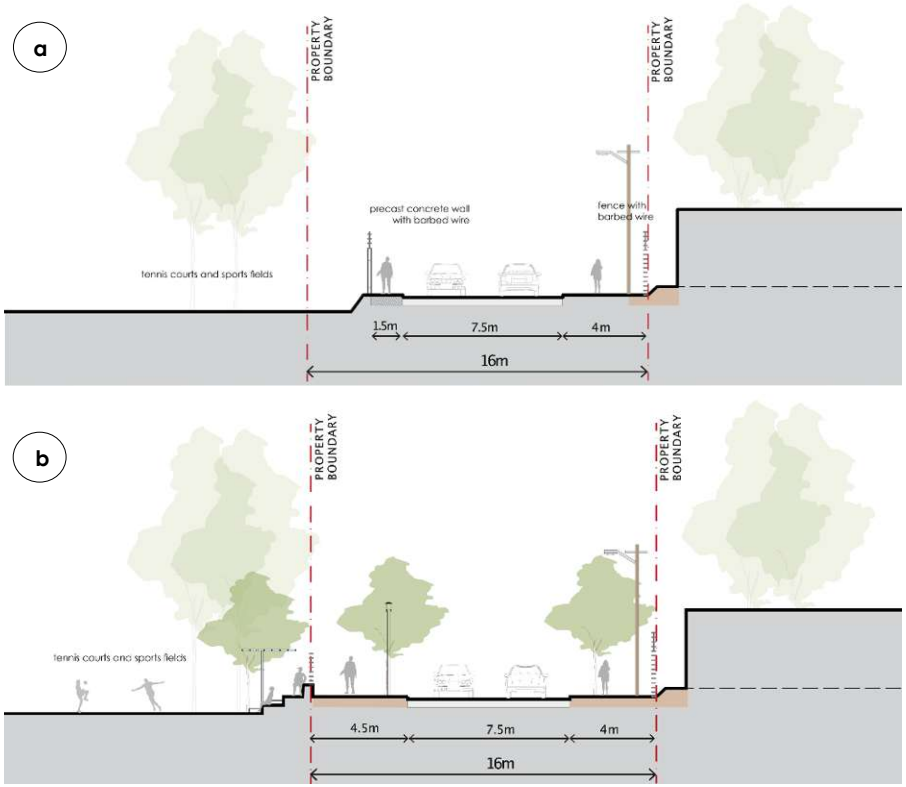


Figure 31: Loop Straat section before (a) and after (b) the proposed urban design upgrade along the section adjacent to Rhino Park

Image 21: Loop Straat before (a) and after (b) the proposed urban design upgrade and associated development

P4.4: Construct multi-purpose parking forecourt on Erf 3278

The approved private development north of Rhino Park, which is zoned for commercial use, has remained undeveloped for a significant period of time. It is understood that the area in front of the approved commercial development abutting onto Loop Straat is publicly owned land that is approved to be used as parking for the commercial development. It is recommended that the Municipality implement a multi-functional parking court that can be used for more than just private parking. Positive results of the implementation of the parking court include:

- a catalyst for development of the adjacent, private, commercial site;
- a positive semi-public space that could accommodate markets and community events (refer to P4.3);
- the parking lot can be used by the general public visiting the public swimming pool at Rhino Park, or by the visitors / residents of the new housing developments proposed as part of Focus Area 5 (refer to P5.2 & P5.5).

The parking court should be implemented according to the urban design guidelines provided (refer to **sub-section 5.4**).

It is believed that the designated parking area is too big for the type of commercial development proposed. It is therefore recommended that a portion of the area designated for parking be further subdivided and rezoned to allow for the development of a mix-use building. Such development will allow for the better utilisattion of public land. However, the new development must not compromise the approved private development and should only be initiated with the consent of the owners of the private erven.

5.3.6 Focus Area 5: vacant, publicly owned land adjacent to the Rhino Park sports complex and Calendula Straat

Focus Area 5 concentrates on the vacant, publicly owned land to the north and east of Rhino Park sports complex (the latter space is also immediately west of Calendula Straat), as shown in **Figure 32**.

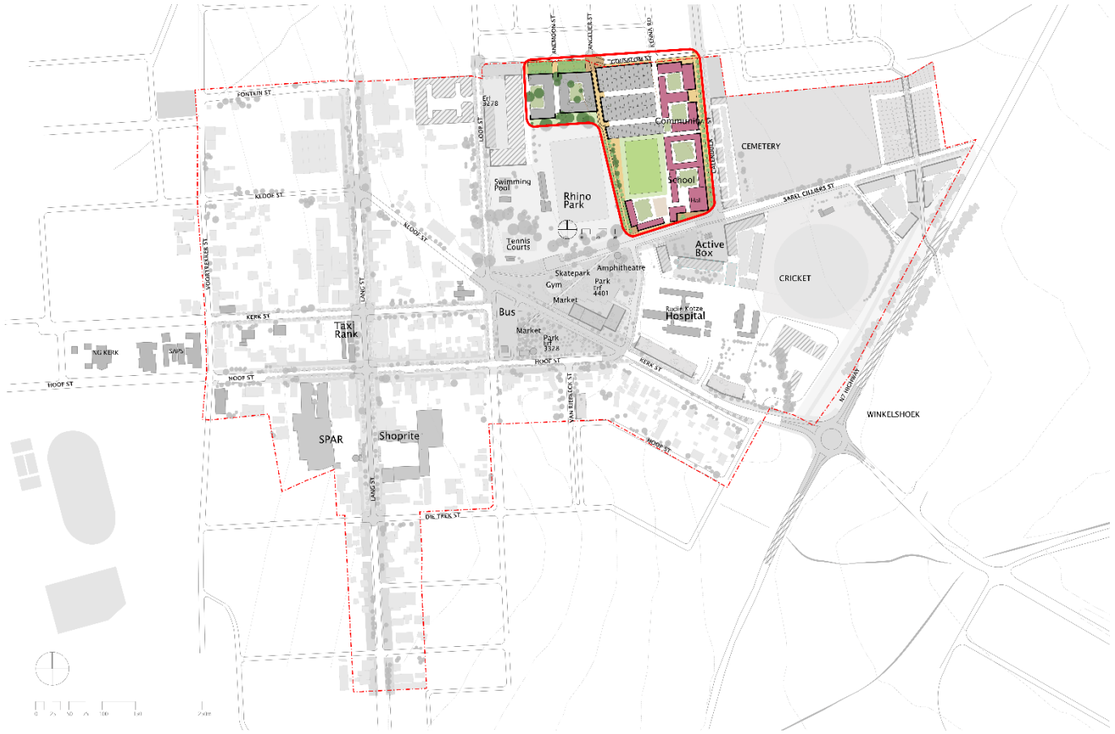


Figure 32: Focus Area 5 within the context of the study area

The problem

Vast areas of vacant land contribute to the problems of fragmentation and segregation, especially in small towns such as Piketberg. Moreover, vacant land contributes towards issues of community safety and security. It is understood that the vacant land between the sports complex and Calendula Straat has been earmarked for the development of a new Primary School to be developed by the WCG's Department of Education (southern portion, corner of Calendula and Sarel Cilliers Straat, as shown in **Image 22a**) and a Community Centre to be developed as part of the WCG's RSEP Programme (northern portion, corner of Calendula and Gousblom Straat, as shown in **Image 22b**).

In the past, public facilities in South Africa have taken on a suburban form with the following typical issues and constraints:

- Overly large sites with buildings located in the middle of the property with no relationship to the street. Remaining land, which for wealthier school accommodates sports facilities, are left vacant and underutilised in less affluent school;
- The buildings do not contribute to the definition or surveillance of the surrounding spaces or streets. Traversing vacant land to reach school puts becomes an unsafe journey for many students;
- Because of the location of the buildings on the site, large amounts of money are spent on perimeter fencing as unsurveilled buildings, offset from the street are easy targets for vandalism, increasing budget spent on maintenance.

Image 22: Vacant land between the Rhino Park sports complex and Calendula Straat has been earmarked for the development of a new Primary School (a) and a Community Centre (b)

The solution

The sites chosen for the Primary School and the Community Centre are considered appropriate for the following reasons:

- Public facilities located along a major structuring route such Calendula Straat will serve to reinforce the spatial structure of the precinct;
- The facilities are closely located to the community that they will predominantly serve (Steynville), which enhances accessibility; and
- The location of the facilities adjacent to another meets the desire to cluster public facilities, which in turn promotes the sharing of inter-related facilities.

Notwithstanding the appropriate spatial location of these public facilities, it is vital that these facilities are carefully designed so that the form and function of the buildings occupying the land have a positive relationship with the surrounding public realm, as well as a positive relationship with each other. Well-designed education facilities such as these should bring dignity to the community they serve and inspire children to learn. To this end, a set of urban design guidelines have been prepared to provide guidance to architects and engineers when these facilities reach the procurement stage.

One of the key proposals contained in the guidelines is to minimize the space requirements of the proposed Primary School and Community Centre to create compact, efficient, easily maintainable facilities that take on an urban rather than suburban form. Buildings should be located on the street edge of the site, leaving a significant portion of public land available for additional development. It is proposed that this land be utilised for public housing (refer to **Figure 33**), which is a location that will promote spatial integration between the existing and new residential neighbourhoods.

Figure 33: Conceptual design solution for Focus Area 5

It is evident from **Figure 33** that the design concept for Focus Area 5 links into the existing movement network: Kenna Weg, Angelier Straat and Anemoon Straat all extend southwards across Gousblom Straat to provide access to the proposed new housing developments. It is further proposed that a pedestrian path be created to extend south from Angelier Straat between the Rhino Park sports complex and Primary School linking into the central "public heart".

Action project interventions

P5.1: Community Centre

A new Community Centre facility (including a multi-purpose hall, youth development facilities, elderly & facilities, outdoor play areas / sports courts, as well as administration offices) is proposed to occur to the north of land allocated for the development of a new Primary School (as chosen by the WCG's Department of Education) (refer to **Figure 33**). The need for a Community Centre in Piketberg was determined as part of the WCG's RSEP Programme and is a public-private partnership between the Bergrivier Municipality and PPC Cement. It is recommended that the architect appointed to design the Community Centre adheres to the urban design guidelines provided (refer to **sub-section 5.5**), including a positive relationship between the building and Calendula Straat (an example of such a building is the Red Location Museum in Port Elizabeth, **Image 23**).

Image 23: The Red Location Museum in Port Elizabeth was designed to ensure a positive relationship with the surrounding public realm

P5.2 & 5.5: Public housing

Piketberg currently has a significant housing backlog (according to the Bergrivier MSDF 2019, 1 967 people in Piketberg were on the housing waiting list as at June 2018). In an effort to reduce this backlog, as well as in an effort to increase thresholds and to reduce the relative cost of serviced land, it is proposed to develop medium density public housing in Focus Area 5. In order to create a varied and interesting urban environment, as well as to promote choice and surveillance, it is recommended that two distinctive housing typologies be accommodated, *viz.*:

- Courtyard apartment blocks (3 or 4-storey); and
- 2- or 3-storey semi-detached / row house units.

An example of courtyard apartment blocks is Drommedaris in Brooklyn, Cape Town (**Image 24a**). The project was a collaboration between WCG's Department of Human Settlements and two private sector housing agencies (the Social Housing Foundation and Communicare), and consists of 92 bachelor flats, 58 one-bedroom and 69 two-bedroom units. All units are rental stock available to people earning between R1 500 and R7 500 a month, with rentals ranging between R750 a month to R2 250, depending on the tenant's earnings and the size and finishes of the unit.

An example of semi-detached / row house units is Springfield Terraces in Woodstock, Cape Town (**Image 24b**), which consist of 133 units in the form of duplex on simplex and duplex on duplex semi-detached units, ranging from studio apartments of 27m² through to three bedroom units of 73m². The public spaces as a design element received considerable attention in the project, contributing significantly to the quality of the housing environment. Units were designed to surround and define spaces which were envisioned to become important social spaces, which effectively serves to extend the living space of the individual housing units, and in turn establishes a sense of ownership of external spaces.

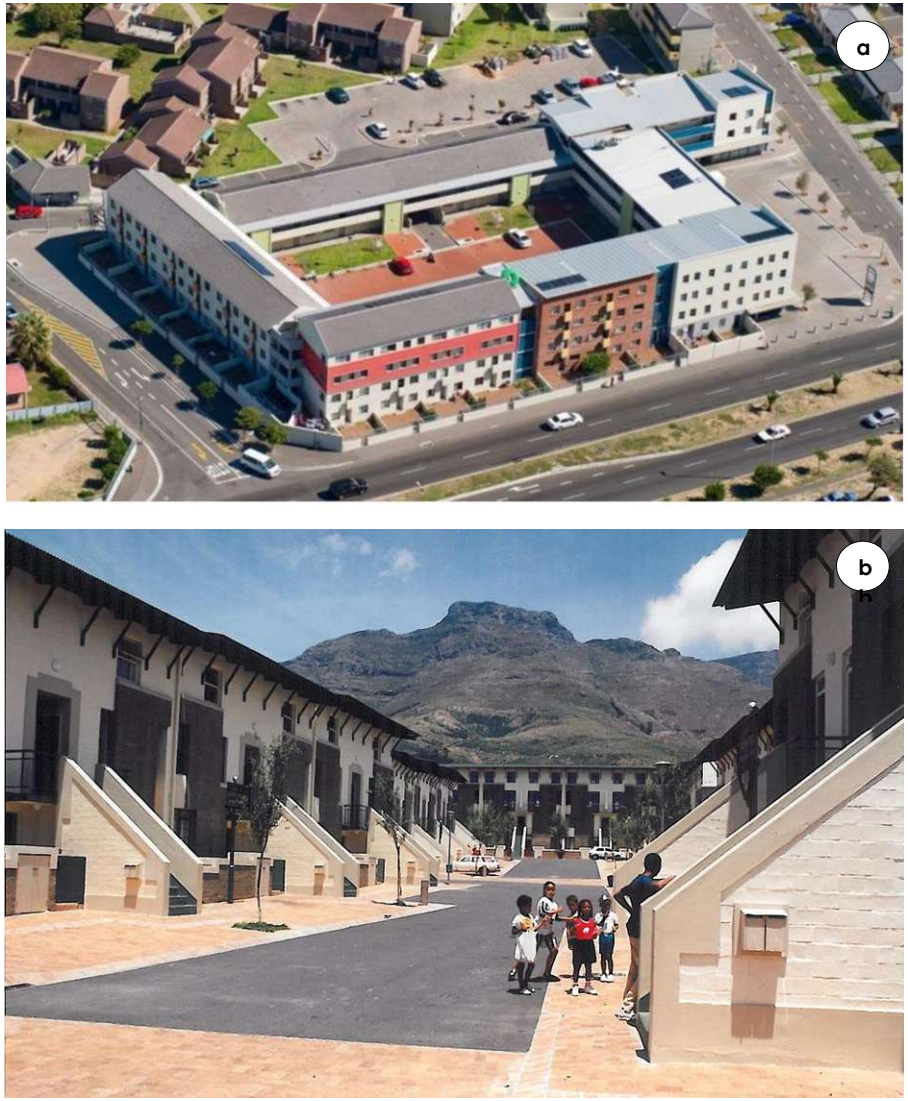


Image 24: Two housing typologies are proposed; courtyard apartment blocks (a) and semi-detached row house duplex units (b)

P5.3: Public pathway

The proposed pathway extending from Angelier Straat south into the central "public heart" (running between the Rhino Park sports complex and Primary School) will increase accessibility to public amenities for the residents of Steynville, as well as promote integration of the precinct as a whole. It is important that the new pathway features place-making elements such as paving, trees, lighting and seating (example in **Image 25**).

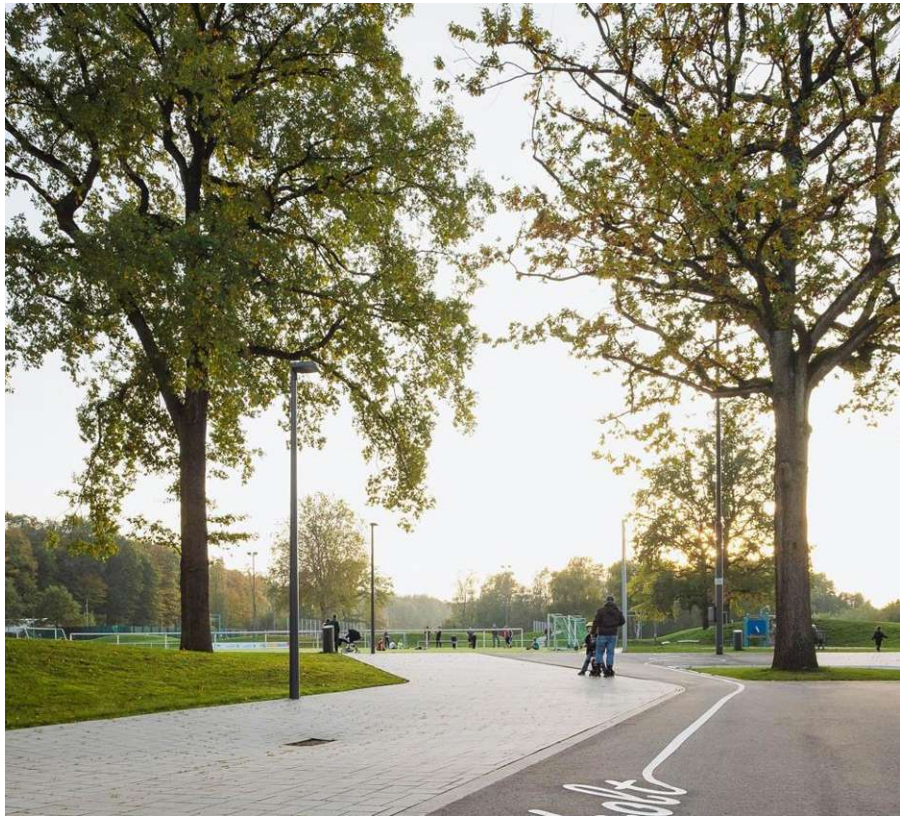


Image 25: The new public pathway running between the Rhino Park sports complex and Primary School should feature place-making elements such as paving, trees, lighting and seating

P5.4: Primary School

The new Primary School is located in a key strategic position in the precinct from a spatial planning standpoint because it:

- falls along a major structuring route (Calendula Straat);
- is positioned at the gateway into Steynville when entering from the new road link adjacent to Radie Kotze Hospital; and
- is located at the interface of three major public amenities, *viz.*:
  - the Rhino Park sports complex;
  - the open space in the central "public heart"; and
  - the Active Box and associated public space.

As a general principle, schools must be well-designed and contribute positively to the public realm. Given the new school's strategic location, it is especially important that this school is given careful and considered urban design attention. It is, therefore, imperative that the architect appointed to design the Primary School adheres to the urban design guidelines provided (refer to **sub-section 5.5**).

An example of a school that is designed to positively contribute to the public realm is Sinenjongo High School in Joe Slovo, Cape Town. The building is designed so that the entrance to the school faces directly onto the abutting public street, with place-making elements such as terracing steps and tree planting contributing to a positive interface with the street (**Image 26a**). Internally, the building is is arranged around a hierarchy of sheltered courtyards (**Image 26b**). The large shared courtyard allows for outdoor play and assembly of all children, while the smaller covered courtyards between the classrooms provide protection from the external elements and act as a social gathering space for children of various age groups. Further, the building relates positively to the on-site sports field. Overall, the school is an excellent example of a strong balance between form and function.

Image 26: Sinenjongo High School was designed so that it positively contributes to the public realm (a); the internal design is arranged around a hierarchy of sheltered courtyards (b)

5.3.7 Focus Area 6: area between the cemetery / cricket oval and the N7 freeway

Focus Area 6 focusses on the vacant, mostly publicly owned land between the cemetery / cricket oval and the N7 freeway, as illustrated in **Figure 34**.

Figure 34: Focus Area 6 within the context of the study area

The problem

This vacant land is currently underutilsed. Further, the land is sterile and presents a poor visual interface with the adjacent N7 freeway, and consequently Piketberg appears uninviting to visitors and potential tourists (**Image 27a**).

In addition, the land currently forms part of an important NMT route between Steynville and the commercial / industrial activity /employment node to the east of the N7. However, the informal route is not safe because it has no surveillance (**Image 27b**),and the crossing of the N7 itself is extremely dangerous for pedestrian and motor vehicles alike.

Image 27: The vacant land between the N7 and the cricket oval is sterile and presents a poor visual interface (a); the pedestrian pathway between Steynville and the N7 crossing (b)

The solution

The following interventions are proposed for Focus Area 6:

a. Develop vacant, underutilised land with medium density social housing (e.g. 2 - 3 storey walk-up apartments).

b. Create a formalised pedestrian route from Gousblom Staat to a safe NMT bridge crossing over the N7 (visually permeable route with lighting).

c. Facilitate the development of a pedestrian footbridge over the N7 (in collaboration with SANRAL).

d. Create visually complex edges to the N7 around the entrance to Piketberg to help slow down traffic for NMT crossings (e.g. development of 2-3 walk-up apartments; tree planting).

The design concept for Focus Area 6 is shown in **Figure 35**.

Figure 35: Conceptual design solution for Focus Area 6

Action project interventions

P6.1: Upgrade NMT route between Steynville and the N7 crossing

The NMT route between Steynville and the preferred crossing point of the N7 freeway is currently informal. A particular issue is that there is no lightning, which means that it is currently very unsafe for people to walk this route at night or early in the morning. It is proposed to upgrade this NMT route with new paving and lighting, as well as other place-making elements such as tree planting and seating (**Image 28**).

Image 28: Formal NMT route with place-making elements

P6.2: Construct a pedestrian bridge over the N7 freeway

A large number of pedestrians cross the N7 between Steynville and the urban area to the east of the N7 (e.g. Winkleshoek and industrial development). However, there is currently no formal crossing of the N7 and so this crossing is very dangerous. It is therefore proposed that the Berg River Municipality enters into negotiations with SANRAL to construct a new pedestrian bridge over the N7. Other similar examples can be found on the N2 outside of Plettenberg Bay (**Image 29**) and on the N2 in Somerset West.

Image 29: Pedestrian bridge crossing the N2 outside Plettenberg Bay

P6.3: Introduce traffic calming measures along the N7

The N7 highway by nature is a mobility route accommodating fast moving traffic. The design of the road does not accommodate pedestrian movement, nor does its design indicate an entrance to a tourist worthy town. It is therefore proposed that traffic calming measures are introduced along the N7 around the Piketberg entrance. By creating more visually complex edges to the highway through tree planting and physical measures such as painted road markings (example shown in Image 26), traffic is slowed down to make it safer for at-grade pedestrian crossing at the N7 circle and surrounds.. These traffic calming measures as well as bold and playful signage located on the N7, signal to visitors the entrance to the town (see **Image 30**).

Image 30: Road markings on major throughfare roads result in slower moving vehicles, which can in turn lead to motorists taking more interest in their surroundings

P6.4 & P6.5: Public housing

Vacant land to the east of the cemetery and cricket oval abutting onto the N7 should be considered for additional public housing. It is recommended that 2-storey or 3-storey semi-detached row house duplex units be developed adjacent to the cemetery, with courtyard apartment blocks being located adjacent to the cricket oval (refer to **Figure 35**).

5.4 Additional Positive Interventions

While the proposed interventions within the six focus areas are considered priority projects, the interventions listed below will also have a positive impact on the town and should be considered for future investigation / implementation (the items listed below correspond to the items shown in **Figure 36**):

a. Create a northern gateway into Piketberg

The northern entry into Piketberg located along the R366, which is the entrance into town for visitors from Piket-Bo-Berg, Elandsbaai and Lambertsbaai, is currently poorly defined and unwelcoming (**Image 31**). A more welcoming northern 'gateway' will not only serve to reinforce the spatial structure of the town, but will also help to create a better first impression for travelers and tourists entering the town from the north.

Image 31: The current northern gateway into Piketberg is uninviting

b. Extend Watsonia Straat to intersect with Lang Straat

By extending Watsonia Straat to intersect with Lang Straat, the spatial structure of the northern part of Piketberg will be reinforced and new housing developments will be connected to higher order roads in the movement network (thus promoting spatial integration).

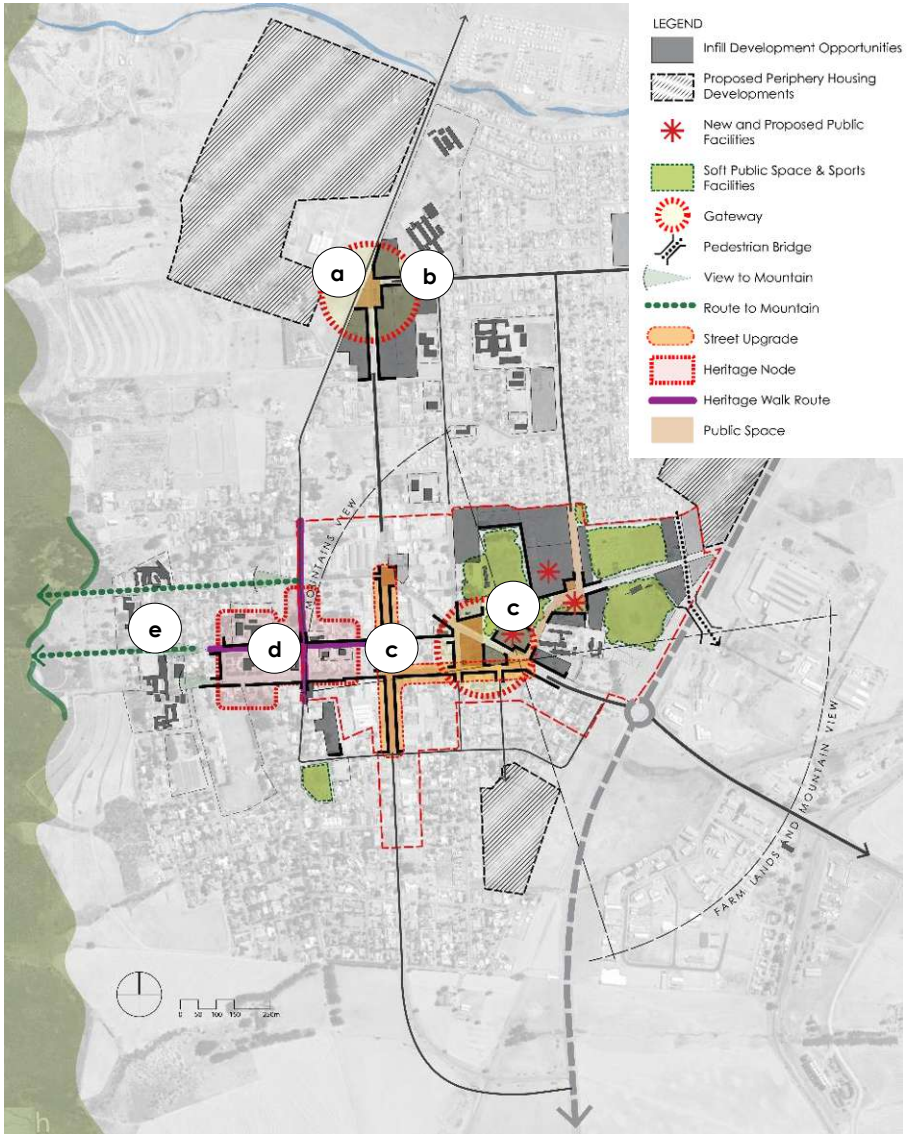


Figure 36: Additional positive interventions in Piketberg

c. Establish an annual festival or regional sporting event

Tourists who visit small towns such as Piketberg are looking for a small-town experience. Cultural events such as an annual festival or regional sporting event (e.g. a mountain bike race) are examples of unique experiences that can attract tourists to Piketberg. Not only do these events attract tourists, but they also provide opportunities for entrepreneurs and small local businesses to sell their products. In addition to attracting tourists to the town and promoting local businesses and their products, the benefits of such events mirror those of a public market (refer to P2.7 on pg. 38).

Two potential locations for such events to occur are Lang Straat (the street could be closed to accommodate the event) or in the open space associated with the central "public heart" (refer to **Figure 36**).

An example of a successful cultural event involving street closures is "First Thursdays", which is an event held on the first Thursday of every month in the Cape Town CBD. A key emphasis of the event is on walking the streets of Cape Town so as to change the concept people have of the CBD (i.e. streets are closed to traffic so that pedestrians can "reclaim" the streets). The event takes place between Wale and Strand streets, including Cape Town's fashionable Bree Street, where restaurants and bars spill out into the streets to create a festival atmosphere (**Image 32**).

Establishing a cultural event in Piketberg could potentially have many benefits for the town, but in order for the events to be successful it is important that the local community, in collaboration with the Bergrivier Municipality, conceptualises the events based on its own values, resources and the estimated benefits so that the event is the right "fit" for the town.

Image 32: Bree Street in the Cape Town CBD is closed o traffic for the monthly 'First Thursdays' event

d. Enhance the heritage core

Although features are already in place to celebrate the heritage core of the town (e.g. the museum and associated 'heritage walk'), more can be done to enhance the heritage core, including introducing contemporary signage and pedestrian upgrades to Kloof, Kerk and Voortrekker Straat.

e. Promote better access to the mountain

Having a mountain on its doorstep should be a competitive advantage for a town like Piketberg. However, there is currently limited access onto the mountain from the town centre and a very limited number of trails for outdoor activities such as hiking, trail running and mountain biking. It is therefore suggested that the Municipality explore the opportunity to create high quality trails that are easily accessible

from the town centre. Once these trails are established then Piketberg can tap into the ever-expanding tourism market associated with trail running and mountain biking. Nearby Piket-Bo-Berg has done just this and, in the space of just a few years, has become a burgeoning destination for trail running and mountain biking enthusiasts (**Image 33**).

Image 33: The mountains above the town have potential to attract outdoor sports enthusiasts, including mountain bikers

5.5 Urban Design Guidelines

5.5.1 Introduction

The proportion, scale and interface conditions of buildings can contribute to a number of factors that make a place more liveable, pedestrian scaled, vibrant and safe. The orientation and design of buildings can create and define spaces, with the primary role of all buildings to clearly delineate public and private space. Further, the quality of public spaces that surround buildings has an impact on the quality of the urban environment, which in turn dictates the sense of place of the urban environment.

The purpose of the urban design guidelines is to define and develop an appropriate design language for the various built elements of the precinct, as well as the public realm surrounding the buildings. The guidelines are not intended to be overly prescriptive, but are rather general guidelines aimed at promoting a built form and standard of public spaces that will facilitate the creation of a high quality urban environment, while at the same time being appropriate and sensitive to the local context.

5.5.2 General Built Form Guidelines

The general built form guidelines apply to the following aspects:

- development blocks;
- height;
- building placement; and
- interface and street frontage.

Development blocks

In order to create a flexible development block which can accommodate growth over time and a number of uses and activities, the following guidelines apply:

- Block widths should be a minimum of 30m wide to accommodate erven that back onto each other, thus ensuring no back yards front onto streets or open spaces; and
- Blocks should be a maximum length of 90m to ensure ease of pedestrian access and movement through the precinct.

The block sizes themselves are flexible, as long as they fit within the suggested parameters (refer to **Figure 37**).

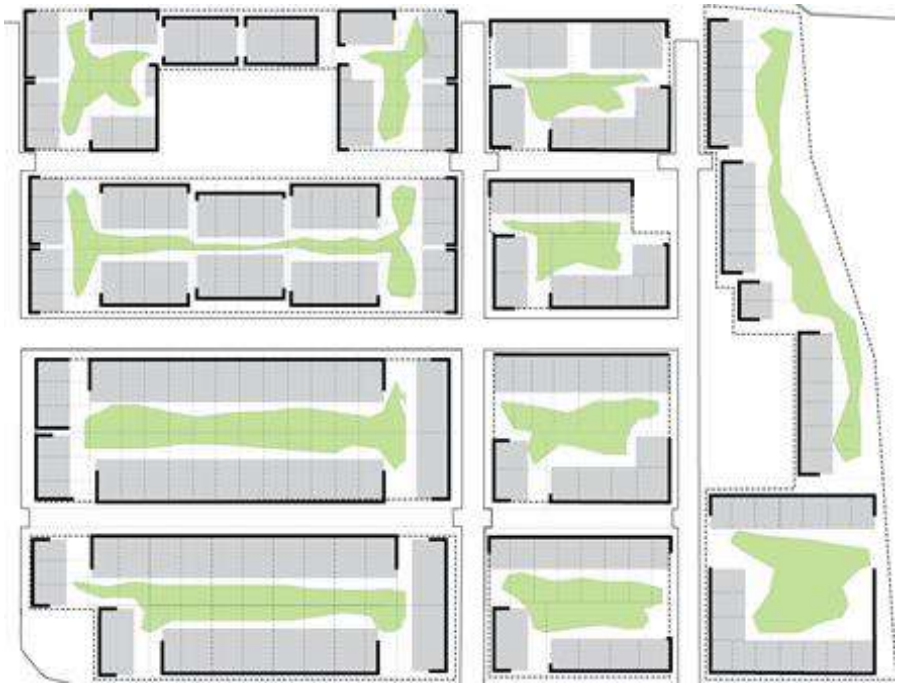


Figure 37: Flexible block sizes allow for a range of housing typologies

Infill development proposed in development concept for the precinct (e.g. public housing infill proposed as part of Focus Area 5, refer to **Figure 33**) is based on a typical block ranging between 30m – 50m in width and no more than 100m in length. These block sizes have been selected to accommodate a range of housing typologies of varying density and height, such as courtyard apartment blocks and 2 – 3 storey semi-detached row houses as proposed in the Precinct Plan.

Height

General building height in an area contributes decisively to the its character: it determines the scale of buildings, the enclosure of the street space / public realm, and also directly has an impact on the density of development and the intensity of an area. Piketberg is a rural town with a rural character and therefore existing building heights are modest (generally 1- or 2-storeys, with odd buildings reaching 3-storeys in the CBD).

As a general rule, the height and scale of new development in the precinct should respect, respond and contribute to the existing character of Piketberg. This means that the height of future development should aim to preserve and/or enhance the relationship of the town with the surrounding rural landscape, including the Piketberg Mountains (e.g. heights must be carefully managed to avoid intrusion into views of the mountain). Notwithstanding, new development should enhance the sustainability of the town: the distribution of new development, its form, scale and height, should aim to establish a more sustainable development pattern by relating density and uses to accessibility and provision of infrastructure. Of course, building heights in relation to residential development is also a factor – it follows that the higher development is, the more units can be provided.

With these factors in mind, recommended heights for proposed new development in the precinct ranges between 2 – 4 storeys in height (refer to **Figure 38**). When deciding on final height of buildings, the following aspects should also be considered:

- micro-climate (e.g. sun, shade and wind);
- landmark elements (e.g. corners of landmark buildings such as the gateway building located in the central "public heart" can be landmark elements that are higher than the remainder of the building).

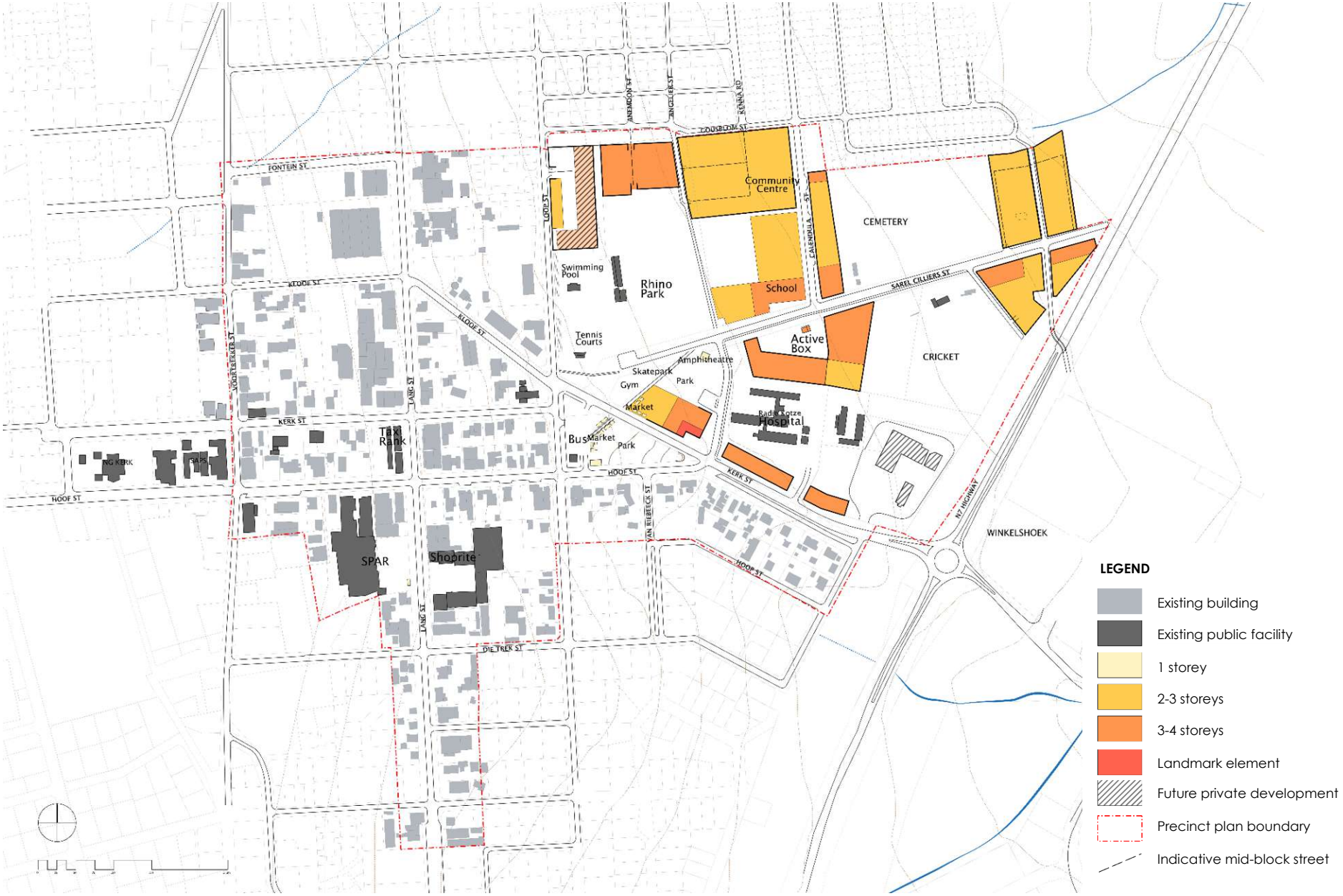


Figure 38: Recommended height for new development within the precinct

Building placement

The placement of buildings on an individual property has a significant impact on the public environment. Buildings that are located in the centre or to the back of a property provide little to no sense of enclosure to the street or space, as well as limited surveillance opportunities overlooking the public realm.

In order to create a positive urban environment with define and surveilled streets the following guidelines are recommended:

- Position buildings to the front of plots along the street edge (**Figure 39a**).
- Establish setback lines of no more than 2m from the street boundary (**Figure 39b**).
- Ensure continuity of the street edge: at least 70% of the building footprint should be placed on or within 2m of the street fronting property boundary to ensure street and space enclosure and continuity in the street façade.
- Building entrances should be placed on the street front.
- Ensure that buildings are configured to enable development to front onto and define the public realm and for secondary, service and private functions to be located to the backs of plots.
- Allow for a gradation between public and private space, by designing semi-private interfaces through the use of raised terraces, colonnades and landscaping where appropriate.
- For both residential and commercial/retail uses, locate parking to the rear of the plot with the building along the street edge (**Figure 39c**).

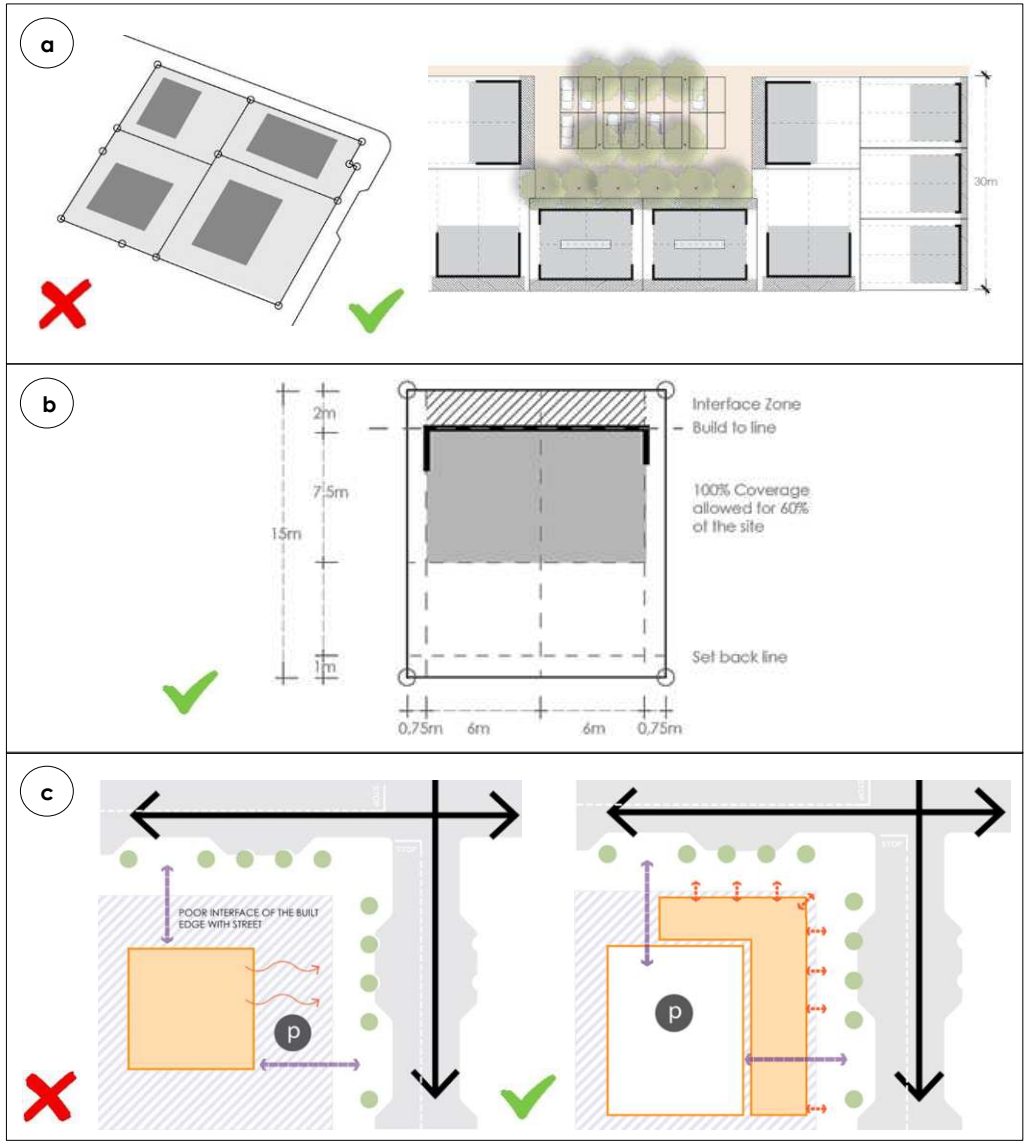


Figure 39: Building placement guidelines – position buildings to optimize space (a); setback lines of no more than 2m from the street (b); and locate parking to the rear of the plot away from the street

Interface and frontage

The interface between the public street space and the development that edges it is fundamental to the functioning and success of the street, which in turn impacts the social, economic and environmental functioning of the place overall. Built form that has a positive interface with the public realm helps to promote safety through surveillance and a sense of place. To create a positive public realm, the following guidelines should be applied:

- Bring life to the street by maintaining visual connections between inside and outside, especially in the frontages of public buildings.
- Perimeter fences should be kept to a minimum, but when unavoidable fences must be visually permeable (ClearVu fencing is preferable to palisade fencing, see **Figure 40a**).
- Building facades fronting onto the public realm should be visually active (a building is considered "visually active" if 30% or more of the frontage features such as windows, doors, transparent walls and accessible open space) (**Figure 40b**).
- The use of level changes is useful to demarcate between the public and private realm: front stoeps, steps, low walls, colonnades, overhangs and planting are all elements which can be used to create a sense of privacy from the public street, whiles still providing surveillance (**Figure 40c**).
- Provide protection from the elements with overhangs, colonnades, shading elements and strategic tree planting (**Figure 40c**).
- In multi-storey residential buildings, balconies should be incorporated to ensure that there is passive surveillance overlooking the public realm (**Figure 40c**).

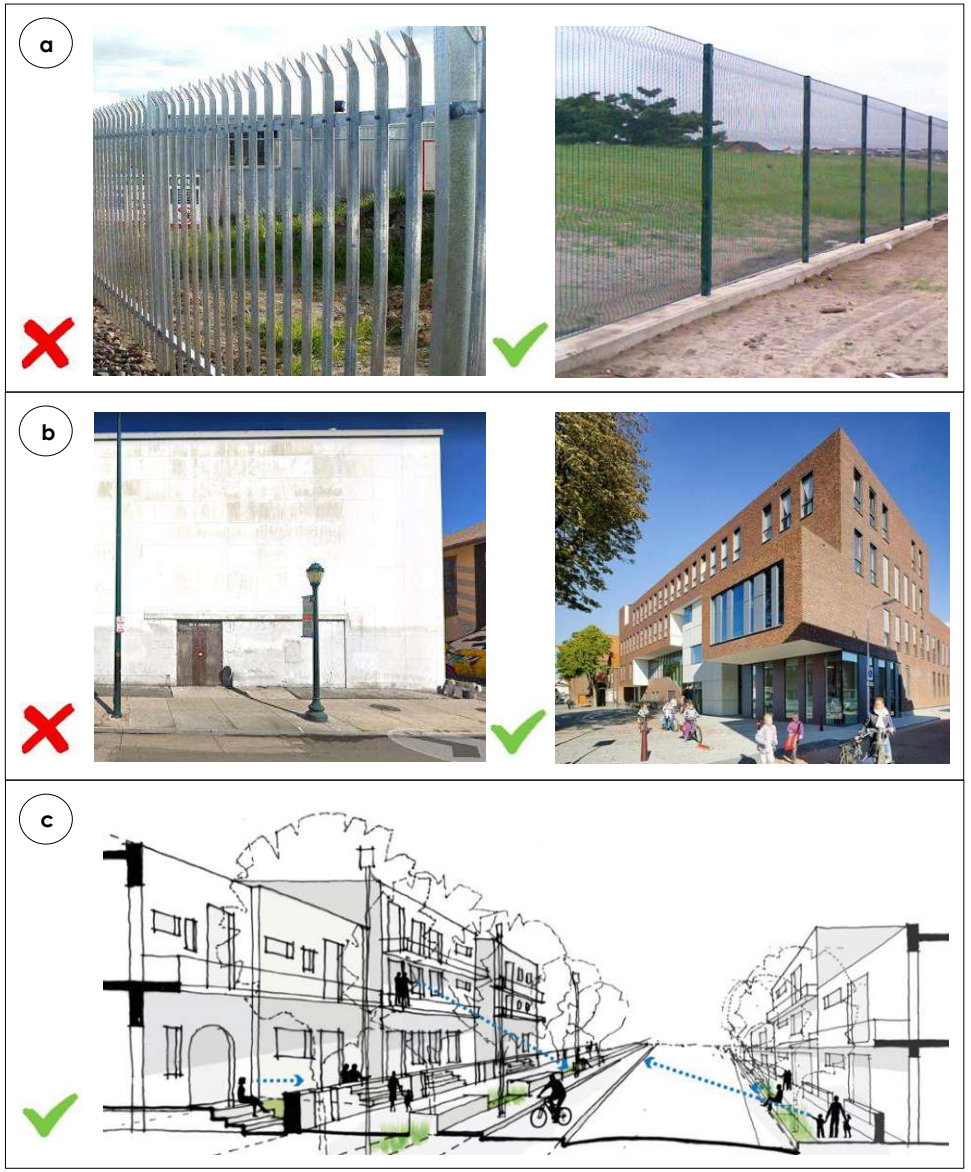


Figure 40: Interface and frontage guidelines – ClearVu fencing is preferable to palisade fencing (a); promote active facades (b); and make use of elements such as front stoeps, overhangs and colonnades (c)

5.5.3 Specific Built Form Guidelines

A. Public facilities

Public facilities are special, landmark buildings within a town, aiding in activating and defining the public realm and creating a sense of place. They are places for communities to gather in a safe and secure environment. The design of these buildings should therefore be of high quality with a strong identity. The following guidelines apply to the public facilities within the precinct:

- A mixed-use approach should be taken whereby facilities are clustered to support the sharing of resources and optimisation of space (**Figure 41a**).
- The perimeter of public facilities should ideally be made by buildings (rather than fences) to establish a secure and low maintenance perimeter and active street edges (**Figure 41b**).
- Create a series of internal, surveilled courtyards and play areas defined by buildings.
- Ensure a transition between public and private: locate the most public components (e.g. hall, cafeteria's, reception lobbies etc.) at the entrance to allow some areas of the facility to be more open to the public than others, ensuring security when required.
- Façades must be positive and engaging to ensure an active, safe public environment.
- Minimise solid walls and 'dead' edges by creating visually permeable facades.
- Make use of varied colour palette and public art to assist in creating landmark buildings (**Figure 41c**).
- Perimeter boundary walls are discouraged, but if they are required then low walls of up to 0,8m high are encouraged, but if necessary, walls can reach a maximum height of 1.8m (but must be visually permeable once exceeding 1m in height).

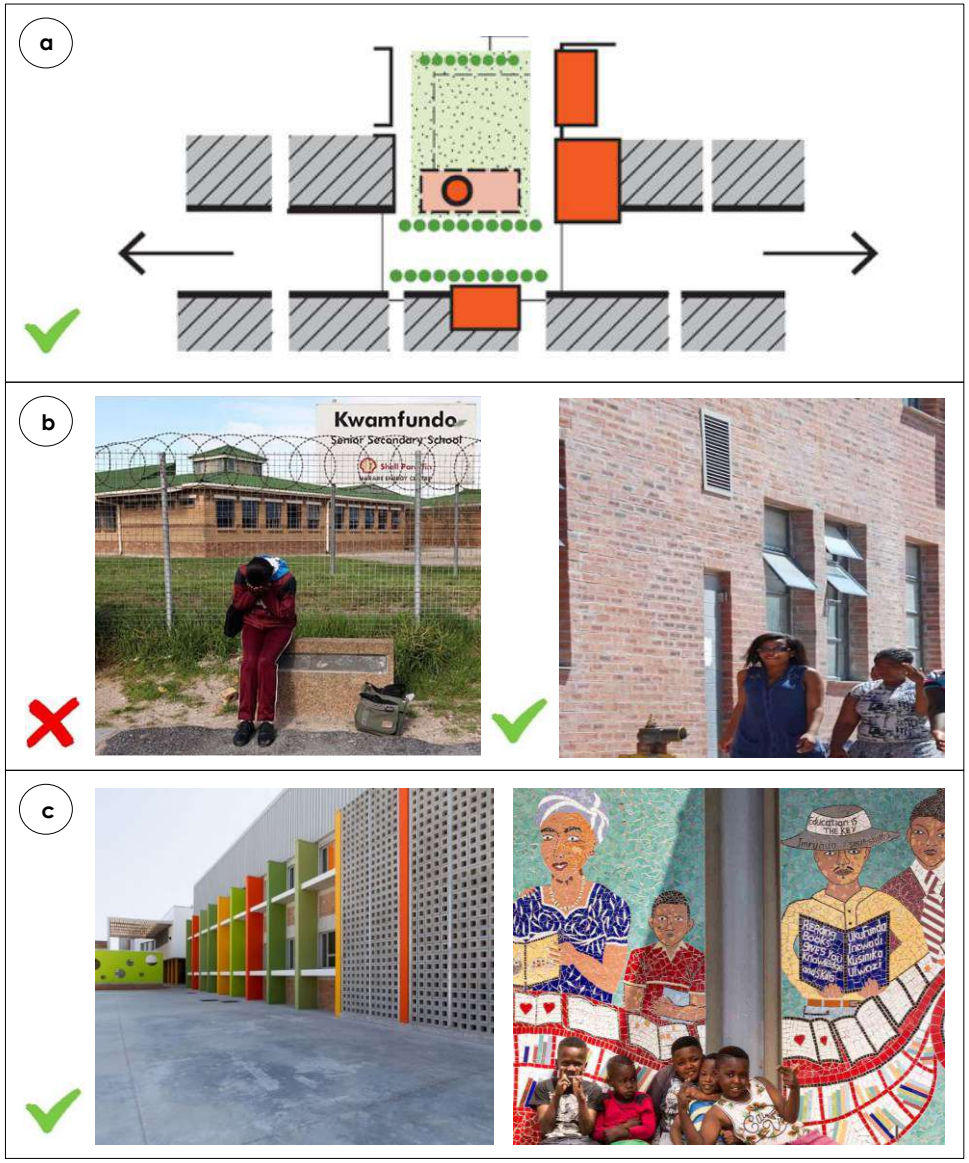


Figure 41: Specific guidelines for public buildings – cluster facilities to promote sharing (a); edges of plots should be made by buildings rather than fences (b); and use colour and public art to create a landmark building (c)

B. Public housing

Three flexible residential housing typologies are proposed within the precinct, *viz.*:

- Courtyard apartment blocks (2 – 4 storeys);
- 2-storey or 3-storey semi-detached row house duplex units; and
- 2-strorey Live-Work units.

These typologies are robust and flexible, enabling growth over to occur over time. Further, these typologies provide a variety of choice and tenure. Each typology is unpacked below.

Courtyard apartment blocks

The 2 – 4 story apartment block typology takes the form of a perimeter building creating an internal multi-purpose courtyard (refer to example in **Image 22a**). The following guidelines apply to this typology:

- The block is a minimum width of 50m and maximum length of 90m.
- Building depths range from 12 – 20m metres.
- The courtyards accommodate both parking and play with a minimum of 30% of the area accommodating soft landscaping.
- The buildings can accommodate ground floor commercial uses as well as residential dwelling units.
- Wherever possible balconies should be included to create overlooking features and increase safety through surveillance.
- Perimeter block buildings facing onto the street should have a maximum ground floor setback of 2m from the street edge. Above ground, buildings can overhang to the property boundary.
- A variation in heights of the block is encouraged (2 – 4 storeys), as well as variation in the façade treatment.

Semi-detached / row house units* and *Live-Work units

The 2 – 3 story simplex or duplex units are located on a roughly 18m x 6m site and work as either a pair of semi-detached units (**Figure 42a**) or a row of units (**Figure 42b**) (either simplex or duplex).

Figure 42: Conceptual illustrations of semi-detached duplex units (a) and row house duplex units (b)

The 2 – 3 storey shophouse is a mixed-use typology with an option for a shop on the street edge on the ground floor of the unit and residential above (**Figure 43a**). These units can be developed as row house units in a combination of different formations to avoid monotony and variation in spaces (**Figure 43b**).

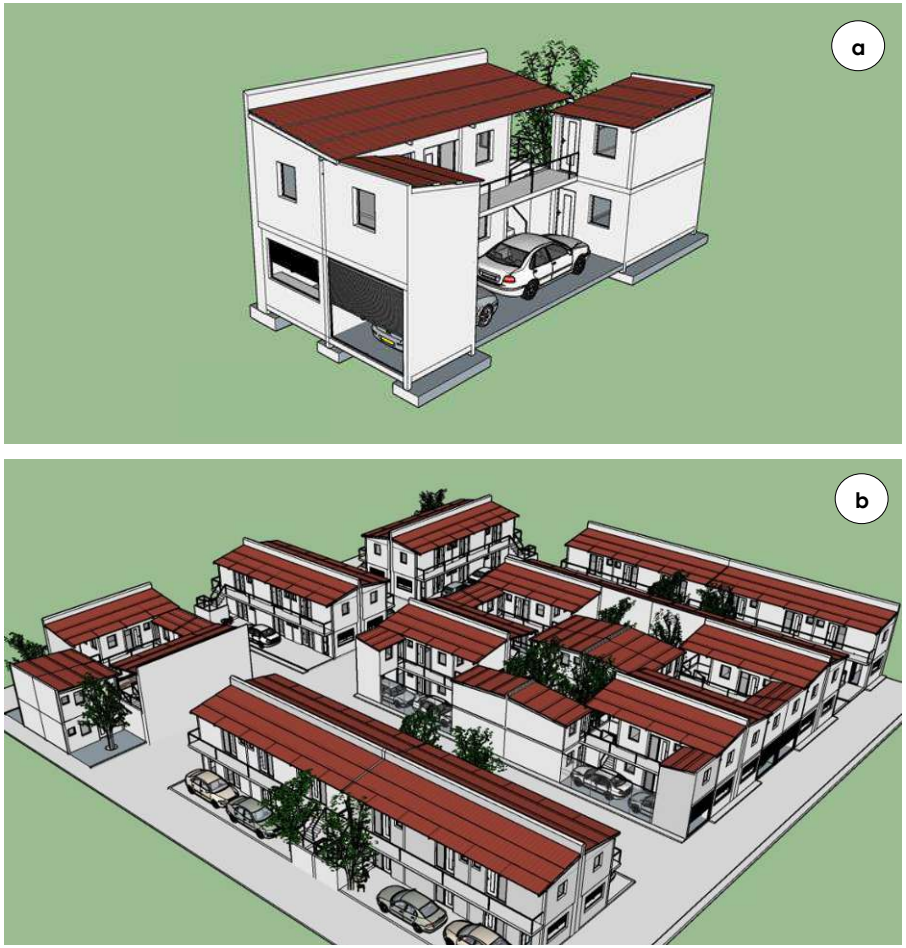


Figure 42: Live-Work units allow for a shop on the street edge on the ground floor of the unit and residential above (a) can be developed as row house units in a combination of different formations (b)

The following guidelines apply to the semi-detached / row house and Live-Work units typologies:

- The block is a minimum width of 30m and maximum length of 90m.
- Long, thin sites must be favoured over short, fat sites to maximise services and create continuous street frontages.
- The maximum ground floor setback from the street edge is 2m, but above the ground floor the units may hang over to the property boundary, thus creating a colonnade or overhang.
- Wherever possible balconies should be included to create overlooking features and increase safety through surveillance.
- A variation in heights along the of the block is encouraged as well as variation in the façade treatment.
- Shared staircases allow for duplex units to be created (in the case of semi-detached / row houses) or allow for access to the shop and home separately (in the case of Live-Work units).

C. Public toilets

The following guidelines apply to the new public toilets:

- Locate public toilets strategically in active areas (e.g. where people sit and wait for public transport) to increase convenience and to benefit from natural surveillance by the community.
- Avoid placing toilets in areas where visibility is reduced (e.g. behind fences, walls and bushes).
- Use robust materials to reduce maintenance costs and add longevity to the buildings.
- Use simple design and locally available materials.
- Include storage / locker spaces for storage of shopping bags.
- Access to toilets should be at grade or have ramp access to provide accessibility for disabled persons.

5.5.4 General Public Realm / Landscaping Guidelines

The public realm within the precinct (e.g. streets, landscaped open spaces, parks, plaza's and other public areas) provide an opportunity for the expressions of its 'sense of place and for an appreciation of its local character. General guidelines in relation to the public realm are listed below:

- All streets and public spaces should be visibly unified and have a cohesive rhythm created by landscape elements (e.g. paving, trees, furnishings, lighting and signage / wayfinding) (**Figure 44a**).
- Street furnishings, trees and amenities should not clutter the public realm and pedestrian environment, but rather occupy consistent, well-defined zones parallel to the pedestrian walking zone (**Figure 44b**).
- Maintenance, safety and comfort should be primary considerations in the type, design and placement of street furniture and landscape elements.
- Adequate quantities of street furniture should be evaluated and used in all public areas, including seating, bicycle parking, lighting and rubbish bins.
- Landscape elements should represent a common design language and style that improve the legibility and continuity of the public realm throughout the precinct (**Figure 44c**).
- Tree planting, seating, paving patterns, signage and lighting should be used to further accentuate the human scale of the urban environment.
- Systematic placement of landscape elements and furniture in the public realm should contribute to a clear, unified and legible language of landscape elements.
- Materials used should respond to climatic conditions, be durable and vandal proof.

Figure 44: General guidelines for the public realm – landscaping elements should be visually unified (a); street furniture and trees should not clutter the pedestrian environment (b); and a common design language improves continuity of the public realm (c)

5.5.5 Specific Public Realm / Landscaping Guidelines

Specific elements to be considered in the design and definition of the public realm relate to the following:

- Hard landscaping;
- Soft landscaping;
- Lighting;
- Seating; and
- Signage.

The collective role of these various elements is to contribute to the active use of the public environment and enhance the quality and comfort of these spaces by inter alia:

- Accentuating the human scale;
- Providing a play, socilaise and relax;
- Providing shelter and shading; and
- Providing information, direction and wayfinding.

The specific guidelines below define a 'minimum' set of requirements for each landscape element that forms part of the design language for the precinct.

A. Hard landscaping

The treatment of hard surfaces (e.g. streets, pavement, pathways etc.), as well as the differentiation between the different surfaces, plays a vital role in defining the public realm and establishing continuity of the urban environment. The hard landscape elements should:

- Use robust, functional and permeable materials where possible (the latter for the purposes of effective stormwater management).
- Use different materials, texture and colour to differentiate between hard surface functions, improve place-making aesthetics, contribute to way finding within the precinct and enhance pedestrian safety (**Figure 44a**).
- Use hard landscaping (e.g. paving) as traffic calming measures to create pedestrian priority areas, especially when crossing streets and high vehicle traffic areas (**Figure 44b**).
- Use materials that are non-slip and avoid kerbs, steps and uneven surfaces where possible to allow maximum accessibility for all users.

Figure 44: Specific guidelines for hard landscaping – use different materials, texture and colour to differentiate between hard surface functions (a); and use paving as a traffic calming measure (b)

B. Soft landscaping

Soft landscaping (i.e. vegetation and grass) has a vital role to play in the urban environment in terms of softening spaces, creating shade and contrast. Trees and planted elements can contribute greatly to the attraction and character of a space. Guidelines in relation to soft landscaping are listed below:

- Plant indigenous / water wise trees and plants to reduce maintenance and irrigation needs.
- Retain existing trees wherever possible as they provide critical shade to urban street scape and public open space.
- Introduce trees and greening where possible and appropriate to create shade, define space, improve place-making aesthetics and soften the urban environment.
- New trees adjacent to streets should be selected from the species listed below based on appropriateness (e.g. prevailing urban environment; place-making quality; micro-climate etc.) (refer to **Image 33**):
  - *Harpephylum caffrum;*
  - *Celtis africana / C. sinensis;*
  - *Quercus ilex;*
  - *Syzygium guineense;*
  - *Platanus acerifolia;*
  - *Afrocarpus falcatus;* and
  - *Ficus rubignosa*
- New trees in open spaces (e.g. parks, urban squares etc.) can consist of the species listed above, as well as the additional species listed below (refer to **Image 34**):
  - *Quercus nigra;*
  - *Quercus palustris;*
  - *Syzygium cordatum;*
  - *Ficus natalensis;*
  - *Ficus microcarpa;* and
  - *Erythrina caffra*.
- Trees should be planted where sufficient space is available and where there are no underground services.
- Tree should be placed, staked and planted as per the as per details shown in **Figure 45** (recommended size for new trees is 100ℓ-200ℓ bag size, to be sourced from local tree nursery).
- Ideal spacing of trees along street sidewalks is 5-7m, and planted in clusters/groupings in open spaces.

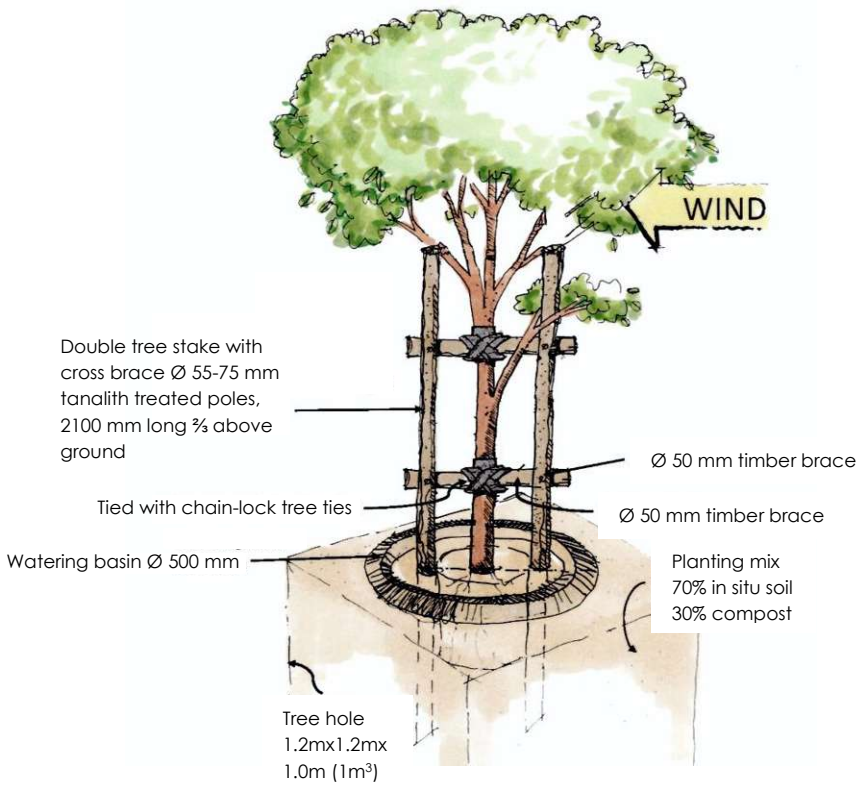


Figure 45: Recommended tree planting and staking arrangement

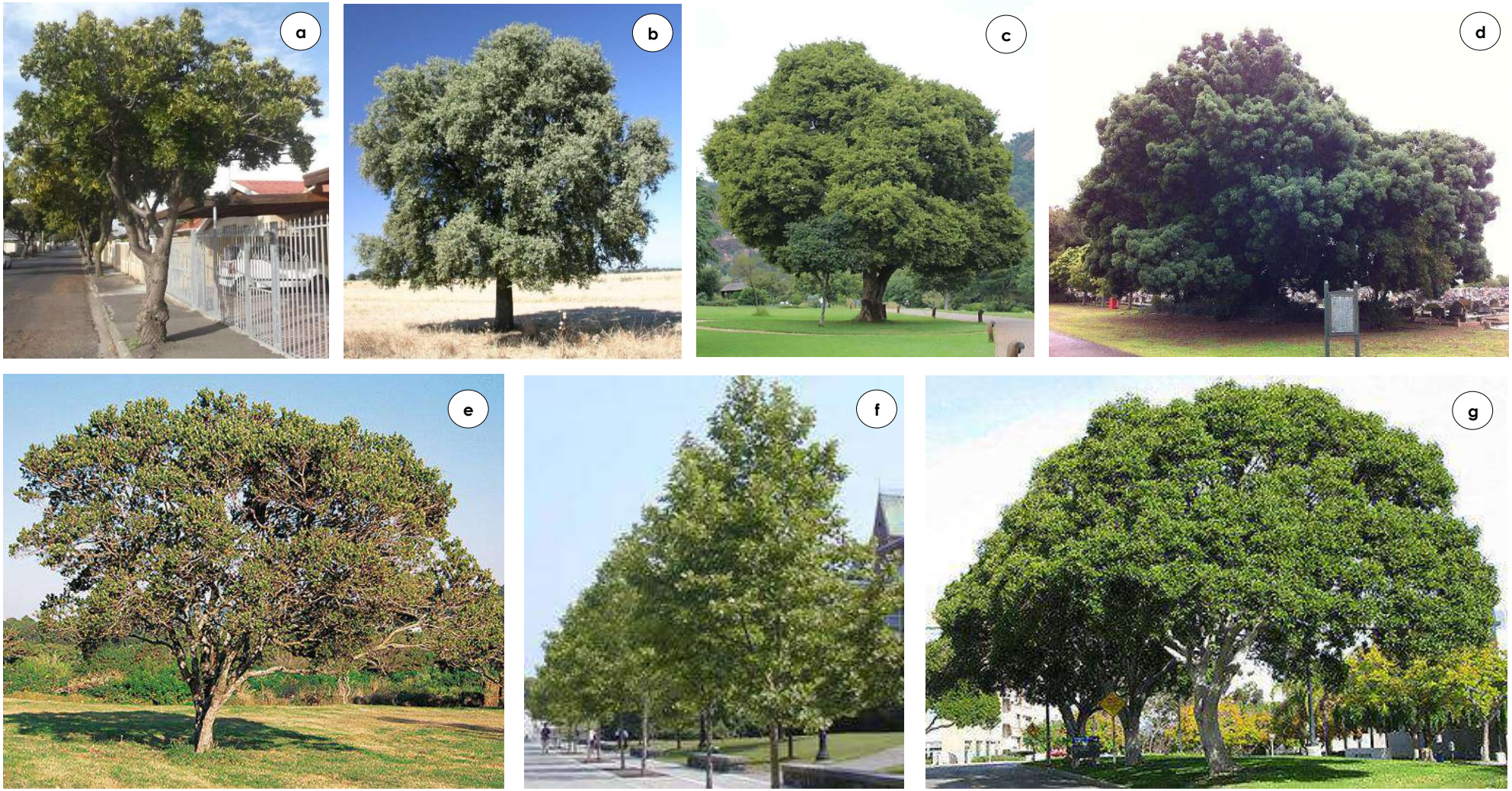


Image 33: New tree species to be planted adjacent to streets – *Harpephylum caffrum* (a); *Quercus ilex* (b); *Celtis Africana* (c); *Afrocarpus falcatus* (d); *Syzygium guineense* (e); *Platanus acerifolia* (f); and *Ficus rubignosa* (g)

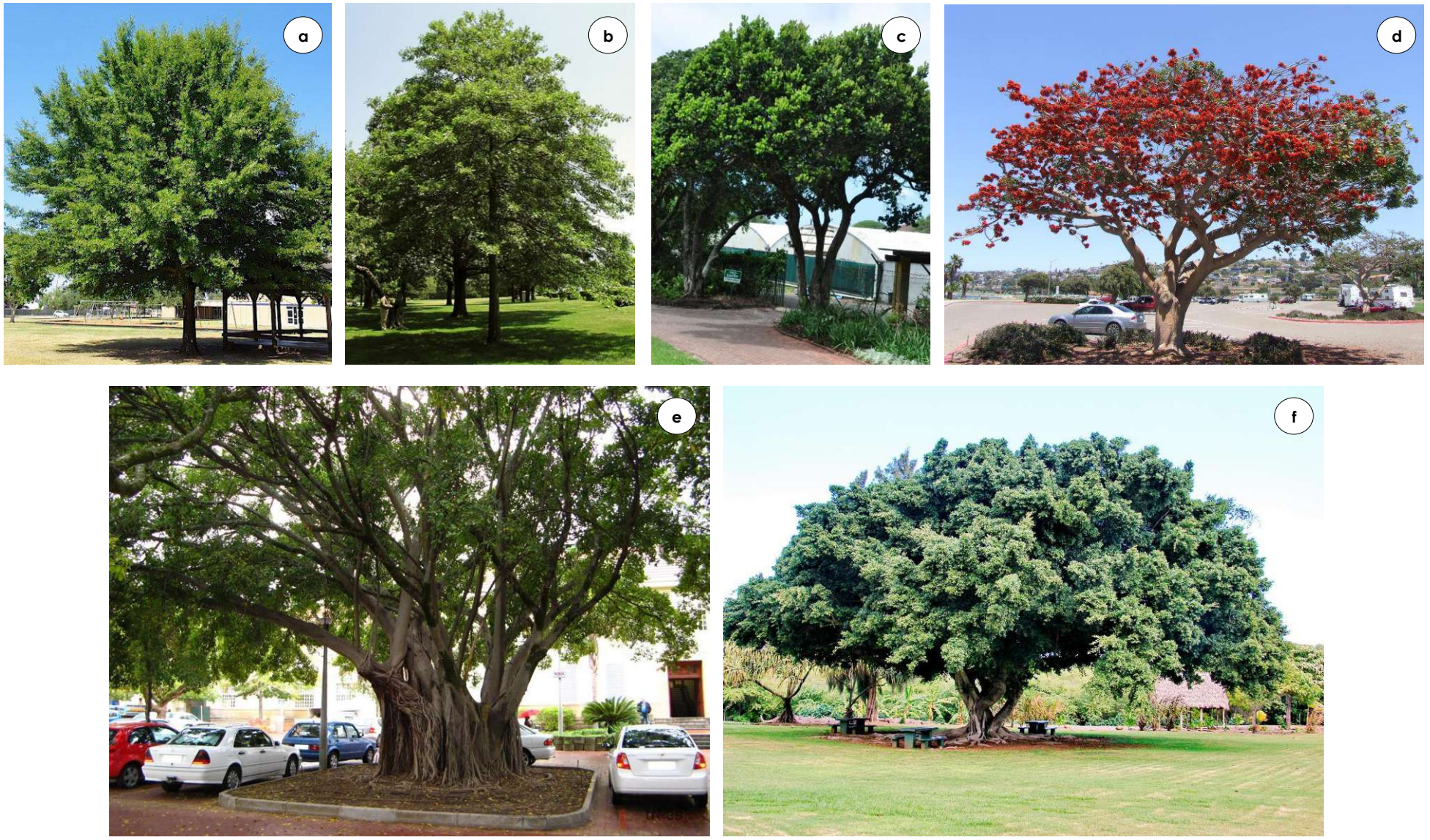


Image 34: New tree species to be planted in open spaces (in addition to those recommended to be planted adjacent to streets) – *Quercus nigra* (a); *Quercus palustris* (b); *Syzygium cordatum* (c); *Erythrina caffra* (d); *Ficus natalensis* (e); and *Ficus macrocarpa* (f)

C. Lighting

Lighting should ensure that primary streets, pathways and public spaces are well illuminated during hours of darkness to ensure visibility and enhance safety in the public realm. Guidelines in relation to lighting are listed below:

- Lighting to be integrated into the public realm to promote comfortable, safe pedestrian activity at night, as well as provide aesthetic appeal (**Figure 46a**).
- Lighting should be appropriately designed for the function of the space (i.e. the light fitting and lamp will differ depending on whether the type and nature of the public realm element).
- Light posts should wherever possible be scaled to the pedestrian (**Figure 46b**).
- Edges of a parks and public plazas should be well lit as this will help define and identify the interior space.
- Illuminate public facility buildings and building entrances to increase safety and security of these facilities, as well as to identify these buildings as places of prominence (**Figure 46c**).
- Ensure public transport facilities (e.g. bus stop and taxi rank) are well lit so that users of these services feel secure.
- Reduce energy consumption by opting for energy saving light fittings and timing of lighting levels.
- Lighting should be positioned and designed to eliminate overwhelming glare or light pollution into adjacent properties.

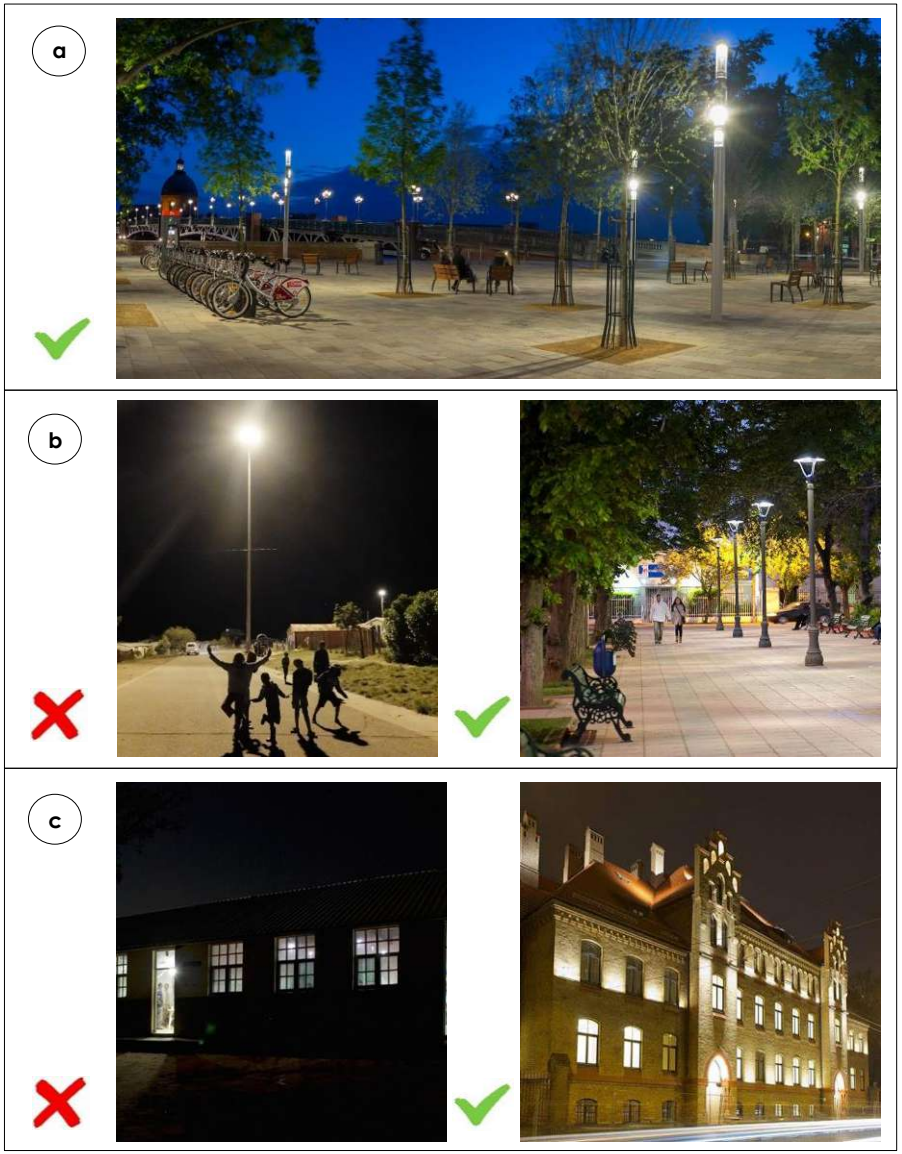


Figure 46: Specific guidelines for lighting – promote comfortable, safe pedestrian activity at night (a); scale lighting to the pedestrian (b); and illuminate public facility buildings and building entrances

D. Seating

Seating is for everybody and should be appropriately distributed within the precinct, with an overall aim of offering a welcoming place for people to socialize and/or relax. The following guidelines apply to seating within the precinct:

- Seating should be simple in design and cost-effective, as well as robust, durable and vandal proof.
- Seating should, wherever possible, be built into the public realm using materials such as concrete (i.e. materials that can't be dismantled and requires minimum maintenance), as shown in **Image 35**. Concrete pigment can be changed and adjusted so various colours available (ex. Sandstone brown, grey, charcoal).

Image 35: Concrete benches work well in the public realm because they are cost-effective, as well as robust, durable and vandal proof

- If seating is located on the sidewalk it should be orientated such that it will not impede pedestrian movement.
- Seating should be placed in public open spaces and parks where there is heavy pedestrian movement to encourage their use.
- Position seating to allow passive observation of public spaces (people watching).

E. Signage

The success and performance quality of signage depends on the placement, the designed graphic and the material used. Existing signage within Piketberg should be reconsidered to:

- Be a coordinated system of wayfinding that uses the same style of graphics throughout the town.
- Become integral and complementary to the character of the public realm.
- Be incorporated with buildings or with landscape elements (e.g. lighting, rubbish bins) so as to not clutter the public realm.
- Be simple, legible, part of a family and easy to understand.

Image 36: Signage should use the same style of graphics throughout the town and be incorporated with landscape elements

6. IMPLEMENTATION PLAN

6.1 Introduction

Implementation refers to the next steps to be taken to bring the "action project" proposals to life. The implementation framework is arguably the most important aspect of the Precinct Plan – there are numerous cases of precinct plans that have been well formulated but then have subsequently failed to make an impact because of a poorly conceptualised implementation framework.

Implementation of the Precinct Plan will take place over many years, and will involve multiple partners, including all three levels of government (National, Provincial and Local), the community, private developers / institutions, non-profit organisations, volunteer organisations and private donors. Implementing the vision for the precinct will require a coordinated effort from all these partners.

6.2 Key Factors Influencing Implementation

The implementation process for the Precinct Plan is likely to be influenced by a number of factors, which should be given serious consideration from the onset (**Figure 47**). These factors are:

- Planned public and private sector projects and investments;
- Municipal budget allocation;
- Active and organised key stakeholders and their interests;
- Development issues identified in consultation with stakeholders;
- Proposed development vision, objectives and principles;
- Constraints associated with municipal owned land;
- Political continuity; and
- Municipality Departments responsible for implementation and their roles.

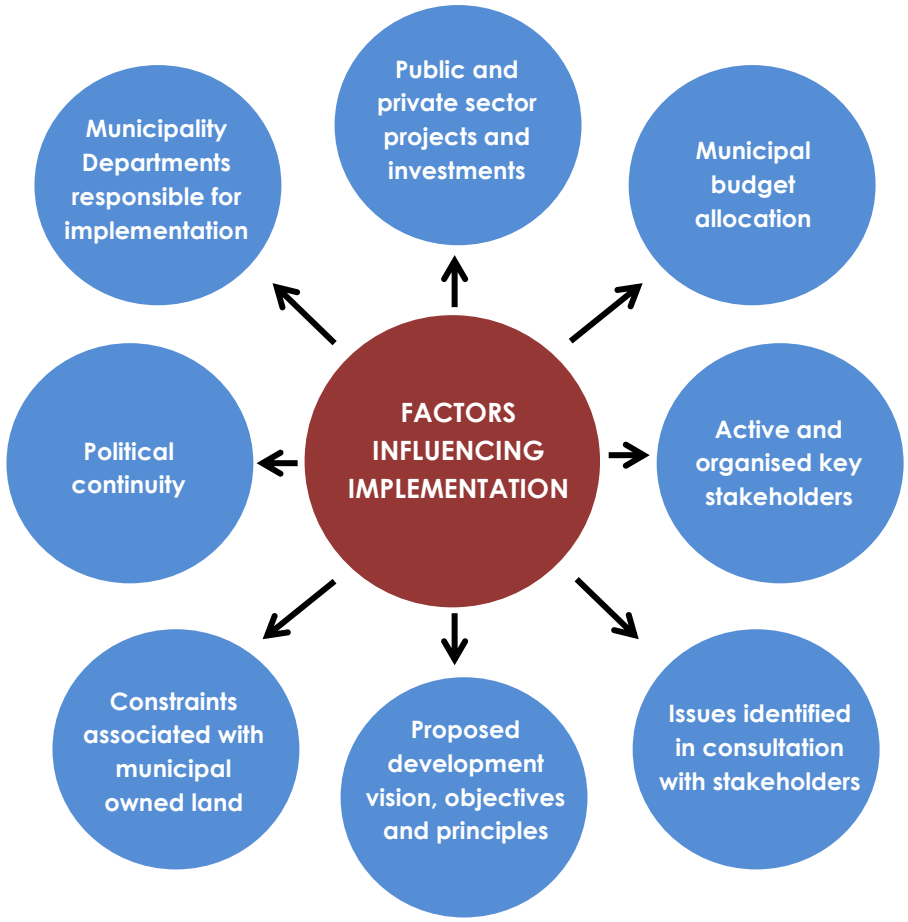


Figure 47: Factors influencing the implementation of the Precinct Plan

6.3 Conceptual Engineering Drawings and Preliminary Costing

The civil engineers on the Project Team have prepared a series of conceptual design drawings associated with the various urban design proposals. These conceptual designs are provided in **Annexure C**. A preliminary costing schedule for each Focus Area is provided in **Annexure D**. The following should be noted in connection with the costing schedule:

- All costs are based on the drawings provided in **Annexure C**;
- The costing was conducted in the absence of services data and an engineering survey (including contour survey);
- A blanket professional fee of 20% was added for the design, supervision and contract management of civil engineering and landscaping items.

6.4 Implementation Matrixes

Implantation matrixes for "action projects" within the various Focus Areas are provided in **Tables 2** to **6** below.

Table 2: Implementation matrix – Focus Area 1

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing (ROM)
Focus Area 1: CBD urban design upgrade (Lang Straat, Hoof Straat and Kerk Straat upgrades)							
P1.1: Lang Straat Upgrade	Pedestrian realm and street upgrade of Lang Straat		Medium term	Bergrivier Municipality	Civil Engineering Services Planning and Environmental Management	1. Further consultation with key stakeholders 2. Traffic Impact Assessment 3. Detailed engineering designs	To be determined
P1.2: Public toilet in Lang Straat	Public toilet and storage facility, including seating and shading elements	P1.1	Medium term	Bergrivier Municipality	Planning and Environmental Management	1. Further consultation with owner of Erf 4357 required. 2. Possible statutory land-use approvals (e.g. subdivision).	To be determined
P1.33: Lang Straat Upgrade extension	Pedestrian realm and street upgrade for the northern portion of Lang Straat		Long term	Bergrivier Municipality	Civil Engineering Services Planning and Environmental Management	1. Further consultation with key stakeholders 2. Traffic Impact Assessment 3. Detailed engineering designs	To be determined
P1.4: Hoof Straat Upgrade	Pedestrian realm and street upgrade of Hoof Straat		Long term	Bergrivier Municipality	Civil Engineering Services Planning and Environmental Management	1. Further consultation with key stakeholders 2. Traffic Impact Assessment 3. Detailed engineering designs	To be determined
P1.5: Kerk Straat Upgrade	Pedestrian realm and street upgrade of Kerk Straat		Long term	Bergrivier Municipality	Civil Engineering Services Planning and Environmental Management	1. Further consultation with key stakeholders 2. Traffic Impact Assessment 3. Detailed engineering designs	To be determined

Table 3: Implementation matrix – Focus Area 2

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing
Focus Area 2: Central "public heart"							
P2.1: New street link between Sarel Cilliers / Calendula Straat and Kloof Straat	New road link to improve spatial structure of the precinct, as well as enhance accessibility		Short term	Bergrivier Municipality	Civil Engineering Services Planning and Environmental Management	Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	Refer to Annexure D
P2.2: Kloof, Kerk, Sarel Cilliers and Loop Straat intersection re-design	Rationalisation of intersection with surrounding road closures & re-alignment of existing Provincial Road route		Short term	Bergrivier Municipality WCG Department of Transport & Public Works	Civil Engineering Services Planning and Environmental Management Roads branch: WCG Dept. of Transport & Public Works	1. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.) 2. Agreement with WC Dept. of Transport & Public Works to realign Provincial Road	
P2.3: Gateway feature on Erf 3328	Landscaped and/or sculptured gateway feature at Y-intersection entering town		Short Term	Bergrivier Municipality Private sector donor	Civil Engineering Services Planning and Environmental Management	Gateway feature to be designed with community input	
P2.4: Gateway public building on Erf 4401	New public facility gateway building and associated landscaping	P2.1	Medium – long term	Bergrivier Municipality WCG Department of Transport & Public Works	Community services Planning and Environmental Management	1. Further consultation with key stakeholders (e.g. decision on type of public facility to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	

P2.5: Upgrade the interface between Rhino Park and the adjoining public space in the central "public heart"	Removal of solid wall surrounding Rhino park and replacing with visually permeable fence. Upgrading boundary interface with place-making elements.	P2.2	Short – medium term	Bergrivier Municipality	Community Services Civil Engineering Services	Further consultation with key stakeholders	
P2.6: Public toilet and storage facility near bus depot	Public toilet and storage facility, including seating and shading elements		Short – medium term	Bergrivier Municipality	Planning and Environmental Management	Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	
P2.7: Public market	Construction of public market	P2.6	Short – medium term	Bergrivier Municipality	Planning and Environmental Management	Required statutory land-use approvals (e.g. rezoning; consent use)	Refer to Annexure D
P2.8: Community amphitheatre	Construction of open air amphitheatre in park and associated landscaping	P2.1	Medium – long term	Bergrivier Municipality Private sector donor	Community Services Planning and Environmental Management	Further consultation with key stakeholders	
P2.9: Community skatepark	Construction of skatepark connected to outdoor gym with shading, seating and lighting elements		Medium – long term	Bergrivier Municipality	Community services	Further consultation with key stakeholders	

Table 4: Implementation matrix – Focus Area 3

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing (ROM)
Focus Area 3: Calendula Street and the Active Box							
P3.1: Calendula Straat urban design upgrade	Pedestrian realm and street upgrade of Calendula Straat		Short – medium term	Bergrivier Municipality	Civil Engineering Services	Further consultation with key stakeholders	Refer to Annexure D
P3.2: Mixed-use development along the eastern edge of Calendula Straat	Mixed use development including Live-Work units	P3.1	Medium – long term	Bergrivier Municipality WCG Department of Human Settlements Private housing development agency	Planning and Environmental Management WC Department of Human Settlements	1. Further consultation with key stakeholders (e.g. decision on type development to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	
P3.3: Public realm upgrade surrounding the Active Box	Paving and landscaping of space surrounding Active box	P3.1 and P.2.1	Medium – long term	Bergrivier Municipality	Civil Engineering Services	Further consultation with key stakeholders	
P3.4: Mixed-use development framing the Active Box	Mixed use development including Live-Work units	P3.3	Medium – long term	Bergrivier Municipality WCG Department of Human Settlements	Planning and Environmental Management WCG Department of Human Settlements	1. Further consultation with key stakeholders (e.g. decision on type development to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	
P3.5: Upgrade the Calendula Street play park	Maintenance, lighting and landscaping of Calendula Straat play park	P3.1	Short – medium term	Bergrivier Municipality	Community Services		

Table 5: Implementation matrix – Focus Area 4

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing (ROM)
Focus Area 4: Interface between Loop Straat and the Rhino Park sports complex							
P4.1: Replace solid wall surrounding Rhino Park with transparent fence	Remove solid wall and replace with visually transparent fencing	P2.5	Short – medium term	Bergrivier Municipality	Community Services Civil Engineering Services	Further consultation with key stakeholders	Refer to Annexure D
P4.2: Upgrade entrance to public swimming pool	Create more visually appealing & accessible entrance to pool	P4.3	Short – medium term	Bergrivier Municipality	Community Services Civil Engineering Services	Further consultation with key stakeholders	
P4.3: Loop Straat urban design upgrade adjacent to Rhino Park	Pedestrian realm and street upgrades including planting, paving & lighting	P4.1 and P4.2	Short – medium term	Bergrivier Municipality	Civil Engineering Services	Further consultation with key stakeholders	
P4.4: Construct multi-purpose parking court on Erf 3278	Paving and landscaping of multi-purpose parking court		Medium – long term	Bergrivier Municipality Private developer	Planning and Environmental Management Civil Engineering Services	1. Further consultation with key stakeholders (e.g. decision on type development to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	

Table 6: Implementation matrix – Focus Area 5

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing (ROM)
Focus Area 5: Vacant, publicly owned land adjacent to the Rhino Park sports complex and Calendula Straat							
P5.1: Community Centre	Development of Community Centre		Short – medium term	Bergrivier Municipality PPC	Planning and Environmental Management Community services	1. Further consultation with key stakeholders on the design of the facility 2. Any required statutory land-use approvals	Refer to Annexure D
P5.2: Public housing	Medium density residential housing		Medium – long term	Bergrivier Municipality WCG Department of Human Settlements	Planning and Environmental Management WCG Department of Human Settlements	1. Further consultation with key stakeholders (e.g. decision on type development to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc.)	
P5.3: Public pathway	Landscaped public pedestrian pathway linking Gousblom & Sarel Cilliers St	P5.2 and P5.5	Medium – long term	Bergrivier Municipality	Community services Civil Engineering Services	1. Further consultation with key stakeholders 2. Required statutory land-use approvals (e.g. public right of way servitude)	
P5.4: Primary School	Development of new primary school		Medium – long term	Bergrivier Municipality WCG Department of Education	Planning and Environmental Management WC Department of Education	1. Further consultation with key stakeholders on the design of the facility 2. Any required statutory land-use approvals	
P5.5: Public housing	Medium density residential housing		Long term	Bergrivier Municipality WCG Department of Human Settlements	Planning and Environmental Management WCG Department of Human Settlements	1. Further consultation with key stakeholders (e.g. decision on type development to be constructed) 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc)	

Table 7: Implementation matrix – Focus Area 6

Project	Project Description	Related Projects	Time Frames	Implementing Agent	Departments Responsible	Precondition	High level costing (ROM)
Focus Area 6: Area between the cemetery / cricket oval and the N7 freeway							
P6.1: Upgrade NMT route between Steynville and the N7 crossing	Landscaped pedestrian route linking Gousblom St & Sarel Cilliers & beyond to N7	P6.2, P6.4 and P6.5	Temporary upgrade: short term Permanent upgrade: medium term	Bergrivier Municipality	Community services Civil Engineering Services	Agreement with landowners on Gousblom Straat for continued access between privately owned properties	Refer to Annexure D
P6.2: Construct a pedestrian bridge over the N7 freeway	Construction of high quality pedestrian bridge over N7	P6.1	Long term	SANRAL	SANRAL	Further consultation with SANRAL	
P6.3: Introduce traffic calming measures along the N7	Pedestrian realm and street upgrade for the northern portion of Lang Straat		Long term	SANRAL	SANRAL	Further consultation with SANRAL	
P6.4: Public housing	Medium density residential housing		Long term	Bergrivier Municipality WCG Department of Human Settlements	Planning and Environmental Management	1. Purchase of land from private landowner 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc)	
P6.5: Public housing	Pedestrian realm and street upgrade of Kerk Straat		Long term	Bergrivier Municipality WCG Department of Human Settlements	Planning and Environmental Management	1. Purchase of land from private landowner 2. Required statutory land-use approvals (e.g. subdivision; rezoning; etc)	

7. CONCLUSION

This report presents the Draft Precinct Plan for the Urban Upgrading of the Piketberg Gateway and Central Integration Zone. It sets out the essential built and landscape guiding principles and performance qualities that the proposed interventions of the Precinct Plan will seek to engender (and to which the town of Piketberg as a whole should aspire to). Further, it proposes clear the design informants that give rise to the proposed interventions, as well as sets out the design vision and conceptual approach for achieving the desired outcomes.

The process followed to complete this Precinct Plan is shown in **Figure 48**. Once approved by Council, this Precinct Plan will form part of the spatial planning component of the Bergrivier Municipality IDP.

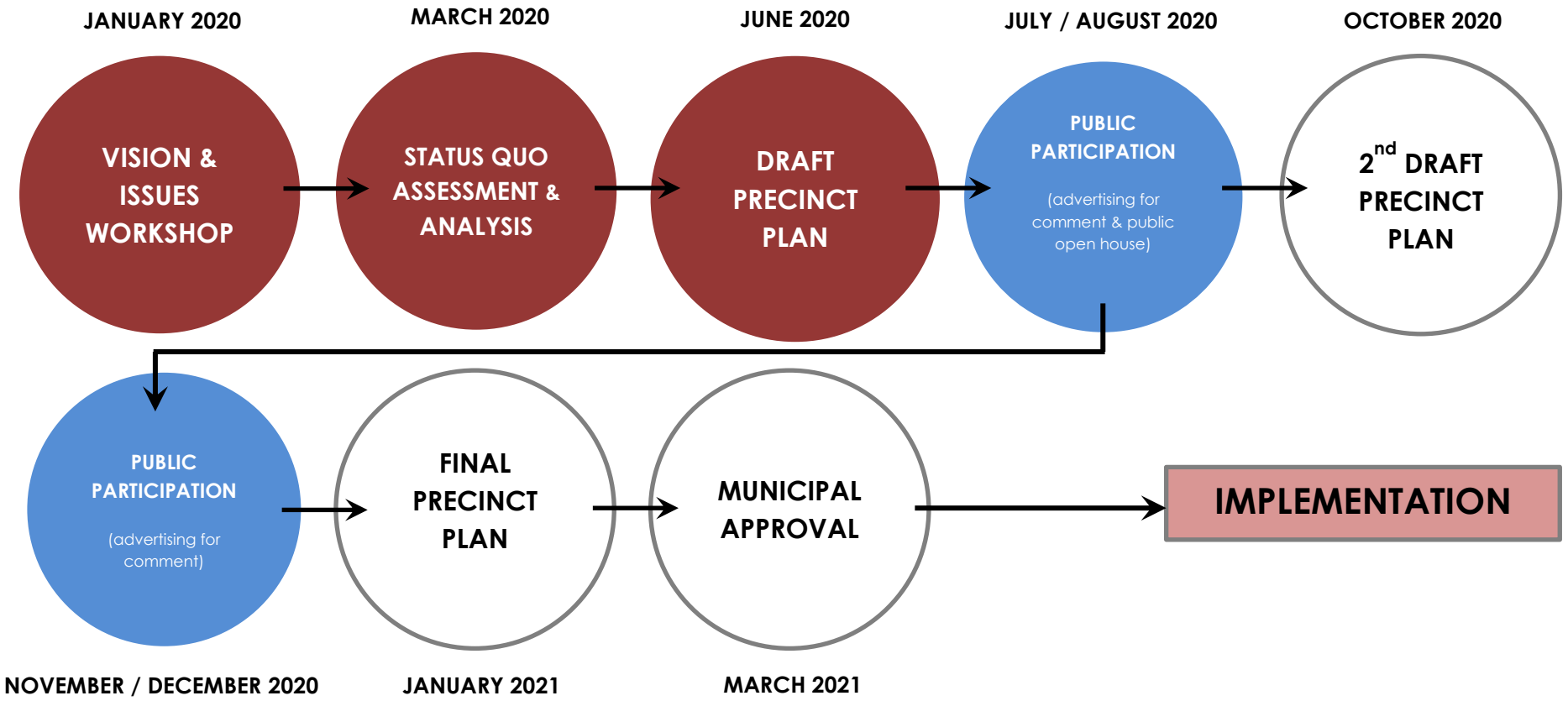


Figure 48: Stages within the production of the Precinct Plan

Annexure A

Status Quo Assessment and Analysis Report

PIKETBERG URBAN UPGRADING PRECINCT PLAN

STATUS QUO ASSESSMENT & ANALYSIS

Prepared by

PLANNING PARTNERS

GAPP
architects/urban designers

SMEC
Member of the Surbana Jurong Group

February 2020

rural development & land reform
Department:
Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA

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1. INTRODUCTION

1.1 Background

The Bergrivier Municipality released its latest Municipal Spatial Development Framework in February 2019 (Bergrivier MSDF, 2019-2024). The Piketberg Gateway and Central Integration Zone Precinct Plan has been identified in the Bergrivier MSDF as a key enabling project for spatial development and land use management in Piketberg. The study area is shown in **Figure 1** overleaf.

Following on from the findings contained in the Bergrivier MSDF, as well as the work initiated by the Western Cape Government's Regional Socio-Economic (RSEP) Programme, the Department of Rural Development and Land Reform (DRDLR) has appointed a multi-disciplinary team to prepare an Urban Upgrading Precinct Plan for Piketberg Gateway and Central Integration Zone (the "Precinct Plan").

The focus of the Precinct Plan is the assessment of the social functions and facilities and the provision of detailed urban design solutions, accompanied by civil engineering drawings and estimated costs for implementation. The proposals in the Precinct Plan will inform the overall development of the precinct in terms of medium to long-term strategic interventions required to promote the development of spatially and economically integrated precincts that are attractive, efficient, convenient, safe and effectively managed. The interventions will also aim to promote urban restructuring, sustainable communities, economic development, poverty alleviation and social cohesion within Piketberg.

1.2 Purpose of the Status Quo Assessment and Analysis

The purpose of the status quo assessment and analysis is to develop a clear understanding of the study area and its context, with attention given to *inter alia*:

- regional and local planning policy context and vision directives;
- contextual realities impacting on the study area;
- existing proposed projects (including the RSEP Programme projects);
- intensity and type of existing land uses;
- existing urban development form and function;
- the quality of the urban environment;
- biophysical factors;
- socio-economic characteristics;
- capacity of the existing infrastructure services network; and
- issues relating to sense of place.

The focus of the status quo assessment and analysis will be to identify key assets, problems and opportunities that exist within the study area that will inform the proposals to be included in the Precinct Plan.

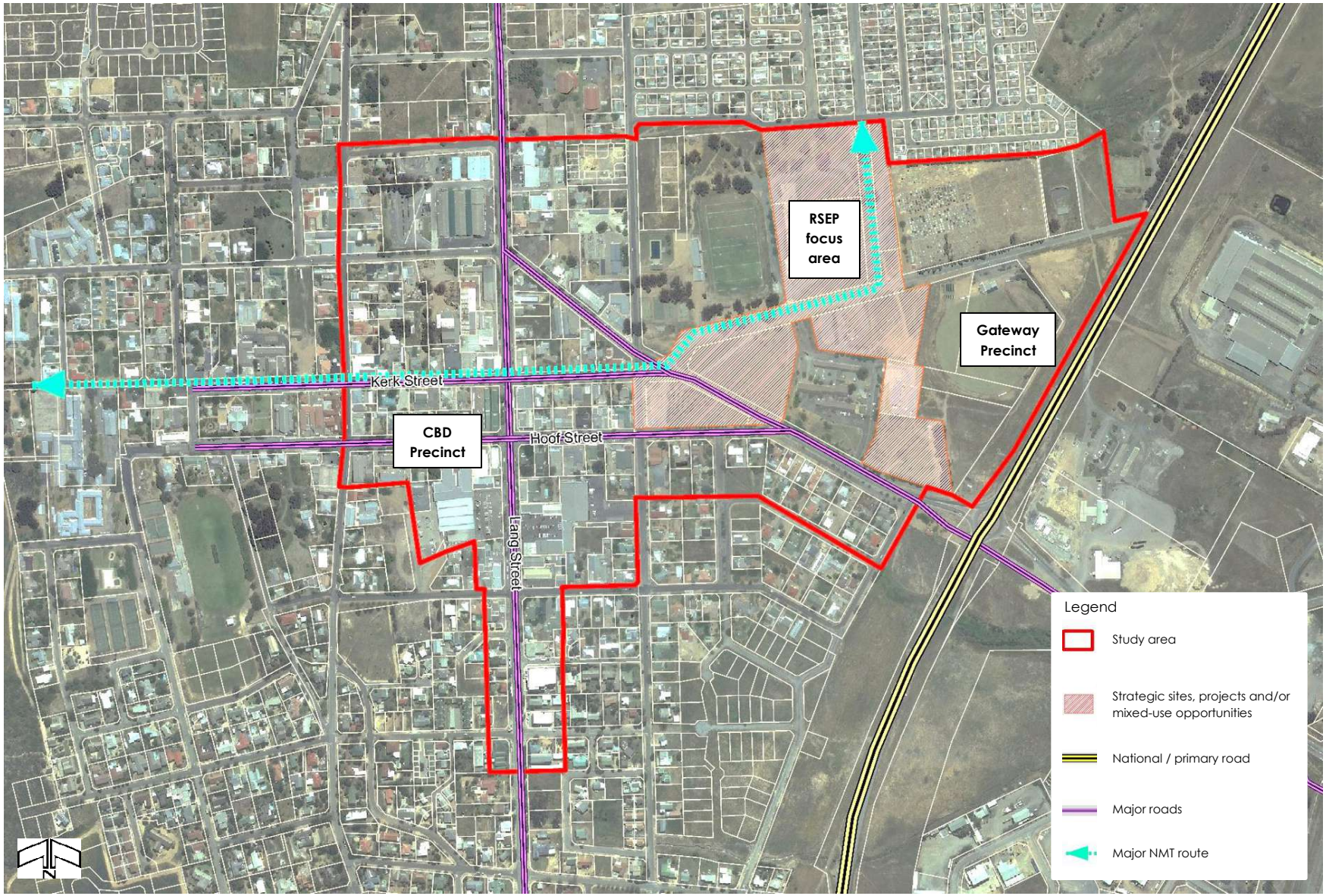


Figure 1: The study area

2. OVERVIEW OF RELEVANT PLANNING POLICY AND DIRECTIVES

The Precinct Plan must be aligned with the key themes and issues contained in National, Provincial and Local policy and directives – particularly with regards to spatial planning and economic policy – in order to achieve consistency in the overarching policy framework applicable to the Bergrivier Municipality. Accordingly, key policy and directives relevant to the spatial planning agenda for the Bergrivier Municipality, and specifically Piketberg, are outlined in the sub-sections below.

Note that it is not considered necessary to delve into an exhaustive analysis of National and Provincial policy and directives for the purposes of this project. Notwithstanding, it is important to emphasise that the Project Team does recognize the desire to implement the vision for spatial transformation as contained in the National Development Plan 2030 (NDP) (i.e. to create liveable, inclusive and resilient towns and cities while reversing the spatial legacy of apartheid), as well as to achieve the principles and strategies contained in other relevant National and Provincial policy and directives such as the Integrated Urban Development Framework (IUDF), 2013; the Spatial Planning and Land Use Management Act, 2013 (SPLUMA); OneCape 2040, 2012; the Provincial Strategic Plan, 2014; the Western Cape Land Use Planning Act, 2014; the Western Cape Infrastructure Framework, 2013; and the Western Cape Provincial Spatial Development Framework, 2014 (PSDF). The core objectives of these National and Provincial policies and directives (e.g. spatial justice, spatial integration, accessibility, sustainability, efficiency, liveability etc.) have been taken into consideration to ensure that the Precinct Plan resonates with the overarching policy framework applicable to National and Provincial Government, and as expressed in municipal policy and planning.

2.1 Regional Socio-Economic (RSEP) Programme

The Regional Socio-Economic (RSEP) Programme is an intergovernmental Programme of the Western Cape Government. The primary goal of the Programme is urban upgrading and renewal focusing on previously disadvantaged neighbourhoods through pro-poor and social upliftment interventions and to address the legacies of spatial segregation. This is done by implementing physical projects that will have an immediate impact and demonstrate "what can be done" in order for municipalities to mainstream this directive in their normal day-to-day work and future planning initiatives and budgeting processes. In addition, non-physical projects are also undertaken (e.g. precinct planning, urban design, and facilitating partnerships and collaboration).

The Programme also aims to promote a "Whole-of-Society" approach which envisions provincial and local government partnering with active citizens, communities and stakeholders to promote social and economic inclusion; and furthermore to promote a "Whole-of-Government" approach to enhance planning-led budgeting through coordinated multi-sector spending in the Province. The Programme is therefore focused on bringing together a range of stakeholders, both Local, Provincial, National and private, in order to achieve effective and efficient joint planning and implementation at the local level and to improve quality of life of and in communities.

One of the key deliverables developed by the RSEP Programme to be utilized and implemented as a new directive by

municipalities, is a "Reconstruction Framework" for their towns, which can be used as a 'Toolkit' for upgrading and integration.

The Framework comprises of a model that investigates the town structure in terms of the impact of apartheid planning, post-apartheid housing developments and the current location of poor communities and their relationship and interaction with the rest of the town. It is aligned to a number of policies such as the IUDF, the NDP and the PSDF. **Figure 2** below illustrates the Reconstruction Framework and its components.

The RSEP Programme team from the Department of Environmental Affairs and Development Planning (DEA&DP) presented the Reconstruction Framework for Piketberg and associated methodology to the Bergrivier Municipality Mayoral Committee on 16 May 2017 and a Council resolution confirming the Municipality's participation in the Programme was passed on 20 May 2017. Subsequently, a workshop was held on 21 June 2017 with relevant Ward Committee members and municipal officials where possible projects were identified. The Bergrivier Municipality submitted three proposed projects, which were

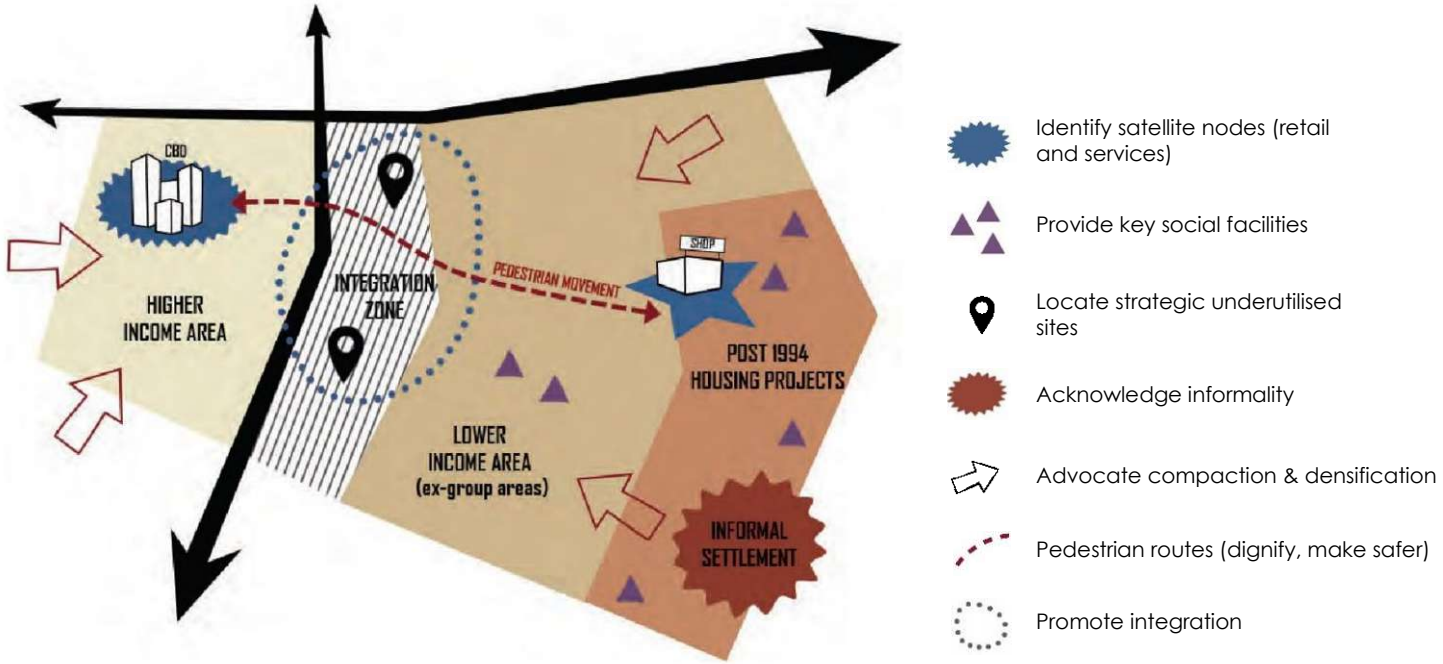


Figure 2: The RSEP Reconstruction Framework (source: Western Cape Government, 2018)

endorsed and approved by the RSEP Programme Adjudication Committee on 20 November 2017.

More detailed information the RSEP Programme projects in Piketberg is provided in sub-section 3.3.4 of this report.

2.2 West Coast District Spatial Development Framework (2014)

The West Coast District Municipality (WCDM) SDF is based on three overarching themes with spatial proposals, strategies and policies relating directly to these three themes and their associated sub-themes, *viz.*:

1. *Built Environment:* Enhance the capacity and quality of infrastructure in the areas with the highest economic growth potential, whilst ensuring continued provision of sustainable basic services to all residents in the District.

2. *Socio-Economic:* Facilitate and create an enabling environment for employment, economic growth and tourism development, while promoting the access to public amenities such as education and health facilities.

3. *Biophysical:* Enhance and protect the key biodiversity and agricultural assets in the district and plan to minimise the human footprint on nature, while also mitigating the potential impact of nature (climate change) on the residents of the district.

The spatial vision for the WCDM SDF is to create a "*quality destination of choice through an open opportunity society*". Spatial proposals are centered around promoting sustainable development, prioritising development in highest growth potential areas, and facilitating development along key corridors. The SDF identifies 3 focus areas in the WCDM for prioritised future development, one of which is the "*Lower N7 Regional Development Corridor*". The Bergrivier Municipality forms part of the regional N7 corridor, with Piketberg as the northern "gateway" to this corridor, as illustrated in **Figure 3** below, and identified as an agricultural service centre, with medium growth potential.

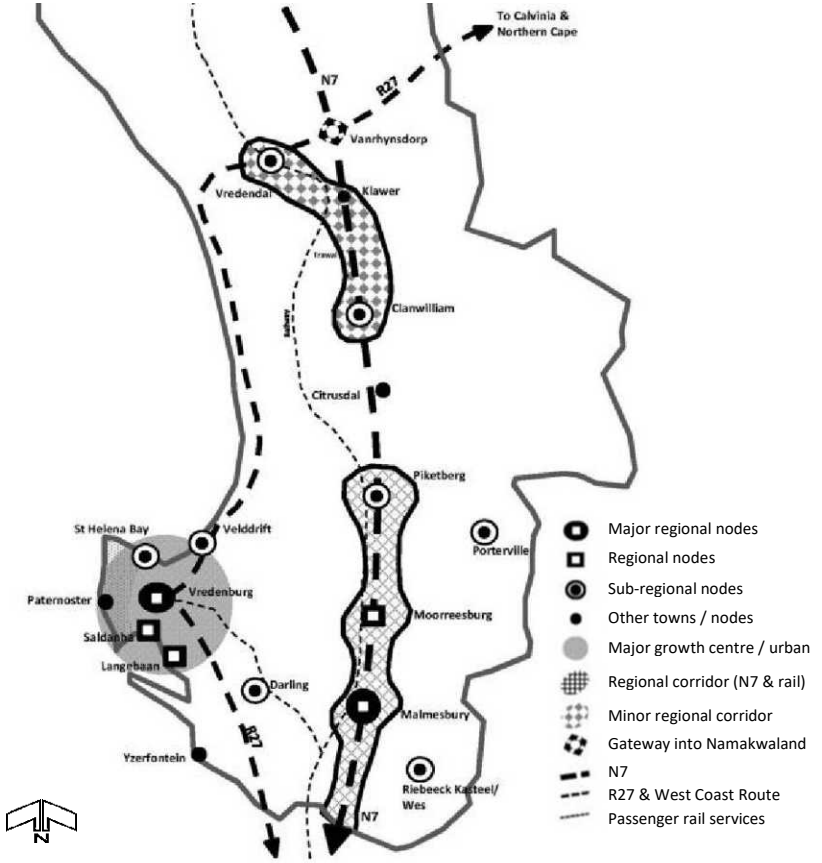


Figure 3: Extract of the WCDM SDF spatial concept (source: Urban Dynamics, 2014)

2.3 Bergrivier Integrated Development Plan (2017-2022)

The Bergrivier Integrated Development Plan (2017-2022) (IDP) is a high-level strategy that links the IDP goals and strategic objectives to functional development priorities. Development priorities derive from community needs, institutional needs and the Municipal Frameworks and Sector plans, and has been captured in a vision and mission statement for the municipality:

Vision: *A prosperous community where all want to a live, work, learn and play in a dignified manner.*

Mission: *Commitment to sustainable development and the delivery of services that are responsive to the developmental needs of all communities in Bergrivier Municipality.*

The IDP is structured around five strategic goals. These goals have been aligned with the National and Provincial strategic goals and contain strategic objective and 'game changers' identified by the municipality to ensure that certain areas enjoy dedicated attention and investment and will have an impact on addressing developmental aspects (strategic objectives and 'game changers are listed in **Table 1** overleaf – note that only relevant aspects are listed).

2.4 Bergrivier Municipality Spatial Development Framework (2019-2024)

The Bergrivier MSDF guides and directs spatial planning and development management of the land and settlements under its jurisdiction. More specifically, it seeks to provide guidance on how best to manage land use and plan to meet current and future needs for settlement growth and spatial development, and where best to direct scarce resources in order to achieve outcomes that are in line with the development principles set out in the applicable National and Provincial spatial planning legislation.

The MSDF gives attention to six conceptual focus areas that structure spatial proposals to respond systematically to the challenges and opportunities for spatial development in the Bergrivier municipal area, *viz.*:

1. Building resilience

To build environmental and economic resilience in Bergrivier, the MSDF proposes to *inter alia apply water-wise and energy-smart urban design and infrastructure delivery systems*.

2. Strengthening rural-urban linkages

The MSDF recognizes the importance of linkages between the towns and their rural hinterland areas, and seeks ways to strengthen urban-rural linkages in collaboration with affected communities by *inter alia facilitating development of public transport and NMT routes within and between towns.*

3. Promoting spatial transformation

The MSDF works to mobilise urban communities to spatially re-configure their towns function over time to create improved efficiencies, sustainability of the urban form and related infrastructure and transport networks as well as to achieve the fundamental principle of Spatial Justice. In promotion of spatial transformation the MSDF proposes *inter alia*:

- *Prioritising development of strategically located urban land (i.e. close to opportunities);*
- *Upgrading NMT and security along principal routes linking townships with urban activity nodes;*

Table 1: Strategic goals, objectives and 'game changers' identified in the Bergrivier IDP (source: Bergrivier Municipality, 2017)

Strategic Goal	Strategic Objectives	Game Changers
Strategic Goal 1 Strengthen financial sustainability and further enhancing good governance	To budget strategically	Thorough financial planning based directly on community needs
Strategic Goal 2 Sustainable service delivery	To develop and provide bulk infrastructure	Proper planning for all bulk services
	To maintain existing bulk infrastructure and services	- The development of a maintenance plan for all services - The development of innovative methods to manage droughts and water supply - The development of innovative methods to manage energy supply and/or alternative means of energy
Strategic Goal 3 Facilitate an enabling environment for economic growth to alleviate poverty	To facilitate an environment for the creation of jobs	Develop a programme for SMME development with municipal opportunities such as clear public open spaces, manufacturing of pavers and hardening of pavements
Strategic Goal 4 Promote a safe, healthy, educated and integrated community	To promote healthy lifestyles through the provision of sport and other facilities and opportunities	n/a
	To promote a safe environment for all who live in Bergrivier	n/a
	To create innovative partnerships with sector departments for improved education outcomes and opportunities for youth development	Establishment of youth cafés
Strategic Goal 5 A sustainable, inclusive and integrated living environment	To develop, manage and regulate the built environment	RSEP programme in Piketberg

- *Promoting densification and mixed land uses along principal routes and around activity nodes; and*
- *Curtailing urban sprawl and promoting compact urban development.*

4. *Excellence in service delivery*

There is a need to enhance and extend the service functions of the towns and settlements in Bergrivier, and thus the MSDF places particular focus on the unique service functions of each town and settlement in order to identify opportunities for the development of higher-order service facilities (e.g. excellent education institutions; sub-regional and possibly even regional-scale facilities for sports and recreation etc.). To improve service delivery the MSDF proposes inter alia:

- *Reinforcing the performance of existing rural service centres; and*
- *Concentrating higher order facilities in the main towns (i.e. Piketberg, Porterville and Velddrif).*

5. *Transitioning to smart infrastructure*

Recognising that water is a scarce commodity and that trends in electricity consumption indicate lessening reliance by consumers on bulk distribution networks and thus lower revenue streams for the Municipality, the MSDF strives for efficiency in developing and maintaining key infrastructure networks. The MSDF also recognises the advent of the so-called 'Fourth Industrial Revolution' and the prospective spatial impacts of ICT network rollouts. To facilitate these transitions the MSDF proposes *inter alia*:

- *Promoting municipal-wide extension of broadband coverage; and*
- *Replacing outdated systems with smart technologies when maintenance costs are prohibitive.*

6. *Opening up opportunities in the agricultural and ocean economies*

This conceptual focus area is not applicable to the study area or the Precinct Plan, however potential linkages with tourism opportunities in these sectors is noted.

In addition to the six conceptual focus areas described above, the Bergrivier MSDF is underpinned by a composite map that presents the role and function of the settlement network, the municipal space-economy's internal and external linkages, and desirable land uses delineated as 'Spatial Planning Categories'. The composite map is shown in **Figure 4** overleaf, in which the following aspects regarding Piketberg are evident:

- it is one of 2 'sub-regional node service centre' in the Bergrivier Municipality, along with Porterville;
- it is identified as a 'regional freight hub';
- the town falls along a 'composite tourism and freight (national and regional) route' (i.e. the N7); and
- local Bergrivier and West Coast tourism routes emanate from the town.

Specific spatial concepts and strategies for Piketberg, shown in **Figure 5**, aims to unpack the longer-term vision for the town into key strategic responses relating to the issues and opportunities highlighted in the analysis synthesis. This spatial strategy is informed by the broader municipal concept and SDF approach, as well as by the IDP's identified priorities, therefore establishing a localised response to the town's status quo towards a collectively envisioned future.

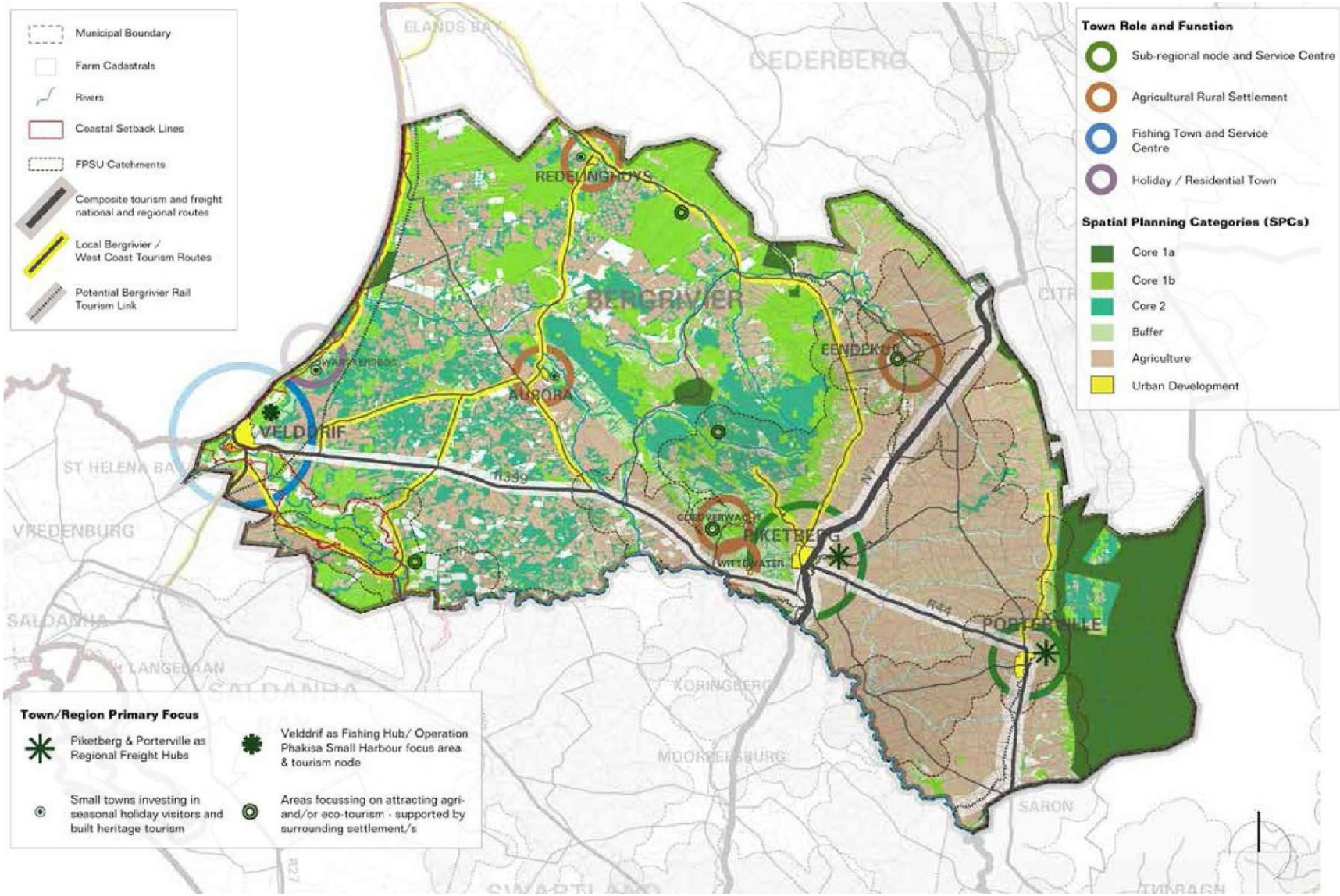


Figure 4: Composite Bergrivier MSDF (2019 – 2024) (source: Bergrivier MSDF, 2019)

The following spatial strategies contain in the MSDF are pertinent in relation to the Precinct Plan:

- *Combine restoration of urban green spaces with recreational, functional community parks that can contribute to social integration through shared public green spaces.*
- *Strengthen the local economy through consolidated commercial and retail node areas and activities in strategic locations.*
- *Strengthen the local tourism economy through recreational nodes, festivals and branding strategies.*
- *Capitalize on the strategic location of the N7 through promoting Piketberg as a destination rather than pit stop while implementing traffic calming measures and truck stops to support thoroughfare.*
- *Provide opportunities for informal trading and local social upliftment.*
- *Promote spatial integration through the development of strategic land parcels within the town centre for community and recreational uses - identified central Integration Zone as new "heart" and gateway into town.*
- *Establish safe walkways along key routes for improved pedestrian access through landscaping, seating and other urban design interventions.*
- *Promote densification and redevelopment of brownfield sites to accommodate housing in well located areas of town.*
- *Prioritise vacant land parcels within town for development over land on the periphery to accommodate existing infrastructure capacities.*
- *Protect the valuable heritage resources that characterise the town's history and urban fabric.*

The strategies set out above are translated into a spatial development framework for the town to guide future land use management and development prioritisation within the urban area of Piketberg (refer to **Figure 6**). The map indicates land for future housing or infill developments, mixed use and/or commercial opportunity sites, strategic walkways and other spatial implementation priorities and projects (the area outlined in red is the study area associated with the Precinct Plan). It is evident that two strategic priorities fall within the study area, namely:

1. The implementation and expansion of the RSEP Programme within the Integration Zone along Church Street; and
2. A land use management and urban design framework for the CBD Precinct with mechanisms to support business development, informal trading and mixed-use opportunities.

These two strategic priorities will be, *inter alia*, unpacked in the Precinct Plan to be compiled.

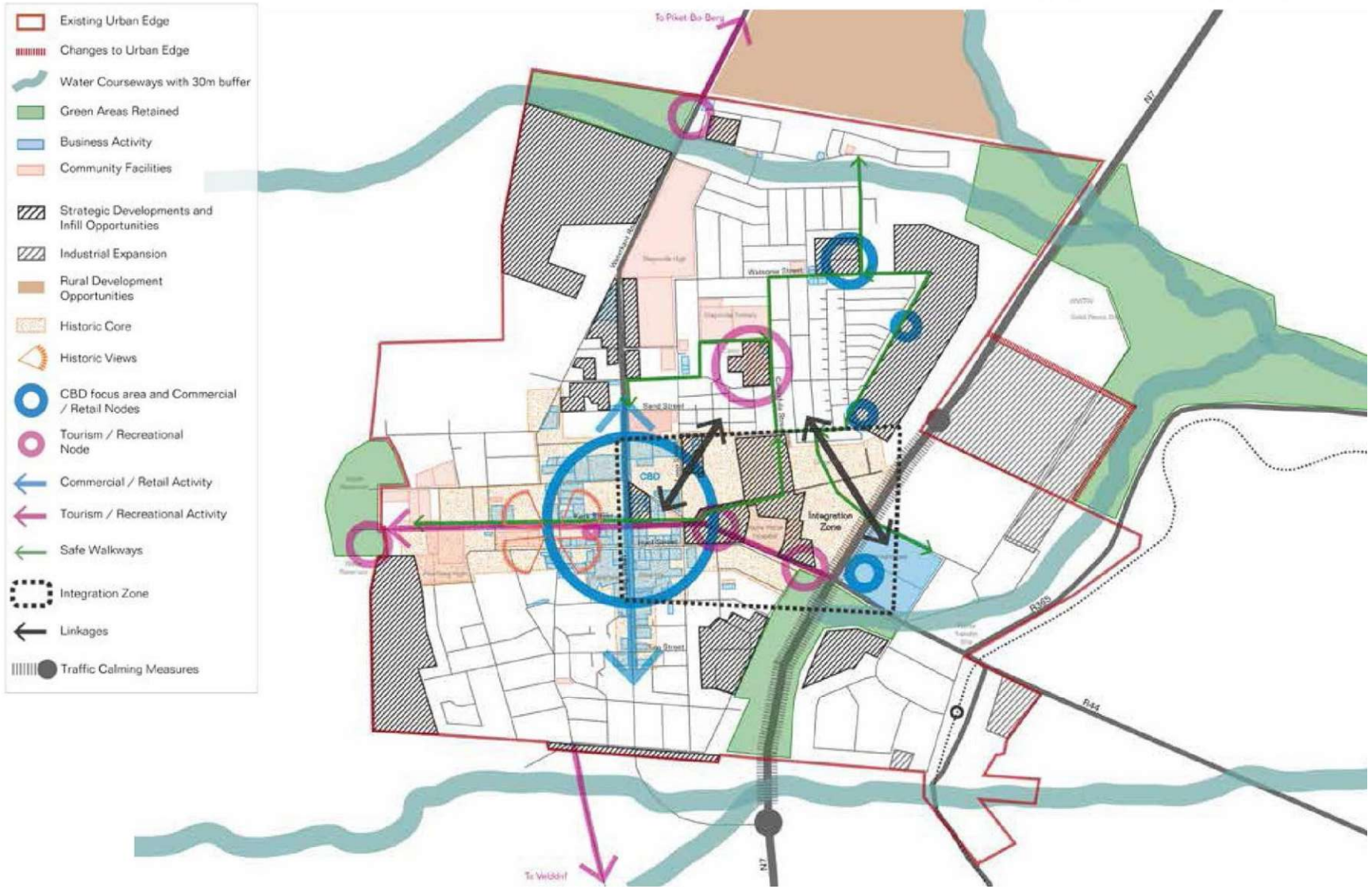


Figure 5: Bergrivier MSDF (2019 – 2024): Spatial Concept and Strategies for Piketberg (source: Bergrivier MSDF, 2019)

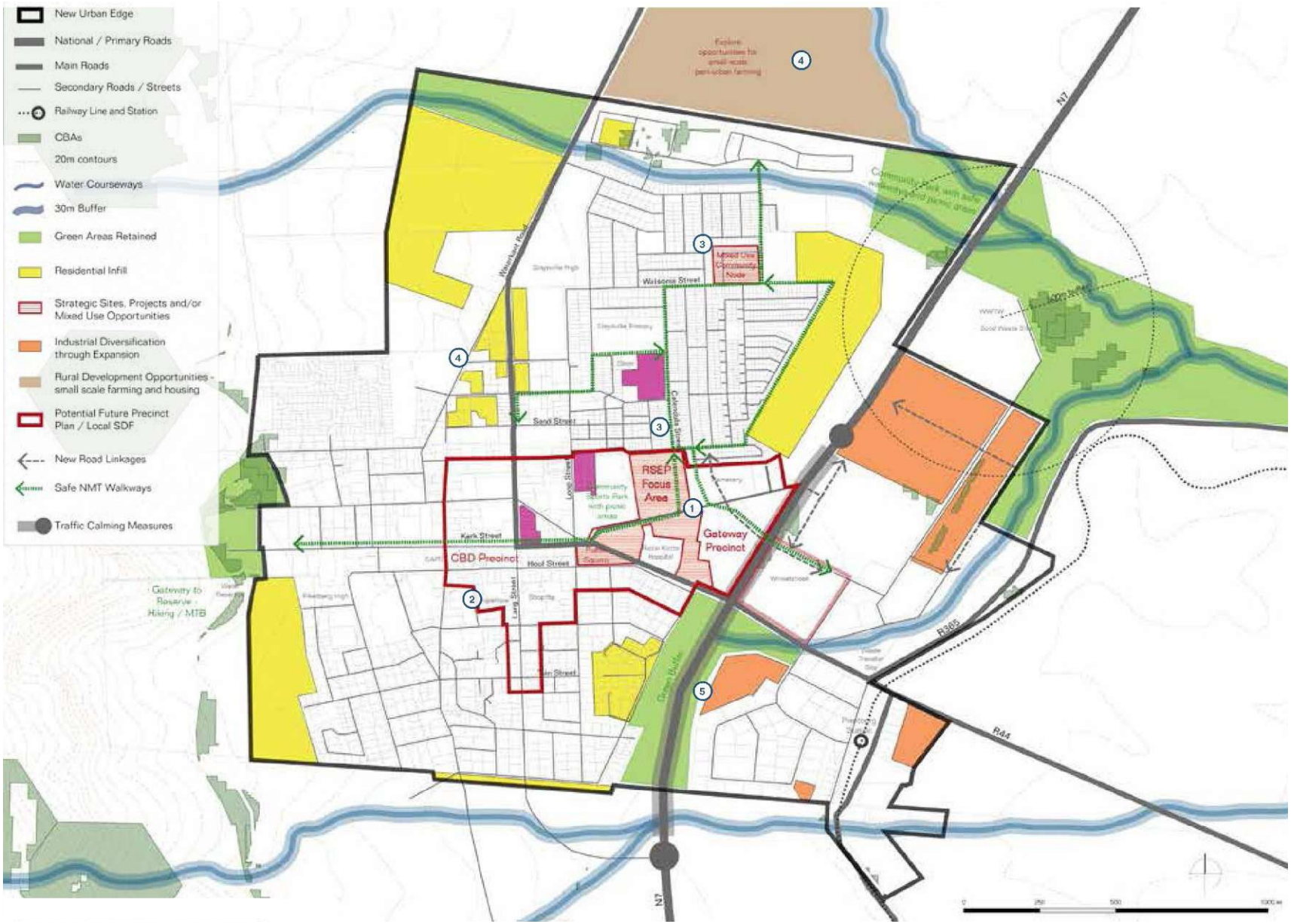


Figure 6: Bergrivier MSDF (2019 – 2024): Framework for Piketberg (source: Bergrivier MSDF, 2019)

2.5 Bergrivier Municipality Local Economic Development Strategy (2015)

The purpose of Local Economic Development (LED) is to enhance economic growth to ensure an improvement in the quality of life for all its residents firstly and secondly to enhance the revenue of the municipality. It is a process where the public sector, business and non-governmental sector collectively apply focused attention and energy to create an environment conducive for economic growth and employment generation and improve the sustainability of the local economy based on a local competitive and comparative economic profile.

The Bergrivier Municipality LED Strategy includes a range of potential projects / interventions per town (as identified through community participation). Projects that are potentially relevant to the Precinct Plan include:

- A facility for skills development and business training (particularly for people working in the informal sector);
- A local transport system for residents; and
- The development of Long Street into a street market.

3. CONTEXTUAL ANALYSIS

3.1 Municipal Area Overview

3.1.1 Context

The Bergrivier Municipality has a geographical area of approximately 4 407 km² in extent and forms part of the West Coast District Municipality. The municipal area is bordered in the west by the Atlantic Ocean, in the east by the Groot Winterhoek Mountains with the Berg River defining the southern boundary of the municipality. The Verlorenvlei and the northern section of the Groot Winterhoek mountains define the northern boundary.

The area administered by the Municipality encompasses a variety of land uses and settlement types: the towns of Piketberg, Porterville, Eendekuil, Redelinghuys and Aurora, which serve principally as service centres to their rural hinterland; the inter-related coastal towns and resorts of Velddrif / Laaiplek and Dwarskersbos; and the Moravian Mission-owned rural settlements of Goedverwacht, Wittewater and Genadenberg with their distinctive heritage character. **Table 2** shows the different settlements in the municipality and their categorization in terms of the settlement hierarchy. Piketberg is the largest town in the area and is the economic / administrative centre of the municipal area, making it the highest ranked settlement in the hierarchy.

Main access routes to and through the area are the north-south aligned National Route N7 (Cape-Namibia Route) and the coastal route R27, with east-west movement being mainly routed on the R399and the R44 links from Velddrif via Piketberg to Porterville. A composite map illustrating the Bergrivier Municipality in context is shown in **Figure 7** overleaf.

Table 2: Bergrivier Municipality settlements, their main functions and locational advantages

Settlement	Main Functions	Comparative Locational Advantage
1st Order		
Piketberg	Sub-regional Node Administrative and Agricultural Service Centre	• Proximity to N7 • Railway connection • District hospital • Community and recreational facilities
2nd Order		
Porterville	Sub-regional Node Agricultural Service Centre	Community and recreational facilities
Velddrif / Laaiplek	Fishing Town Service Centre	• Fishing and crayfishing • Tourism
3rd Order		
Eendekuil	Rural Village	• Rural character • Railway connection • Proximity to N7
Redelinghuys	Rural Village	• Rural character • Scenic beauty
Aurora	Rural Village	Rural character
Dwarskersbos	Coastal Village	Coastal resort town
Genadenberg	Rural Settlement	Rural character
Wittewater	Rural Settlement	Rural character
Goedverwacht	Rural Settlement	Rural character

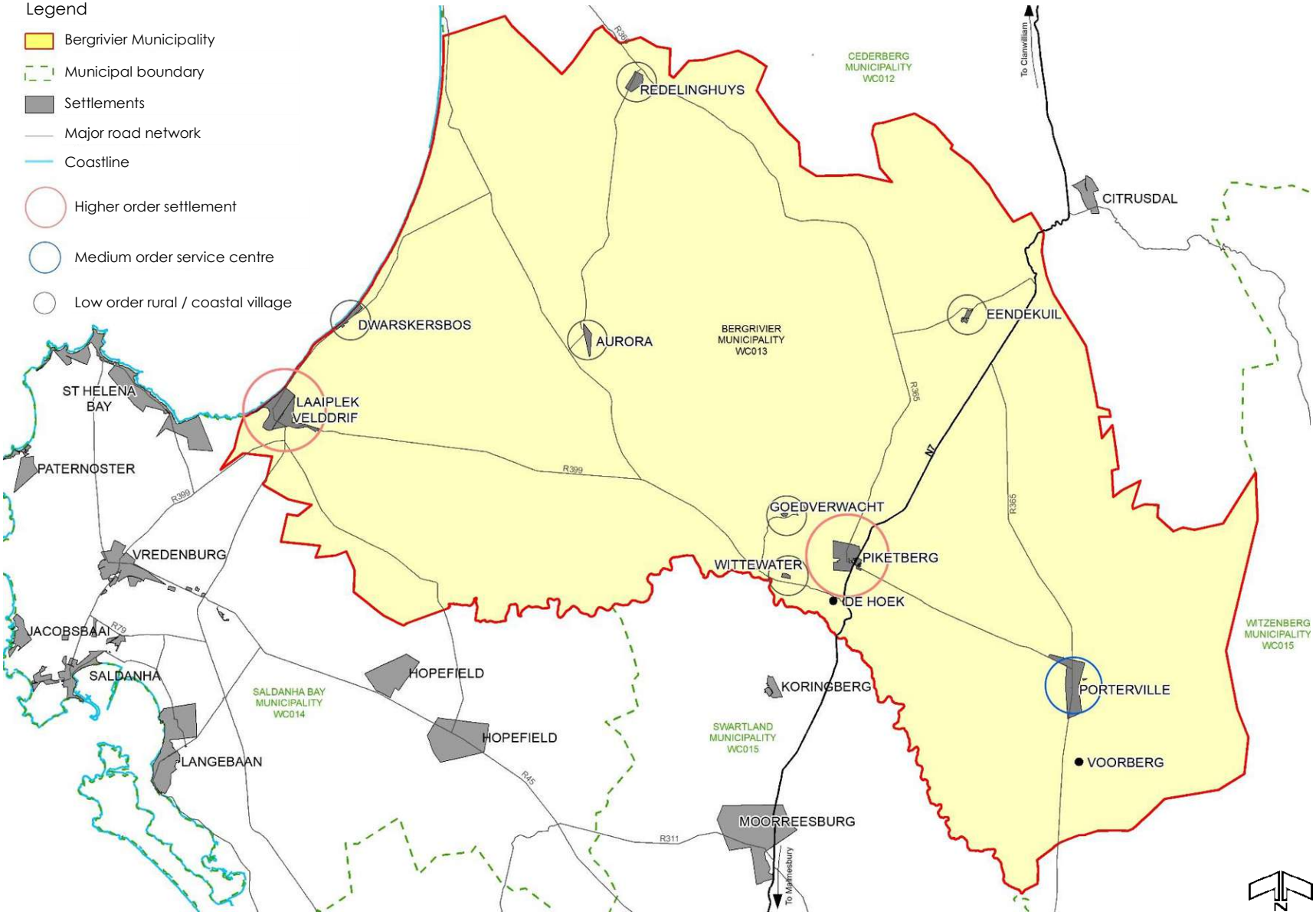


Figure 7: Bergrivier Municipality in context

3.1.2 Economy

The Bergrivier Municipality contributed approximately R4 billion to the Western Cape's Gross Domestic Product (GDP) in 2016, which equates to 5.7% of the total Provincial GDP and 14.7% of the West Coast District Municipality's GDP[1].

The local economy of the Bergrivier Municipal Area is dominated by the agriculture, forestry and fishing sector (28.6% of GDP in 2016), followed by the manufacturing sector (20.9%); wholesale and retail trade, catering and accommodation sector (13.3%); and finance, insurance, real estate and business services (10.4%). Combined, these top four sectors contributed R2,9 billion (73.2%) to the Bergrivier Municipality economy in 2016.

The agriculture, forestry and fishing sector contributed the most jobs in the Bergrivier Municipal Area in 2016 (51.8%), followed by the wholesale and retail trade, catering and accommodation sector (12.6%); general government (8.8%); community, social and personal services (8.6%) and manufacturing (7.7%). Combined, these top five sectors contributed 89.4% of the jobs in Bergrivier Municipality in 2016.

The agriculture, forestry and fishing and mining and quarrying sectors in the Bergrivier municipal area reported an average decrease in jobs (-5 120 and -11 respectively) between 2006 and 2016. There were major job losses reported in the agriculture, forestry and fishing sector in 2016 and 2017 due to the severe drought. The sector which reported the largest increase in jobs between 2006 and 2016 was community, social and personal services (747), followed by wholesale, retail and trade (723) and financial and business services (606).

3.1.3 Community profile

Table 3 overleaf provides a broad overview of the Bergrivier Municipality community profile and provides a comparison (i.e. 2011 census data vs 2016 community survey data) of key indicators relating to community characteristics, levels of education, employment levels and access to basic services.

3.2 Piketberg Overview

3.2.1 Context

Piketberg is the service and commercial centre of the surrounding agricultural area. It serves as the administrative seat of the Bergrivier Municipality, with strong public sector activities such as the municipal head office, district offices for StatsSA and Eskom, provincial government offices, and other public functions.

Piketberg is a historic town rich in cultural and architectural heritage, set in a uniquely scenic landscape with defining biophysical features ideal for attractive recreational activities. The town has a strong existing local market, supported by regional agricultural economies and communities, and is strategically located along the N7 route between Cape Town and Namibia. However, spatial tensions continue to exist within the town's urban footprint, with spatial segregation being particularly evident; the former showgrounds site in the town

[1] The Bergrivier Municipality ranked 4th out of 5 with regards to GDP contribution in the West Coast District Municipality per Local Municipality in 2016, behind Saldanha Bay (30.6%), Swartland (27,1%) and Matzikama (14,9%).

acts as a barrier between the higher income and lower income areas (e.g. Steynville), while the location of isolated housing developments on the periphery continue to entrench socio-economic barriers. Attempts are currently being made to address these issues, with the implementation of RSEP Programme projects such as paving and lighting along Calendula Street, an outdoor gym and the "Active Box" project (refer to sub-section 3.3.4 for more details on these projects). Contextual informants relating to Piketberg, as they relate to the study area, are identified in **Figure 8** overleaf.

3.2.2 Economy

The primary economic base of Piketberg is agriculture. The main crops grown in the surrounding area are fruit (pears, stone fruit and citrus in Piket-bo-Berg), wheat, wine grapes, fynbos flowers and rooibos, while the main livestock are cattle and sheep.

Piketberg has a well-equipped commercial community and has some of the big retail outlets (e.g. Shoprite and Spar) and several well-known smaller retail facilities, as well as big industrial facilities, including agricultural pack stores that support the agricultural sector. The PPC cement factory on the outskirts of the town is a beacon of the local economy.

The town is also the administrative centre of the municipal area, and therefore has distinct administrative functions (e.g. Bergrivier Municipality offices are located in Piketberg, as are district offices of StatsSA and Eskom).

Piketberg itself is not known as a key tourist destination. However, the area surrounding Piketberg has a lot to offer for tourists, including nearby Piket-bo-Berg, with its own monthly farmers market, as well as increasingly popular mountain bike trails.

Table 3: Bergrivier Municipality community profile (2011 vs. 2016)

		2011	2016
Population	Total population	61 897	67 474
	Population growth rate	2.9%	9.0%
	Dependency levels	46.9%	56.3%
	15 – 64 years of age	68.1%	67.2%
Education	Higher education	7.7%	9.9%
	Secondary School	23.8%	27.1%
	Primary	8.6%	7.8%
	No schooling	5.9%	3.2%
Households	Number of households	16 794	19 074
	Average household size	3.8	3.7
	Female headed households	31.5%	35.4%
	Formal dwellings	93.4%	91.7%
	Housing owned / paying off	44.9%	60.9%
	Households with flush toilet connected to sewerage system	72.3%	97.8%
Employment	Unemployment	4.1%	N/A
	Others not economically active	38.4%	N/A

(source: Stats SA Census, 2011 & Stats SA Community Survey, 2016)

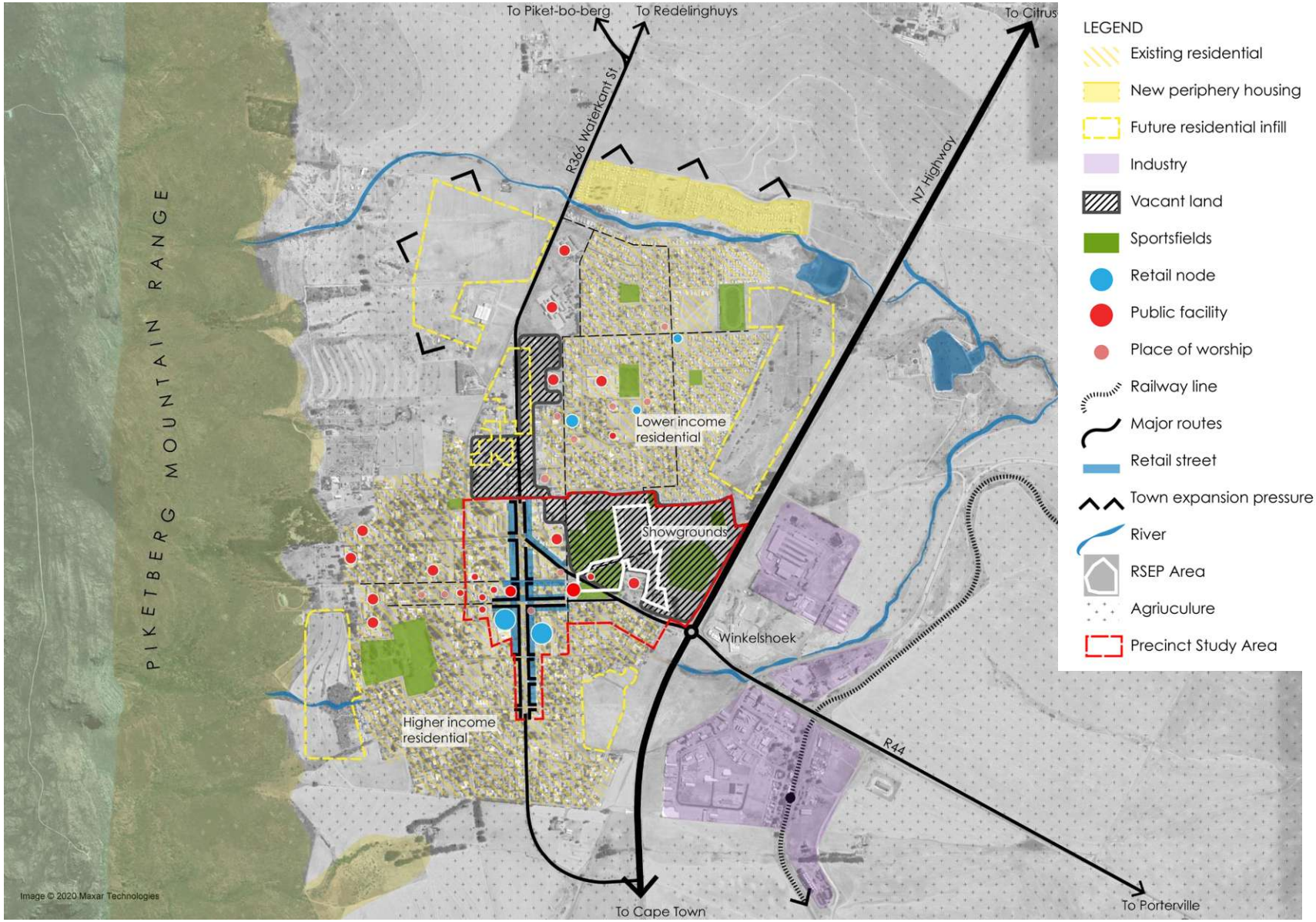
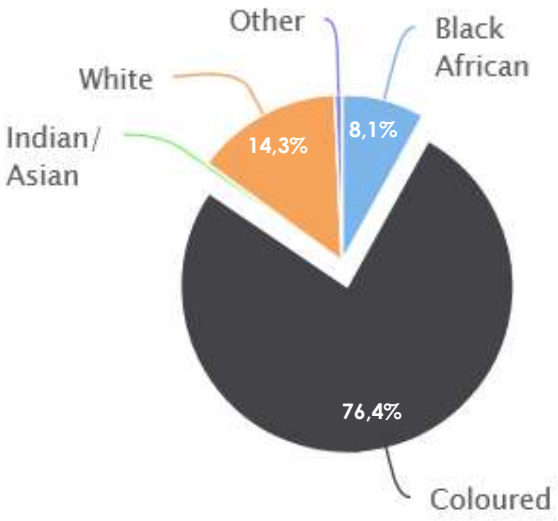


Figure 8: Piketberg in context

3.2.3 Socio-economic profile

Population

The population of Piketberg, as per the national census data of 2011, was 12 075, with the estimated population in 2018 being 13 378[2] (i.e. annual growth rate of 1,1%). The racial breakdown of the population is shown in **Graph 1**, with it evident that the vast majority of inhabitants (76,4%) are coloured.

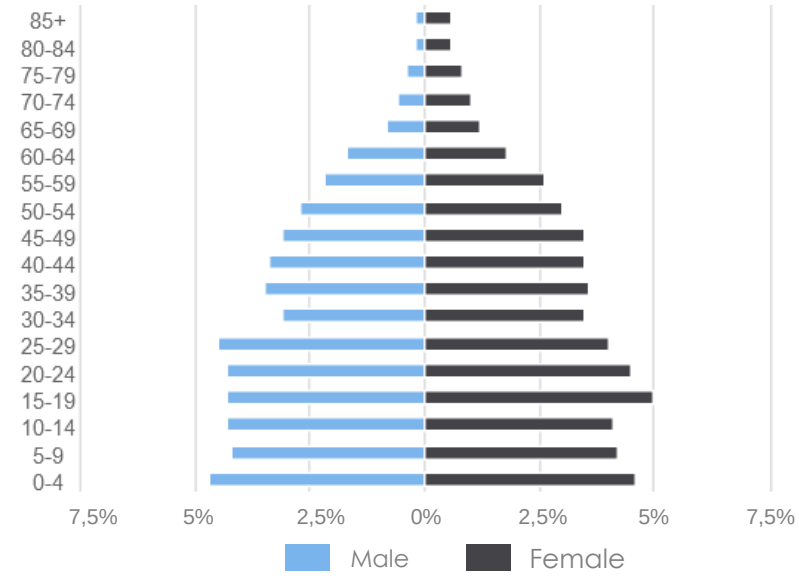


Graph 1: Population groups (source: Stats SA)

Age and sex profile

The national census data of 2011 demonstrates that 26.1% of the population of Piketberg is younger than 15 years old. Approximately 67.5% of the population is aged between 15 and 64 years old, which is considered an active economic age. The remaining 6.4% is aged 65 and over.

Graph 2 illustrates the age profiles of male and female inhabitants of Piketberg and it is evident that the town has a relatively young population. The sex ratio in Piketberg is 92,4 (i.e. 92 males per 100 females).



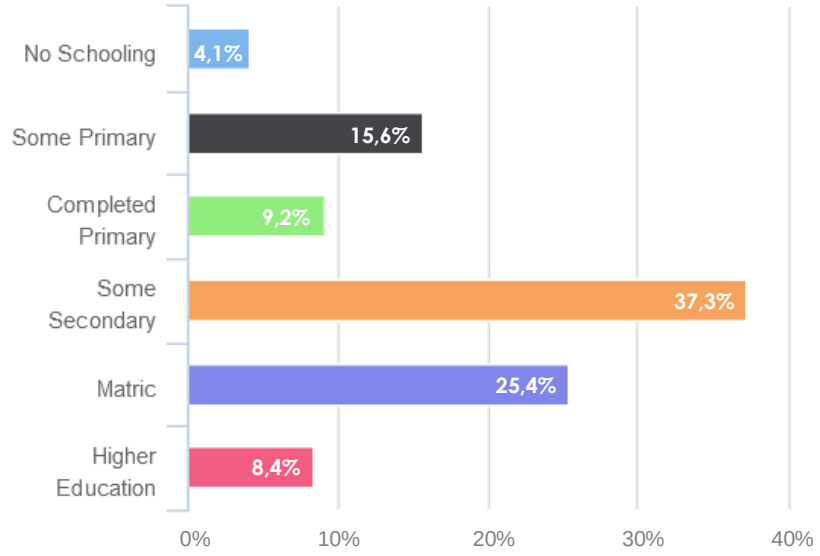
Graph 2: Age and sex distribution (Source: Stats SA)

Education

The 2011 census recorded that 4.1% of the Piketberg population over 20 years of age has no schooling, 25.4% has completed

[2] Based on Mid-Year Population Estimates (MYPE) undertaken by the Western Cape Department of Environmental Affairs and Development Planning during 2018.

matric and only 8,4 % has higher and tertiary qualifications. Highest level of education is shown in **Graph 3**.



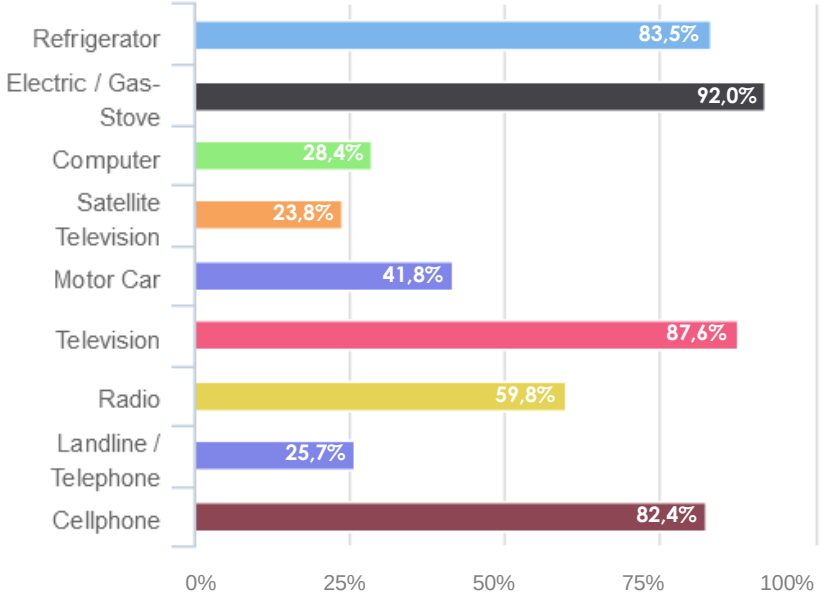
Graph 3: Highest level of education – all ages (source: Stats SA)

Living conditions

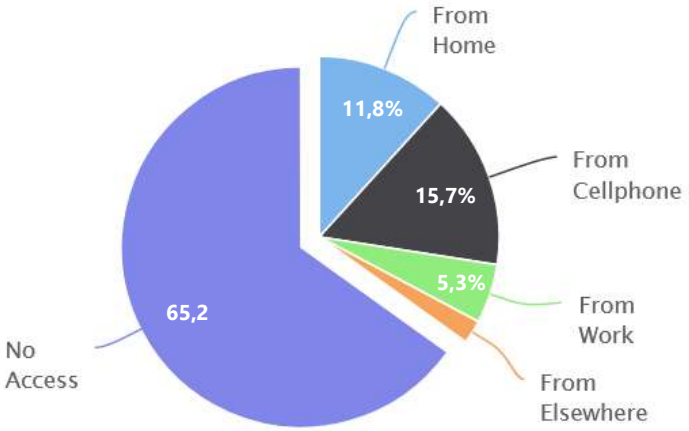
There are 2 920 households in Piketberg, with an average household size of 3,8 people. Population density is 910 people per km². 90,6% of all dwellings in the town are formal, with 65,5% of housing being owned / under payment.

Statistics obtained from 2011 census data show that 97,5% of dwellings are connected to electricity, 90,5% of dwellings have a flush toilet connected to sewerage (1,6% have no toilet facilities) and 82,5% of dwellings have piped water inside the dwelling. 96,9% of households have their refuse removed once a week (either by the local authority or by a private company).

Graph 4 shows that 41,8% of households have access to a car, 28,4% have access to a computer and only 25,7% of households have a landline telephone (however 82,4% have access to a cellphone). **Graph 5** overleaf illustrates that 65,2% of residents do not have any access to the internet.



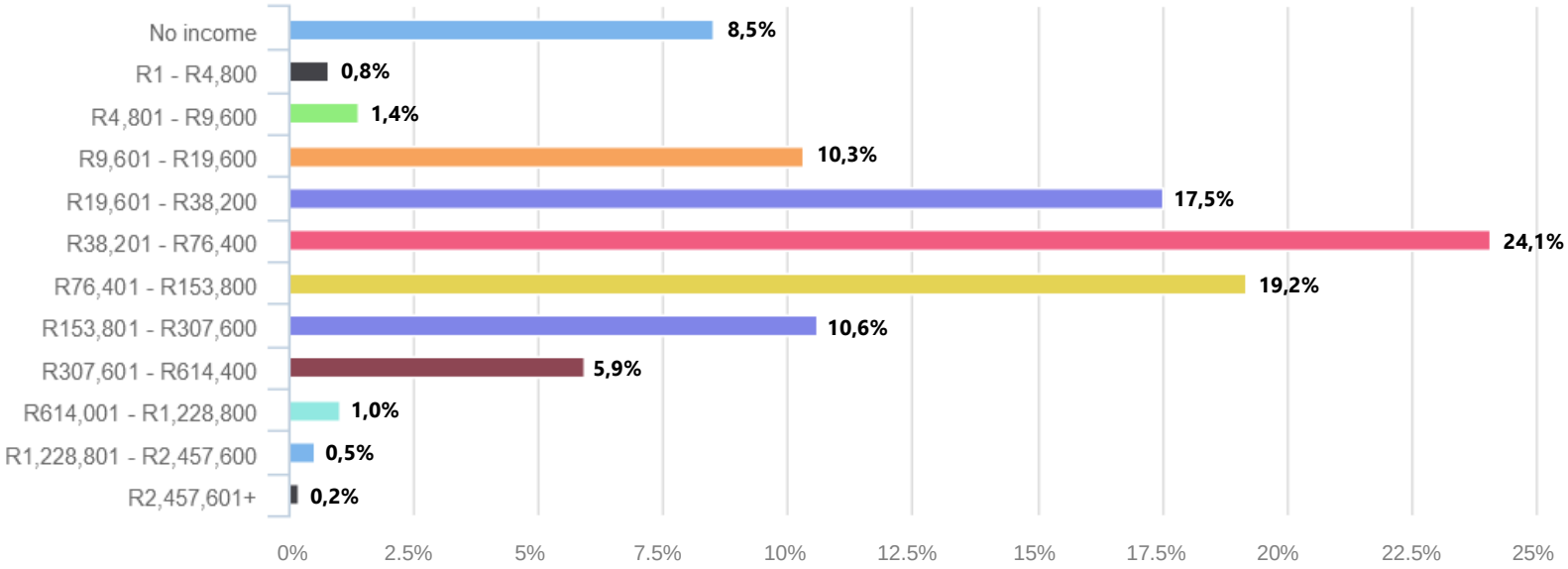
Graph 4: Access to household goods (source: Stats SA)



Graph 5: Access to internet (source: Stats SA)

Income distribution

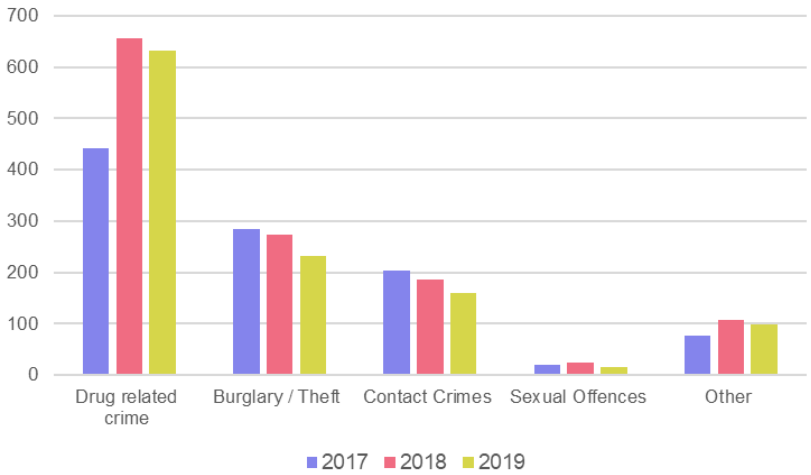
According to census data from 2011, 8,5% of households (i.e. 248 households) had no income during 2011. A total of 38,5% of households (i.e. 1 124) earned a combined income of less than R38 200 per annum (or R3 183 per month), while 62.6% of households (i.e. 1 827) earned less than R6 366 per annum. The distribution of average household income is illustrated in **Graph 6**.



Graph 6: Average annual household income (source: Stats SA)

Crime

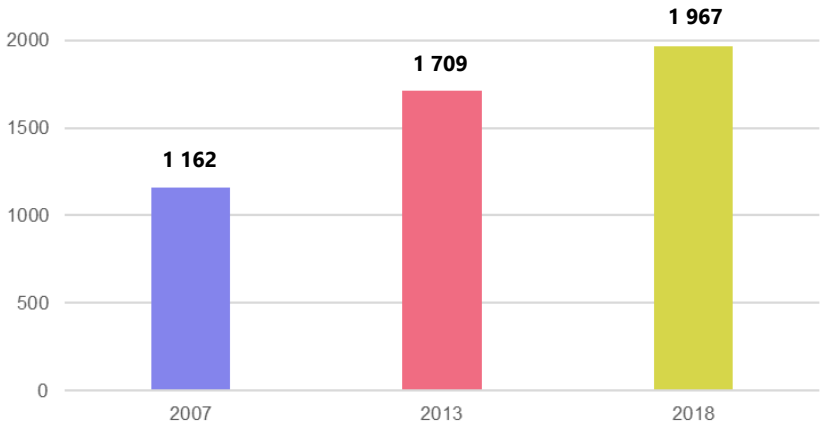
According to www.crimestatssa.com, drug related crime is the most prevalent crime in Piketberg, with 632 incidents reported in 2019 (a 30% increase in incidents from 2017). Burglary / theft (234 incidents) and contact crime (159 incidents) were also prevalent in 2019, however the number of these incidents reduced by 19% and 28%, respectively, compared with 2017. The number of criminal incidents reported in Piketberg over the period 2017 - 2019 is shown in **Graph 7**.



Graph 7: Incidents of crime (2017 - 2019) (source: www.crimestatssa.com)

Housing backlog

There were 1 967 people in Piketberg on the housing waiting list as at June 2018, which is the highest number in the Bergrivier Municipal Area. It is evident from **Graph 8** that the housing backlog has grown steadily since 2007 (a 41% increase between 2007 and 2018).



Graph 8: Housing backlog (2007 - 2018) (source: Bergrivier HSP, 2013 & Bergrivier MSDF, 2019)

Summary of key issues

- 62.6% of households in Piketberg earned less than a combined R6 366 per month in 2011. It can therefore be inferred that Piketberg is not a very wealthy town and many households do not have a large amount of disposable income.
- Approximately 48.1% of the people living in Piketberg are regarded as either too young or too old to be employed. This places a significant burden on the working-age population and has a strong impact on social grant dependency.
- The population has a low skills base, with only 8.4% having achieved a form of higher education.

- Only 41,8% of households have access to a car, which means that a large number of people are reliant on mini-bus taxi's and NMT transport to move around (the town does not have a formal public transport network).
- 65,2% of residents do not have any access to the internet, and therefore have limited opportunities to meaningfully participate in modern society (e.g. access to information; access to the job market etc.).
- From the high incidence of drug related crime (632 incidents in 2019) it can be inferred that drug abuse is an issue in Piketberg, particularly amongst the poorer communities.
- The number of people on the housing waiting list, as well as the steady growth in the number of people on the waiting list, indicates that the Municipality will need to allocate significant amounts of land within or immediately surrounding the town for housing purposes (particularly should the current model of subsided housing provision persist).

3.2.4 Bulk engineering services assessment

Piketberg is a well-developed urban area with full engineering service networks providing water, electricity, sewage, roads and storm water drainage to the vast majority of properties. No detailed plans of the existing infrastructure could be sourced, but from some masterplan maps and other reports the following could be extracted:

- The 2016/17 Water Services Development Plan (WSDP) indicates that Piketberg is serviced from various water sources. These water sources and distribution networks are sufficient to supply all the urban areas in the Municipality. It was reported that frequent pipe failures however are experienced in the water network especially on the fibre cement pipe infrastructure.
- The existing water distribution system does not have sufficient capacity to supply the water demands for the fully occupied existing and future development areas.
- Existing sewage networks and treatment plants do have enough capacity dealing with the existing loads.
- The current electricity network requires upgrading and is not performing sufficiently.
- The Bergrivier MSDF (2019-2024) indicates that bulk water sources servicing Piketberg need to be upgraded by 2020; water treatment needs upgrading before the end of 2024; waste-water treatment will need upgrading in the next 10 years (i.e. prior to 2030); and electricity supply needs to be upgraded before 2025.
- Some decay in urban infrastructure is visible in the town in the form of potholes and failure of some roads. It can be expected that these types of failures also form part of the underground networks in the form of storm water, sewer and water networks.

3.2.5 Transportation assessment

<u>Roads</u>

The roads within Piketberg appear to be in a relatively good condition. This is confirmed by overall results of the Bergriver Municipality data obtained from NEXTEC, who was appointed by the WCDM on the Rural Roads Asset Management System (RRAMS) programme. The defect that stood out most on the paved roads, was "brittleness". This indicates that the tarred

surfaces are dried out and in need of some enrichment which can be done at low cost, and some work of this nature was observed in progress in the town centre.

The Project Team is aware that SANRAL have made preliminary proposals to upgrade the intersection with the R399 at the main gateway entrance to the town. The Project Team has been unable to ascertain exactly what the proposal is at the time of issuing this status quo report, but will continue to endeavour to engage with and obtain further information from SANRAL.

Traffic

The general traffic flows observed within Piketberg had the typical pattern of town traffic. A slight peak in the morning, noon and afternoon with lighter traffic between the peak hours.

Pedestrian Movement

There are distinct pedestrian movement patterns present within the immediate Piketberg town area. Pedestrians move between Steynville and the CBD (particularly the Spar and Shoprite supermarkets) throughout the day. Movements observed on a Wednesday morning and Friday noon did not differ significantly, however there is a significant increase in movement during the weekend peak periods (i.e. Friday afternoon through to Sunday noon). **Plate 1a** shows pedestrians walking between Steynville and the CBD. Other significant pedestrian movement occurs between Steynville and the industrial area to the east of the N7 National Road, as shown in **Plate 1b**.

Due to safety concerns of pedestrians crossing the busy N7, SANRAL commissioned SMEC South Africa in 2015 to do an investigation to erect a pedestrian bridge across the N7. The conceptual designs are illustrated in **Figure 9**. This pedestrian bridge is not planned to be implemented in the near future, with SANRAL ostensibly choosing not to pursue this intervention.

Plate 1: Pedestrians walking between Steynville and the CBD (a) and crossing the N7 (b)

Figure 9: SANRAL did commission a conceptual design for a pedestrian bridge crossing over the N7 in 2015, however this bridge has not yet been implemented (source: SMEC South Africa, 2015)

Public Transport

The main mode of public transport in Piketberg is minibus taxis. Most routes start or terminate at the ranking facility in the CBD. Mid-week observations revealed little activity at the taxi rank throughout the day (**Plate 2a**), with none of the hawker stall open for business. However, activity ramps up considerably on the weekends (i.e. Friday afternoon through to Sunday noon) (**Plate 2b**).

According to the West Coast DITP, public transport trips in the Bergrivier Municipality are more rural in nature, with demand peaking on Friday afternoons and Saturday mornings, when the agricultural workforce in particular do their weekly/monthly shopping. Long-distance taxis are easily spotted at the rank, as these are the ones pulling trailers. Sunday services tend to be long distance trips, transporting commuters to their places of work for the week to come.

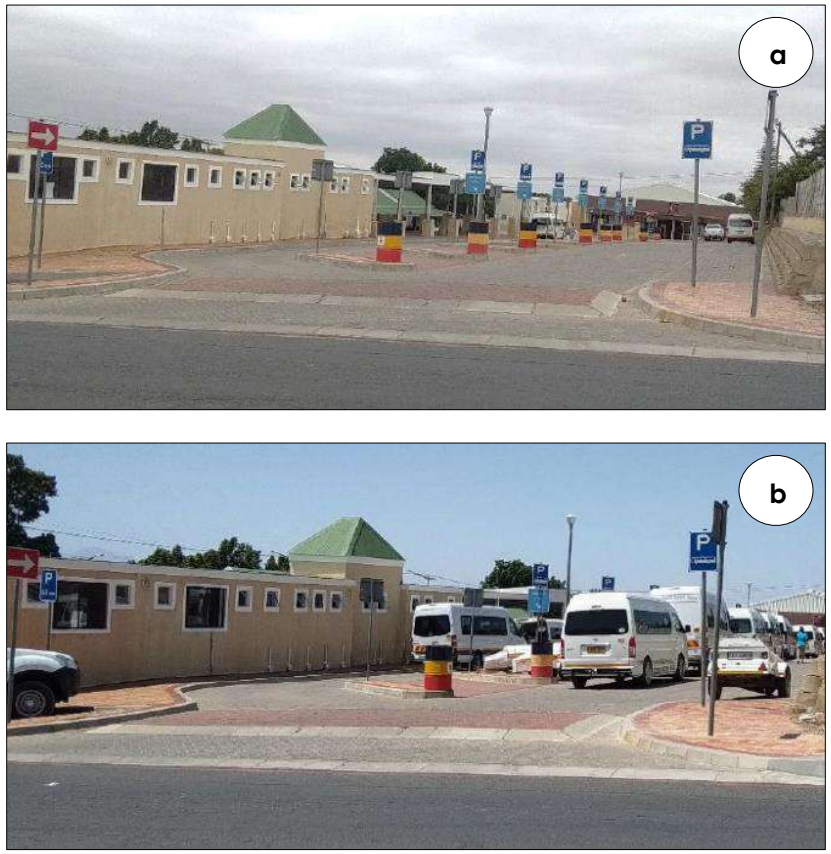


Plate 2: The taxi rank is quiet during the weak (a), with activity ramping up significantly on weekends (b)

According to the West Coast DITP, Broodkraal accommodates the largest passenger volume from the Piketberg taxi rank, amounting to approximately 60% of total passengers moving through the rank on a Friday, and approximately 50% on a Saturday.

There is no commuter bus service currently operating in Piketberg. The buses observed parked in the town are for scholar transport (contracted by the Western Cape Education Department), as well as for farm commuters on weekends (**Plate 2c**). The only regular long-distance bus service that operates through Piketberg is the Intercape, operation on the N7 and utilising the petrol station at Winkelshoek as its stop.

Plate 2c: The bus stop becomes cluttered with busses on Saturdays

3.2.6 Regional contextual realities impacting on Piketberg

Transient visitors on weekends

Piketberg's role as a sub-regional service centre means that there is an influx of transient visitors to the town on weekends from the surrounding settlements and farms, many of whom go about performing their weekly tasks (e.g. grocery shopping, ATM cash withdrawals, visit to the post office, etc.). Consequently, Piketberg CBD is a hive of activity on Friday evenings and

Saturday afternoons, particularly Lang Straat (**Plate 3a**), at Piquetberg Mall (**Plate 3b**) and in the vicinity of the taxi rank (**Plate 3c**).

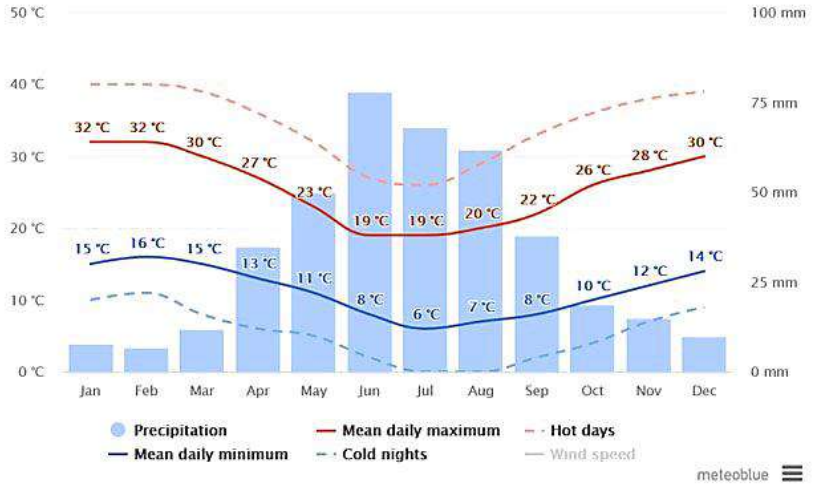
Plate 3: The Piketberg CBD comes alive on weekends, with Lang Straat (Plate 3a), Piquetberg Mall (Plate 3b) and the taxi rank (Plate 3c) being particularly vibrant

While the weekly influx of people on weekends is beneficial to the local economy, it is also associated with social issues such as public drinking (**Plate 4a**), loitering (**Plate 4b**) and urinating in public. A recent decision taken by local farmers to ban farmworkers from drinking on farms has resulted in an increase in public drinking within Piketberg on weekends, which further exacerbates these social issues.

Plate 4: Public drinking at the taxi rank (a) and loitering in Lang Straat (b)

Climate

Piketberg experiences hot and dry summers. It is evident from **Graph 9** demonstrates that average temperatures between December and March are above 30°C, with the hottest days over this period reaching 40°C. Winter can be very cold as well, with snow falling frequently on the Groot Winterhoek Mountains.



Graph 9: Piketberg average temperatures and precipitation (source: www.meteoblue.com)

Despite the hot weather, some of the public spaces in Piketberg, including streets, have little or no shade, which means that users are not protected from the harsh summer sun. Reasons for the lack of shade include lack of tree planting in key public spaces (**Plate 5a** & **b**), inadequate tree heights (i.e. trees are too small to cast adequate shade, as illustrated in **Plate 5c** & **d**), and an absence of adequate or few colonnades or canopies along building / street interfaces. It is evident from **Plate 5d** that the height of the trees in Lang Straat are stunted by the presence of overhead telephone wires.

Plate 5a-b: Key public spaces such as the outdoor gym (a) and Calendula Street (b) have no tree planting, meaning that users are exposed to the harsh summer sun

Plate 5c-d: Trees in green open spaces (c) and major streets such as Lang Straat (d) are generally too small to cast adequate shade

It is evident from **Plates 6a-c** that many users of public space in Piketberg desire shade for refuge from the sun (and it is further evident that the shady areas that do exist in the town can quickly become overcrowded on very hot days).

Plate 6: It is evident that people in Piketberg desire shade, for example queuing for the ATM in Lang Straat (Plate 6a), waiting for a bus (Plate 6b) and loitering in the CBD (Plate 6c)

3.3 The Study Area

3.3.1 Land ownership

The interventions proposed within the study area will focus on publicly owned land. however, development management proposals will also include guidelines that will encourage the private sector to respond in a positive manner with respect to urban design improvements within the town. **Figure 10** illustrates land that falls under public ownership, whether it be State, Provincial or Municipal owned land (it should also be noted that all land falling within road reserves is also owned by the Bergrivier Municipality).

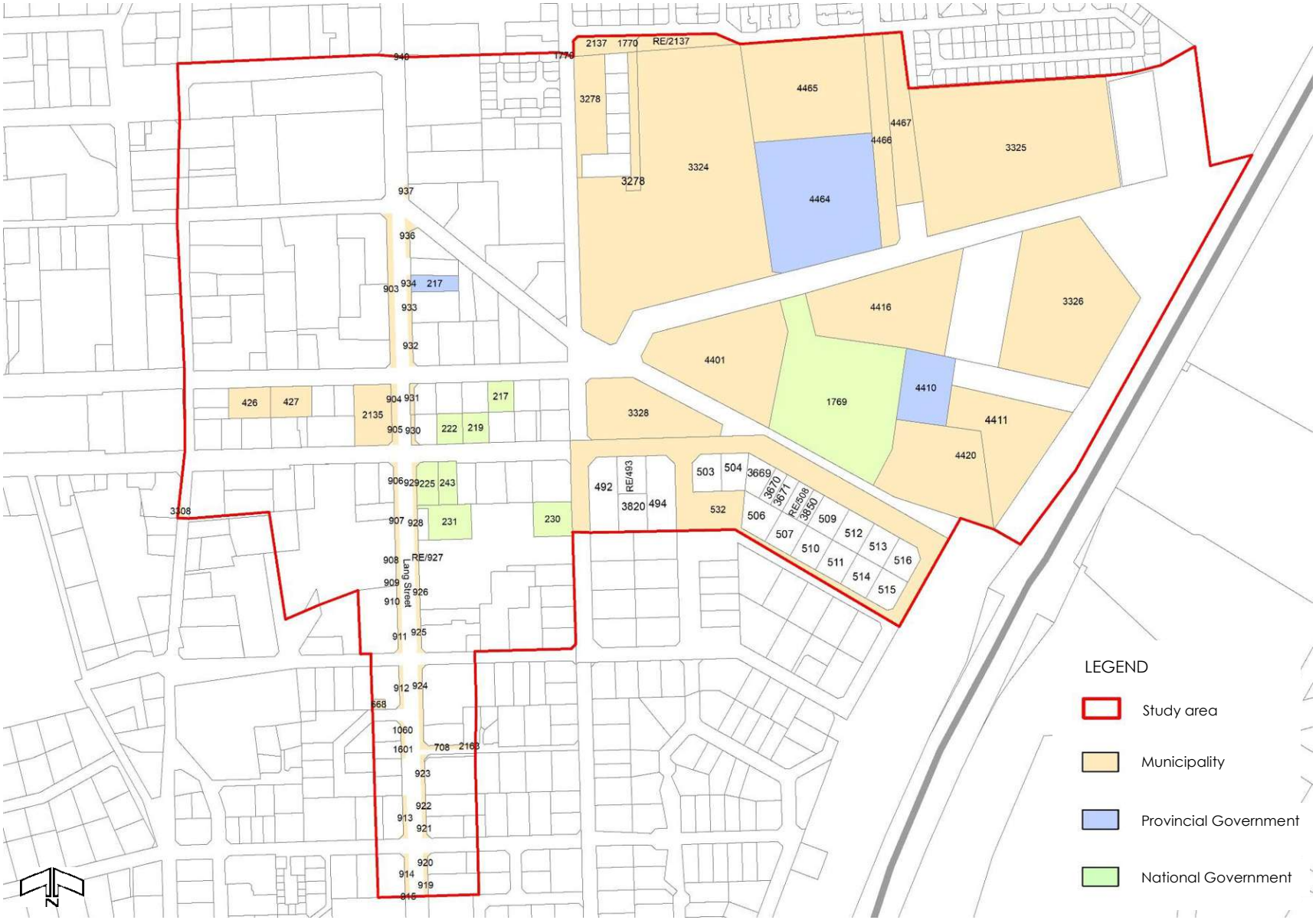


Figure 10: Public land ownership (source: Bergrivier Municipality, 2020)

3.3.2 Zoning

Land falling within the study area has a variety of zonings, as illustrated in **Figure 11**, including business, industrial, single residential, open space, community and authority use.

It is important to understand the zoning within the study area because it gives an indication of what land uses are currently permitted on certain parcels of land, as well as the development parameters of land parcels. If any interventions proposed as part of the Precinct Plan are inconsistent with the regulations contained in the Bergrivier Municipality Integrated Zoning Scheme By-Law then it will be necessary to undergo a land use planning application procedure prior to the implementation of the inconsistent proposal(s) (e.g. rezoning, consent use, regulation departures etc.). The Precinct Plan will make recommendations where such regulation departures are required and should be granted by the Municipality.

3.3.3 Land use

The study area includes a mix of retail, commercial, institutional, sporting and residential uses, as illustrated in **Figure 12**. It is evident that the retail outlets and businesses are situated along the main arteries of Lang Straat and Hoof Straat, with Piquetberg Mall (especially the anchor tenant, Spar) and Shoprite being the primary people generators in the CBD. ATMs are located on the map because these attract large numbers of people on weekends when transient visitors from the surrounding farms and towns congregate in Piketberg.

Small scale retail and food stores are mainly located along Lang Straat between Kerk and Die Trek Straat, while some light industry and larger scale outlets such as Piket Implements, Agrimark and John Deer are located on the northern end of Lang Straat.

There are very few restaurants and coffee shops within the precinct. This points to a lack of demand, but is also an indication that the CBD lacks vibrancy over a 24-hour period (as well as possibly a sterile tourism industry, with a limited offering in the town).

Public facilities are largely clustered along Kerk, Hoof and Voortrekker Streets (e.g. schools, places of worship, post office and police station). Sporting facilities (e.g. Rhino Park and the recently restored cricket oval) and public amenities are clustered in the north-eastern portion of the study area (the old' showgrounds').

There is little informal trading in the study area. The formal market area associated with taxi rank is well utilised on weekends, but not very well used during the week. Informal pavement trading does occur, with some retail outlets also displaying wares on the pavements and outside shops.

Although falling outside of the study area, it should be noted that the industrial area located on the eastern side of the N7 is a strong attractor for workers living in Piketberg (and consequently and a strong flow of pedestrians is seen crossing the N7 to reach their place of work). Further, the Winkelshoek node (including petrol station, Spur restaurant and local retail stores) is located to the east of the N7 and attracts a number of motorists who stop during long distance journeys.

3.3.4 Existing & future development opportunities

Existing and future development opportunities in the study area are shown in **Figure 13**. Existing development includes two completed RSEP Programme projects, namely Calendula Street (**Plate 7a**) and the active gym (**Plate 7b**).

Plate 7: Completed RSEP Programme projects: Calendula Street (a) and the outdoor gym (b)

Future development includes the forthcoming Active Box (also a RSEP Programme project, plans attached in **Annexure A**), a new primary school (to be developed by the Provincial Department of Education), a Thusong Service Centre (a Provincial Government project that will be a service centre providing Government information and services to the community).

In addition to the above, by overlaying the publicly owned land (**Figure 10**) and vacant land (**Figure 12**), it becomes evident from **Figure 13** that the study area offers several potential opportunities for infill development.

Private sector developments include a proposal for a new petrol filling station / retail development on the old caravan park at the gateway entrance to the town off the N7 (refer to **Annexure B**).

3.3.5 Movement and access

An assessment of movement and access within the study area revealed the findings listed below. These findings are spatialised in **Figure 14**.

- Access into Piketberg is taken directly off the N7, which is the primary accessibility route through the West Coast District Municipality. Despite this prominent access, the gateway into the town is currently poorly defined.
- The R366, which is the main entrance road into Piketberg and the road running through the centre of the study area, is classified as a Provincial Road. This status means that public upgrades to this road are not the responsibility of the Bergrivier Municipality. In addition, the nature and extent of development along this route is restricted.

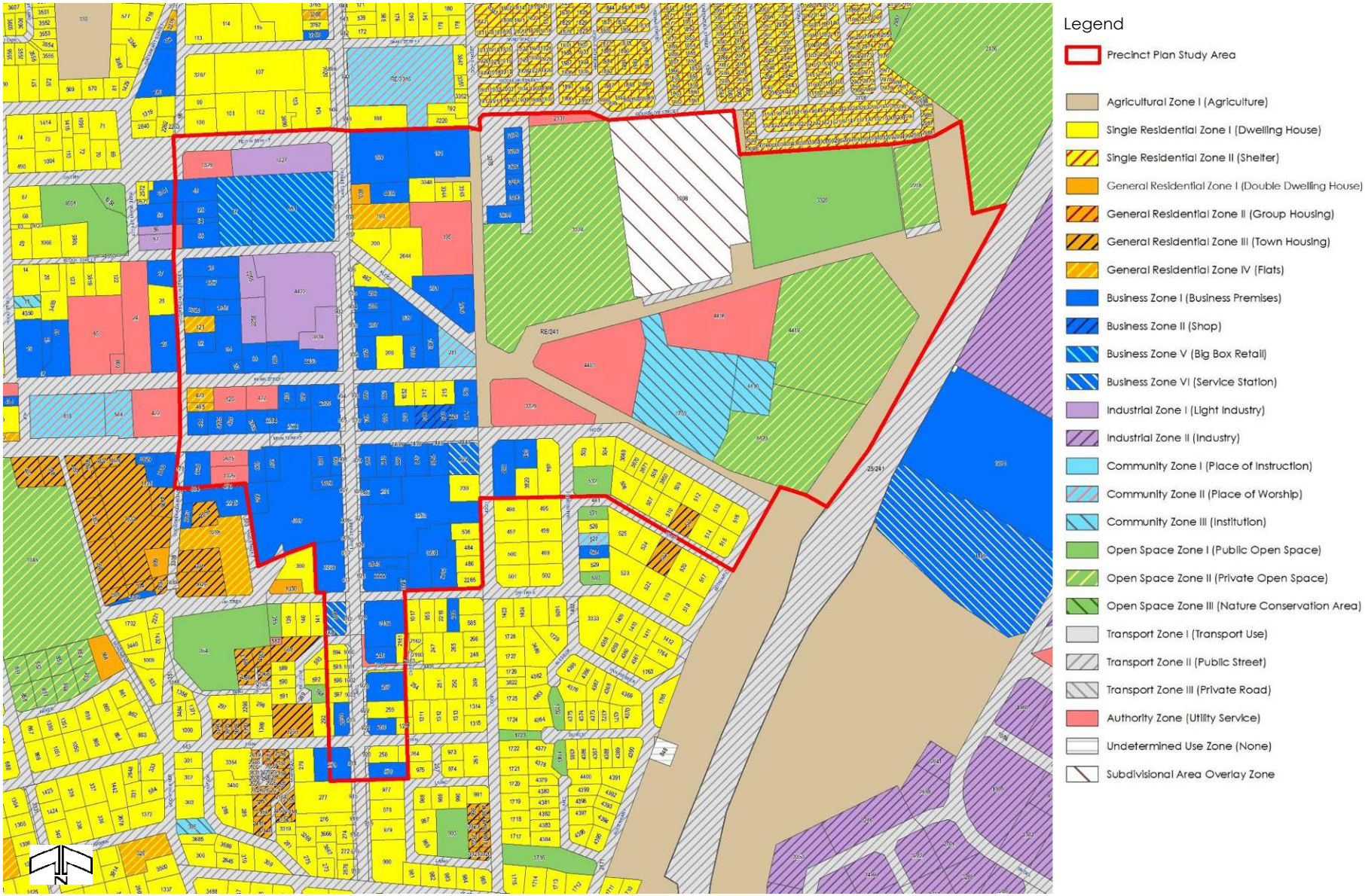


Figure 11: Zoning map (source: Bergrivier Municipality, 2020)

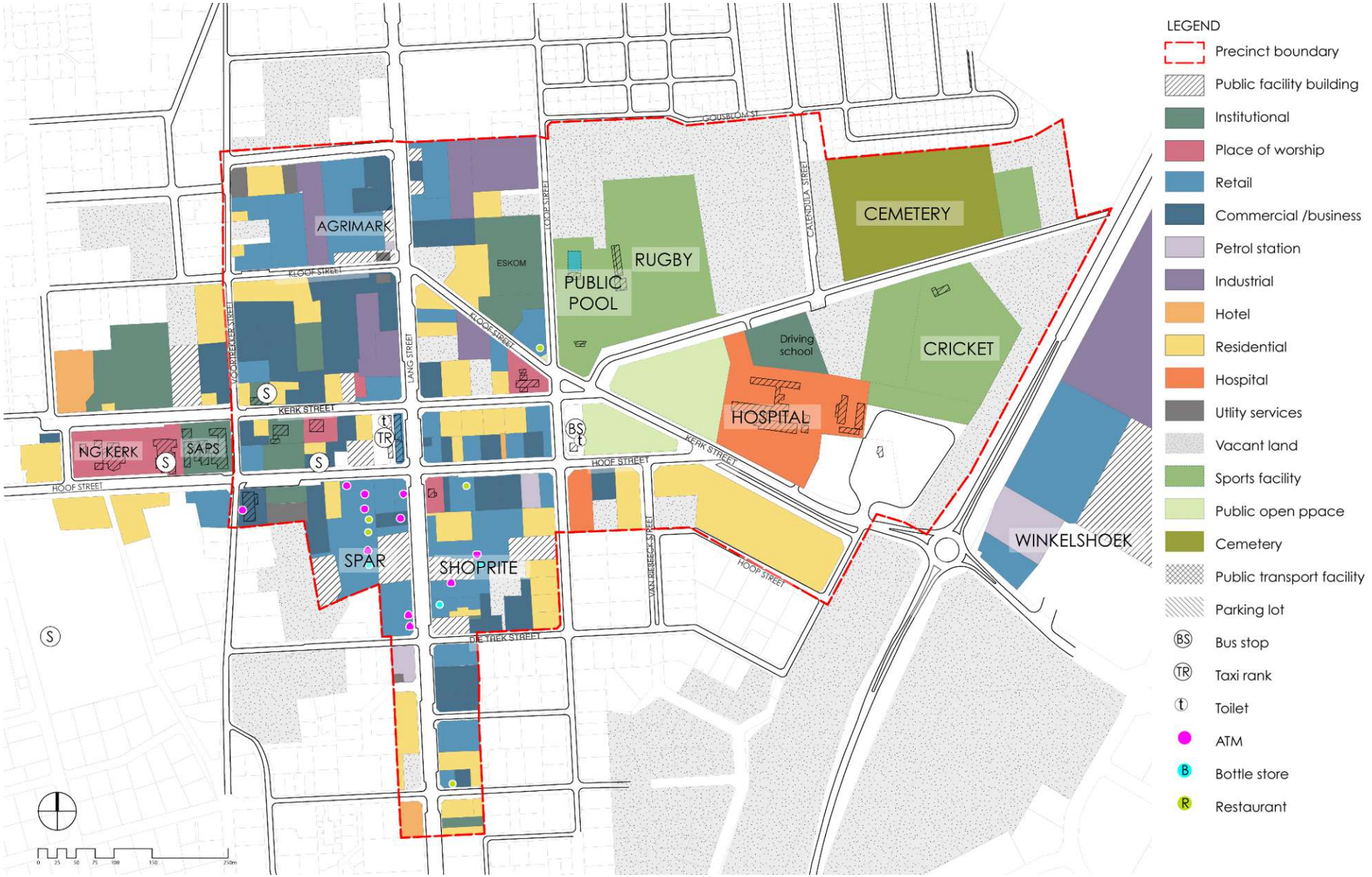


Figure 12: Land use

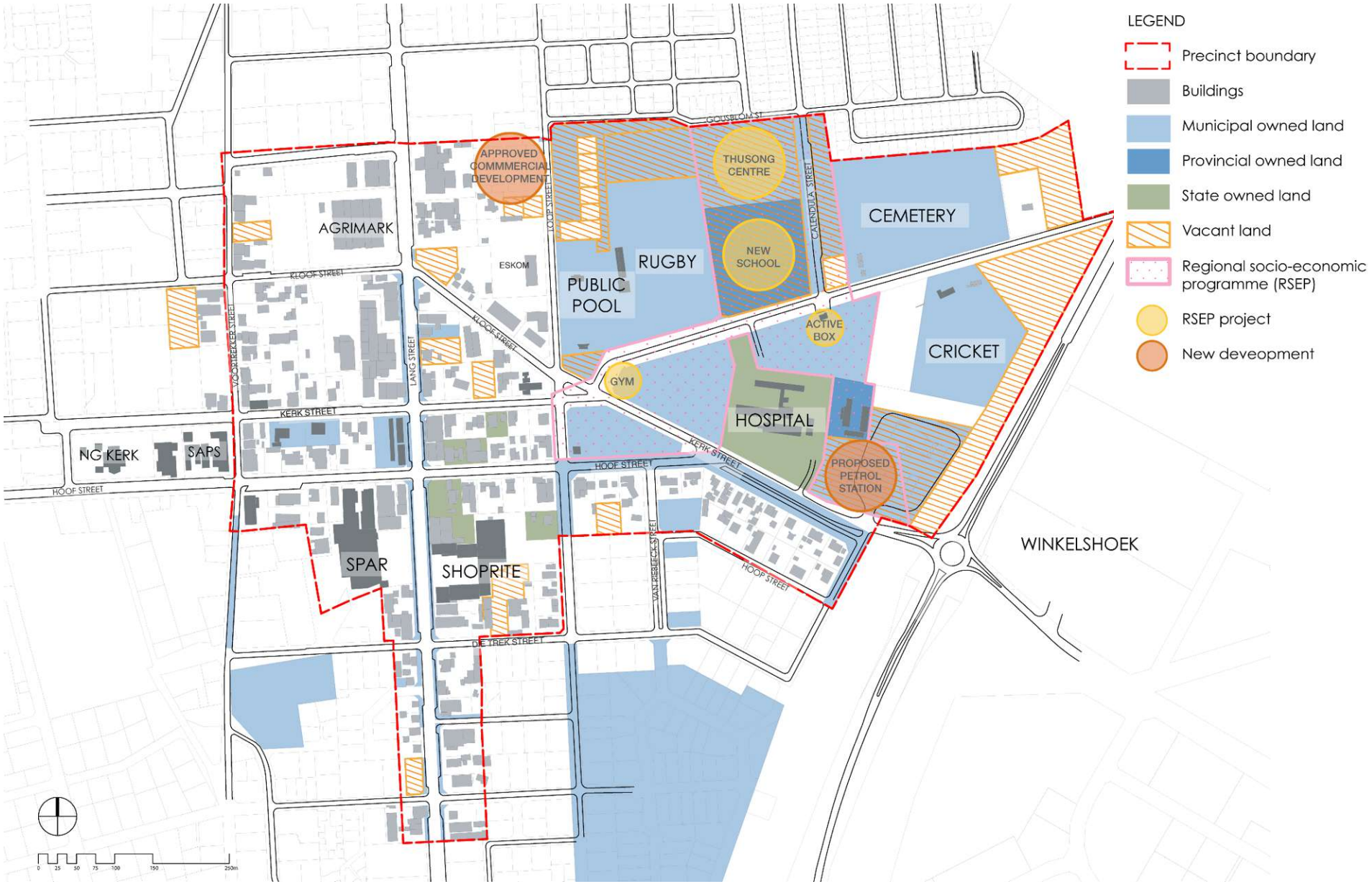


Figure 13: Existing and proposed development opportunities

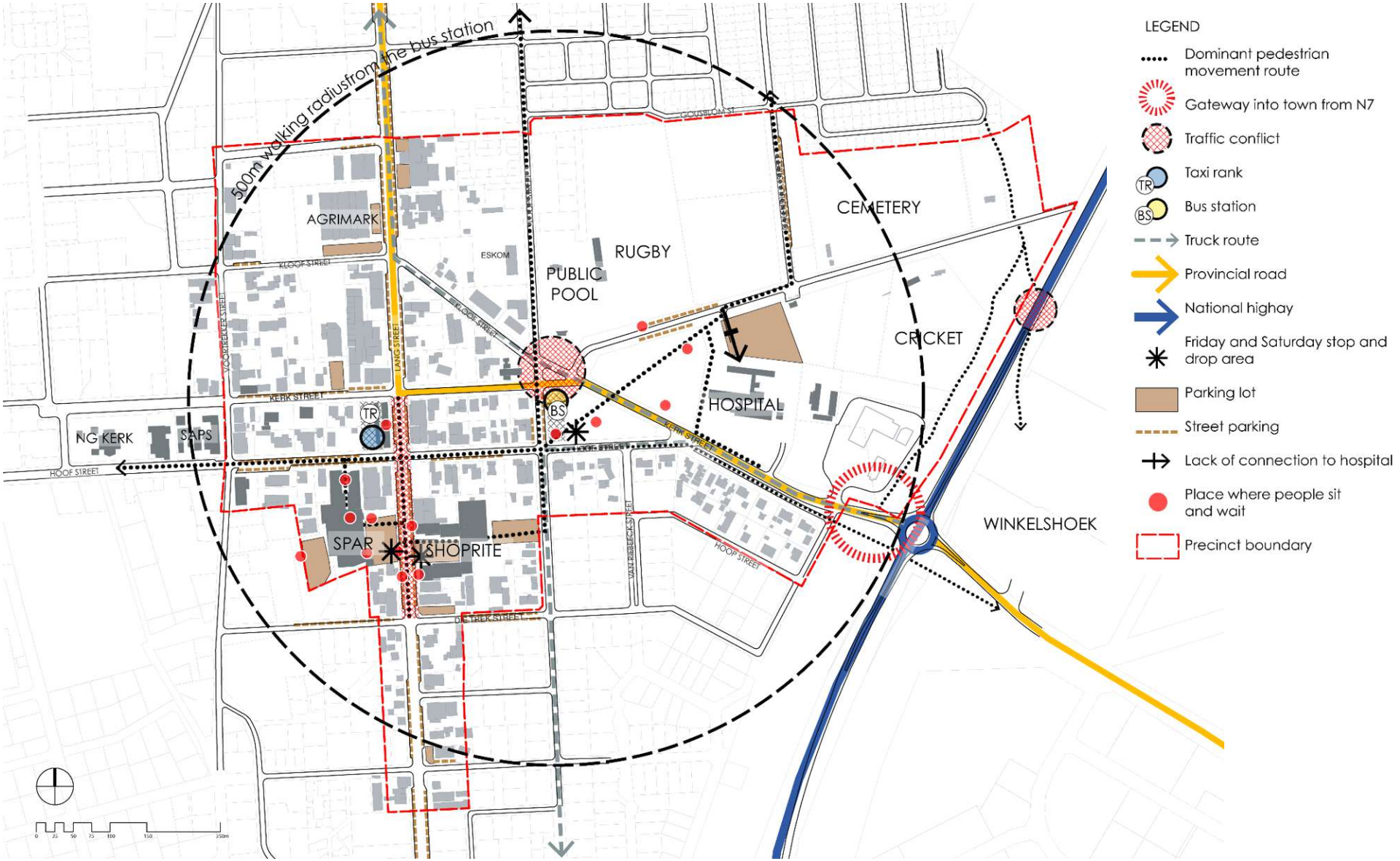


Figure 14: Movement and access

- There are several dominant pedestrian movement routes. The primary route is from the north, along Calendula Street, across the two triangular parks, up Hoof Straat to Lang Straat. Other well utilised routes are along Loop Straat from the north into town and from the bus station through the back of Shoprite; along Hoof and Kerk Straat towards Winkelshoek and the industry on the eastern side of the N7; along the western side of the hospital connecting Kerk Straat to Kerk Sraat; and from the north along the eastern edge of the N7 towards the N7 or Kerk Straat (R366).
- Large numbers of people, from surrounding farms and small towns (e.g. Porterville, Eendekuil, Aurora and Korngberg, refer to **Figure 7**) arrive in Piketberg on Fridays and Saturdays via taxis or busses. Apart from the taxi rank, taxis also drop and pick up people outside SPAR and Shoprite and at the bus station.
- Lang Straat is a very wide, car dominant street. On Fridays and Saturdays there is pedestrian / vehicle conflict where people walk in the street and cross the road at random.
- Pedestrian and vehicle conflict occurs at two additional points (besides Lang Straat): firstly at the intersection of Kerk, Hoof and Loop; and secondly along the N7 where there is a strong pedestrian desire line from the north of the precinct to the industrial area and Winkelshoek to the east of the N7.
- There is a large amount of street parking along most streets and several large parking lots. It is evident that the parking allocated in the town is excessive – it was observed that the parking facilities are not fully utilised, even at peak times on weekends (**Plate 8**).
- There is poor access to the hospital from the northern parts of Piketberg (e.g. Steynville), especially for the elderly and people in wheelchairs.

Plate 8: Excessive parking in Kerk Straat

Figure 15a illustrates street sections through Lang Straat at two different points along the street, as well as a photo of the street looking south. The following aspects are evident:

- Lang Straat is a wide (25m) street that consists of 4 lanes of traffic, narrow sidewalks, tree planting and parallel parking on both sides of the carriage way;
- the narrow sidewalks are cluttered with litter bins, overhead telephone poles, signage and electrical sub stations;
- the parking lots in front of the two retail centres exacerbate the lack of spatial definition and pedestrian scale along this stretch of the street; and
- low bottle brush trees located along the stretch of street in front of the Spar and Shoprite, providing poor spatial definition and shade.

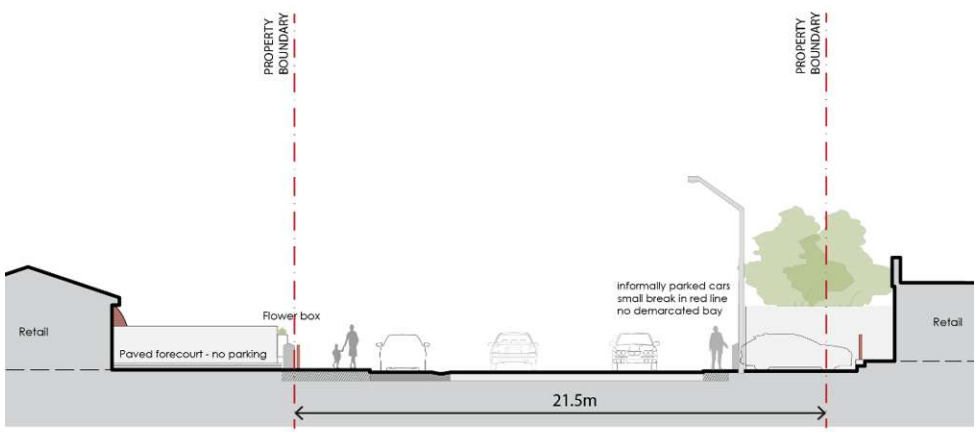


Figure 15b: Section through Hoof Straat

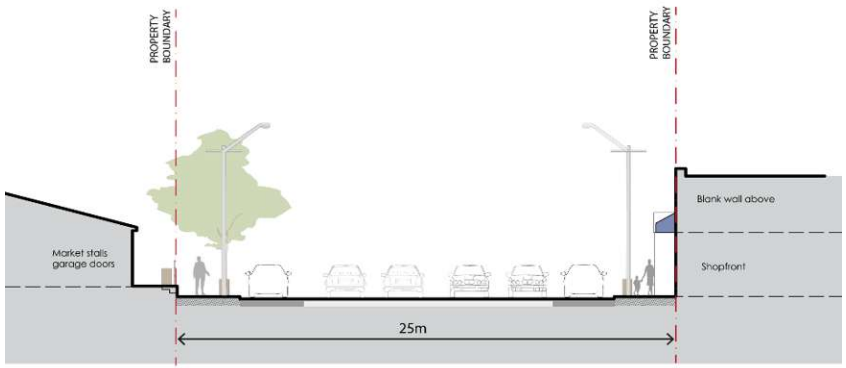


Figure 15a: Sections through Lang Straat

Figure 15b illustrates a street section through Hoof Straat, which is a strong pedestrian movement route from the bus station to Lang Straat and beyond. The street is approximately 21.5m wide accommodating formal parallel parking along the southern edge with informal parking along the northern edge. The sidewalks have varying widths. There are few trees and the trees that do exist are small and provide little shade to pedestrians. The interface quality along this street varies with many positive interfaces including shopfronts and stoeps. Although the majority of the buildings are 1 storey high, they are mostly located along the street edge providing some spatial definition to the street.

Figure 15c illustrates a street section through Loop Straat, which is a 19m wide street including sidewalks in deteriorating conditions and two lanes of traffic. There are no marked street parking bays, but the street is wide enough to accommodate parallel parking and cars are parked haphazardly along the length of the street. The section of Loop Straat situated between Eskom and the Rhino Sports precinct is well utilised by pedestrians (movement between Steynville and the CBD). However, this section of the street has a negative character: blank walls and high fences create a tunnel like, unsafe feeling with very narrow sidewalks, few trees and little lighting. The only entrance to the public swimming pool is from this street.

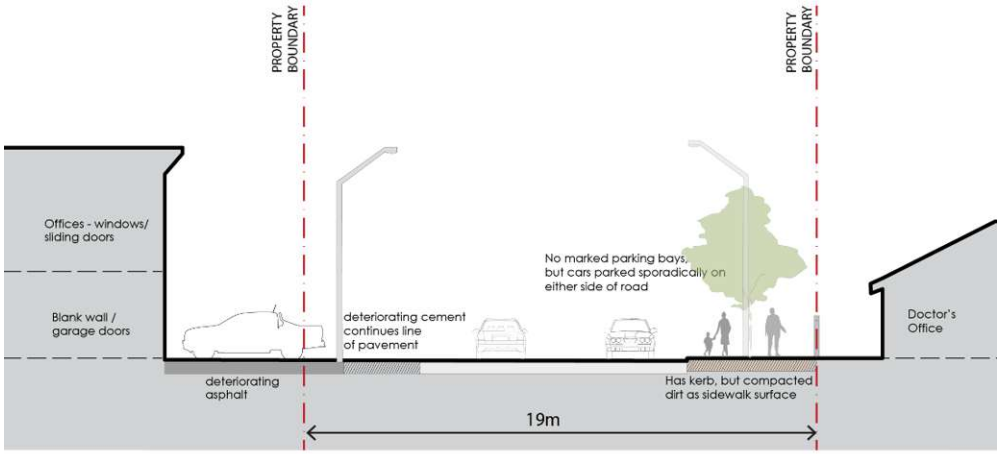


Figure 15c: Section through Loop Straat

3.3.6 Public space and landscape features

Public space and landscape features are illustrated in **Figure 16** overleaf. A cluster of open spaces and sports facilities is located in the norther-eastern portion of the study area on the site of the old showgrounds. The sports facilities are well used and well maintained.

Two large park areas are located in the centre of the study area on either side of Kerk Straat next to the bus station. The smaller of the two is well treed and is used during the weekends by people waiting for transport, as well as some recreation. A new outdoor gym is located in the western corner of the larger park. The gym is well used, especially during summer evenings, however a lack of shade means that it is not well utilised during hot summer days.

Two small parks are located within or close to the precinct along Voortrekker Straat and Calendula Straat. The new park located on Calendula Straat has very new trees and no grass, resulting in a dusty and hot play area (**Plate 9a**).

For a town that experiences high temperatures during the summer months, there are very few trees that provide adequate shade. A variety of trees are found within the precinct, however the majority of them are short with small canopies that provide limited shade or spatial definition to the streets and spaces they occupy (**Plate 9b**).

Natural river courses have been canalised on the southern and northern edges of the precinct.

Figure 16: Public space and landscape features

3.3.7 Landmarks and destinations

Landmarks and destination places are shown in **Figure 17**. The location of the town on the mountain's edge provide the town with views towards Piketberg mountain to the west (**Plate 10a**), as well as the agricultural plains beyond the town and the Groot Winterhoek mountains to the east (**Plate 10b**).

Plate 10: The town enjoys scenic views of Piketberg mountain to the west (a) and Groot Winterhoek mountains to the east (b)

The NG Kerk on Kerk Straat, the mountain and large sports facilities provide a sense of place and orientating landmarks within the town.

The main destination places / people generators within Piketberg include:

- The provincial hospital;
- The various sporting facilities;
- The various public facilities and amenities;
  The taxi rank and bus stop (especially on weekends);
- The Spar and Shoprite supermarkets (especially on weekends);
- The various ATMs (especially on weekends);
- Other retail and business opportunities along Lang and Hoof Straat.

3.3.8 Heritage assets & special places

Established in 1836, the old Town established itself around the NG Kerk, an imposing neo-gothic style cathedral with beautiful window patterns, plastered panels and interesting towers. In addition to the church, the town has a variety of beautiful, historically buildings of value (these buildings are commemorated by the historical walk along Kerk and Voortekker Streets, where the majority of the towns heritage buildings are located).

The uniqueness of Piketberg lies in its proximity and relationship to the Piketberg mountain, which is a protected heritage asset. Views towards the mountain should be enhanced, celebrated and protected.

Heritage assets and special places are shown in **Figure 18**.

Figure 17: Landmarks and destination places

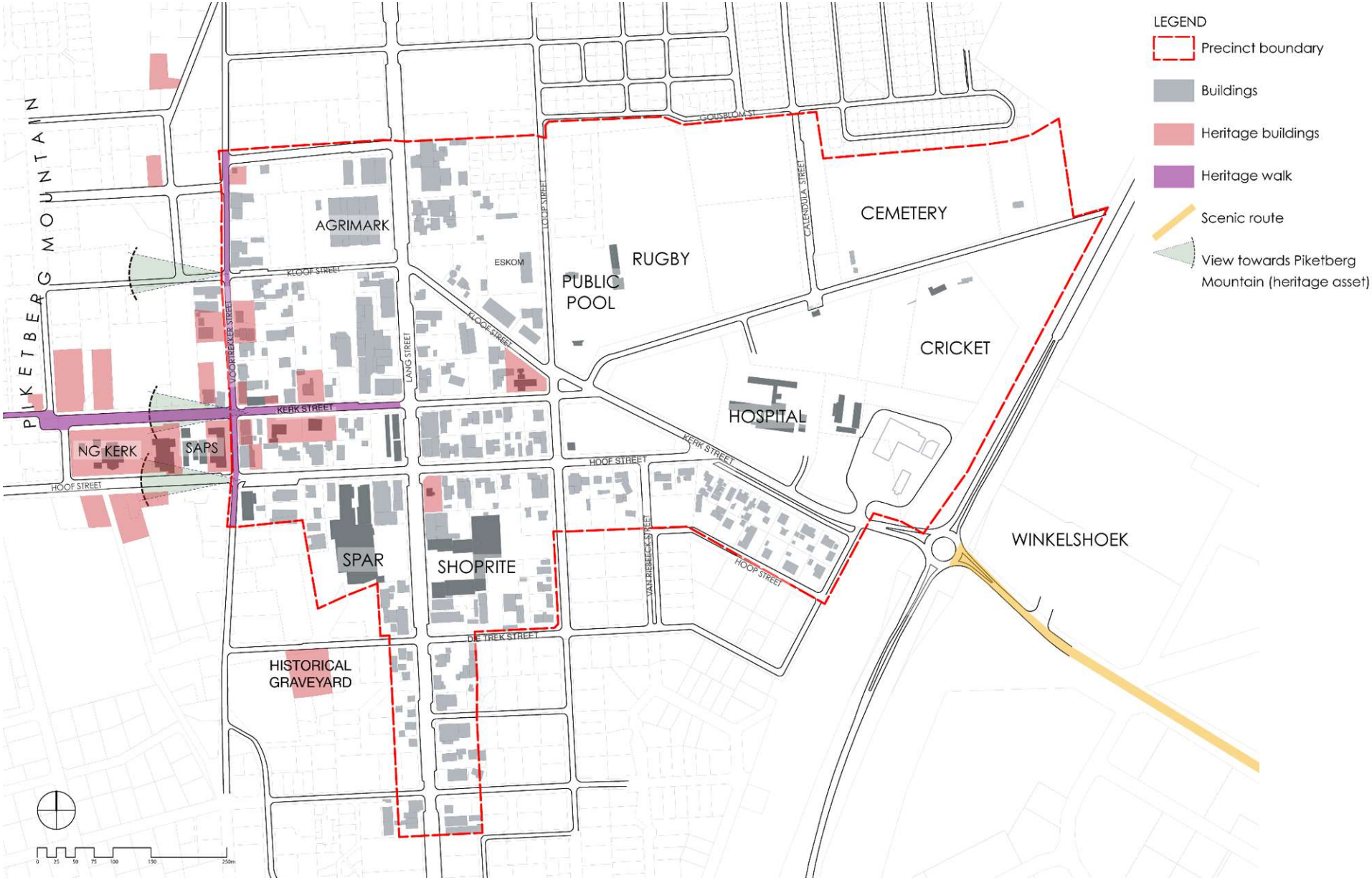


Figure 18: Heritage assets and special places

3.3.9 Building and street interface

The conditions of the building facades and street interface directly relate to the quality of the public environment. Building edges have been divided into three conditions in **Figure 19**: blank, transparent and active.

- Blank edges: solid walls with no relationship to the street;
- Transparent edges: glass facades, windows, well maintained 'green' edges such as hedges or visually permeable fencing; and
- Active edges: characterised by spill out activities and edges that engage with the public realm to create a positive street interface environment.

It is evident from **Figure 19** that there are very few active edges with spill out activity. The dominant edge condition is 'transparent', with many shop windows facing the street, low walls and permeable fencing. A cluster of blank edges are found in the northern part of the study area along Lang Straat and around the sports facilities (**Plate 11a**), negatively affecting the quality of the public environment and the public spaces within these areas.

Façade edges that include canopies or stoeps provide shelter from the elements as well as a transition zone between public and private. A concentration of these elements can be found along Voortrekker Straat with some colonnaded edges along Lang Straat.

In addition to building edges, the physical quality of the public environment, including the sidewalks and parking areas, contribute to the character of the precinct. Uneven sidewalks, as well as the patchy grey paving (**Plate 11b**), detract from the physical aesthetic of the town. Further, large pieces of vacant land or parking lots also negatively affect the character and quality of the town.

Plate 11: Blanks walls, for example at the Rhino Sports Park (a) and patchy grey paving (b) detract from the quality of the urban environment

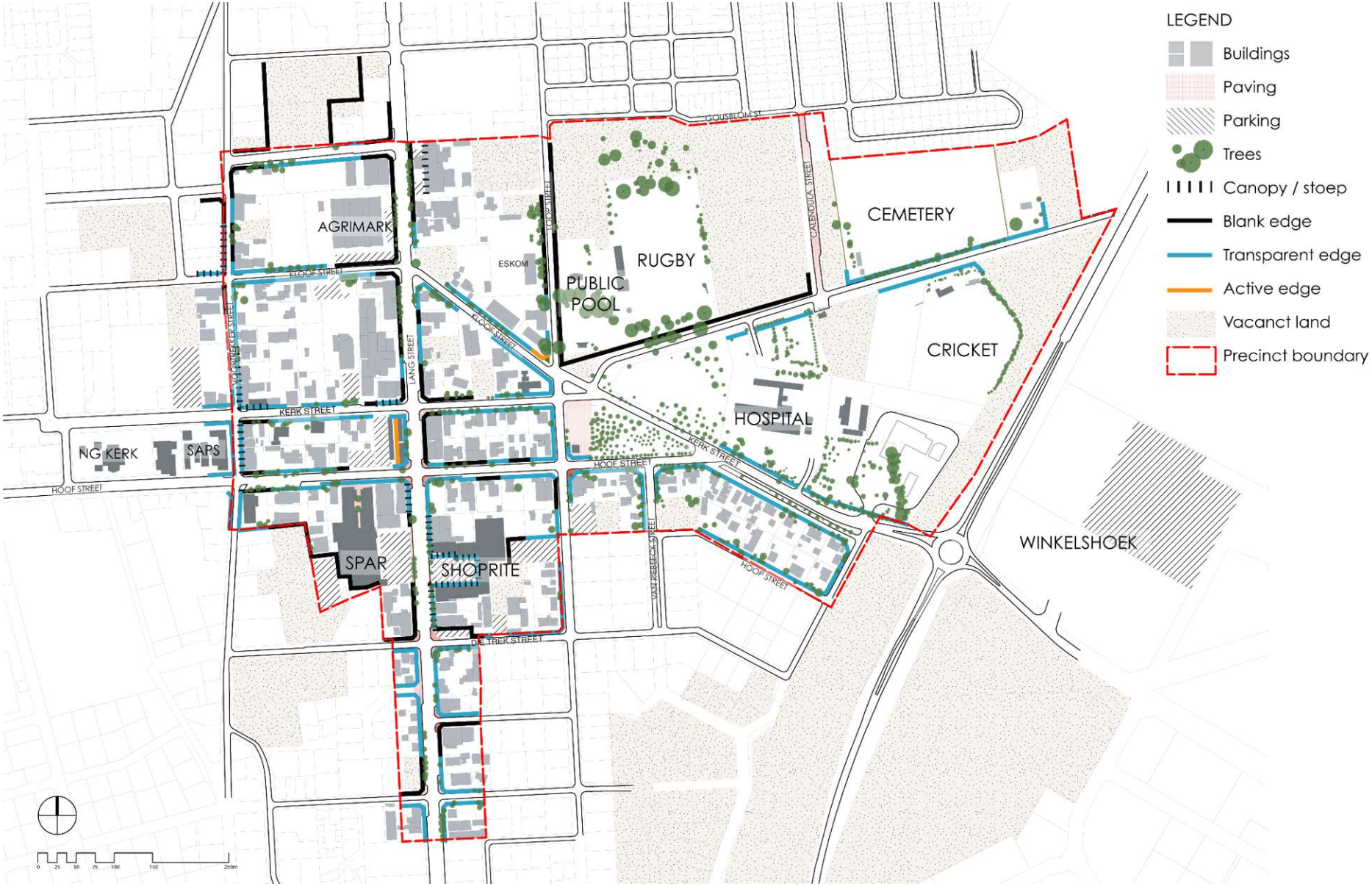


Figure 19: Building and street interface

4. FOCUS GROUP WORKSHOP

4.1 Introduction

The Project Team is acutely aware that the Precinct Plan must be contextually appropriate and be driven by human needs (i.e. a recognition that the basic function of settlement design is to improve the lives of people and to meet human needs). To this end, the Project Team will encourage collaborative approach with key stakeholders throughout the process. Key stakeholders include nominated representatives from the Bergrivier Municipality, as well as community representatives.

The "Enquiry by Design" (EbD) process sees stakeholders as an integral part of information gathering, vision formulation, design, and ultimately, the implementation of the Precinct Plan. The most important aspect of employing an 'EbD' process is that the results are co-produced with the stakeholders supported by technical inputs supplied by the Project Team rather than by the Project Team telling them what they are going to get at the end of a long process.

A key component of the 'EbD' process is the "vision & issues" focus group workshop, which was held with key stakeholders on 27 January 2020. The workshop was attended by 17 stakeholders. The attendance register for the workshop is provided in **Annexure C.**

4.2 Objectives of the Focus Group Workshop

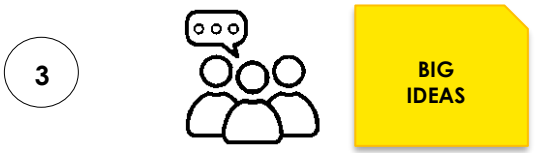
The main objective of the workshop was to engage with key stakeholders in the Piketberg community to gain valuable local knowledge of the study area, as well as to ensure that the community's concerns are identified and considered in the formulation of the interventions and proposals to be included in the Precinct Plan.

4.3 Methodology

The workshop was structured around 5 activities aimed to share local knowledge of the town as it is, and to imagine what the study area could be in the future. The 5 activities were:

Sticker exercise to identify assets (green stickers), problems (red stickers) and opportunities (blue stickers) in the Study Area

Sticky note exercise to imagine and dream an ideal Piketberg



Group discussions to develop 5 big ideas for the Study Area

Report back to share all group discussions and ideas to all workshop attendees

Vote to identify the overall best ideas for the study area

4.4 Outcomes

4.4.1 Issues & problems

The workshop participants identified the following as their main areas of concern (mapped in **Figure 20a**):

- Open areas are dangerous for the pedestrians;
- Traffic problem occurring at Kloof Street / Loop Street triangle;
- Lack of public toilets;
- Lack of lighting in Calendula Street;
- Access to the hospital from Steynville is problematic, in particular a night;
- Public drinking on the edge of Rhino Park sportsfields on weekends;
- Loitering is a problem on weekends, especially in Lang Straat in the vicinity of Shoprite; and
- Minibus taxis cause traffic issues in Lang Straat on weekends.

4.4.2 Assets & opportunities

The following assets and opportunities were identified by the stakeholders (mapped in **Figure 20b**):

- The CBD is an asset that must not be compromised, but Lang Straat could be upgraded;
- Historic buildings in Kerk Street are an asset;
- There is a need for a people friendly park / recreation area that can accommodate the entire community and families;
- Opportunity for informal trading and possibly a weekend market;
- Live/work units could improve safety (eyes on the street); and
- Opportunities for businesses south of Hoof Street.

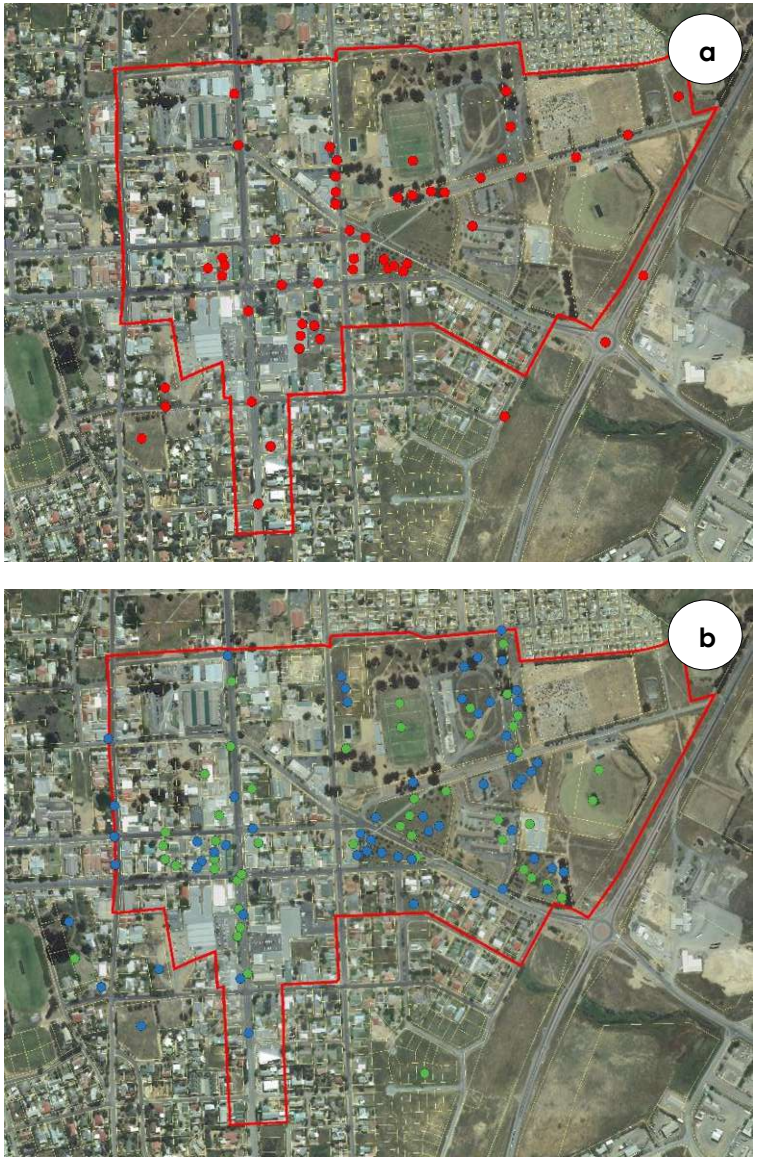


Figure 20: Problems (a) and assets & opportunities (b) identified by stakeholders (a)

4.4.3 Big ideas

The following project ideas were put forward by the stakeholders:

- Lighting & benches for Calendula Street and associated play park;
- Safety measures should be implemented at the open spaces at Calendula Street / Sarel Cilliers Street;
- Optimize utilization of open spaces;
- Open spaces for passive relaxation (opportunity for a festival/park) and family outings;
- Protect the CBD and the existing businesses;
- Resolve conflict between vehicles and pedestrians (Loop, Kerk and Kloof Straat) through redesign;
- Reroute taxis to reduce conflict with pedestrians in Lang Straat;
- Rehabilitation of the entrances and main roads;
- Redesign Lang Straat between Kerk and Die Trek Straat using urban design principles;
- Opportunities for business premises in Hoof Street opposite the hospital;
- Improve access to the hospital from Steynville;
- More public toilets; and
- Rehabilitation of the entrances and main roads; and
- Informal trading areas in suitable areas.

4.4.4 Synthesis

Figure 21 spatialises the big ideas emerging from the Focus Group Workshop and provides a synthesis of the stakeholders' input into the design process.

Plate 12: Workshopping ideas with stakeholders (a) and stakeholder mapping of assets, opportunities and problems (b)

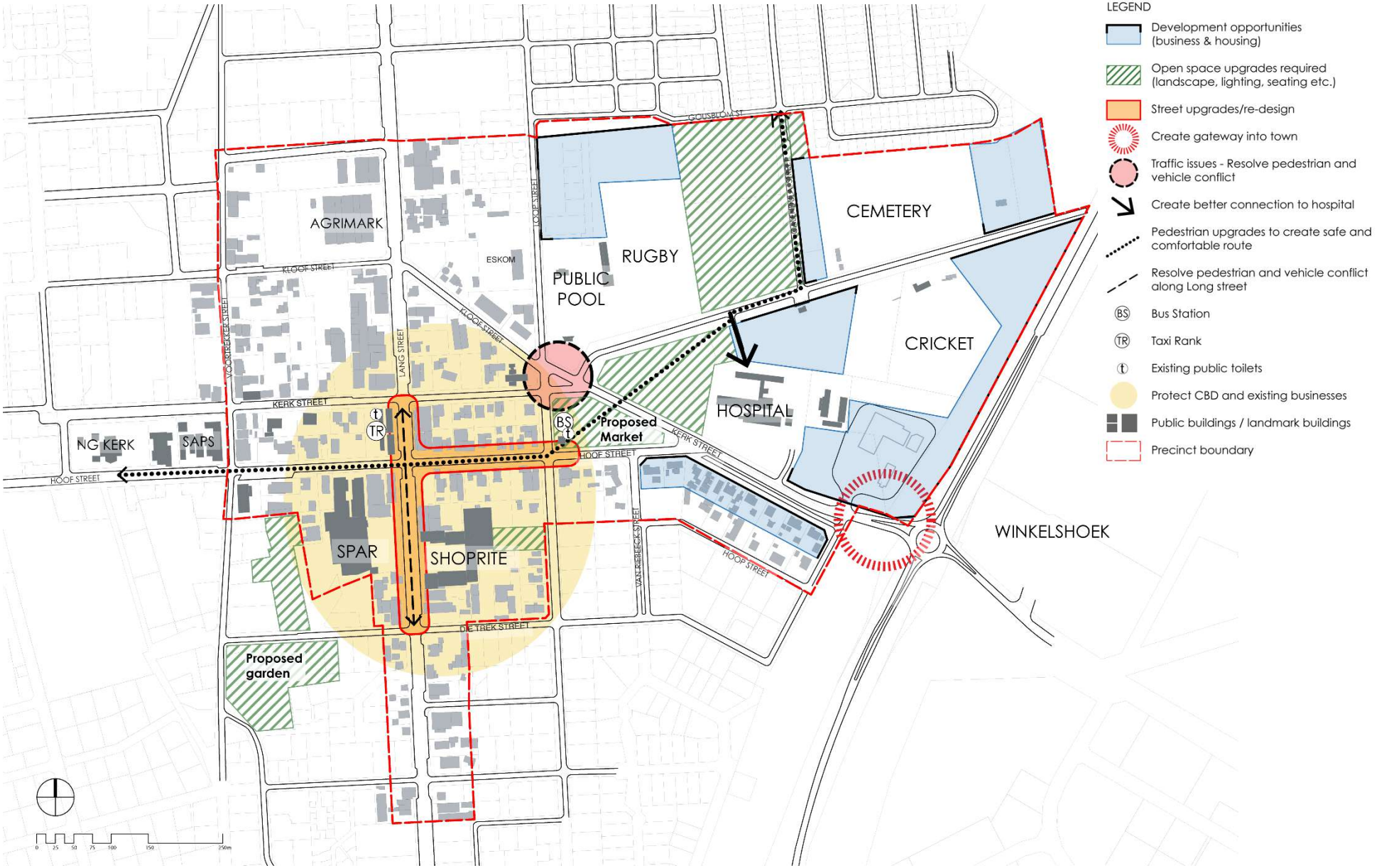


Figure 21: Synthesis of big ideas emerging from the Focus Group Workshop

5. OPPORTUNITIES AND CONSTRAINTS

5.1 Introduction

One of the major objectives of the Status Quo Assessment and Analysis stage of the project is to establish opportunities and constraints in relation to further development within the study area. Such opportunities and constraints are a result of all of the relevant information from the analysis, including the synthesis of information gathered from the Focus Group Workshop. This information is then overlaid and organized on respective composite opportunities and constraints maps to allow for an holistic interpretation of the nature of the challenge. These maps will be used in the Precinct Plan stage of the project as indicators that directly inform design decisions.

5.2 Opportunities

Opportunities within the study area are listed below and spatialised in **Figure 22**:

- Piketberg is a relatively small town, with most amenities within a 500m – 1km walking distance;
- The existing sports facilities are in relatively good condition and are well utilised;
- There are a number of new public projects planned within the study area;
- Various parcels of land that have development potential are publicly owned;
- There are strong, well-established pedestrian routes through the study area;
- The numerous heritage buildings and associated heritage route give the town a sense of place;
- The CBD is functioning well, with a range of retail, business and social amenities on offer;
- There are established public parks with trees;
- The town enjoys beautiful views to the near and far mountains;
- Public transport facilities provide access opportunities to the surrounding region;
- Lang and Hoof Straat are two active routes and are a strong base for public realm upgrades;
- The caravan park has recently been sold and the opportunity exists to guide proposals for the site to enhance the gateway experience to the town.

5.3 Constraints

Constraints within the study area are listed below and spatialised in **Figure 23**:

- The gateway into Piketberg from the N7 is undefined;
- Some of the major streets in the study area are excessively wide, ill-defined and car dominant;
- Large parking lots on key streets, as well as excessive street parking, exacerbate the car dominant feel of the town;
- Pedestrian and vehicles conflict at the confluence of Kloof, Loop and Kerk Straat, as well as crossing the N7;
- The provincial road along Kerk Straat and part of Lang Staat has limitations for pedestrian friendly upgrades;
- There are established truck routes through the centre of town;
- There is a lack of high-quality paving along pathways and sidewalks;
- Overheard telephone lines along Lang Straat, large dustbins and ill-placed signage are contributing to clutter along sidewalks;

- Blank facades along Lang and Loop Straat, as well as around the Rhino Park sports complex, are contributing to a negative public realm;
- Public parks require lighting, seating and public space upgrades;
- Small street trees providing inadequate shade, especially along Lang Straat;
- Lack of high-quality space for people to wait for transport on weekends; and
- Access to the hospital from the low-income areas in the northern portion of town is limited, particularly for the elderly and disabled.

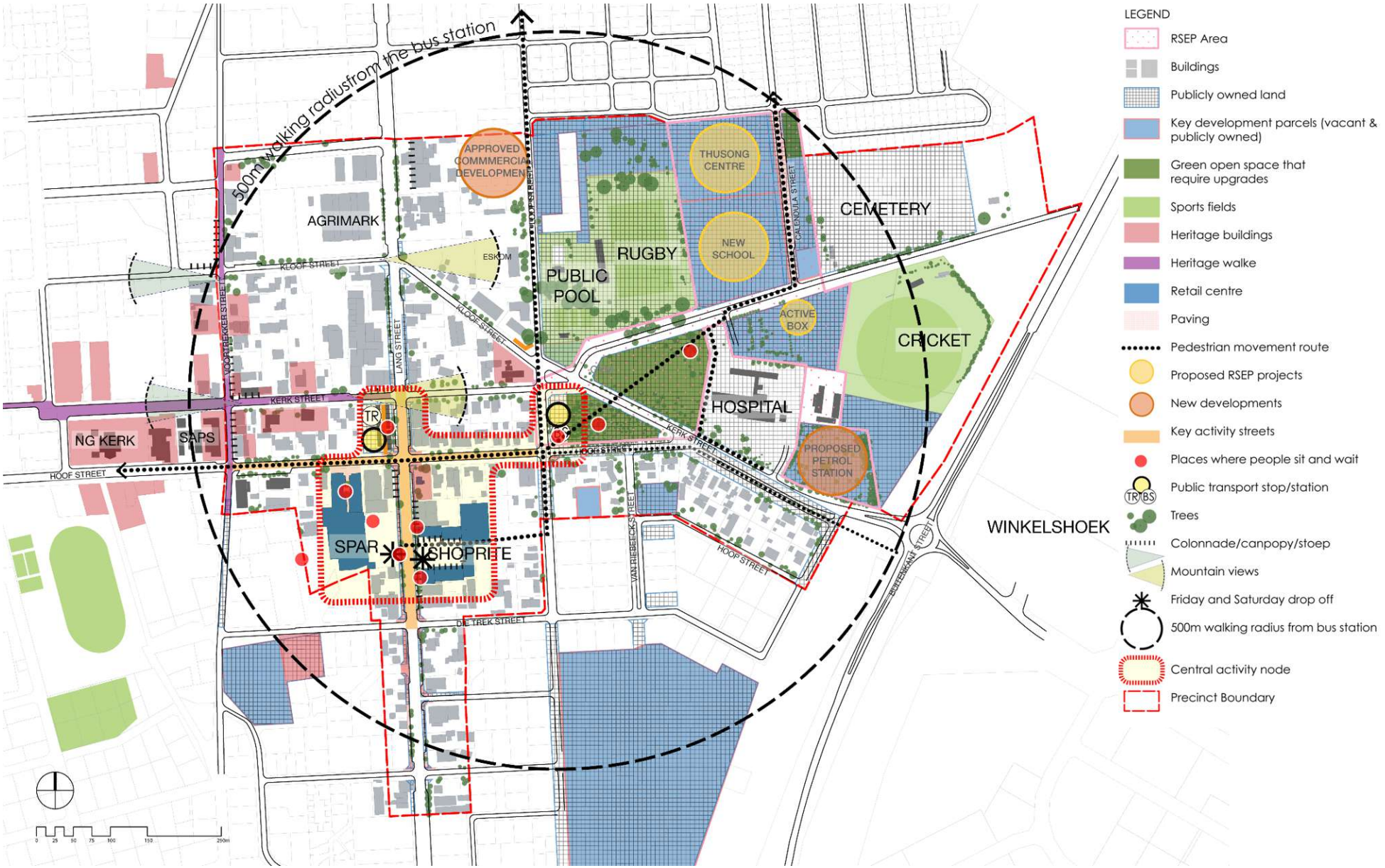


Figure 22: Opportunities within the study area

Figure 23: Constraints within the study area

6. CONCLUSION

This report has analysed and assessed the study area in relation to its contextual location within Piketberg and the wider Bergrivier Municipality region. It has established that Piketberg is well located on the N7 and has a strong CBD, but is spatially segregated and lacks urban design quality. Further, the town has defining social problems such as poor levels of education, a skewed income distribution and drug and alcohol related issues. Notwithstanding, there is tremendous potential to revitalize the town through urban design and landscaping interventions, particularly within the study area.

There are a number of opportunities and constraints that must be considered as informants when conceptualizing design proposals and interventions to be incorporated in the Precinct Plan for the study area.

This report, including the outcomes of the Focus Group Workshop, encompasses the first stage of the production of the Precinct Plan, as illustrated in **Figure 24**. The next stage is to produce a Draft Precinct Plan including conceptual design proposals and interventions, following which the first of two public participation engagements will commence.

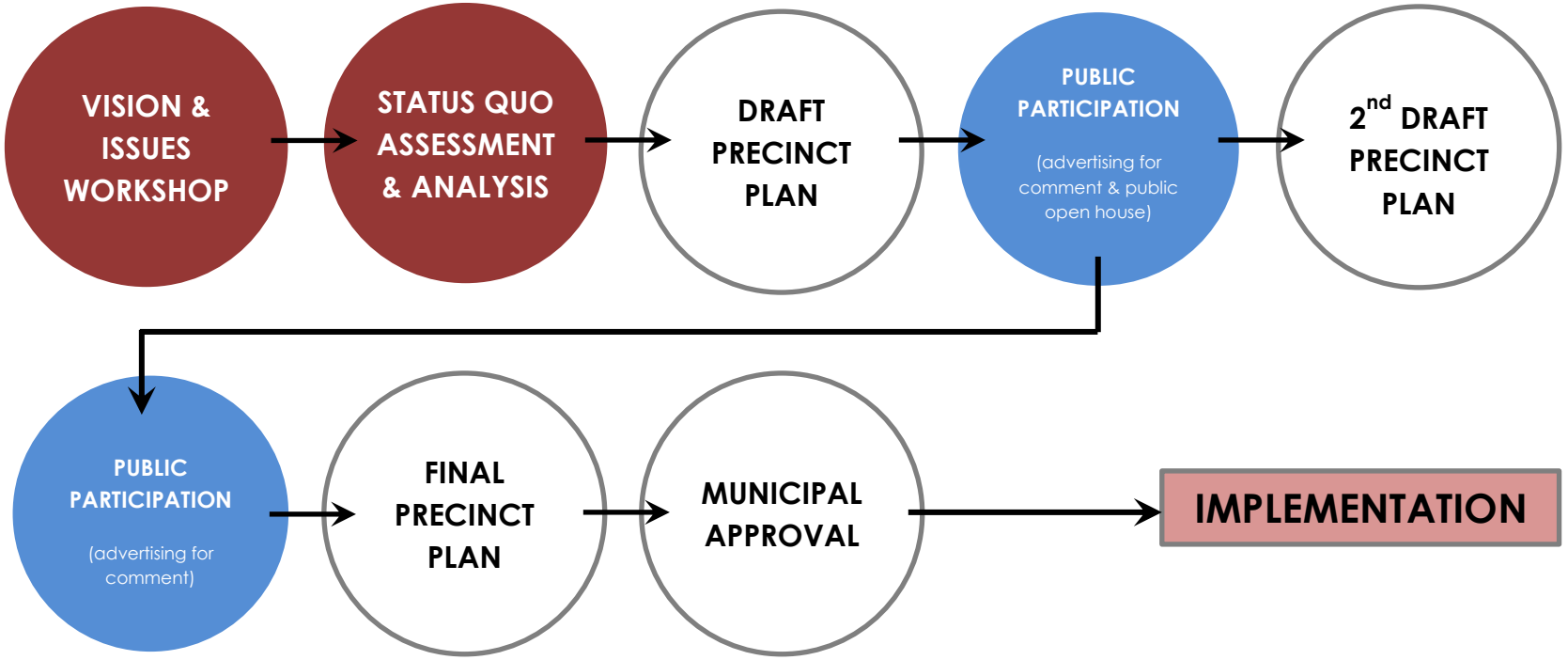
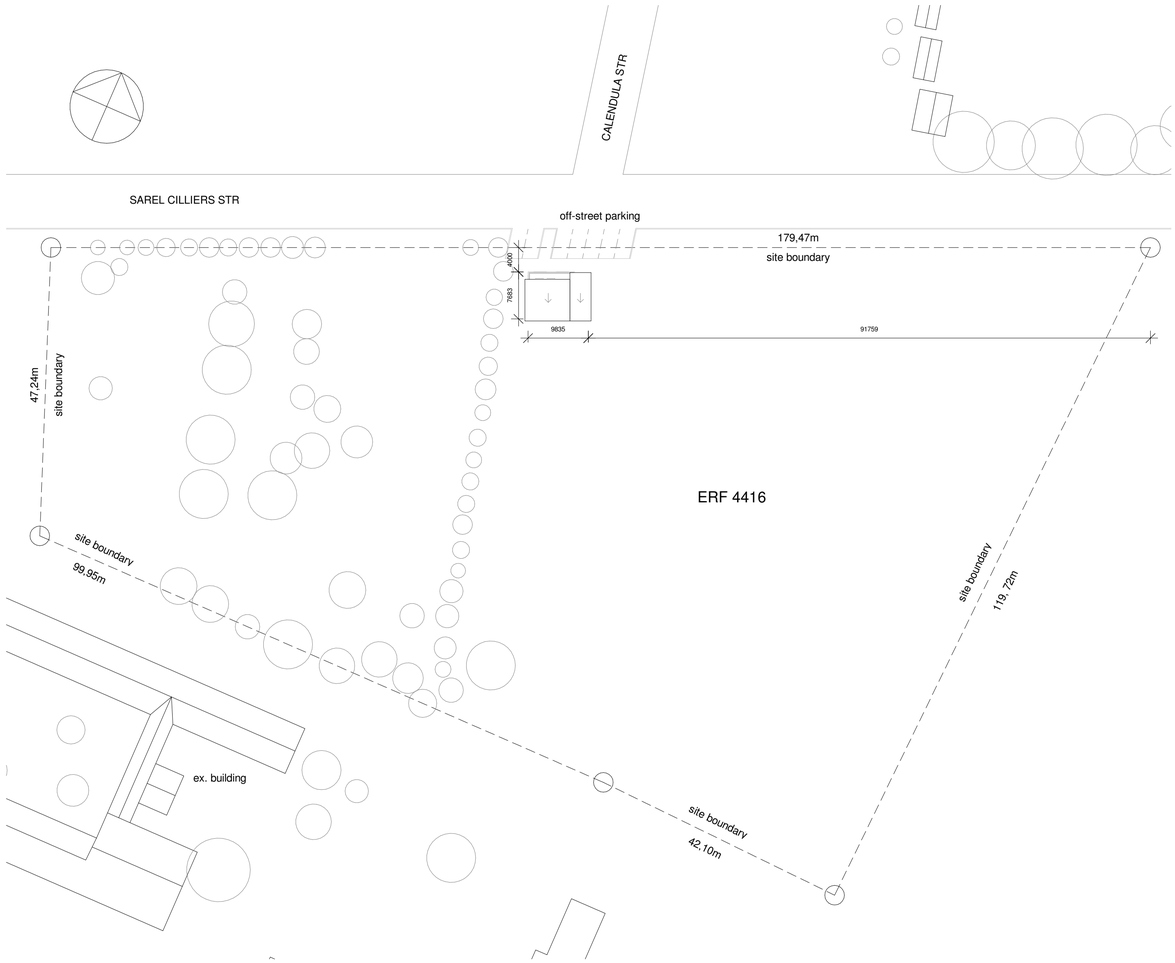


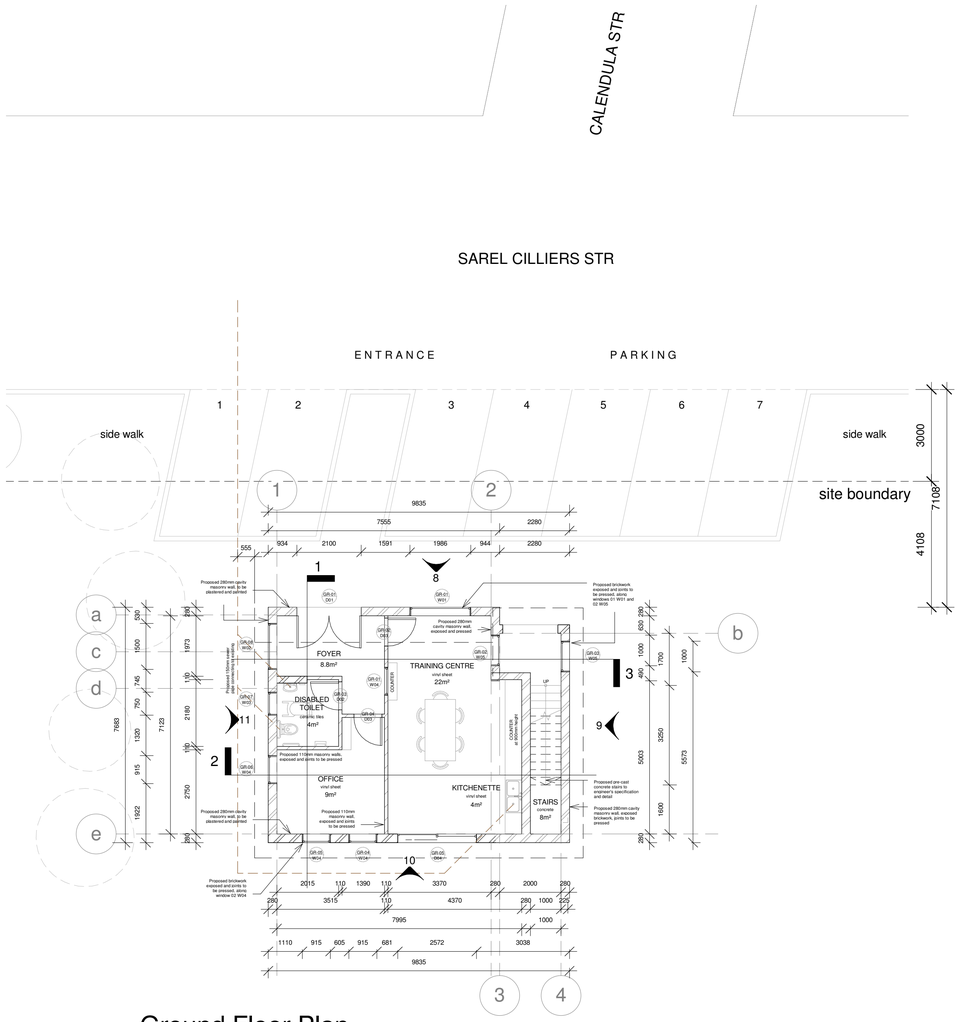
Figure 24: Stages within the production of the Precinct Plan

ANNEXURE A

“Active Box” development plans

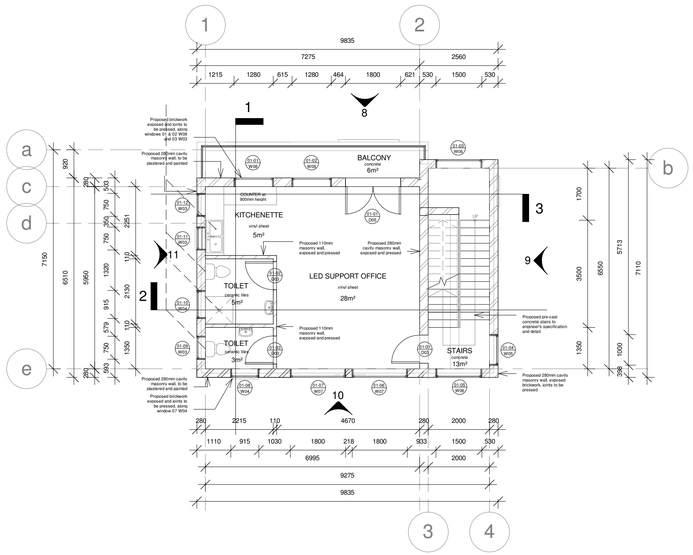


1 Site Plan
1 : 500

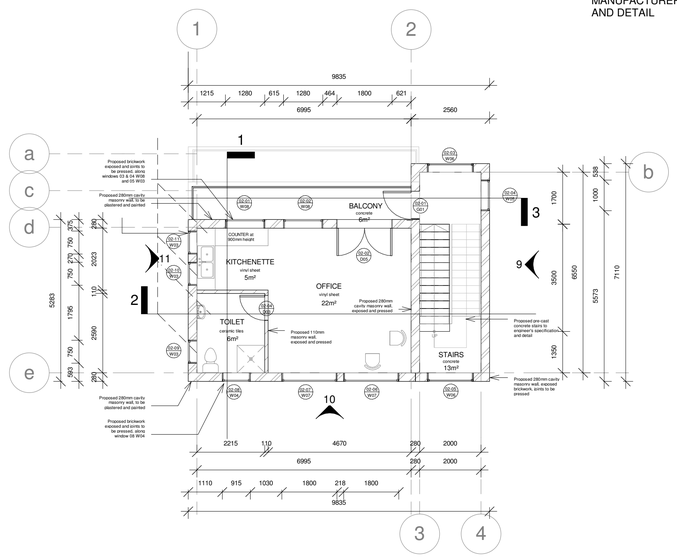


2 Ground Floor Plan
1 : 100

NOTE:
ALL WINDOW AND DOOR FIXTURES TO BE ALIMINIUM FRAMED TO MANUFACTURER'S SPECIFICATION AND DETAIL



3 First Floor Plan
1 : 100



4 Second Floor Plan
1 : 100

COVERAGE

Bulk Factor :
No Restrictions in accordance with Local Authority

Site Area	= 12 503m²
Existing Building Area	= 0m²
Proposed Building Footprint	= 74m²
Proposed Ground Floor	= 63.5m²
Proposed First Floor	= 49m²
Proposed Second Floor	= 40m²
TOTAL COVER	= 74m² = 0.6% cover

NOTES

GENERAL NOTES:

ALL BUILDING WORK TO COMPLY WITH SABS 0400.
ALL BUILDINGWORK TO COMPLY WITH LOCAL MUNICIPAL BY-LAWS.
NO DIMENSIONS TO BE SCALED OR SCANNED.
ALL DIMENSIONS TO BE CHECKED BEFORE ANY WORK IS PUT IN HAND.
WHERE APPLICABLE THE CONTRACTOR AND HIS SUB-CONTRACTOR MUST CHECK ALL RELEVANT DETAILS, LEVELS AND DIMENSIONS BEFORE COMMENCING WORK ON SITE, OR MANUFACTURING ANY COMPONETS.
ANY DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT IMMEDIATELY.
THE USE OF TRADE NAMES ON THIS DRAWING SIMPLY SERVES TO INDICATE A STANDARD ACCEPTABLE TO THE CHIEF DIRECTORATE-WORKS. ANY OTHER BRAND MAY BE USED PRIOR WRITTEN APPROVAL OF THE CHIEF DIRECTORATE WORKS.

THE DESIGN ON THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

ALL DIMENSIONS AND LEVELS ARE TO BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY WORK.

DIMENSIONS ARE INDICATED IN MILLIMETERS.

NOTES:

THE USE OF TRADE NAMES ON THIS DRAWING SIMPLY SERVES TO INDICATE A STANDARD ACCEPTABLE TO THE DEPARTMENT, ANY OTHER BRAND MAY BE USED WITH THE PRIOR WRITTEN APPROVAL OF THE PROJECT LEADER.

THE CONTRACTOR MUST WORK FROM FIGURED DIMENSIONS ONLY. CHECK ALL DIMENSIONS AND LEVELS ON SITE BEFORE COMMENCING ANY WORK. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS, SCHEDULES, DRAINAGE DRAWINGS, INTERNAL ELEVATIONS, ENGINEERS AND OTHER SPECIALIST'S DRAWINGS.

REFER CONFLICTING INFORMATION TO THE ARCHITECT AND OTHER RESPONSIBLE CONSULTANTS

REVISIONS

REV.	DESCRIPTION	DATE	BY

DESIGN FOR APPROVAL

DOCUMENT STATUS
COUNCIL SUBMISSION

UNLESS STAMPED, THIS DRAWING IS NOT VALIDATED AND SHOULD NOT BE USED

CONSULTANT

CLIENT

PROJECT LEADER	DATE	SIGN
ARCHITECTURAL SERVICES Rushdy Parker - P Arch 7761	DATE 04 Feb 2019	SIGN
C & S ENGINEER SERVICES	DATE	SIGN
ELECTRICAL ENGINEER SERVICES	DATE	SIGN
MECHANICAL ENGINEER SERVICES	DATE	SIGN

PROJECT INFORMATION
ACTIVE BOX
ERF 4461, Piketberg, Bergrivier Municipality

DRAWING TITLE
Site Plan & Plans

CAPITAL | MAINTENANCE

DATE	DRAWN	SCALE	CHECKED
2019/01/30 12:25:02 PM	NS	As indicated	WA

PROJECT FILE NO.
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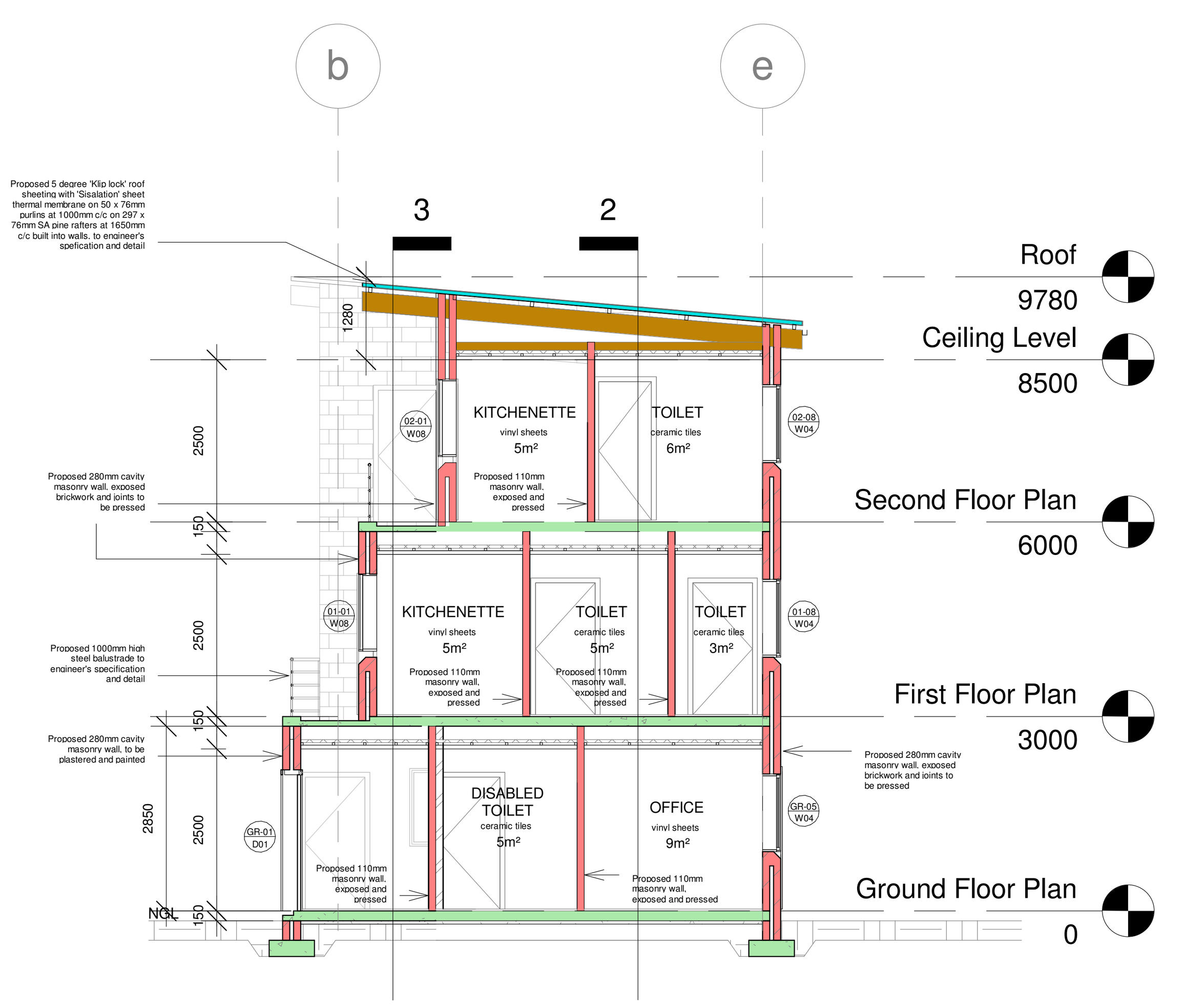
DRAWING NO.	REV.NO
2018-007	**00**



5 Section 1
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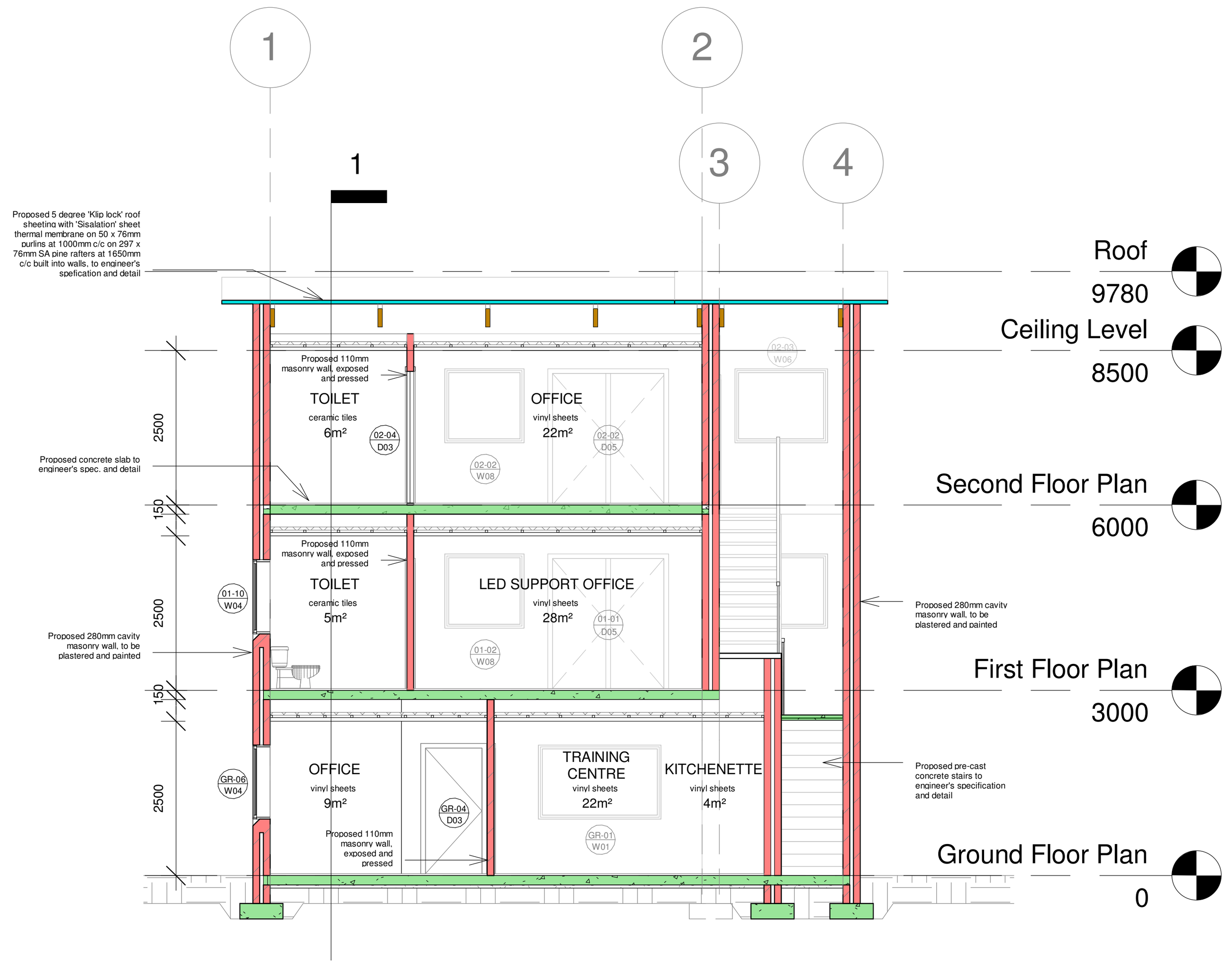
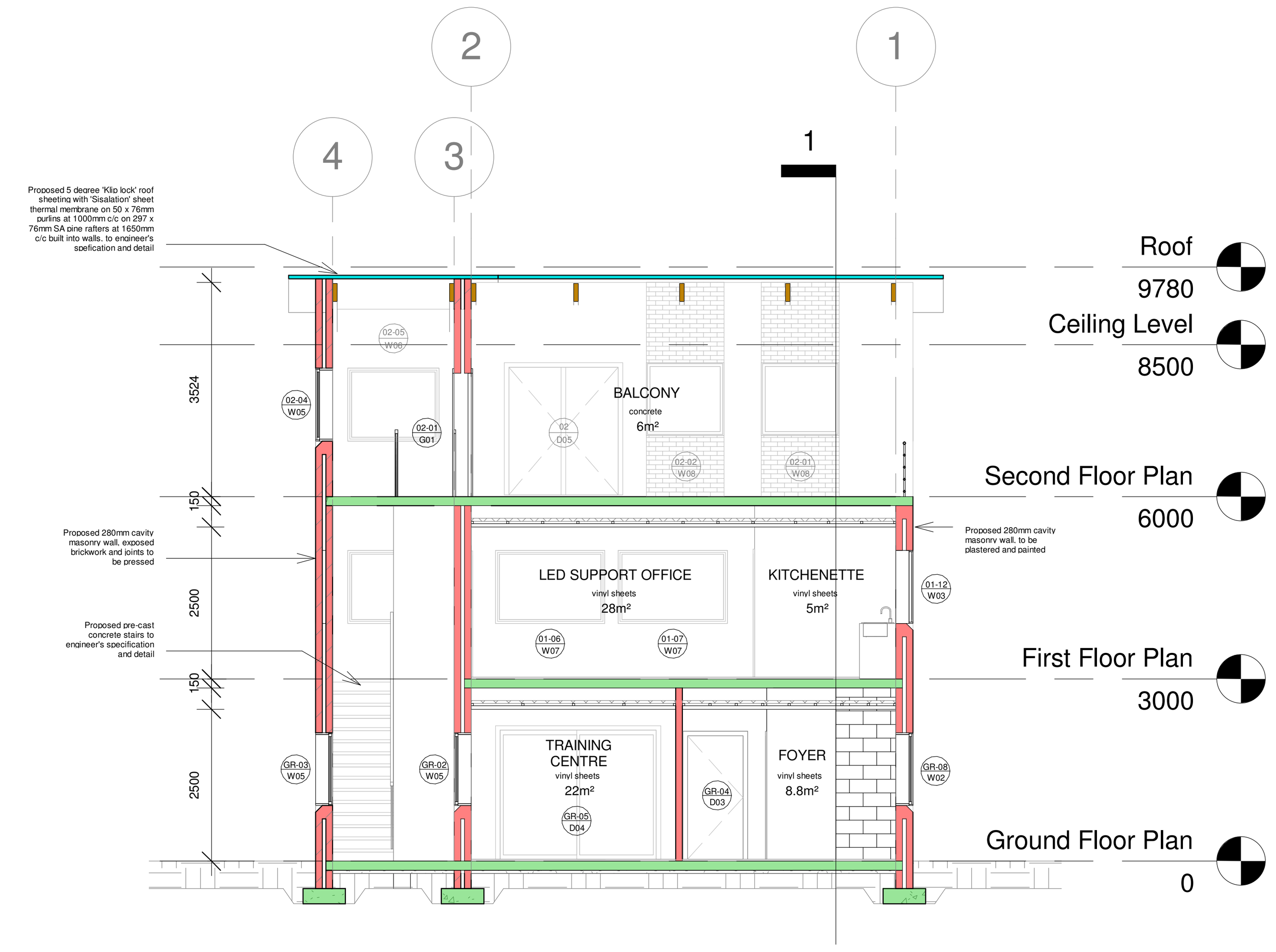
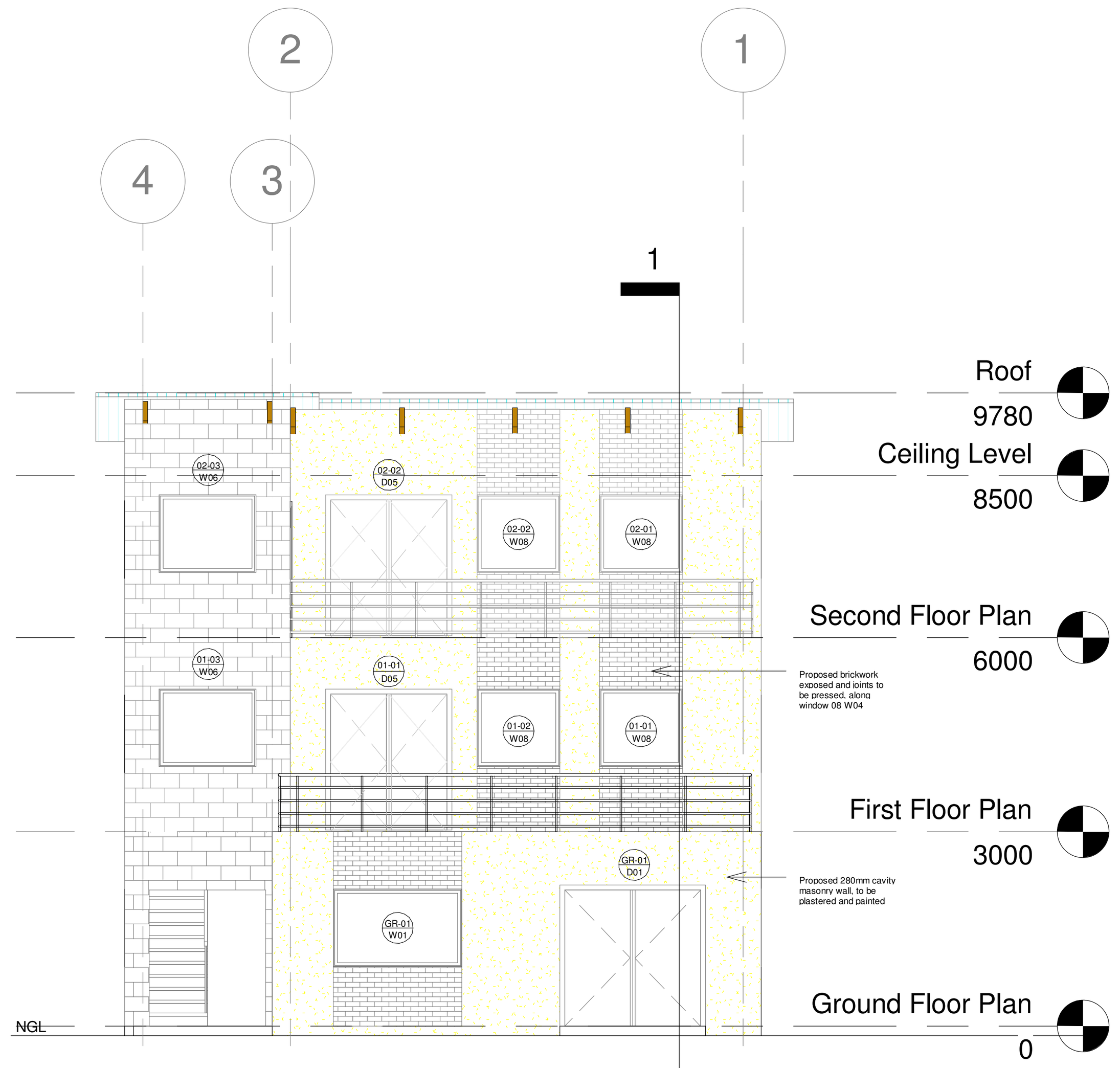


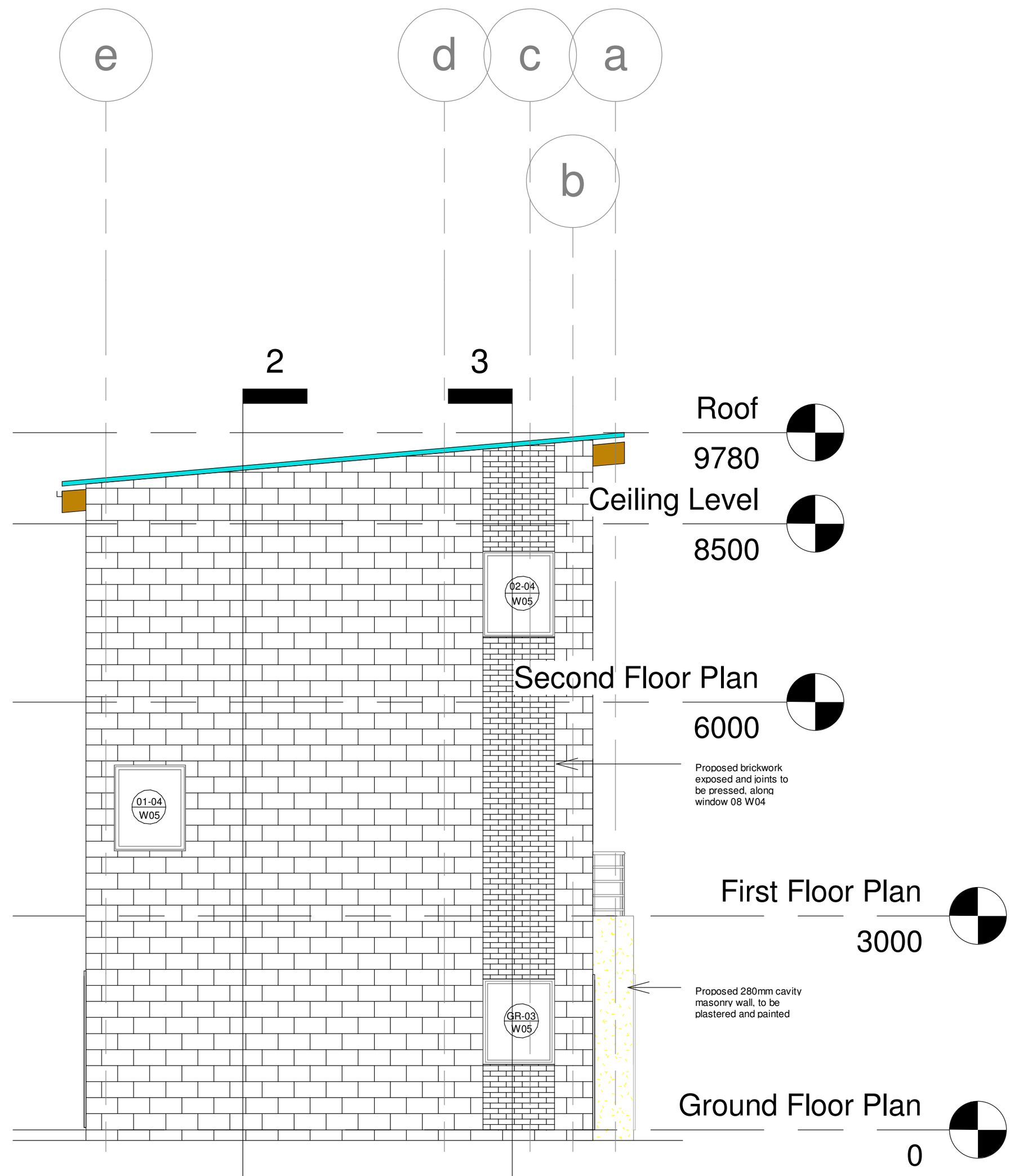
6 Section 2
1 : 100



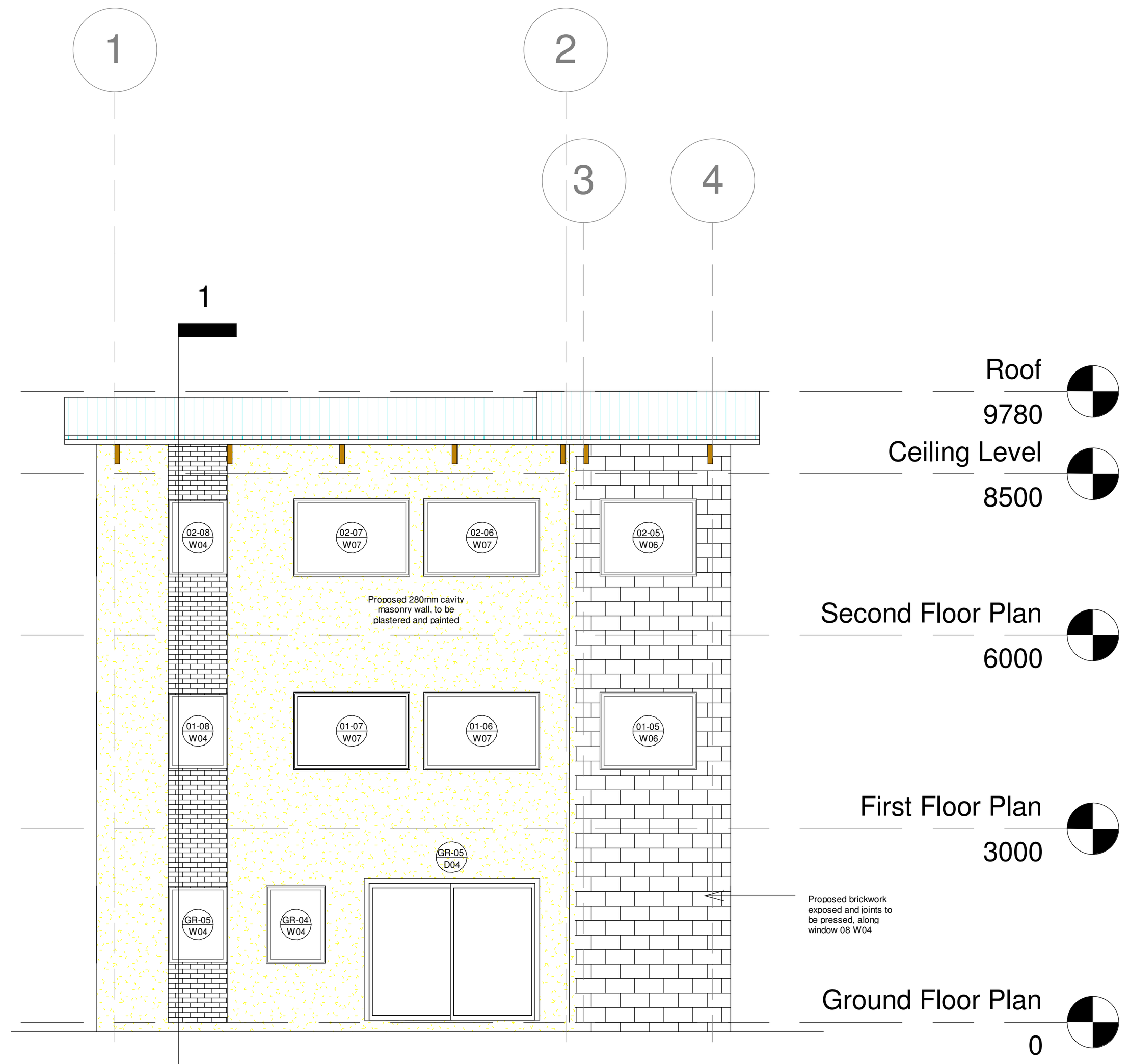
7 Section 3
1 : 100



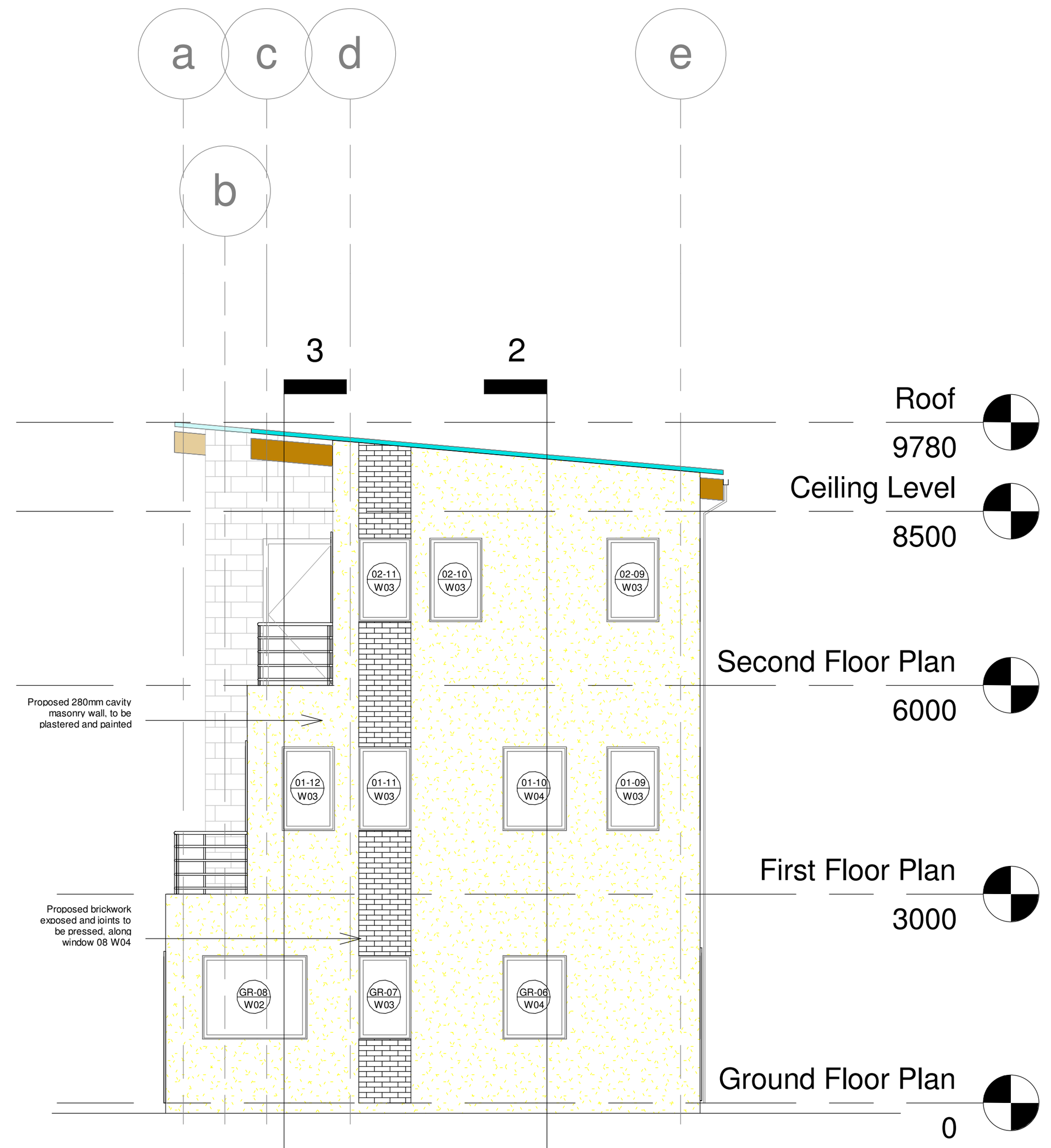
8 North Elevation
1 : 100



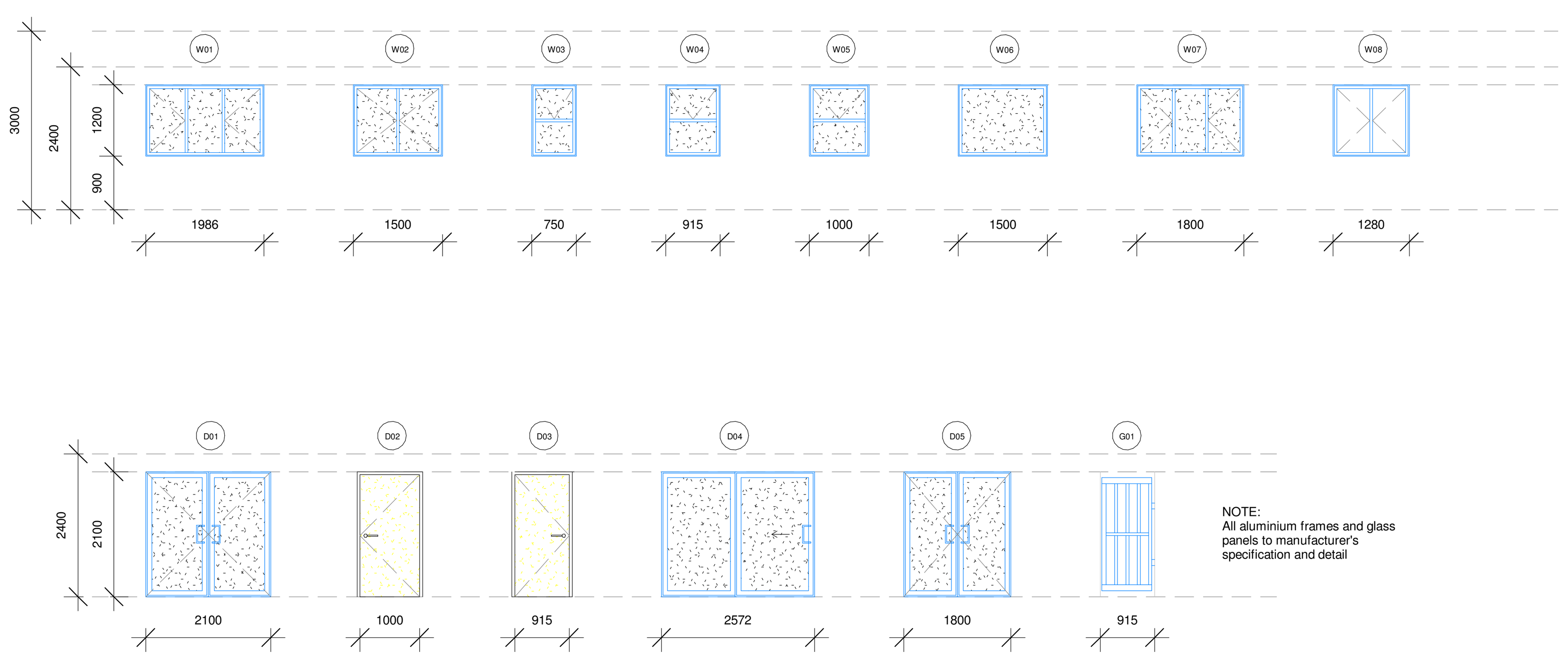
9 East Elevation
1 : 100



10 South Elevation
1 : 100



11 West Elevation
1 : 100



12 Door & Window Schedules
1 : 100

Conductance and Solar Heat Gain Schedule - Ground Floor

Climate Zone: Zone 4 - Temperate Coastal — 4
Constants: Conductance(Cu): 1,4
Solar Heat Gain Coefficient(SHGC/CSHGC): 0,13
Floor Area: 53,8m²

Conductance (CU) — Allowable: Nett Floor area x U; Floor Area: 53,8m² X 1,4 = 75,32
Solar Heat Gain (SHGC): Allowable Solar Heat Gain: Nett Floor Area X cshgc; Floor Area: 53,8m² X 0,13 = 6,994

Room Name/No:	Window/Door No:	Description	Window Type	Width:	Height:	Area (A)	U-Value (U)	Conductance (AxU)	Horizontal Projection (P)	Vertical Height (H)	P/H	SHGC Value of Glazing Element (S)	Orientation	Solar Exposure (E)	A x S x E
Training Centre	GR-01-W01	SIDE HUNG WINDOW, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,986m	1,200m	2,38m²	3,4	8,103	0,040	1,200	0,033	0,5	N	0,71	0,85
Office	GR-04-W04	TOP HUNG WINDOW, WITH SAFTY GLASS	Single Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	5,73	6,292	0,315	6,709	0,047	0,66	S	0,52	0,38
Office	GR-05-W04	TOP HUNG WINDOW, WITH SAFTY GLASS	Single Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	5,73	6,292	0,315	6,709	0,047	0,66	S	0,52	0,38
Office	GR-06-W04	TOP HUNG WINDOW, WITH SAFTY GLASS	Single Solar E Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	3,4	3,733	0,440	6,968	0,063	0,5	W	1,30	0,71
Disable Toilet	GR-07-W03	TOP HUNG WINDOW, WITH SAFTY GLASS	Single Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	3,4	3,060	0,440	7,126	0,062	0,5	W	1,30	0,59
Foyer	GR-08-W02	SIDE HUNG WINDOW, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,500m	1,200m	1,80m²	3,4	6,120	0,440	7,263	0,061	0,5	W	1,30	1,17
Foyer	GR-01-D01	GLAZED DOUBLE SWING DOOR, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	2,100m	2,100m	4,41m²	3,4	14,994	0,230	2,100	0,110	0,5	N	0,65	1,43
Training Centre	GR-05-D04	GLAZED SLIDING DOOR, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	2,572m	2,100m	5,40m²	3,4	18,364	0,505	7,447	0,068	0,5	S	0,52	1,40
							Total CU:	66,957						Total SHGC:	6,91
								Complies							Complies

Conductance and Solar Heat Gain Schedule - 1st Floor

Climate Zone: Zone 4 - Temperate Coastal — 4
Constants: Conductance(Cu): 1,4
Solar Heat Gain Coefficient(SHGC/CSHGC): 0,13
Floor Area: 41,4m²

Conductance (CU) — Allowable: Nett Floor area x U; Floor Area: 41,4m² X 1,4 = 57,96
Solar Heat Gain (SHGC): Allowable Solar Heat Gain: Nett Floor Area X cshgc; Floor Area: 41,4m² X 0,13 = 5,382

Room Name/No:	Window/Door No:	Description	Window Type	Width:	Height:	Area (A)	U-Value (U)	Conductance (AxU)	Horizontal Projection (P)	Vertical Height (H)	P/H	SHGC Value of Glazing Element (S)	Orientation	Solar Exposure (E)	A x S x E
Kitchenette	01-01-W08	SIDE HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	1,280m	1,200m	1,54m²	2,1	3,226	0,040	1,200	0,033	0,43	N	0,71	0,47
LED Support Office	01-02-W08	SIDE HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	1,280m	1,200m	1,54m²	2,1	3,226	0,040	1,200	0,033	0,43	S	0,52	0,34
LED Support Office	01-06-W07	SIDE HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	1,800m	1,200m	2,16m²	2,1	4,536	0,315	4,209	0,075	0,43	S	0,52	0,48
LED Support Office	01-07-W07	SIDE HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	1,800m	1,200m	2,16m²	2,1	4,536	0,315	4,209	0,075	0,43	W	1,30	1,21
Toilet	01-08-W04	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	2,1	2,306	0,315	4,209	0,075	0,43	W	1,30	0,61
Toilet	01-09-W03	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	2,1	1,890	0,440	4,365	0,101	0,43	W	1,25	0,48
Toilet	01-10-W04	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	2,1	2,306	0,440	4,468	0,098	0,43	N	0,65	0,31
Kitchenette	01-11-W03	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	2,1	1,890	0,440	4,626	0,095	0,43	S	0,49	0,19
Kitchenette	01-12-W03	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	2,1	1,890	0,440	4,703	0,094	0,43	S	0,49	0,19
LED Support Office	01-01-D01	GLAZED DOUBLE SWING DOOR, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	2,100m	2,100m	4,41m²	3,4	14,994	0,230	2,100	0,110	0,5	S	0,49	1,08
							Total CU:	40,799						Total SHGC:	5,37
								Complies							Complies

Conductance and Solar Heat Gain Schedule - 2nd Floor

Climate Zone: Zone 4 - Temperate Coastal — 4
Constants: Conductance(Cu): 1,4
Solar Heat Gain Coefficient(SHGC/CSHGC): 0,13
Floor Area: 32,9m²

Conductance (CU) — Allowable: Nett Floor area x U; Floor Area: 32,9m² X 1,4 = 46,06
Solar Heat Gain (SHGC): Allowable Solar Heat Gain: Nett Floor Area X cshgc; Floor Area: 32,9m² X 0,13 = 4,277

Room Name/No:	Window/Door No:	Description	Window Type	Width:	Height:	Area (A)	U-Value (U)	Conductance (AxU)	Horizontal Projection (P)	Vertical Height (H)	P/H	SHGC Value of Glazing Element (S)	Orientation	Solar Exposure (E)	A x S x E
Kitchenette	02-01-W08	SIDE HUNG WINDOW, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,280m	1,200m	1,54m²	3,4	5,222	1,018	2,186	0,466	0,5	N	0,33	0,25
Office	02-01-W08	SIDE HUNG WINDOW, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,280m	1,200m	1,54m²	3,4	5,222	1,018	2,186	0,466	0,5	S	0,33	0,25
Office	02-06-W07	SIDE HUNG WINDOW, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,800m	1,200m	2,16m²	3,4	7,344	0,315	1,706	0,185	0,5	S	0,44	0,48
Office	02-07-W07	SIDE HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	1,800m	1,200m	2,16m²	2,1	4,536	0,315	1,706	0,185	0,43	W	1,12	1,04
Toilet	02-08-W04	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	2,1	2,306	0,315	1,706	0,185	0,43	W	1,12	0,53
Toilet	02-09-W03	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	2,1	1,890	0,440	1,860	0,237	0,43	W	1,06	0,41
Kitchenette	02-10-W04	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,915m	1,200m	1,10m²	2,1	2,306	0,440	2,047	0,215	0,43	N	0,52	0,25
Kitchenette	02-11-W03	TOP HUNG WINDOW, WITH SAFETY GLASS	Double Solar E Low E - Aluminum/Steel Frame	0,750m	1,200m	0,90m²	2,1	1,890	0,440	2,123	0,207	0,43	S	0,44	0,17
Office	02-02-D05	GLAZED DOUBLE SWING DOOR, WITH SAFETY GLASS	Single Solar E Low E - Aluminum/Steel Frame	1,800m	2,100m	3,78m²	3,4	12,852	1,208	3,000	0,403	0,5	S	0,36	0,68
							Total CU:	43,568						Total SHGC:	4,06
								Complies							Complies

Requirement as per clause 4.5.4.1 a : Min R-Value of 3.7 UP

FLAT ROOF (3°-SLOPE) CONSTRUCTION		
Construction Build-up	R-Value unventilated	
	UP	DOWN
Outdoor Air Film	0.03	N/A
Metal cladding:IBR Sheeting	0	N/A
Radiant Barrier (Reflective Insulation for flat skillion or pitched roof (<= 10°))	0,68	
Roof air space (non-reflective)	0,18	N/A
Thermal Insulation (Isotherm: 100mm thick)	2.33	N/A
Gypsum Plasterboard	0.6	N/A
Indoor Air Film	0.11	N/A
TOTAL R-VALUE	3,93	N/A

13 Fenestration Calculations
1 : 100

COVERAGE

Bulk Factor :
No Restrictions in accordance with Local Authority

Site Area	= 12 503m²
Existing Building Area	= 0m²
Proposed Building Footprint	= 74m²
Proposed Ground Floor	= 63.5m²
Proposed First Floor	= 49m²
Proposed Second Floor	= 40m²
TOTAL COVER	= 74m² = 0.6% cover

NOTES

GENERAL NOTES:

ALL BUILDING WORK TO COMPLY WITH SABS 0400.
ALL BUILDINGWORK TO COMPLY WITH LOCAL MUNICIPAL BY-LAWS.
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DIMENSIONS ARE INDICATED IN MILLIMETERS.

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REFER CONFLICTING INFORMATION TO THE ARCHITECT AND OTHER RESPONSIBLE CONSULTANTS

REVISIONS

REV.	DESCRIPTION	DATE	BY

DESIGN FOR APPROVAL

DOCUMENT STATUS
COUNCIL SUBMISSION

UNLESS STAMPED, THIS DRAWING IS NOT VALIDATED AND SHOULD NOT BE USED

CONSULTANT

CLIENT

	DATE	SIGN
PROJECT LEADER		
ARCHITECTURAL SERVICES Rushdy Parker - PR ARCH 7761	04 Feb 2019	
C & S ENGINEER SERVICES		
ELECTRICAL ENGINEER SERVICES		
MECHANICAL ENGINEER SERVICES		

PROJECT INFORMATION
ACTIVE BOX
ERF 4461, Piketberg, Bergrivier Municipality

DRAWING TITLE
Sections & Elevations

CAPITAL		MAINTENANCE	
DATE 2019/01/30 12:23:58 PM	DRAWN NS	SCALE 1 : 100	CHECKED WA

PROJECT FILE NO.
Y:\JOBS\006 - Projects - Current\2018-008 Active Box Piketberg\2.0 Technical\5. Architect\Rev 01 D\Active Box_Concept Layout_Rev 01 D_ns.rvt

DRAWING NO. 2018-008
REV.NO **00**

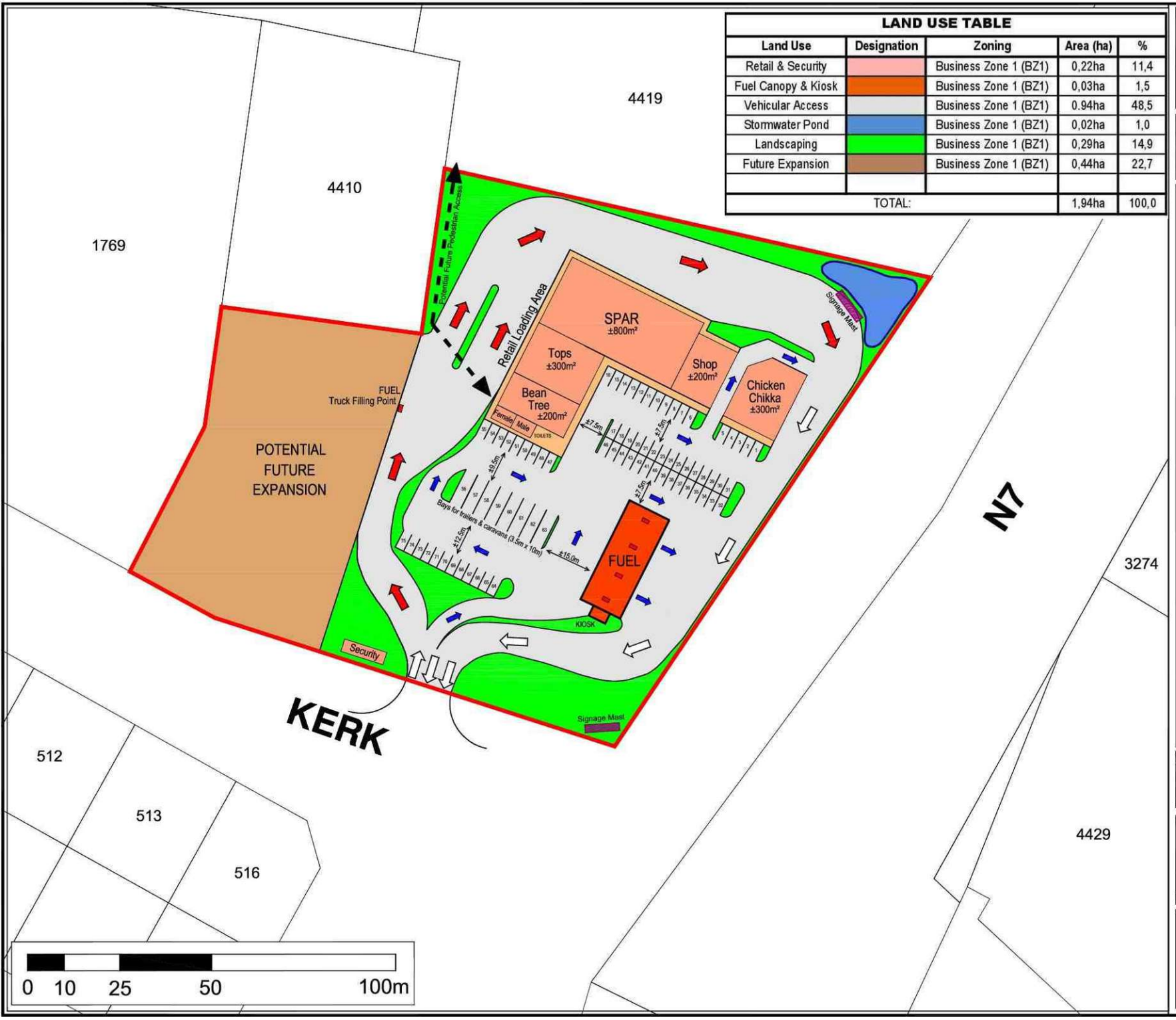
ANNEXURE B

Site Development Plan for the old caravan park site

PIKETBERG
ERF 4420

PROPOSED SDP

LAND USE TABLE				
Land Use	Designation	Zoning	Area (ha)	%
Retail & Security		Business Zone 1 (BZ1)	0,22ha	11,4
Fuel Canopy & Kiosk		Business Zone 1 (BZ1)	0,03ha	1,5
Vehicular Access		Business Zone 1 (BZ1)	0.94ha	48,5
Stormwater Pond		Business Zone 1 (BZ1)	0,02ha	1,0
Landscaping		Business Zone 1 (BZ1)	0,29ha	14,9
Future Expansion		Business Zone 1 (BZ1)	0,44ha	22,7
TOTAL:			1,94ha	100,0



Subject Property

Cadastral Boundaries

***Updated SDP - in response to TIA**
(Extended Caravan/ Trailer Parking Bays)

PLEASE NOTE:
All boundary line positions, distances and property sizes need to be verified by a Professional Land Surveyor.

DATE 12 December 2019
SCALE See linescale
PLAN NO. 6
FILE NAME:

CLIENT

URBAN DYNAMICS WESTERN CAPE
TOWN & REGIONAL PLANNERS
2nd FLOOR
TYGERVALLEY CHAMBERS 5
27 WILLIE VAN SCHOOR AVENUE
BELLVILLE
7530
TEL: (021) 949 1545
FAX: (021) 949 1580
Website: www.udet.co.za
URBAN DYNAMICS WESTERN CAPE INC REG. No: 2005/008201

ANNEXURE C

Focus Group Workshop attendance register

BERGRIVIER MUNISIPALITEIT   BERGRIVIER MUNICIPALITY

ATTENDANCE REGISTER

PIKETBERG PRECINCT PLAN MEETING

DATE: 27 JANUARY 2020

	Name and Surname	Institute	Email address	Contact number	Signature
1	Werner Wagener	Bergrivier Mun.	wagenerw@bergmun.org.za	022 913 6000	[signature]
2	TIM FLORENCE	PLANNING PARTNERS	tim@planpart.co.za	021 418 0516	[signature]
3	Johan Basson	SMEC	johan.basson@smec.com	021 4172900	[signature]
4	Mari Botha	DEA&DP: RSEP	mari.botha@westerncape.gov.za	021 483 0768	[signature]
5	HENDRINA DELPORT	BERGRIVIER MUN		0789366661	[signature]
6	Amalia Fortuin	" "		0847222164	[signature]
7	A Richter	" "	protea7@telkomsa.za	0732302110	[signature]
8	H. [illegible]	" "		0604542119	[signature]
9	M Erasmus	" "		0713722065	[signature]
10	Wolf Liebenberg	Leebco	wolf@liebco.co.za	0828991295	[signature]
11	Philip Jankielsohn	SPAR	Philip@bolandsuperspar.co.za	022 913 1163	[signature]
12	Cazelda Adams	Ander Boerste Bergrivier Forum	a.cazelda@gmail.com	0633971981	[signature]
13	Ilse van Wyk	Bergrivier Mun.	VanWykI@bergmun.org.za	0630925709	[signature]
14	Keenin Abrahams	Bergrivier Mun	abrahamsk@bergmun.org.za	022 913 6000	[signature]
15	COLLETTE MAY	WARD 3	collette.g.may@yahoo.com	0714211178	[signature]
16	Lorraine Mcp	Wyk 3		0845955772	[signature]
17	A. de Vries	"	devriesa@bergmun.org.za	082 [illegible] 6514	[signature]

	Name and Surname	Institute	Email address	Contact number	Signature
18	Driaan Pretorius	Wyk 3 - Godsdienshuis	driaanpretorius001@gmail.com	082 327 7475	
19	RAY VAN ROOY	BERGRIVIER MUN	burgemeester@bergmunorg.za	0836579615	
20					
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Annexure B

Consultation Report

PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN

CONSULTATION REPORT

Prepared by

Planning Partners (Pty) Ltd

PLANNING PARTNERS

Prepared for

Department of Agriculture, Land Reform & Rural Development

agriculture, land reform & rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

FEBRUARY 2021

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Annexure A: Attendance Register ("Vision and Issues" Stakeholder Workshop)

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1. INTRODUCTION

1.1 Background

A "vision & issues" focus group workshop was held with key stakeholders at the outset of the project on 27 January 2020. The workshop was attended by 17 stakeholders (attendance register for the workshop is provided in **Annexure A**). The main objective of the workshop was to engage with key stakeholders in the Piketberg community to gain valuable local knowledge of the study area, as well as to ensure that the community's concerns are identified and considered in the formulation of the interventions and proposals to be included in the Precinct Plan.

The Piketberg Gateway and Central Integration Zone Precinct Plan (the "Precinct Plan") was subject to two rounds of public participation, *viz.*:

- First Draft Precinct Plan (July / August 2020); and
- Second Draft Precinct Plan (November / December 2020).

The process followed for public participation in respect to each of the draft precinct plans in outlined below:

<u>First Draft Precinct Plan</u>

The First Draft Precinct Plan was advertised for public comment on 2 July 2020.

The public participation strategy contained in the Inception Report for the project recommended the following procedures:

- advertisements in the local community newspaper;
- notifications to be sent to registered Interested & Affected Parties (I&APs) via e-mail / post;
- two copies of the Precinct Plan to be made available for public viewing in publicly accessible locations (e.g. Municipal Library);
- posters to be erected in public places; and
- a public open house (scheduled during the 30-day public commenting period) where the proposals will be explained by the professional team.

However, due to constraints resulting from the Covid-19 pandemic, the public participation strategy associated with the First Draft Precinct Plan was amended to include the following procedures:

- notification on the Bergrivier Municipality's website;

- invitation to view the First Draft Precinct Plan on a dedicated Facebook page;
- a dedicated WhatsApp contact number for more information; and
- information posters (refer to **Annexure B**) erected in the following places:
  - the public noticeboard at Shoprite;
  - the public noticeboard at Spar;
  - entrance foyer to the Radie Hospital; and
  - entrance foyer to the payment counter at the Bergrivier Municipality offices in Piketberg.

In addition to the above, the Project Team presented the First Draft Precinct Plan (i.e. PowerPoint presentation) to the MAYCO Committee on 25 August 2020. Further, the proposals were discussed at a special Ward Committee meeting of Ward 3 and Ward 4 held on 11 August 2020.

Second Draft Precinct Plan

The Second Draft Precinct Plan was advertised for public comment on 14 November 2020. The public participation strategy included the following:

- advertisements in the local community newspaper (i.e. Weslander), refer to **Annexure C**;
- notification on the Bergrivier Municipality's website;
- invitation to view the Second Draft Precinct Plan on a dedicated Facebook page;
- a dedicated WhatsApp contact number for more information; and
- information posters (refer to **Annexure D**) erected in the following places:
  - the public noticeboard at Shoprite;
  - the public noticeboard at Spar;
  - entrance foyer to the payment counter at the Bergrivier Municipality offices in Piketberg.
  - the bus stop;
  - the taxi rank;
  - the entrance to the Rhino Park sports complex;
  - the entrance to the public swimming pool on Loop Straat;
  - along Sarel Cilliers Straat (at the interface between Rhino Park and the new school site);
  - the play park along Calendula Straat; and
  - the old shooting range (i.e. Erf 2218).

In addition to the above, the Project Team presented the First Draft Precinct Plan (i.e. PowerPoint presentation) to the MAYCO Committee on 4 November 2020. Further, the proposals were presented to Ward Committee members of Ward 3 and Ward 4 was held on 19 November 2020.

1.2 Purpose of the Consultation Report

The purpose of the Consultation Report is to summarize the comments received on both the First and Second Draft Precinct Plan documents, and for the Project Team to provide a response to the comments received. Where relevant, the responses provided include details of how the issues raised / suggestions are incorporated into the Second Draft Precinct Plan / Final Precinct Plan.

2. CONSUTLATION OUTCOMES

2.1 First Draft Precinct Plan

2.1.1 Summary of commenting parties

A total of six comments were received on the First Draft Precinct Plan. The commenting parties are listed in **Table 1**.

Table 1: Summary of the commenting parties – First Draft Precinct Plan

No	Name / entity	Designation
1	Adv. Hanlie Linde	Municipal Manager: Bergrivier Municipality
2	Mari Smith	WCPG Development Facilitation (RSEP/VPUU Project Office)
3	Ward Committee Members	Ward 3 & Ward 4: Bergrivier Municipality
4	Chris Koch	Director, Technical Services: Bergrivier Municipality
5	Jan Truter	Member of the public; local town planner
6	Abrie Hanekom	Member of the public

2.1.2 Summary of comments received and responses from the Project Team

Table 2 provides a summary of the comments received and the Project Team's responses thereto. The commenting party (i.e. "Raised by") is identified by the number used in **Table 1**.

Table 2: Summary of comments received on First Draft Precinct Plan and Project Team responses

Comment		Raised by	Response
1	**Proposed "Youth Centre"**		
a	Suggestion to keep the Youth Centre in its current RSEP location along Calendula Street, with various reasons provided: • will promote clustering of facilities (close to proposed school, as well as existing library and clinic); • will best serve the community's needs at the original proposed location; • the scale of the building(s) needed for the Youth Centre will not be appropriate at the consultants proposed location; • the focus of the Youth Centre should be local youth (not necessarily youth's coming from surrounding towns and farms); • the current design of the Youth Centre building includes a hall, offices and rooms that will look very uninviting on the abutting green open space should the proposed location be chosen; and • the RSEP location has enough space for both the Youth Centre and social/affordable housing.	1; 2; 3; 5	After having received the preliminary Site Development Plan for the Youth Centre from the Bergrivier Municipality, and having considered the comments made in connection with the location of the Youth Centre, the Project Team accepts that the Youth Centre will be better suited to the RSEP location along Calendula Street. The Youth Centre will be shown in this location in the Second Draft Precinct Plan.
b	Suggestion for another facility to be positioned in the area suggested by the project team for the Youth Centre (examples of suggestions include a market building or Department of Home Affairs).	2; 3	It is still proposed that the site recommended for the Youth Centre in the First Draft Precinct Plan be included for future development, but the use of this building will be changed, and should be considered to be a public building.
c	Suggestion to change the description of the Youth Centre to an "Arts and Cultural Centre" (of which the youth component will only be one element of the centre).	2	This idea will be discussed with the relevant officials from the Bergrivier Municipality.
d	Recommend that a separate community participation session takes place regarding the location of the Youth Centre, perhaps aimed at the youth who would make use of the facility?	2	The constraints resulting from the Covid-19 pandemic have meant that is has not been possible for the Project Team to engage with members of the community in physical public participation meetings.

Comment		Raised by	Response
			Guidance has been obtained from municipal officials and community representatives.
2	**Spaces associated with the proposed "public heart"**		
a	Positioning the Youth Centre (or any other facility) in the "public heart" will lead to a loss of the green open and the effect of openness and spaciousness will be lost.	1	It is acknowledged that development of a building in this location will result in the loss of green open space. However, the Project Team strongly recommends that a prominent public building in this location will be a strong urban design intervention, with the following aspects being especially pertinent: • The building will represent a "gateway" feature, marking the arrival into Piketberg from the N7; • The building will be an important structuring element at the proposed new road intersection of the new link road on the western side of the hospital with Kloof Straat; and • The building will help to define the park space and activate the "public heart" and provide much needed vibrancy to a part of the town that is currently lacks high levels of activity for most of the time during the week. Furthermore, it is believed that there will be sufficient green open space remaining in the "public heart" following the development of this building. A smaller, well designed and easily maintained park provides more opportunities and benefits to the community than a larger park (which may be underutilised and difficult to maintain).

Comment		Raised by	Response
b	Not certain that a public amphitheatre is part of the culture of rural Western Cape – will it not just become a place where Saturday shoppers will sit? It could be difficult to keep clean and maintain to a standard where it is nice enough to be the town entrance and focal point.	1	The amphitheatre was an idea presented to the project team during the first public workshop. This was strongly supported by the attending workshop participants and has thus been incorporated into the precinct design. There are a number of examples of the successful inclusion of amphitheatres in the Western Cape. Further, precedent studies performed by the Project Team have shown that these spaces have the potential to be attractive, multi-functional (including places to sit) and versatile spaces in well-located, well-ultilised green open spaces. Correctly designed, the amphitheatre should be easy to maintain. The amphtheatre will be given more specific design attention in the Second Draft Precinct Plan.
c	There is a lack of parking areas for trucks and taxis, especially in relation to the proposed "public heart".	2	The presence of trucks and taxis is not desirable in the "public heart" and the Project Team does not want to encourage them to park in this area. Therefore no additional parking will be provided for these types of vehicles in this area. Notwithstanding, the proposed reconfiguration of the Loop, Kerk and Kloof Straat intersection means that there is potential to expand the existing bus station to accommodate more parking opportunities.
d	Instead of calling git the "Public Heart", suggestion to call it something like "One Piketberg Public Square" or name it after a well-known (not controversial) historic figure.	2	This idea will be discussed with the relevant officials from the Bergrivier Municipality.
e	The entire area between the N7 to Loop Straat (against the backdrop of	5	This is the whole idea behind the creation of the new "public

Comment		Raised by	Response
	Piketberg Mountain with Aasvoelkop) is the gateway into Piketberg. Land use activities that supports this function should be developed by the public sector.		heart", which is a strong feature of the First Draft Precinct Plan and will be elaborated on further in the Second Draft Precinct Plan.
3	**Calendula Street**		
a	Suggest planning Calendula Straat as a future activity street.	2	Calendula Straat does not have the characteristics to become a fully functional "activity street" similar to, for example, Lang Straat. However, the Project Team does agree that more active uses are required along Calendula Straat. Such proposals do form part of the First Draft Precinct Plan and will be elaborated on further in the Second Draft Precinct Plan.
b	Use infill mixed-use development (e.g. live-work units) to define the eastern edge of Calendula Street.	2	A conceptual proposal for development along the eastern edge of Calendula Street does form part of the First Draft Precinct Plan. However, the Project Team is aware that there are bulk water and sewer services pipes running in this location. Therefore further investigations into the approximate position of these pipes will need to be conducted prior to finalizing the type of development to be positioned in this location as part of the Second Draft Precinct Plan.
c	Open area east of Calendula Straat, bordering on graveyard, is problematic. Convert this area into a shaded park area; relocate the gym area here; or consider informal trading.	5	Refer to response in item 3(b) above.
4	**Social / affordable housing**		
a	The proposal for social / affordable housing is supported in principle, but concern is raised about the appearance of such housing. Care and thought must be given to the design and appearance of social / affordable housing.	3	The Project Team agrees that the design and appearance of any social / affordable housing to be located within the precinct is very important. This aspect will be given more careful attention in the Second Draft Precinct Plan.

Comment		Raised by	Response
b	Proposed residential development adjacent to the cricket field / N7 should be considered within the context of proposed redevelopment of the golf course for social / affordable housing.	5	The Project Team is aware of the proposals to develop the golf course with social / affordable housing. The Project Team has thus far not been provided with any conceptual layouts or unit designs for this development, however consideration will be given to this future development when designing the proposed residential development adjacent to the cricket field / N7.
5	**Location of the proposed school**		
a	The proposed location for the new school is wrong – the location contributes nothing towards spatial or social integration unless elements within the existing three town schools are also re-organised and integrated within the new school.	5	The proposed school is a long-standing project between the WCG Department of Education and the Bergrivier Municipality (i.e. the need for a new school in Piketberg has been identified). The location of the school is considered to be appropriate from a town planning / urban design standpoint and it will be retained as part of the Second Draft Precinct Plan.
b	The new school should be located at the Watsonia Sports Grounds (co/ Watsonia and Ranonkel streets) to provide more convenient and safer access to children from new Mooiplaas, Trajektekamp and Riemvasmaak sections (generally, town north of Watsonia Street). The location at Watsonia is also more accessible to a new township extension where the golf course is currently located.	5	Refer to response in item 5(a) above.
c	The site of the proposed school should be developed for a higher order education land use activity at regional impact level to match the existing function fulfilled by the Radie Kotze Hospital: tertiary education centre, satellite campus for universities, combined with sports grounds facility, larger and integrated public library, youth centre and NGO hub. This new academic hub can combine with Rhino Sports Grounds.	5	Refer to response in item 5(a) above.

Comment		Raised by	Response
6	**Loop, Kerk and Kloof Straat intersection**		
a	Introduce traffic calming measures at the Loop, Kerk and Kloof Straat intersection, possibly introduce a traffic circle.	2; 5	The introduction of a traffic circle at the Loop, Kerk and Kloof Straat intersection was investigated by the Project Team as part of the First Draft Precinct Plan, however it was found to be undesirable from traffic, engineering geometry and urban design standpoints.
7	**Loop Street / Hoof Street upgrade**		
a	Don't agree with the recommendation to reduce parking in the town centre along Lang Straat. There might be a huge difference between "during the week" and "over weekends" parking.	2	The Project Team did conduct a site visit of the study area on Monday 19 January, Friday 24 & Saturday 25 January 2020. While the increase in vehicular traffic on the weekend was noticeable, it was still evident that there is significant surplus parking in the centre of town, including along Lang Straat. It should be noted that the proposal is not to remove all parking along Lang Straat, but rather reduce the amount of parking in order to help promote a more pedestrian friendly town centre, as opposed to the very car-dominant environment that currently prevails.
b	The section of Hoof Street between Lang Straat and Loop Straat can be upgraded for commercial use purposes.	5	The section of Hoof Straat between Lang Straat and Loop Straat has been identified in the First Draft Precinct Plan for upgrade attention. Specific guidelines in relation to the proposed upgrade of Hoof Straat will be included in the Second Draft Precinct Plan.
c	The section of Lang Straat north of Kloof Straat needs redesign and upgrade.	5	Noted. The area of Lang Straat to be given design attention for upgrade, as per the First Draft Precinct Plan, will be extended northwards to include the section of Lang Straat between the Kloof Straat intersection and the Pepper Straat intersection.

Comment		Raised by	Response
d	Pavements are an issue. More detailed proposals are required regarding tree options – perennial trees (summer shade, winder sun), confined root systems, capable of withstanding drought and heat.	5	Specific guidelines in relation to the proposed upgrade of pavements, including tree planting, will be included in the Second Draft Precinct Plan.
e	Propose space integration for parking areas between Spar and Shoprite to create sense of place straddling Lang Street to deepen node character (e.g. same style paving, street furniture, trees and streetlights).	5	The existing character of Lang Straat between the Shoprite and the Spar is one of the major informants behind the proposed upgrade of Lang Straat, as included in the Draft Precinct Plan (refer to sub-section 5.2.2). Specific guidelines in relation to the proposed upgrade of Lang Straat (including tree planting, paving patterns, street lighting, street furniture etc.) will be included in the Second Draft Precinct Plan.
f	Not sure about increased vertical scale for street façade's – how does that support "sense of platteland" and "not undermine visual connection with mountain"? Increased building elevations are dependent on private sector development. Double storeys already possible within Scheme regulations. Unlikely to take place considering low economic activity and building owner's inclination towards cost saving to what is necessary.	5	It is acknowledged that double storey buildings along Lang Straat are already possible (i.e. development rules within the Zoning Scheme permit such development). The intention of including increased vertical scale elements along Lang Straat in the First Draft Precinct Plan was to illustrate a desirable end-state condition for Lang Straat (in accordance with the vision for Piketberg CBD to become slightly more urban in character) and not necessarily a development proposal. The Project Team does not believe that promoting an increase in building heights along Lang Straat to two-storeys will detract from the visual connection to the mountain – there are already numerous two-story buildings along Lang Straat and the connection to the mountain in not impacted.
g	Pave parking area in front of Piketberg Pharmacy.	5	Noted.

Comment		Raised by	Response
8	**N7 traffic circle and proposed foot bridge crossing**		
a	There are a number of large, heavy and wide vehicles (including farm vehicles with farm related machinery) moving on the N7. The existing traffic circle is already a problem for these vehicles and this precinct plan is an opportunity to re-engineer the traffic circle.	6	SANRAL is the custodian of the existing traffic circle on the N7 at the entrance to Piketberg. While SANRAL has been consulted as part of the Precinct Plan process, revised design proposals for this traffic circle does not form part of the project scope.
b	The proposed pedestrian bridge over the N7 should allow for tall and wide vehicles.	6	The proposal for a pedestrian bridge crossing the N7 will only be considered conceptually as part of the project scope. SANRAL is the authority on any development within the N7 road reserve and should the conceptual proposal for the bridge crossing proceed onto detailed design then SANRAL will be directly involved in the design of such a bridge.
c	NMT axis towards the pedestrian bridge over the N7 will need a major safety upgrade (pavement, lighting etc).	5	The NMT path linking existing and future development in Steynville with the proposed bridge crossing the N7 will be given more design attention as part of the Second Draft Precinct Plan.
9	**Heritage core**		
a	Heritage elements must be used to inform and strengthen spatial integration. Piketberg was integrated before apartheid era planning, restore those aspects within the identification of heritage buildings, walks and nodes.	5	Preliminary proposals to enhance and 'celebrate' the heritage of Piketberg, including improved signage, were included as part of the First Draft Precinct Plan. These proposals will be elaborated on in more detail in the Second Draft Precinct Plan.
b	Make more of the symbolic value of the site (e.g. heritage node in front of old Sending Kerk).	5	Refer to response in item 9(a) above.
10	**Rhino Park sports complex**		
a	Create a northern entrance to the pool area to decrease pedestrian traveling distance (i.e. more accessible to the community).	5	The existing entrance to the pool area is identified in the Frist Draft Precinct Plan as being in need of upgrade. Specific guidelines in relation this

Comment		Raised by	Response
			upgrade will be included in the Second Draft Precinct Plan.
11	**Vacant commercial area north of Rhino Park**		
a	Need to address vacant commercial area. Either the owner develops the land or sells it back to the Municipality to incorporate into precinct plan. Should not remain vacant.	5	The Project Team has enquired with the Bergrivier Municipality on the status of the area located to the north of public swimming pool at Rhino Park. The Bergrivier Municipality has advised that the vacant land units zoned "Business Zone 1" are still under private ownership, while the land zoned "Transport Zone II" will serve as access / parking for the private land units (and the private landholders have specifically requested for this access / parking to remain in place). Since the land forms part of a private development initiative it cannot form part of the Precinct Plan proposals. A flexible development block typology is being applied across vacant land within the Precinct including this site. If no private development occurs on this site, public housing can be accommodated.
12	**Proposal for a new market**		
a	Do not think the market-place idea fits in with the general purpose for the precinct (long term). The market stalls at the current taxi rank are not used to capacity. Why is there a need for a market which cannot be addressed otherwise?	5	The Project Team is of the opinion that the success of the existing market stalls at the taxi rank is due to their design rather than the need for a market place. The stalls that remain vacant front onto a narrow alleyway frequently used by delivery vehicles and unfriendly to the pedestrian. Further, these market stalls have to compete with other businesses in the CBD, making them less attractive to transient visitors who specifically travel to Piketberg to shop for high priority goods at the established supermarkets.

Comment		Raised by	Response
			The Project Team believes that market stalls that cater for local entrepreneurs selling local produce and products will be well utilised if they are well designed and correctly located. The location for these market stalls will be defined in the Second Draft Precinct Plan.
13	**Development constraints**		
a	The steep slope from west to east should be included as a development constraint. The slope means that development costs are generally more expensive, the result of which is buildings that are designed for affordability and not for aesthetics of functionality beyond erf boundaries.	5	Noted. The Project Team acknowledges that the slope from west to east should be included as a constraint, particularly in relation to Hoof Straat and Kerk Straat. Notwithstanding, the areas of the study area identified for further development fall on land that is relatively flat and therefore slope should not be a major constraining factor.
b	Climate (i.e. hot summers and cold winters) should be included as a constraint. Proposals need to be made to create shade in summer and increase sunshine in winter.	5	Climate has been identified in the Status Quo Report as a constraint in Piketberg. As such, tree planting and other shading elements have been identified First Draft Precinct Plan as important features to be incorporated into the design of the precinct. Specific proposals for tree planting and other shading elements will be included as part of the Second Draft Precinct Plan.
c	The local economy is skewed in that there is one large dominating mainstream retailer and several low-cost retailers. This needs to be included as a constraint.	5	The impact that big corporate retailers have on the economy of small towns such as Piketberg (including the marginalization of small, local retailers) is an unfortunate consequence of globalization. This issue is not unique to Piketberg and the solution is beyond the scope of this project. Nevertheless, the Project Team has identified an opportunity to accommodate small retail businesses in the

Comment		Raised by	Response
			study area in the form of a local market and live-work units. For these small retail businesses to be successful it is important to give careful consideration to their location and design. Case studies have shown that improvements to the public environment in retail areas can increase the viability of smaller retailers. More details on the market and live-work units will be provided in the Second Draft Precinct Plan.
14	**General**		
a	Suggest a "brain storming" session with Ward Committee members to discuss the proposals.	1	The Project Team understands that the Ward Committee members of Ward 3 and Ward 4 held a meeting on 11 August 2020 to specifically discuss the contents of the First Draft Precinct Plan. The outcome of this meeting was summarized by Werner Wagener of the Bergrivier Municipality and forwarded onto the Project Team as the Ward Committee's comment on the First Draft Precinct plan.
b	Is there going to be an 'implementation plan' to show the phasing of the recommended interventions for short/medium/long term?	2	Yes, an implementation plan will be included as part of the Second Draft Precinct Plan. The implementation plan will include *inter alia*: • Indicative time frames for implementation; • implementing agents (e.g. municipal departments responsible for overseeing implementation); • preconditions for implementation (e.g. is statutory town planning approval required for implementation?); and • Order of magnitude costing estimates for budgeting purposes.

Comment		Raised by	Response
c	Found it difficult to visualise the proposals based on information provided on the maps used for public participation. Having to determine the location of a facility based just on placement without indication of scale and visualisation was too vague and the final product may not be acceptable (the illustration made for proposals pertaining to Long Street (main road) on p.25 and Loop Street on p.37, for example, gave a clearer idea of what is proposed).	3	The Project Team acknowledges that some of the proposals may have been too conceptual for the community and were not conducive to visualization in terms of scale, character etc. However, it should be noted that the purpose of the First Draft Precinct Plan was to present conceptual proposals for stakeholder buy-in rather than detailed proposals. The latter will form part of the Second Draft Precinct Plan, which will also be subject to public participation and the community can submit comments relating to scale, character etc. at that stage of the project.

2.2 Second Draft Precinct Plan

2.2.1 Summary of commenting parties

A total of 8 comments were received on the Second Draft Precinct Plan. The commenting parties are listed in **Table 3**.

Table 3: Summary of the commenting parties

No	Name / entity	Designation
1	MAYCO	Mayoral Committee: Bergrivier Municipality
2	Ward Committee Members	Ward 3 & Ward 4: Bergrivier Municipality
3	Adv. Hanlie Linde	Municipal Manager: Bergrivier Municipality
4	Jaco Breunissen	Manager: Civil Engineering, Bergrivier Municipality
5	Beverly Jonkers	Member of the public
6	DC Van Zyl	Member of the public
7	Ashley Swarts	Member of the public
8	Lorraine Botha	Member of the public

2.2.2 Summary of comments received and responses from the Project Team

Table 4 provides a summary of the comments received and the Project Team's responses thereto. The commenting party (i.e. "Raised by") is identified by the number used in **Table 3**.

Table 4: Summary of comments received on Second Draft Precinct Plan and Project Team responses

Comment		Raised by	Response
1	**Local Economic Development**		
a	Concern raised that the business focus is on the existing CBD / Lang Straat and economic opportunities for the poorer members of the community are being ignored (e.g. opportunities for SMEs to access smaller, affordable spaces such as along Calendula Straat, around the active box and along Loop Straat).	1	The Precinct Plan does make provision for economic opportunities for the poorer members of the community: it is proposed to line the eastern edge Calendula Straat with live-work units and further mixed use development is proposed to frame the Active Box. In addition, the Precinct Plan will be revised to accommodate a market adjacent to the bus station.
b	There is a need / requirement for a dedicated area accommodating a market / informal trading stalls in the study area. It is recommended that the open space adjacent to the bus station is investigated for this function.	1	Noted. The Precinct Plan will be revised accordingly.
2	**Roads, transport and parking**		
a	The preference is for a circle at the Loop/ Kerk / Kloof Straat intersection.	1; 8	The introduction of a traffic circle at the Loop, Kerk and Kloof Straat intersection was investigated by the Project Team as part of the First Draft Precinct Plan, however it was found to be undesirable from traffic, engineering geometry and urban design standpoints.
b	The proposed road next to the hospital, which will link up with the current 3 way stop, is not acceptable due to increased noise and traffic. Noise levels are already a problem and are not policed properly by SAPS (the Bergrivier Municipality are also not enforcing the by-law in regard to allowable noise levels). The proposed	8	It is anticipated that the proposed road adjacent to the hospital will not carry large volumes of traffic, and will carry minimal heavy vehicular traffic (although it is likely that construction vehicles will use this road once development of the

Comment		Raised by	Response
	road will cause noise pollution for the hospital.		Precinct Plan projects commence).
c	The narrowing of Lang Straat to one lane in each direction is supported. However, consideration needs to be given to whether or not delivery and agricultural vehicles will still be able to drive through and turn.	3	Part of the reason for narrowing Lang Straat into one lane in each direction is to disincentivize heavy vehicles from using this road. Instead, it is envisioned that heavy vehicles will rather use the re-routed provincial road along Kloof Straat, before turning into the portion of Lang Straat that will remain two lanes in both directions (refer to Figure 12 on pg. 21 of the Second Draft Precinct Plan). The proposed Loop Straat upgrade will need to be subject to a further Traffic Impact Assessment (TIA) and detailed engineering design.
d	Opposed to the narrowing of Lang Straat from 4 lanes to 2 lanes.	4	As stated in the Second Draft Precinct Plan, the main purpose of the Lang Straat urban design upgrade is to make the street more people friendly by improving the pedestrian environment and reducing the dominance of the motor car. One of the ways of achieving this will be to reduce the width of the road from 4 lanes to 2 lanes (there is substantial international precedent to suggest that this intervention works). The Project Team recommends that the proposal to narrow Lang Straat is first tested through temporary interventions (e.g. using removable paint, movable planter boxes etc.). temporary intervention will enable the redesign to be tested and its impact evaluated (including through a Traffic Impact Assessment (TIA)), following which more permanent

Comment		Raised by	Response
			interventions can be designed, budgeted and implemented.
e	More parking and loading zones should be incorporated at business areas along Lang Straat.	4	The following aspects need to be considered in relation to the proposal to remove on-street parking bays: • The design of the street upgrade will still make provision for the retention of parking bays in certain areas. • From field observations carried out over the month-end weekend, it was evident that the parking lots associated with the two retail shopping complexes are not currently used to capacity. • There is surplus on-street parking in the side streets off Lang Straat (e.g. Kerk, Hoof, Die Trek and Voortrekker Straats). It should be remembered that a pertinent reason for proposing the street upgrade is to promote a more pedestrian friendly urban environment by reducing the dominance of motor cars. It is understood that the public may be apprehensive to this change, however it is important that the Authorities gives the project a chance to succeed. The Precinct Plan does recommend that the proposed street design upgrade be tested by way of a temporary upgrade (and associated TIA) – if the temporary upgrade demonstrates a lack of parking then the proposal can be reconsidered / redesigned.
f	Piketberg currently has a parking problem, particularly on weekends when people from surrounding rural areas	1; 2	Refer to item 2e above.

Comment		Raised by	Response
	come into the town (these people often park and leave their cars in the same place for half the day). Therefore the proposal to remove parking bays in Lang Straat is not fully supported and needs further consideration.		
g	Provision should be made for off-loading areas for cars and busses along Calendula Straat adjacent to the school.	4	Noted. This detail will be included in the conceptual engineering design drawings.
h	A drop-off / parking area must be provided along Loop Straat in front of the swimming pool.	4	Noted. This detail will be included in the conceptual engineering design drawings.
3	**Social / affordable housing**		
a	Concern raised that housing is being proposed in Focus Area 5. Sport is becoming nationally important and consideration should be given to expanding the Rhino Park sports complex instead.	1	Housing is also a national priority and Piketberg currently has a significant housing backlog (according to the Bergrivier MSDF 2019, 1 967 people in Piketberg were on the housing waiting list as at June 2018). In an effort to reduce this backlog, as well as in an effort to increase thresholds and to reduce the relative cost of serviced land, housing is considered the highest and best use of the vacant land in Focus Area 5.
b	The proposal for 3 or 4 storey apartment blocks is uncharacteristic for Piketberg. These buildings should rather be 2 storeys in height.	3	Apartment blocks of 3-4 storeys (i.e. medium density housing) is proposed for 3 reasons: • Medium density housing will assist to reduce the significant housing backlog; • The development of medium density housing on well-located, vacant land within the urban edge will reduce the need for future urban expansion outside of the urban edge (i.e. limit urban sprawl), as well as permitting the Municipality to make more efficient use of well located municipal land; and • Medium density housing reduces the relative cost of serviced land.

Comment		Raised by	Response
			Notwithstanding, the proposal for medium density housing does not necessarily need to be implemented by the Municipality if, upon further assessment, this form of housing is found to be undesirable in this location. Nonetheless, the principle of densification is an important principle of the Precinct Plan.
c	Why row houses? Double storey row houses are so Apartheid (just look at Atlantis and Worcester). Our town does not need this type of housing. Build detached houses where people can walk around their house. Flats also have social problems (e.g. Cape Town).	5	Refer to item 3(a) above. The same logic applies to row houses as it does to apartment blocks.
d	It is mentioned in the Precinct Plan report that the housing may be rental stock. How will the rentals work?	6	The Precinct Plan merely suggests rental stock should be considered by the Municipality. The feasibility, practicalities etc. off the rental mechanism would need to be further investigated by the Municipality.
4	**Rhino Park sports complex**		
a	Rhino Park currently charges people money to watch rugby games. This money is an important income source for the rugby club. The installation of a transparent fence surrounding Rhino Park will mean that people can watch rugby from outside the complex free of charge, and therefore the income source will be lost. The transparent fence is therefore opposed.	2; 4	As outlined in the Precinct Plan, the solid wall is recommended for removal in favour of a transparent fence for 4 reasons: • implementation of visually permeable boundary treatment, in particular with respect to public and community facilities, underpins the principle of integration within the precinct; • solid walls promote crime and anti-social behaviour (i.e. they prevent surveillance and therefore provide refuge for villainous characters); • blank walls are dull and visually uninteresting; and

Comment		Raised by	Response
			• solid walls prevent interaction and hinder the relationship between the activities occurring in adjoining spaces. The comment about the income generation for the rugby club is noted. However, the Project Team suggests a practical solution be found to allow for the proposal for the transparent fence to be retained – the transparent fence will benefit the entire community, whereas the solid walls will only benefit the rugby club on match days. One suggestion is to erect screening material over the fence during rugby games (e.g. canvas sheets, banners and the possibility of renting advertising space on match days, as an additional source of income, should be explored).
b	A proposal, including a budget, to upgrade a portion of the boundary fencing at Rhino Park has already been approval. The design is for a solid wall.	1; 2	Section 27 of the Bergriver Municipal Integrated Zoning Scheme By-law stipulates that 80% of a street boundary wall in "other areas" (i.e. non-residential areas) must be permeable. As a minimum this standard must be applied along this boundary. The same should apply to the eastern boundary treatment of Rhino Park. The transparent fence is a key urban design proposal for Focus Area 2 – not only will improve safety, it will also greatly enhance relationship between Rhino Park and the adjacent "public heart", as well as improve the visual aesthetic of the primary public space in the precinct. It is therefore strongly recommended that the proposal for a solid wall

Comment		Raised by	Response
			surrounding Rhino Park is reconsidered.
c	Is it possible to do an urban design upgrade proposal for the Rhino Park sports complex?	2	This is a good idea. However, it did not form part of the scope of this Precinct Plan.
d	The proposed pedestrian link to the east of Rhino Park (i.e. between Angelier Straat and the central "public heart") will further invite people to watch rugby games without paying entrance fees into Rhino Park. It could also become a place of criminal activity.	4	Part of the project brief is to improve integration within Piketberg, particularly between Steynville and the historic town further south. The proposed pedestrian link promotes integration and is considered a solid urban design intervention. If the potential problems associated with this pedestrian link are insurmountable, then the Municipality can choose not to implement it.
5	**Youth Centre**		
a	The Ward Councilor for Ward 4 is proposing that the Youth Centre be relocated to Zanzibar near to the clinic. Has the proposed location shown in the Precinct Plan been cleared with the Ward Councilor?	3	The Project Team was not aware of any proposal to locate the Youth Centre to Zanzibar near to the clinic prior to the completion of the Second Draft Precinct Plan. The proposed location was determined through an extensive VPUU process. Although an alternative location was tested in the 1st draft Precinct Plan, after consultation with officials and municipal office bearers the currently proposed location was agreed on. As an imminent project, it will contribute to the activation of Calendula Street.
6	**Focus Area 4**		
a	Erf 3278 has been allocated for parking area for the business zoned properties.	7	This is acknowledged in the Precinct Plan. However, as noted in the Precinct Plan, it is believed that the designated parking area is too big for the type of commercial development proposed. It is therefore recommended that a portion of the area designated for parking be further subdivided and rezoned to allow for the development of a

Comment		Raised by	Response
			mix-use building. Such development will allow for the better utilisattion of public land. Notwithstanding, any new development must not compromise the approved private development and should only be initiated with the consent of the owners of the private erven.
g	The proposed plan indicates that houses should be built on a pavement. New sewage/ storm water pipes were recently installed on that current pavement, and therefore it will be difficult to build houses in this location. In meeting with Mayor and Mr. Wessels, it was discussed that it would make more sense to create an in-bound and out-bound road, to give access to parking on Erf 3278.	7	The "pavement" highlighted is on average 20m wide (Ash to please confirm) and is considered inefficient use of public land, which is why the land is identified for infill housing. However, if there are indeed service pipes in this location then it is acknowledged that housing cannot be constructed here.

2.2.3 Amendments to the Second Draft Precinct Plan as a result of the comments received

The following amendments have been made to the Second Draft Precinct Plan as a result of the comments received. These amendments will appear in the Final Precinct Plan to be submitted for approval by the Council of the Bergrivier Municipality.

a. A dedicated area accommodating a market / informal trading stalls will be designed to be located adjacent to the bus station in Focus Area 2.

b. The housing plots earmarked for the "pavement" adjacent to Gousblom Straat in Focus Area 4 will be removed.

3. CONCLUSION

Stakeholders have played an integral role in the formulation and fine-tuning of the proposals presented in the Piketberg Gateway and Central Integration Zone Precinct Plan. Public participation has been a collaborative and creative process that has drawn on stakeholder aspirations, knowledge and experience, and has been a key tool in assisting the Project Team to produce the Precinct Plan.

ANNEXURE A

Attendance Register ("Vision and Issues" Stakeholder Workshop)

BERGRIVIER MUNISIPALITEIT **BERGRIVIER MUNICIPALITY**

ATTENDANCE REGISTER

PIKETBERG PRECINCT PLAN MEETING

DATE: 27 JANUARY 2020

	Name and Surname	*Institute*	*Email address*	*Contact number*	*Signature*
1	Werner Wagener	Bergrivier Mun.	wagenerw@bergmun.org.za	022 913 6000	[signature]
2	TIM FLORENCE	PLANNING PARTNERS	tim@planpart.co.za	021 418 0510	[signature]
3	Johan Basson	SMEC	johan.basson@smec.com	021 4172900	[signature]
4	Mari Botha	DEA&DP: RSEP	mari.botha@westerncape.gov.za	021 483 0768	[signature]
5	HENDRINA DELPORT	BERGRIVIER MUN		0789366661	[signature]
6	Amalia Fortuin	" "		0847222164	[signature]
7	A Richter	" "	protea7@telkomsa.za	0732302110	[signature]
8	H. [illegible]	" "		0604542119	[signature]
9	M Erasmus	" "		0713722065	[signature]
10	Wolf Liebenberg	Leebco	wolf@leebco.co.za	0828991295	[signature]
11	Philip Jankielsohn	SPAR	Philip@bolandsuperspar.co.za	022 913 1163	[signature]
12	Cazelda Adams	Groter Bergrivier Forum	a.cazelda@gmail.com	0633971981	[signature]
13	Ilse van Wyk	Bergrivier Mun.	vanwykI@bergmun.org.za	0630925709	[signature]
14	Keenin Abrahams	Bergrivier Mun	abrahamsk@bergmun.org.za	022 913 6000	[signature]
15	COLLETTE MAY	WARD 3	collettegmay@yahoo.com	0714211178	[signature]
16	Lorraine May	Wyk 3		0845955772	[signature]
17	A. DE VRIES	"	devriesa@bergmun.org.za	082 [illegible] 6514	[signature]

	Name and Surname	Institute	Email address	Contact number	Signature
18	Driaan Pretorius	Wyk 3 - Godsdienshuis	driaanpretorius001@gmail.com	082 327 7475	
19	RAY VAN ROOY	BERGRIVIER MUN	burgemeester@bergmunorg.za	0836579615	
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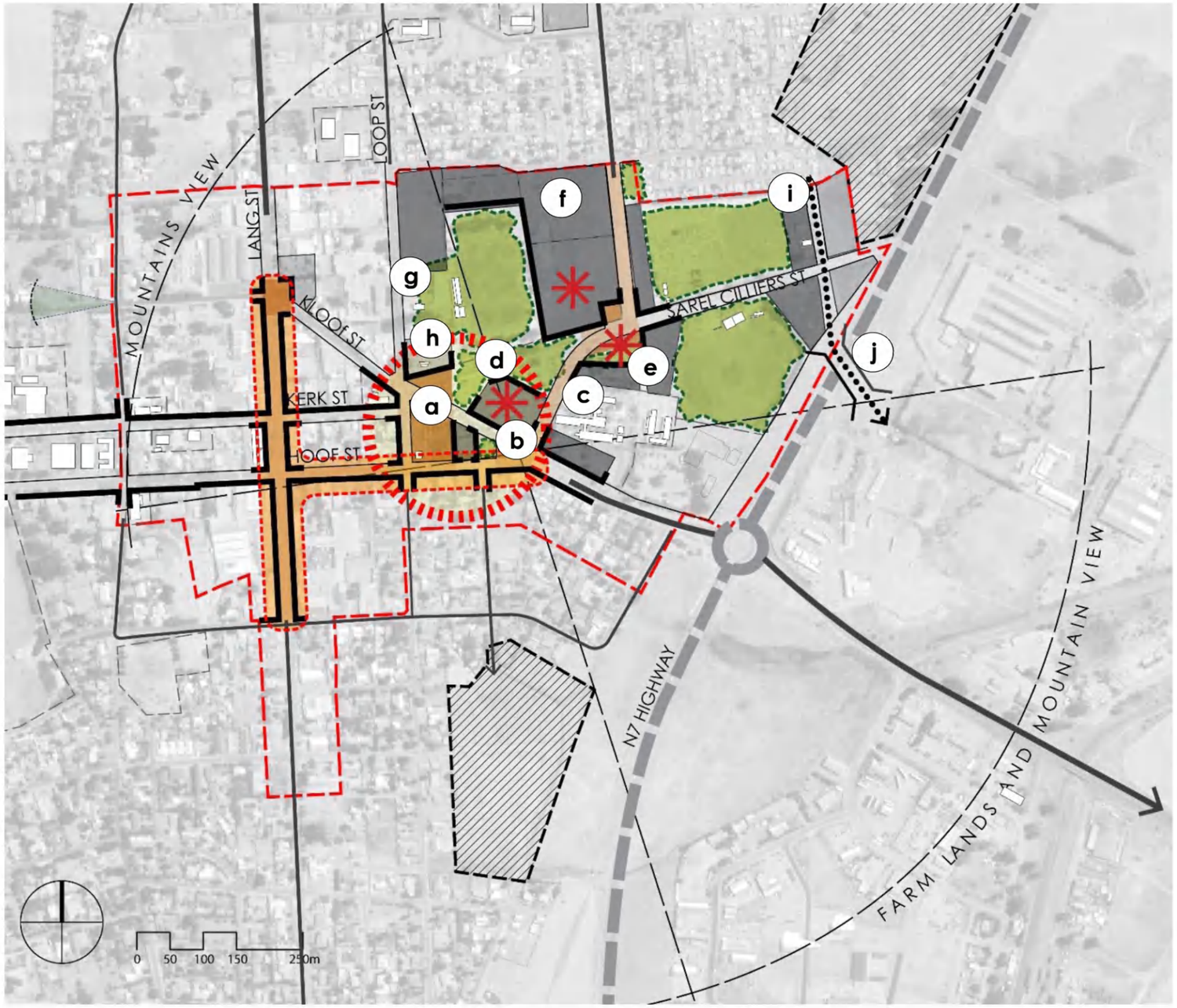
ANNEXURE B

Information Posters (First Draft Precinct Plan)

"tell us what you think of this proposal"

DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN



LEGEND

- Precinct plan boundary
- Infill development opportunities
- Proposed periphery housing developments (SDF)
- New and proposed public facilities
- Parks and sports facilities
- Gateway
- Pedestrian bridge
- View towards mountain
- Street upgrade

a Upgrade triangular intersection of Kloof, Kerk, Sarel Cilliers & Hoof Straat

b Relocate Youth Centre into "public heart"

c New link road between Calendula Straat and Kloof Straat

d Close intersection of Sarel Cilliers Straat in front of Rhino Park sports complex

e Create a public square in association with the Active Box and define with infill development

f Develop medium density social housing to the north / north-west of the Rhino Park sports complex

g Remove barrier walls around Rhino Park sports complex

h Relocate "Posduif" facility and replace with appropriate development

i Develop medium density social housing to the west of the cemetery / cricket oval

j Construct pedestrian bridge crossing over the N7

For more information and details on how to submit your comments

Search "Piketberg Gateway and Integration Zone Precinct Plan" on Facebook

WhatsApp "Hi" to 081 311 3344

Visit www.bergmun.org.za

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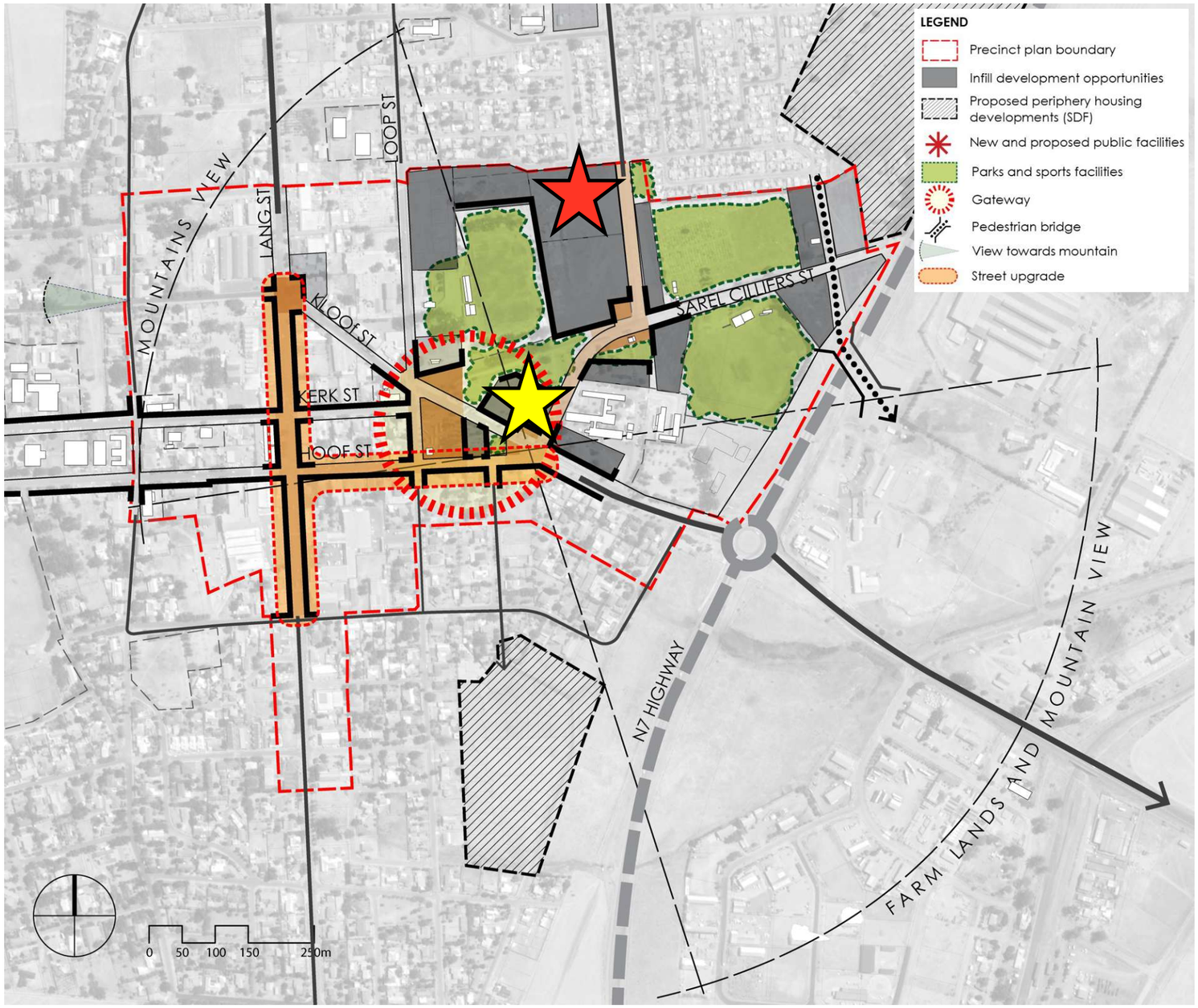
SUBMIT YOUR COMMENTS TO precinctplan@gmail.com

DEADLINE FOR SUBMISSION OF COMMENTS IS 31 JULY 2020

"what do you think of this proposal?"

DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN



A key proposal in the Draft Piketberg Gateway and Central Integration Zone Precinct Plan is to <u>relocate the new Youth Centre</u> from its current proposed location adjacent to Calendula Street to a new location in the central "public heart".

Current location

- Closer to existing facilities in Steynville where large numbers of youth are currently concentrated.
- Safer for Steynville youth to access in evenings (under current circumstances).

Proposed location

- Central location which will serve to integrate the town.
- Close to the bus station, making it easily accessible to both Piketberg residents and youth from out of town.
- Landmark/gateway building located in the new "public heart" of Piketberg.
- Opportunity for youth to sell goods over weekends (entrepreneurial development).

"which location do you prefer?"

For more information and details on how to submit your comments

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ANNEXURE C

Newspaper Advert (Second Draft Precinct Plan)

MUNISIPALITEIT BERGRIVIER MUNICIPALITY

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE FOR PUBLIC PARTICIPATION FOR THE SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN

The Bergrivier Municipality released its latest Municipal Spatial Development Framework in February 2019 (Bergrivier MSDF, 2019-2024). The Piketberg Gateway and Central Integration Zone Precinct Plan has been identified in the Bergrivier MSDF as a key enabling project / focus area for spatial development and land use management in Piketberg.

Following on from the findings contained in the Bergrivier MSDF, as well as the work initiated by the Western Cape Government's Regional Socio-Economic Programme, the Department of Agriculture, Land Reform and Rural Development (DALRRD) appointed a multi-disciplinary team to prepare an Urban Upgrading Precinct Plan for Piketberg Gateway and Central Integration Zone (the "Precinct Plan").

A Precinct Plan serves a vital role in guiding development for catalytic interventions on well located land, reconfiguring space to connect and consolidate the built environment, retrofitting sustainable infrastructure, facilities and public open spaces, and diversifying land use activities. When completed and approved, the Precinct Plan will form part of the municipal Integrated Development Plan (IDP) and gives physical effect to the vision, goals and objectives of the municipal IDP (along with the Bergrivier MSDF).

You are hereby invited to comment on the second draft Precinct Plan. The Precinct Plan document is available for review on the Bergrivier Municipality website (www.bergmun.org.za) during the public participation period, which runs from 12 November 2020 to 14 December 2020. Written comments must be sent to precinctplan@gmail.com

CLOSING DATE: 14 December 2020

DEPARTEMENT VAN LANDBOU, GRONDHERVORMING EN LANDELIKE ONTWIKKELING

KENNISGEWING VAN OPENBARE DEELNAME VIR DIE TWEEDE KONSEP PIKETBERG POORT EN SENTRALE INTEGRASIE SONE GEBIEDSPLAN

Die Munisipaliteit van Bergrivier het die mees onlangse Munisipale Ruimtelike Ontwikkelingsraamwerk (Bergrivier MROR, 2019 2024) in Februarie 2019 vrygestel. Die Piketberg Poort en Sentrale Integrasie Sone Gebiedsplan is in die Bergrivier MROR geïdentifiseer as 'n sleutelprojek / fokusarea vir ruimtelike ontwikkeling en grondgebruik bestuur in Piketberg.

In voortvloeiing van die bevindinge van die Bergrivier MROR, asook die werk wat deur die Wes-Kaapse Regering se Streeks Sosio-ekonomiese Program onderneem is, het die Departement van Landbou, Grondhervorming en Landelike Ontwikkeling 'n multi-dissiplinêre span aangestel om 'n Stedelike Opgraderingsgebiedsplan vir die Piketberg Poort en Sentrale Integrasie Sone voor te berei (die "Gebiedsplan").

'n Gebiedsplan vervul 'n sleutel rol om ontwikkeling te rig in katalitiese ingrypingsprojekte op goed geleë persele, die herstrukturering van die ruimtelike areas om die beboude omgewing beter te verbind en te konsolideer, die skepping van volhoubare infrastruktuur, fasiliteite en openbare oopruimtes en die diversifisering van grondgebruik aktiwiteite. Wanneer die Gebiedsplan gefinaliseer en goedgekeur word, sal die Gebiedsplan deel vorm van die Munisipaliteit se Geïntegreerde Ontwikkelingsplan (GOP) en ruimtelike uitvoering gee aan die munisipale GOP se visie en doelwitte (tesame met die Bergrivier MROR).

U word hiermee uitgenooi om kommentaar te lewer op die tweede konsep Gebiedsplan. Die Gebiedsplan dokument is beskikbaar op die Bergrivier Munisipaliteit se webwef (www.bergmun.org.za) gedurende die openbare deelname periode, wat loop vanaf 12 November 2020 tot 14 Desember 2020. Geskrewe kommentaar moet gestuur word aan precinctplan@gmail.com

SLUITINGSDATUM: 14 Desember 2020

ANNEXURE D

Information Posters (Second Draft Precinct Plan)

BERGRIVIER MUNICIPALITY

"tell us what you think of this proposal"

agriculture, land reform & rural development
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Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN

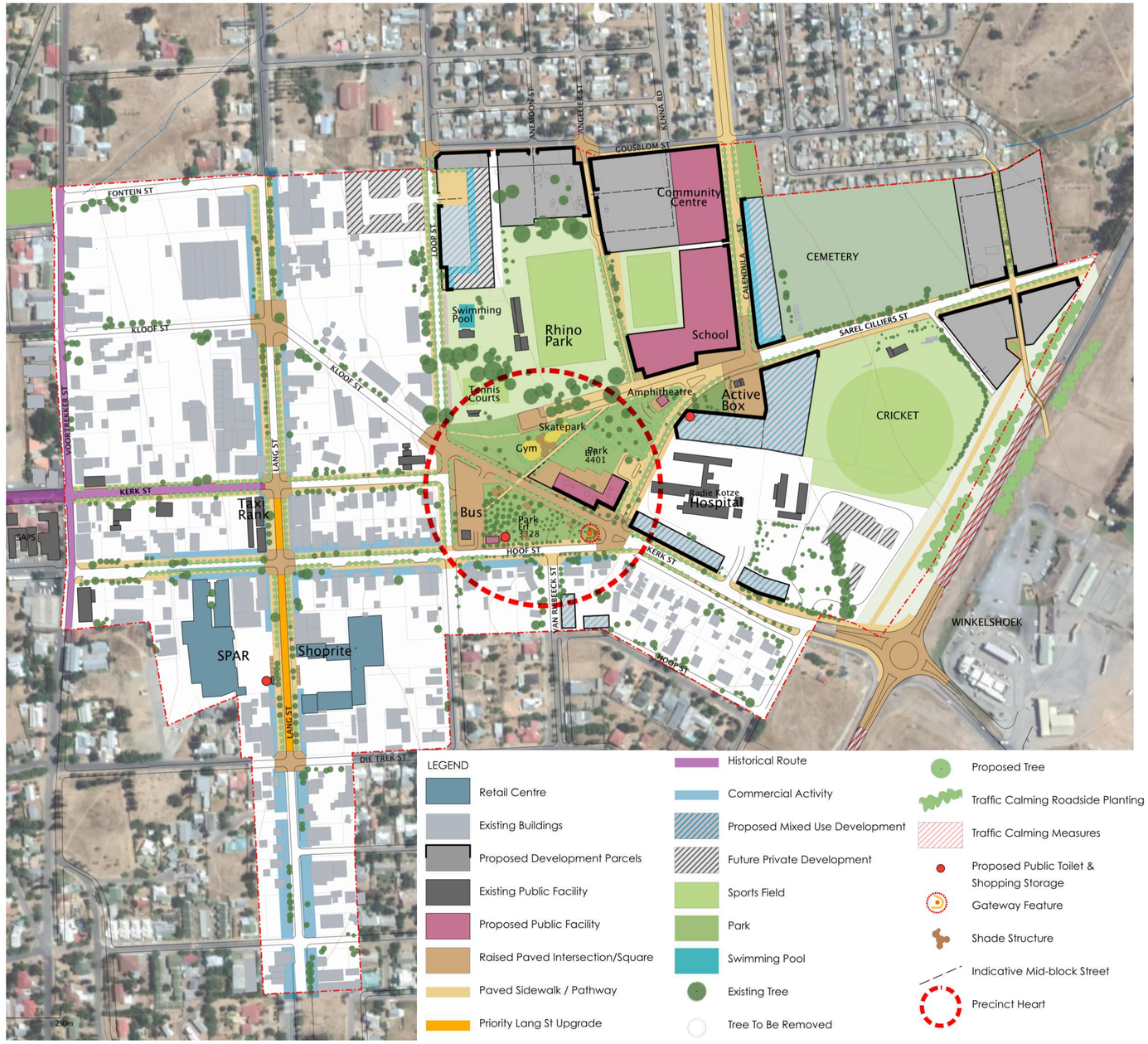
New skatepark connected to outdoor gym with shading elements, seating & lighting

New community facility opening onto and defining public space

Paving, shade, trees, seating & lighting upgrades to Lang, Hoof, Loop, Kerk & Calenduala St

New gateway and entrance feature

New pedestrian route connecting Gousbloem St to Sarel Cilliers



Public space & play park associated with the Active Box defined by mixed-use development

New public amphitheatre & new street next to hospital

New School and Community Centre

Mixed-use residential

Transparent fence around Rhino Park

SUBMIT YOUR COMMENTS BY THE 14 DECEMBER 2020 TO:

E-mail precinctplan@gmail.com

WhatsApp 081 311 3344

FOR MORE INFORMATION VIST:

www.bergmun.org.za

"Piketberg Gateway and Integration Zone Precinct Plan" on Facebook

SUBMIT COMMENTS BY 14 DECEMBER 2020

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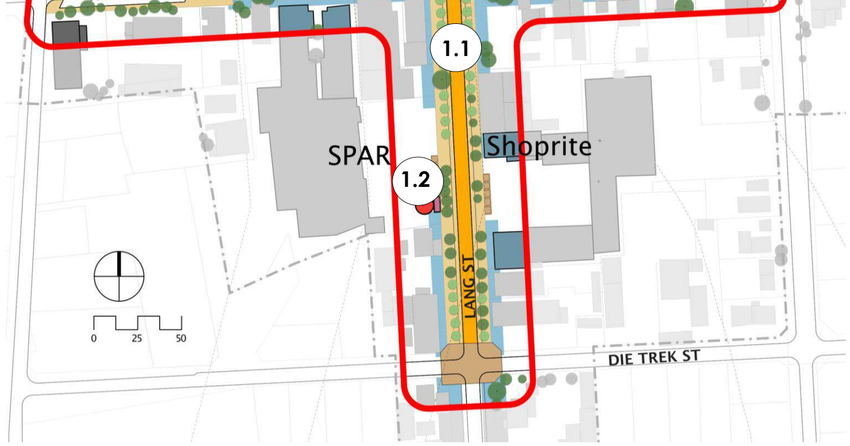
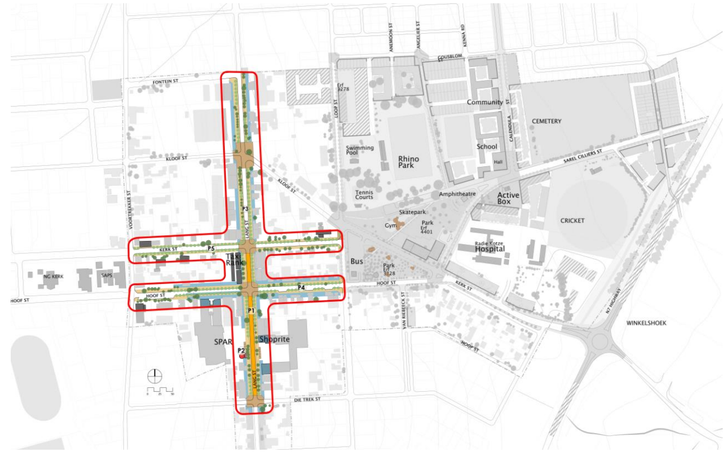
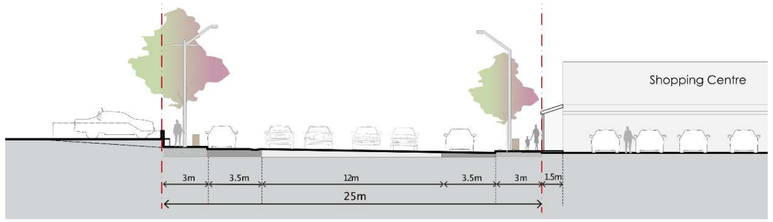
SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 1**

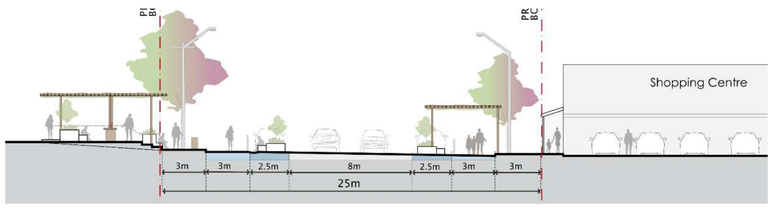
ACTION PROJECT INTERVENTIONS:

- 1.1 & 1.3 Lang Straat public realm upgrade
- 1.2 Public toilet & shopping storage
- 1.4 Hoof Straat upgrade
- 1.5 Kerk Straat upgrade









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SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 2**

ACTION PROJECT INTERVENTIONS:

2.1 **New road link between Calendulastraat / Sarel Cilliers St & Kerkstraat**

2.2 **Kloof, Kerk, Sarel Cilliers and Loop Straat intersection re-design**
- Partial closure of Sarel Cilliers St allows for integration between the park & sports grounds

2.3 **New gateway feature to Piketberg**

2.4 **New community facility** opening onto and defining public space

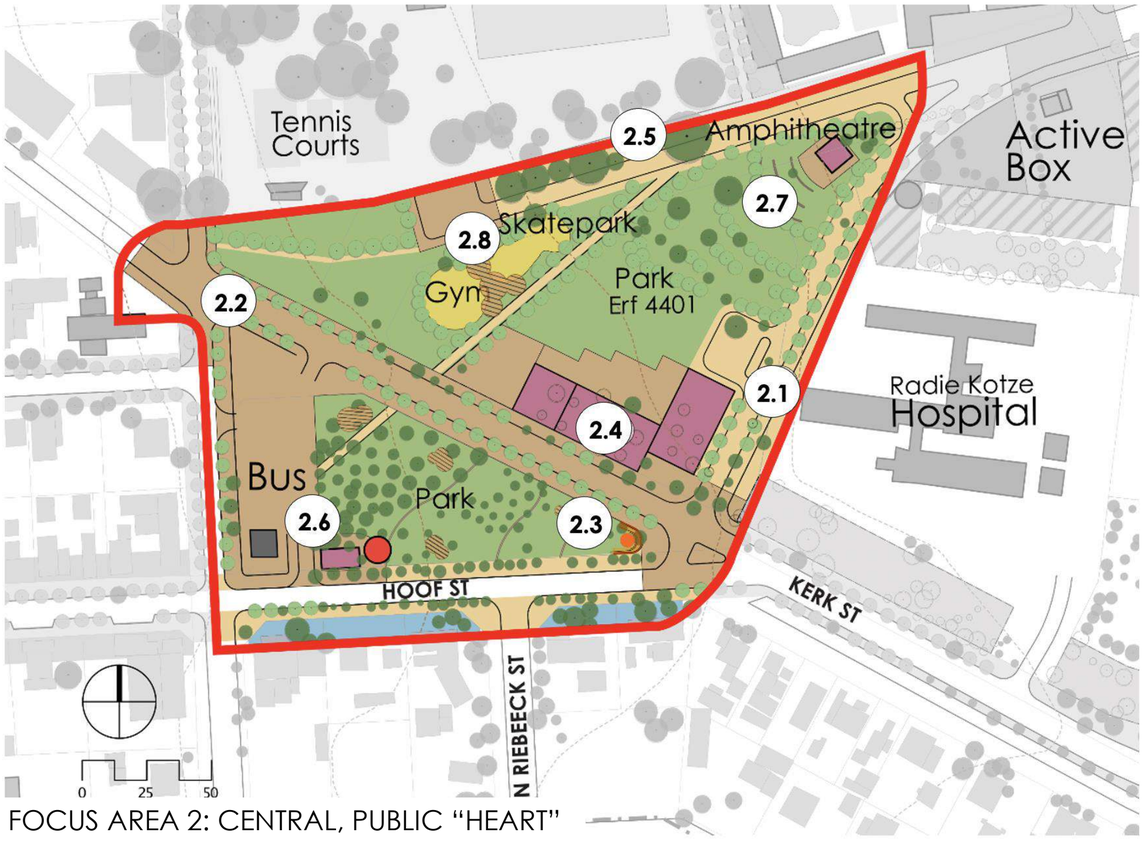
2.5 **Upgrade the interface between Rhino Park and the adjoining public space**

2.6 **Public toilet and storage facility** near bus depot

2.7 **Community amphitheatre**

2.8 **Community skatepark** adjacent to the outdoor gym including lighting and shading elements

FOCUS AREA LOCATION



FOCUS AREA 2: CENTRAL, PUBLIC "HEART"

SUBMIT YOUR COMMENTS BY THE 14 DECEMBER 2020 TO:

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SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 3**

ACTION PROJECT INTERVENTIONS:

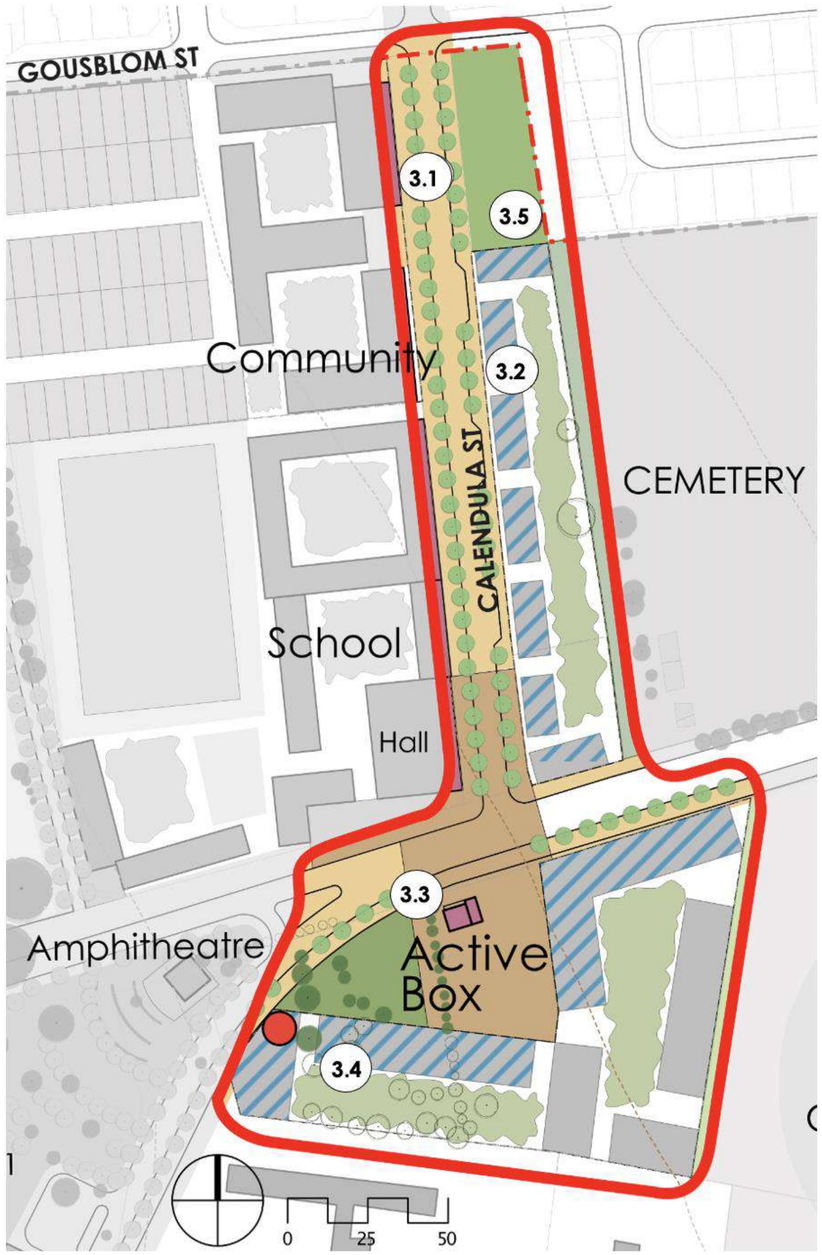
3.1 Calendulastraat public realm upgrade
Including:
- New paving
- New lighting
- Tree-planting
- Seating

3.2 Mixed-use development along the eastern edge of Calendulastraat:
- 2-3 storey shop-houses

3.3 Public space and play park surrounding the Active Box

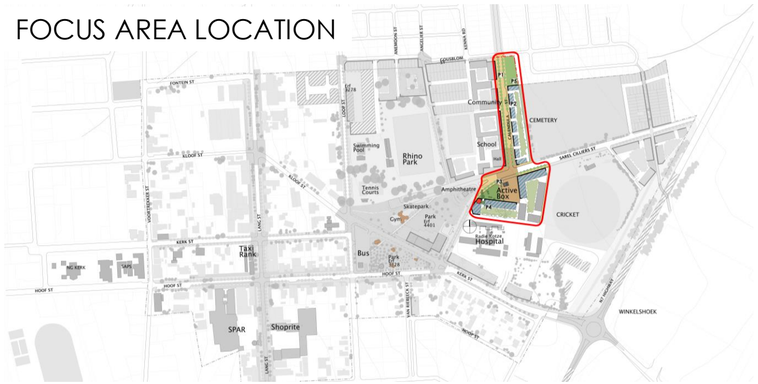
3.4 Mixed-use development framing the Active Box

3.5 Upgrade the Calendula Street play park



FOCUS AREA 3: CALENDULASTRAAT & THE ACTIVE BOX

FOCUS AREA LOCATION



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E-mail precinctplan@gmail.com

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SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 4**

ACTION PROJECT INTERVENTIONS:

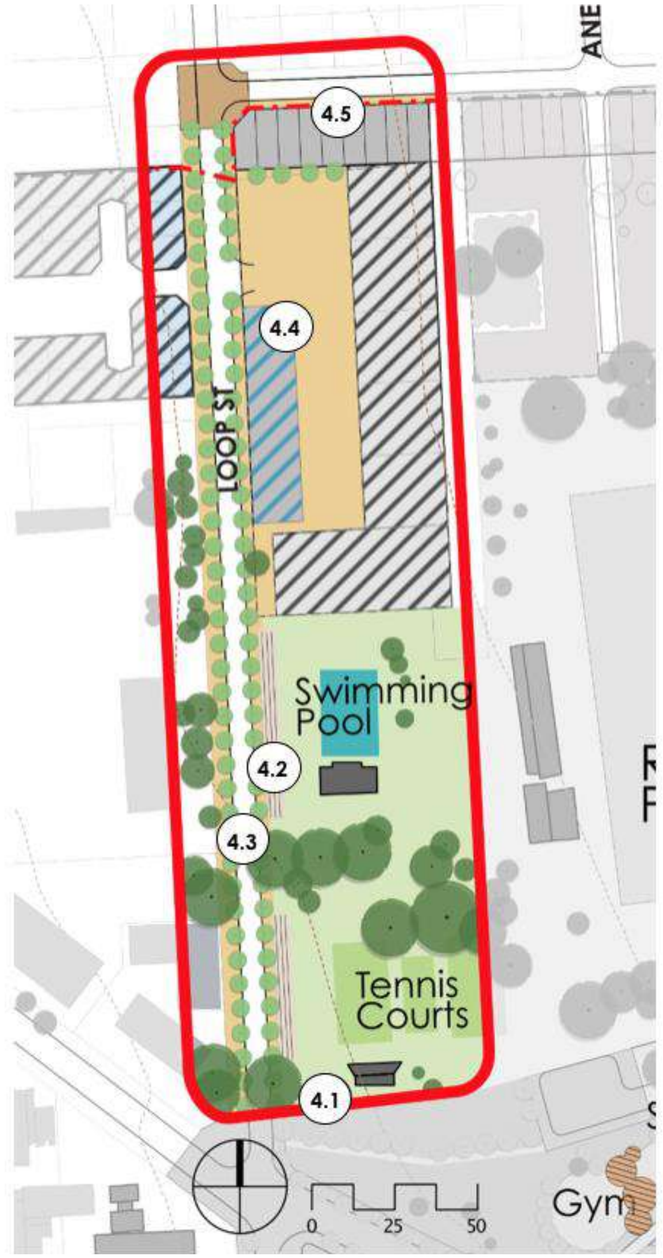
4.1 **Replace solid wall surrounding Rhino Park with transparent fence**

4.2 **Upgrade entrance to public swimming pool**
Turnstile gate with basic shading and lighting

4.3 **Loopstraat urban design upgrade adjacent to Rhino Park**
- Replace solid boundary wall with transparent fence
- New pedestrian lighting
- Tree planting / paving upgrade

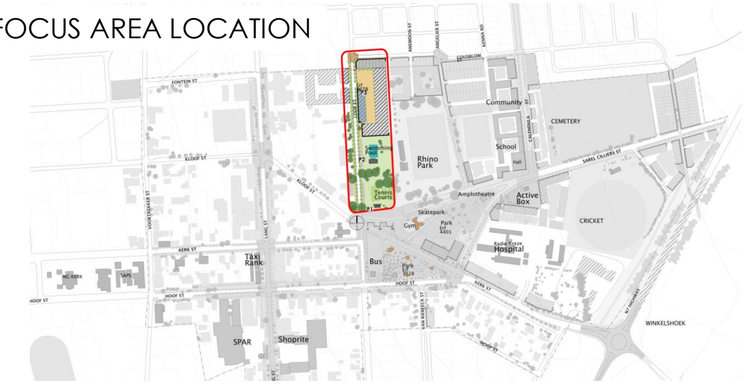
4.4 **Construct multi-functional parking court** earmarked for Erf 3278

4.5 **Residential development -** medium density, 2-3 storey semi-detached or row housing along onto Gousblomstraat



FOCUS AREA 4: INTERFACE BETWEEN LOOP STRAAT & THE RHINO PARK SPORTS COMPLEX

FOCUS AREA LOCATION



SUBMIT YOUR COMMENTS BY THE 14 DECEMBER 2020 TO:

E-mail precinctplan@gmail.com

WhatsApp 081 311 3344

FOR MORE INFORMATION VIST:

www.bergmun.org.za

"Piketberg Gateway and Integration Zone Precinct Plan" on Facebook

SUBMIT COMMENTS BY 14 DECEMBER 2020

BERGRIVIER MUNICIPALITY

"tell us what you **think** of this proposal"

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Department:
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SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 5**

ACTION PROJECT INTERVENTIONS:

5.1 Community Centre
Including:
- Multi-purpose hall
- Elderly care facilities
- Outdoor play areas / sports courts
- Administration offices

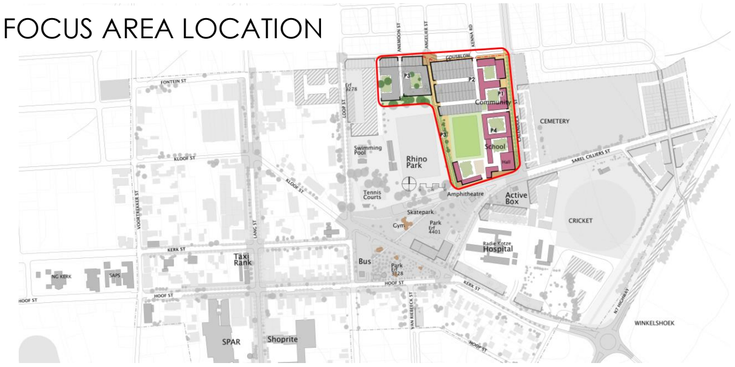
5.2 & 5.5 Public housing
- Courtyard apartment blocks (3 to 4 storeys)
- Semi-detached / row house units (2 or 3 storeys)

5.3 Public pathway

5.4 Primary School
New school along majoring structuring route with strong connection to other public facilities.

FOCUS AREA 5: VACANT, PUBLICLY OWNED LAND ADJACENT TO THE RHINO PARK SPORTS COMPLEX AND CALENDULASTRAAT

FOCUS AREA LOCATION



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SECOND DRAFT PIKETBERG GATEWAY AND CENTRAL INTEGRATION ZONE PRECINCT PLAN: **FOCUS AREA 6**

ACTION PROJECT INTERVENTIONS:

6.1 Upgrade NMT route between Steynville and the N7 crossing
- New paving
- New lighting
- Tree-planting
- Seating

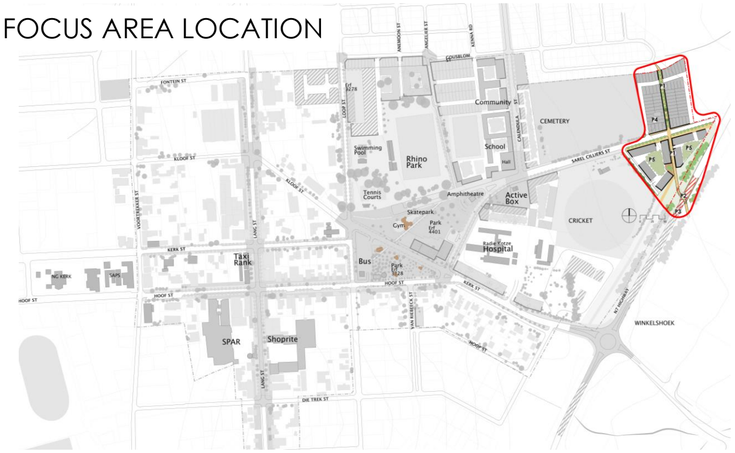
6.2 Construct a pedestrian bridge over the N7 freeway

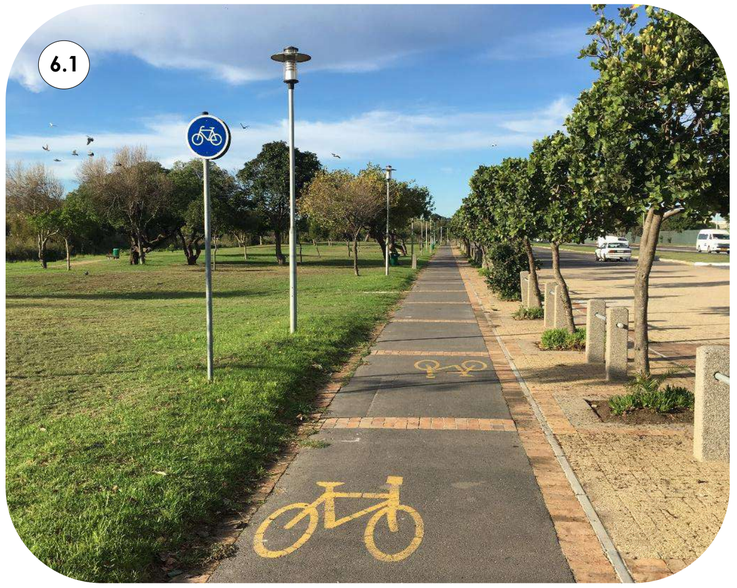
6.3 Introduce traffic calming measures along the N7

6.4 & 6.5 Residential Development
Medium density, 2 – 3 storey, semi-detached, row and apartment style housing

FOCUS AREA 6: RESIDENTIAL INFILL BETWEEN CEMETERY / CRICKET OVAL AND THE N7 FREEWAY

FOCUS AREA LOCATION





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14 DECEMBER 2020

Annexure C

Conceptual Engineering Drawings

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PIKETBERG PRECINCT PLAN

CONCEPT CIVIL ENGINEERING DRAWINGS

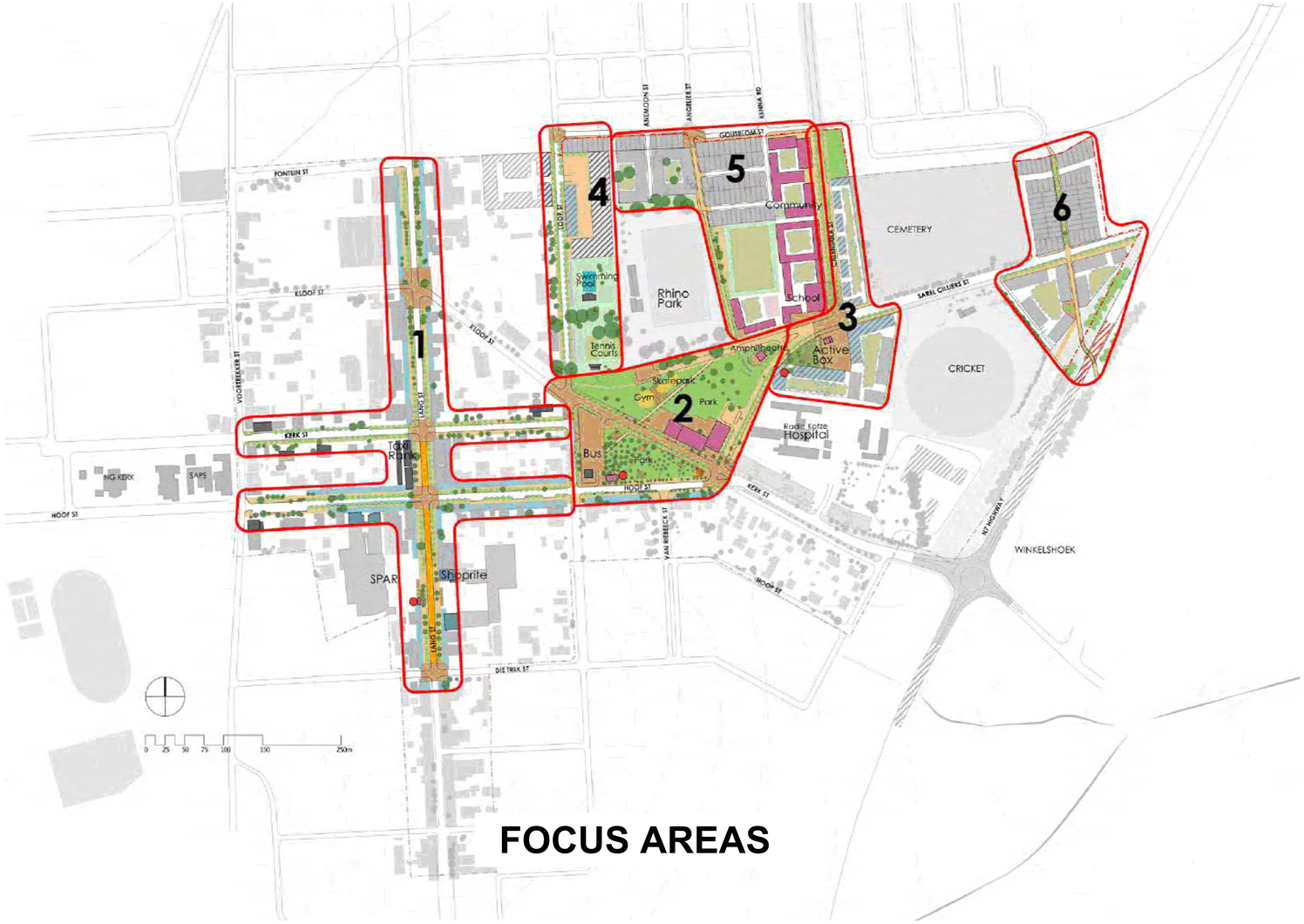
JANUARY 2021

SMEC South Africa
Member of the Surbana Jurong Group

PREPARED BY:

SMEC SOUTH AFRICA (Pty) Ltd
65 RIEBEEK STREET
CAPE TOWN
8001

PIKETBERG PRECINCT PLAN



FOCUS AREAS

NO.	DRAWING NO.	TITLE
1	C1807-W-P-000	INDEX SHEET
2	C1807-W-P-001	FOCUS AREA 1 - ROAD LAYOUT 1 OF 4
3	C1807-W-P-002	FOCUS AREA 1 - ROAD LAYOUT 2 OF 4
4	C1807-W-P-003	FOCUS AREA 1 - ROAD LAYOUT 3 OF 4
5	C1807-W-P-004	FOCUS AREA 1 - ROAD LAYOUT 4 OF 4
6	C1807-W-P-005	FOCUS AREA 2 - ROAD LAYOUT
7	C1807-W-P-006	FOCUS AREA 3 - ROAD LAYOUT
8	C1807-W-P-007	FOCUS AREA 4 - ROAD LAYOUT
9	C1807-W-P-008	FOCUS AREA 5 - PLAN LAYOUT
10	C1807-W-P-009	FOCUS AREA 6 - PLAN LAYOUT
11	C1807-W-P-010	ROAD AND PAVING DETAILS
12	C1807-W-P-011	ROAD AND PAVING DETAILS
13	C1807-W-P-012	STORMWATER DETAILS

REVISION	DATE	DESCRIPTION

ENGINEER

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____ SIGNATURE: .....
Pr. No : _____

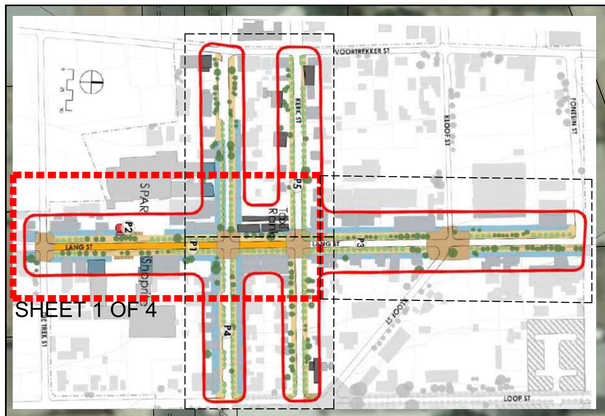
CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

BERGRIVIER MUNICIPALITY

	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-000	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
INDEX SHEET	AS SHOWN	00	A1



LEGEND

TREE -

BOLLARD -

ASPHALT -

PAVING (PEDESTRIAN -

PAVING (ROAD) -

COBBLE STONE -

SPAR

SHOPRITE

TAXI RANK

HOOF STREET

KERK STREET

LANG STREET

CONSTRUCTION LIMIT

UNIVERSAL ACCESS RAMP

UNIVERSAL ACCESS RAMP

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

NEW STORMWATER CATCHPIT

NEW STORMWATER CATCHPIT

SEE DRAWING C1807-W-P-010 FOR DETAILS ON RAISED INTERSECTION

SEE DRAWING C1807-W-P-010 FOR DETAILS ON RAISED INTERSECTION

SEE DRAWING C1807-W-P-010 FOR DETAILS ON RAISED INTERSECTION

MH

MH

MH

A

A

B

B

202

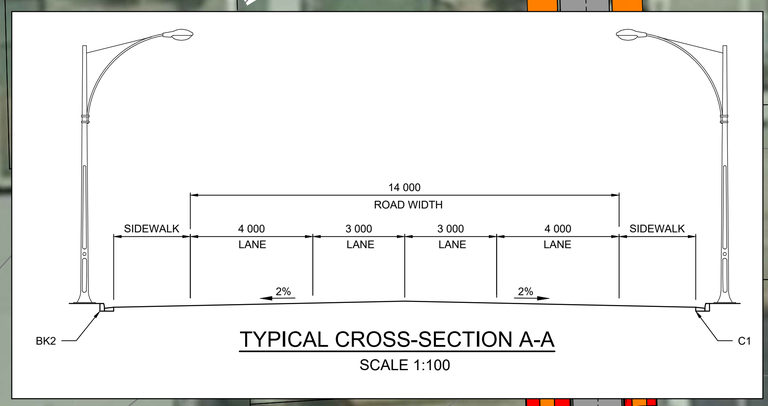
200

198

196

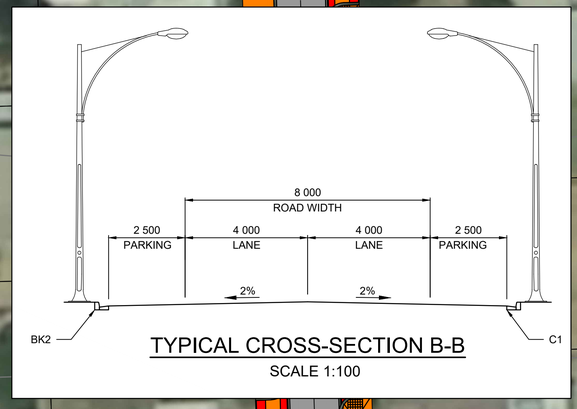
194

192



TYPICAL CROSS-SECTION A-A

SCALE 1:100



TYPICAL CROSS-SECTION B-B

SCALE 1:100

ROAD LAYOUT

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa

Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022
ROGGEBAAI 8012
SOUTH AFRICA

T +27 21 417 2900
F +27 21 417 2999
www.smec.com

Pr. Eng: NAME : _____
Pr. No : _____

SIGNATURE: .....

CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

BERGRIVIER MUNICIPALITY

	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

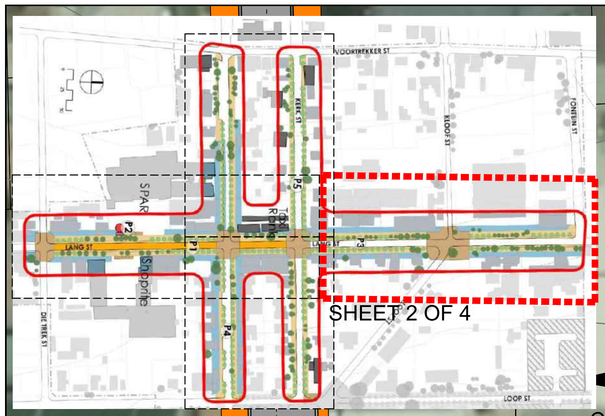
PROJECT

PIKETBERG PRECINCT PLAN
CONCEPT ENGINEERING DRAWINGS

PLAN DESCRIPTION

FOCUS AREA 1
ROAD LAYOUT 1 OF 4

CONTRACT NO.	C1807	
DRAWING No.	C1807-W-P-001	
SCALE	REV.	PAPER SIZE
AS SHOWN	00	A1



SHEET 2 OF 4

LEGEND

TREE -

BOLLARD -

ASPHALT -

PAVING (PEDESTRIAN -

PAVING (ROAD) -

COBBLE STONE -

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

NEW STORMWATER CATCHPIT

UNIVERSAL ACCESS RAMP

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

NEW STORMWATER CATCHPIT

MH

MH

MH

LANG STREET

CONSTRUCTION LIMIT

KERK STREET

SEE DRAWING C1807-W-P-010 FOR DETAILS ON RAISED INTERSECTION

UNIVERSAL ACCESS RAMP

CONNECT EXISTING STORMWATER GRID INLET TO A MANHOLE

SEE DRAWING C1807-W-P-010 FOR DETAILS ON RAISED INTERSECTION

NEW PEDESTRIAN CROSSING

C

C

200

200

198

196

194

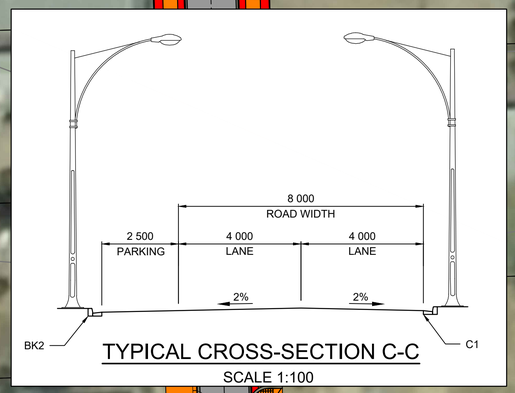
192

190

190

194

192



TYPICAL CROSS-SECTION C-C

SCALE 1:100

ROAD LAYOUT

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa

Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022
ROGGEBAAI 8012
SOUTH AFRICA

T +27 21 417 2900
F +27 21 417 2999
www.smec.com

Pr. Eng: NAME : _____
Pr. No : _____

SIGNATURE: .....

CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
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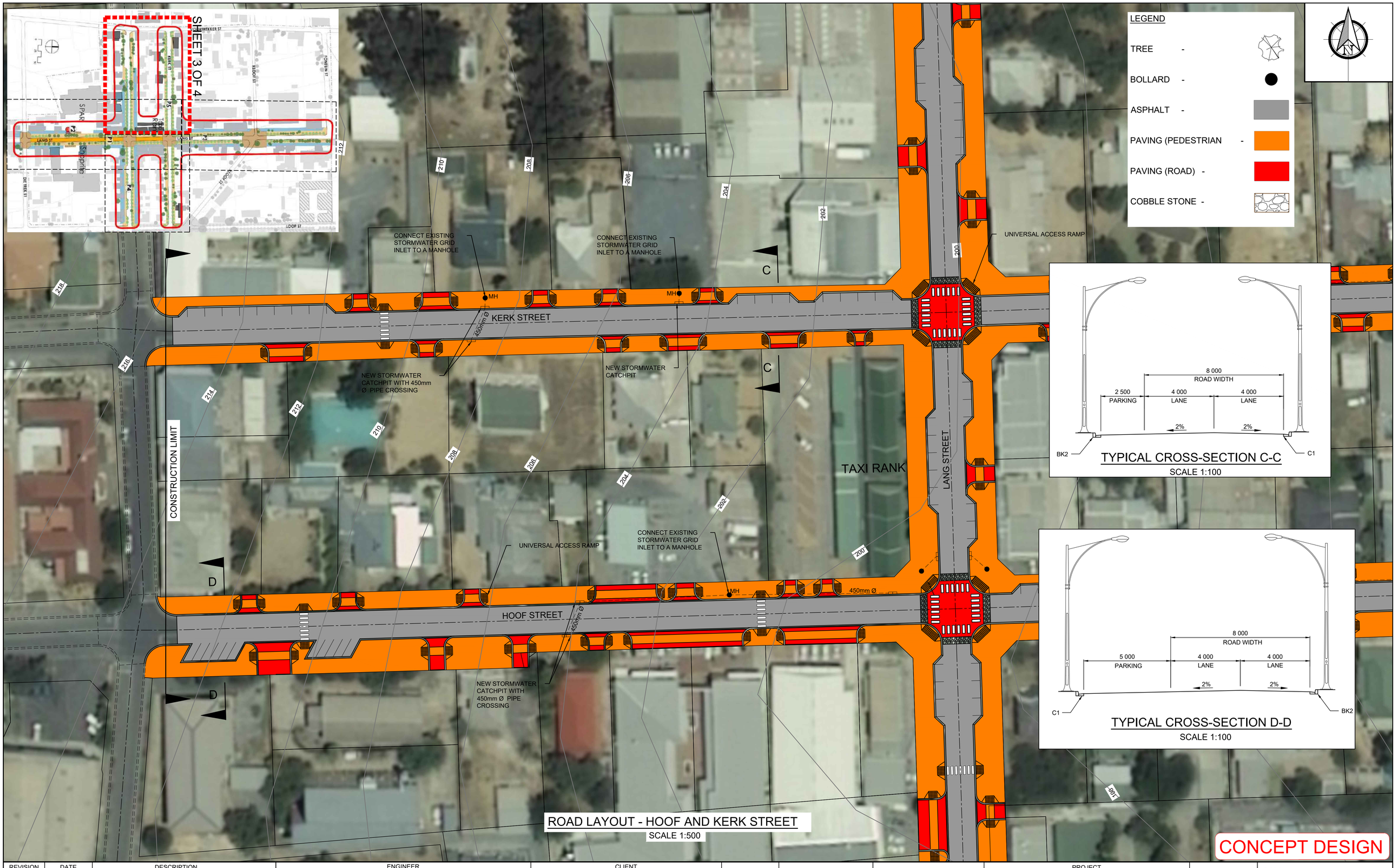
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-002	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 1 ROAD LAYOUT 2 OF 4	AS SHOWN	00	A1



REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa
Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____
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SIGNATURE: .....

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Department: Agriculture, Land Reform and Rural Development
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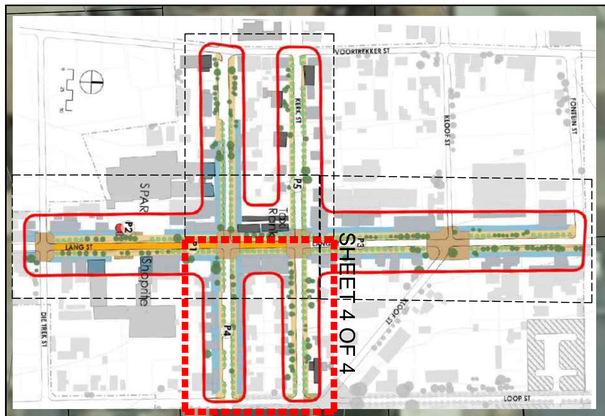
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT

PIKETBERG PRECINCT PLAN
CONCEPT ENGINEERING DRAWINGS

CONTRACT NO.	C1807	
DRAWING No.	C1807-W-P-003	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 1 ROAD LAYOUT 3 OF 4	AS SHOWN	00	A1



SHEET 4 OF 4

LEGEND

TREE -

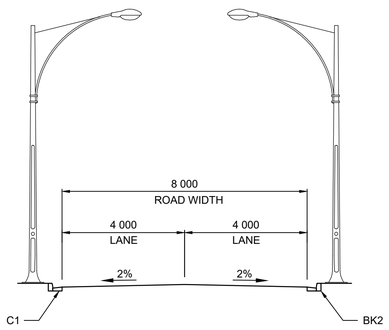
BOLLARD -

ASPHALT -

PAVING (PEDESTRIAN -

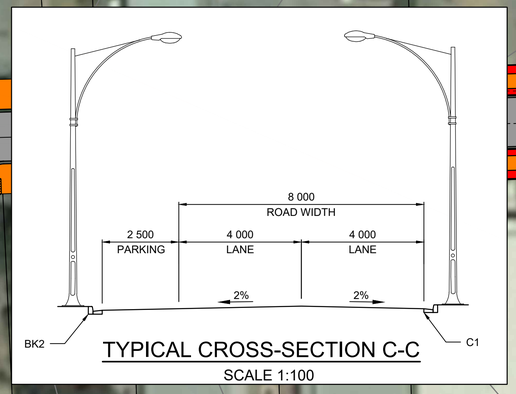
PAVING (ROAD) -

COBBLE STONE -



TYPICAL CROSS-SECTION E-E

SCALE 1:100



TYPICAL CROSS-SECTION C-C

SCALE 1:100

KERK STREET

HOOF STREET

LANG STREET

TAXI RANK

CONSTRUCTION LIMIT

UNIVERSAL ACCESS RAMP

450mm Ø

NEW STORMWATER CATCHPIT WITH 450mmØ PIPE CROSSING

MODIFY EXISTING CATCHPIT TO TIE IN WITH NEW KERB LINE

E

C

ROAD LAYOUT - HOOF AND KERK STREET

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa

Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____
Pr. No : _____

SIGNATURE: .....

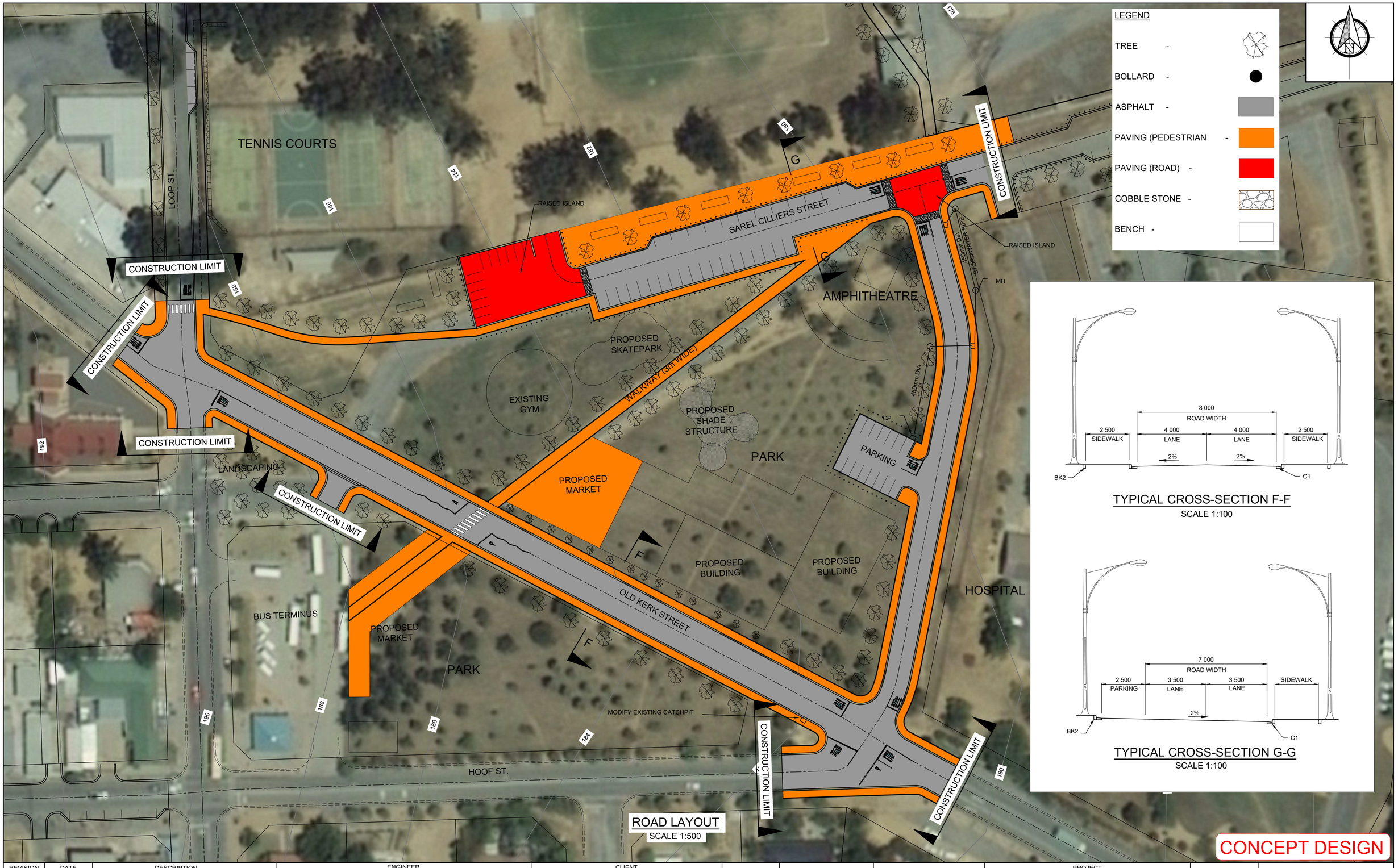
CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

BERGRIVIER MUNICIPALITY

	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-004	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 1 ROAD LAYOUT 4 OF 4	AS SHOWN	00	A1



LEGEND

- TREE -
- BOLLARD -
- ASPHALT -
- PAVING (PEDESTRIAN -
- PAVING (ROAD) -
- COBBLE STONE -
- BENCH -

TYPICAL CROSS-SECTION F-F
SCALE 1:100

TYPICAL CROSS-SECTION G-G
SCALE 1:100

ROAD LAYOUT
SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER
65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 T +27 21 417 2900
ROGGEBAAI 8012 F +27 21 417 2999
SOUTH AFRICA www.smec.com

Pr. Eng: NAME : _____
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CLIENT
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Department: Agriculture, Land Reform and Rural Development
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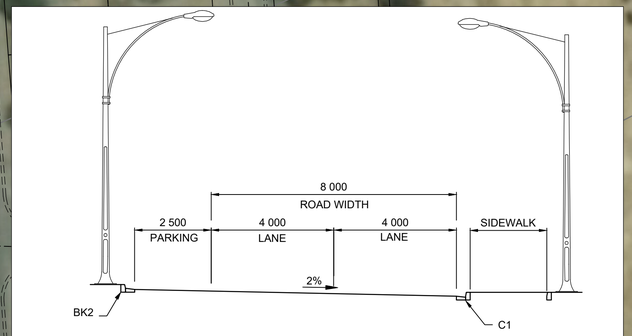
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT			
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	CONTRACT NO.	C1807	
	DRAWING No.	C1807-W-P-005	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 2 ROAD LAYOUT	AS SHOWN	00	A1



TYPICAL CROSS-SECTION H-H
SCALE 1:100

CURRENT VIEW OF CALENDULA STREET

LEGEND

TREE -

BOLLARD -

ASPHALT -

PAVING (PEDESTRIAN -

PAVING (ROAD) -

COBBLE STONE -

BENCH -

CEMETERY
NERINA RD.
CONSTRUCTION LIMIT
RAISED ISLAND
NEW 450mm Ø STORMWATER PIPE WITH HEADWALL
EXISTING HEADWALL TO BE DEMOLISHED AND REPLACED BY MANHOLE
EXISTING WALKWAY
CALENDULA STREET
EXISTING STORMWATER CATCH PIT
NEW CATCHPIT
DEMOLISH EXISTING PEDESTRIAN CROSSING
NEW PROPOSED RAISED PEDESTRIAN CROSSING
MODIFY EXISTING STORMWATER CATCHPIT
PROPOSED BUILDING
EXISTING BUILDING
ACTIVE BOX
SAREL CILLIERS STREET
PROPOSED COMMUNITY CENTRE
PROPOSED PRIMARY SCHOOL
PROPOSED SPORTS FIELD
KENNA RD.
GOUSBLOM ST.
PROPOSED HOUSING
AMPHITHEATRE

ROAD LAYOUT
SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER
65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

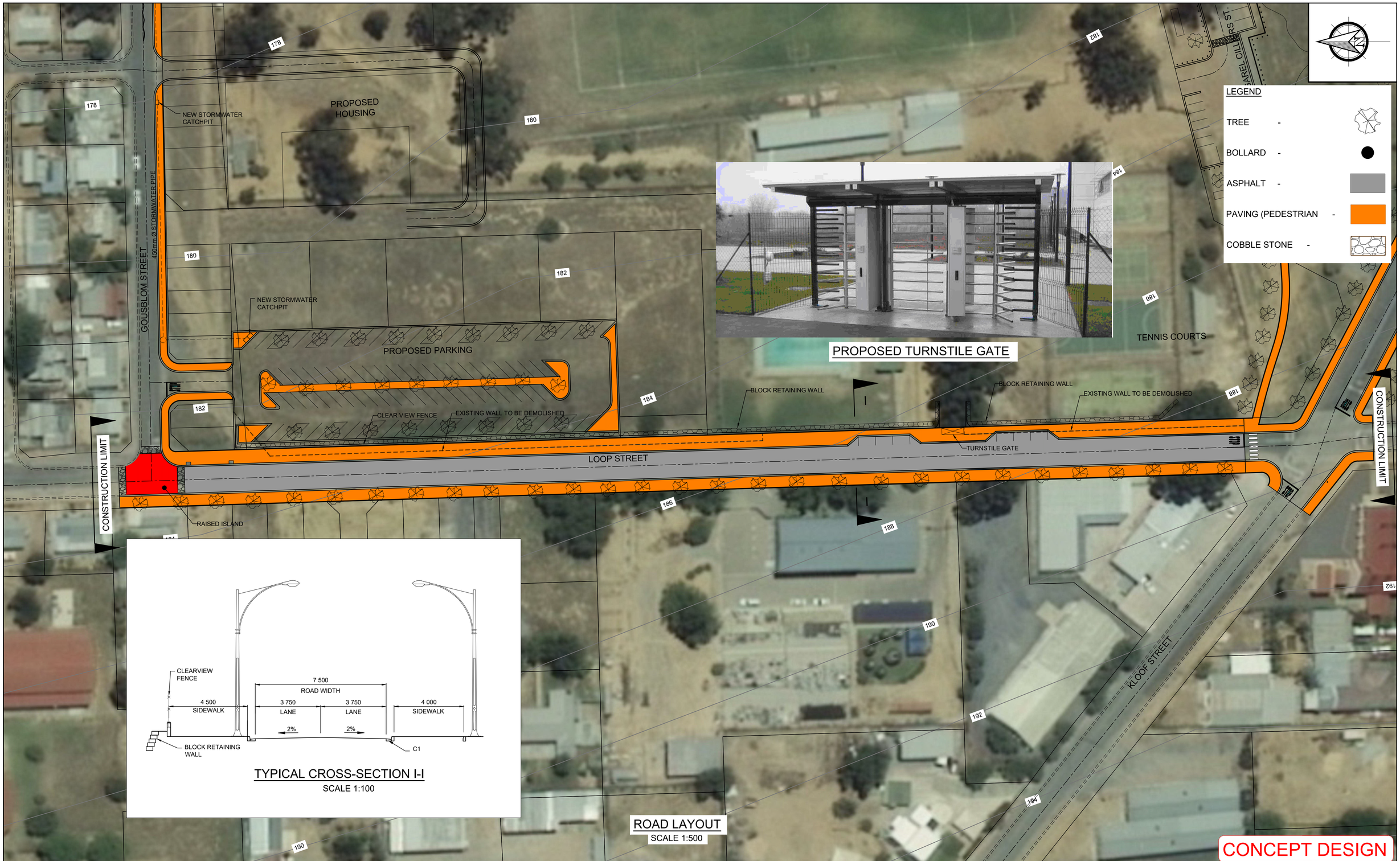
PO BOX 8022 T +27 21 417 2900
ROGGEBAAI 8012 F +27 21 417 2999
SOUTH AFRICA www.smec.com

Pr. Eng: NAME : _____ SIGNATURE: .....
Pr. No : _____

CLIENT
agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA
BERGRIVIER MUNICIPALITY

	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-006	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 3 ROAD LAYOUT	AS SHOWN	00	A1



PROPOSED TURNSTILE GATE

TYPICAL CROSS-SECTION I-I

SCALE 1:100

ROAD LAYOUT

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____ SIGNATURE: .....
Pr. No : _____

CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

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DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-007	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 4 ROAD LAYOUT	AS SHOWN	00	A1

PLAN LAYOUT

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
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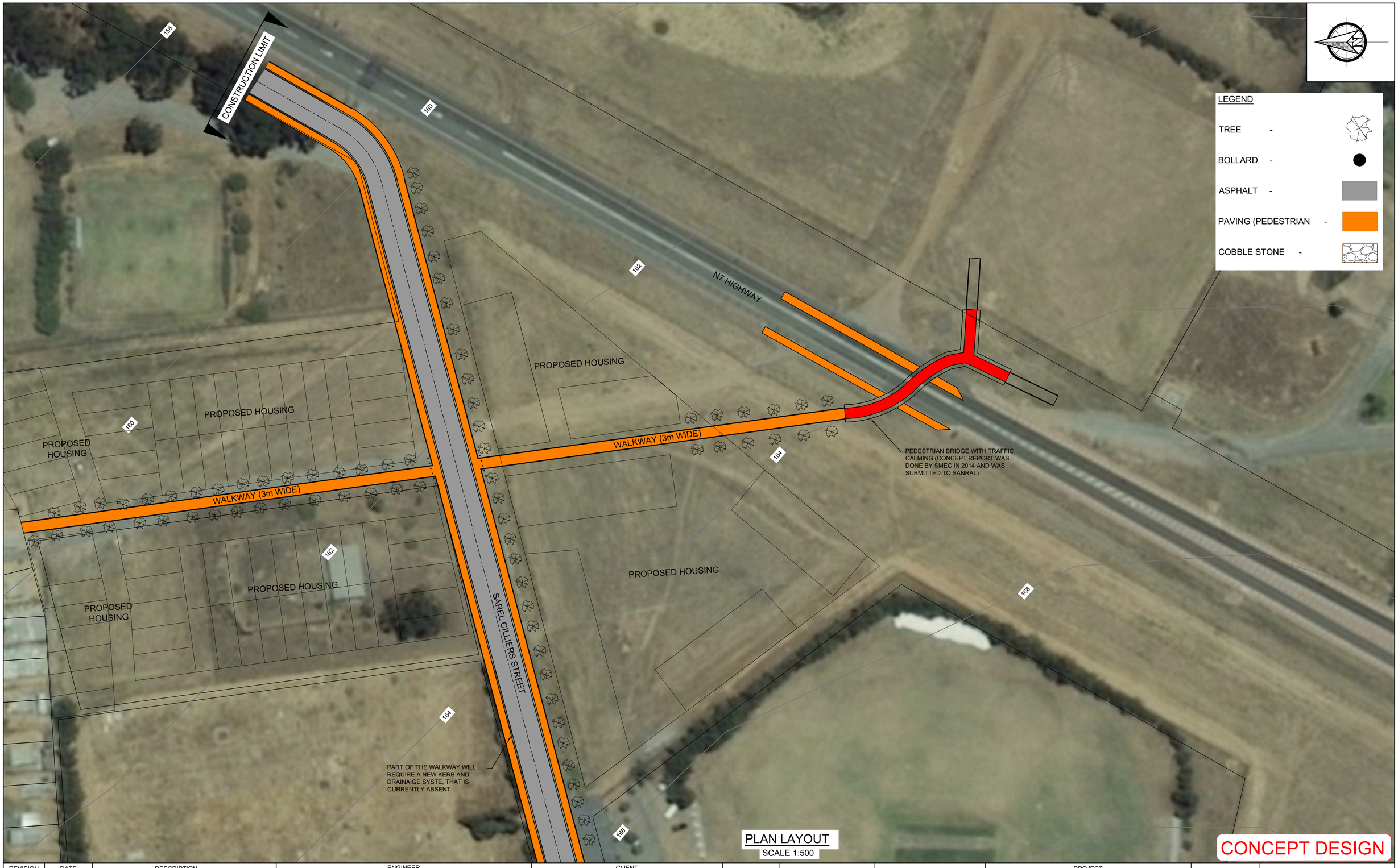
PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-008	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 5 PLAN LAYOUT	AS SHOWN	00	A1



PLAN LAYOUT

SCALE 1:500

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____ SIGNATURE: .....
Pr. No : _____

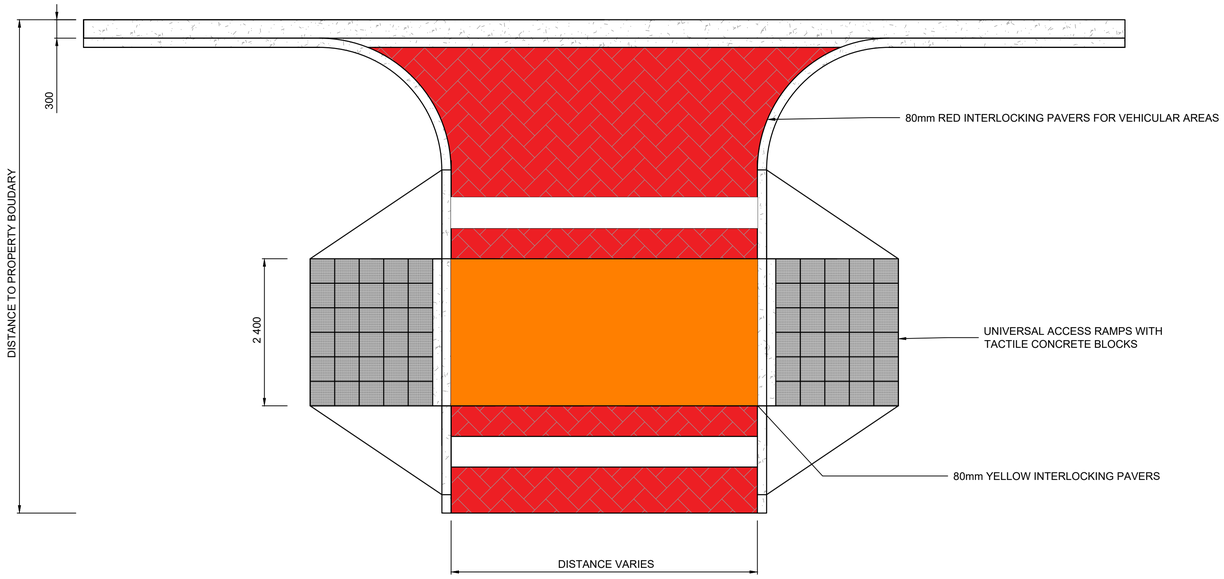
CLIENT

agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

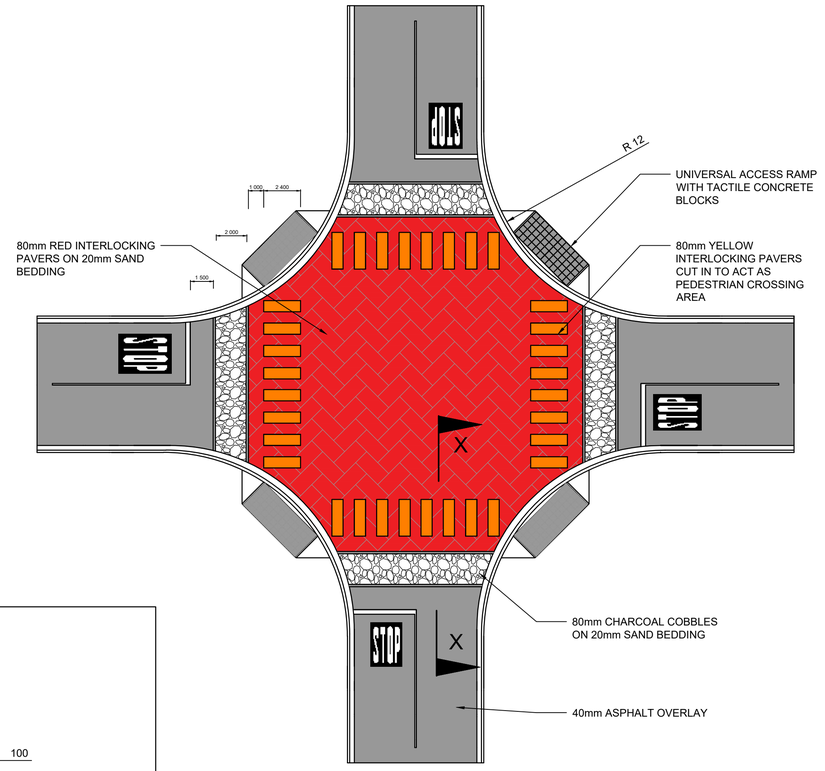
BERGRIVIER MUNICIPALITY

	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

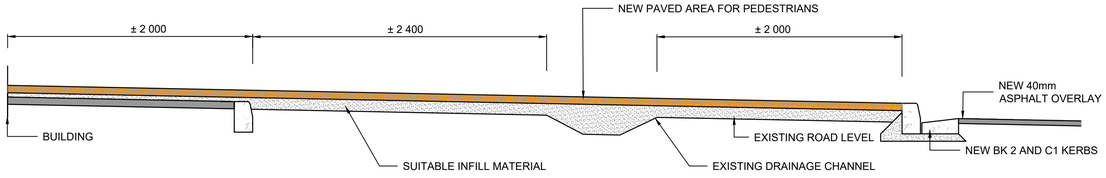
PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-009	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
FOCUS AREA 6 PLAN LAYOUT	AS SHOWN	00	A1



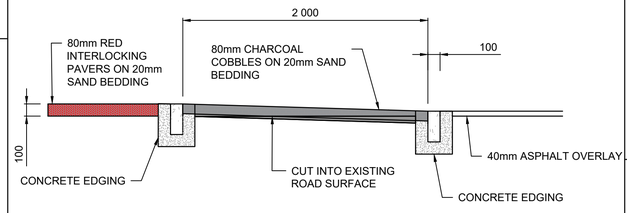
DRIVEWAY DETAIL (FOCUS AREA 1)
SCALE 1:50



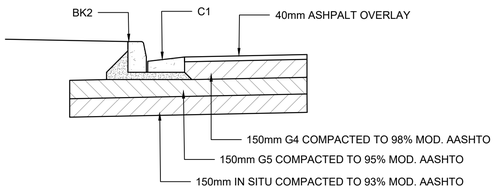
TYPICAL LONG STREET RAISED INTERSECTION
SCALE 1:200



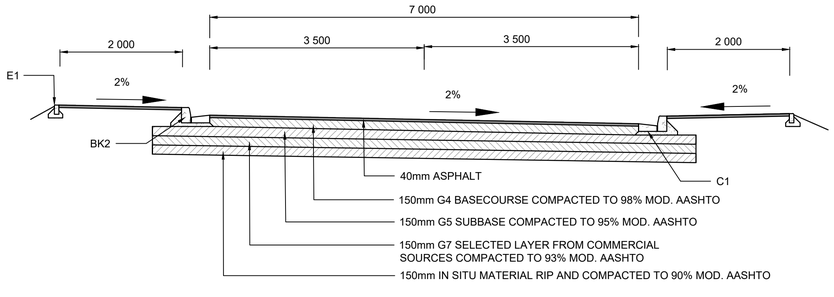
TYPICAL LONG STREET NARROWING DETAIL (FOCUS AREA 1)
SCALE 1:25



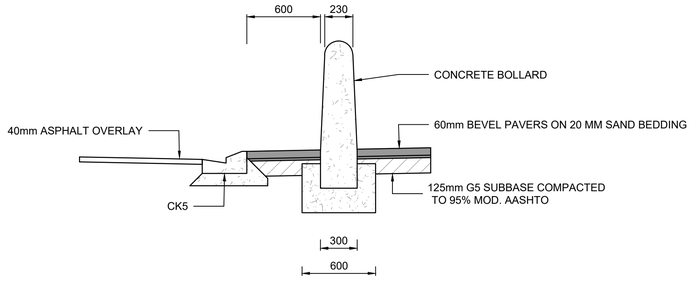
SECTION X-X
SCALE 1:25



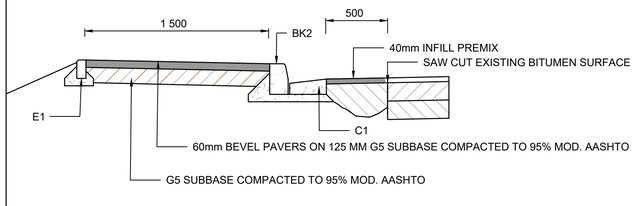
PARKING AREA LAYERWORKS (FOCUS AREAS 2 & 4)
SCALE 1:25



NEW CONNECTING ROAD (FOCUS AREA 2)
SCALE 1:50



SAREL CILLIERS STREET (FOCUS AREA 2)
SCALE 1:50



OLD KERK STREET WALKWAY (FOCUS AREA 2)
SCALE 1:25

CONCEPT DESIGN

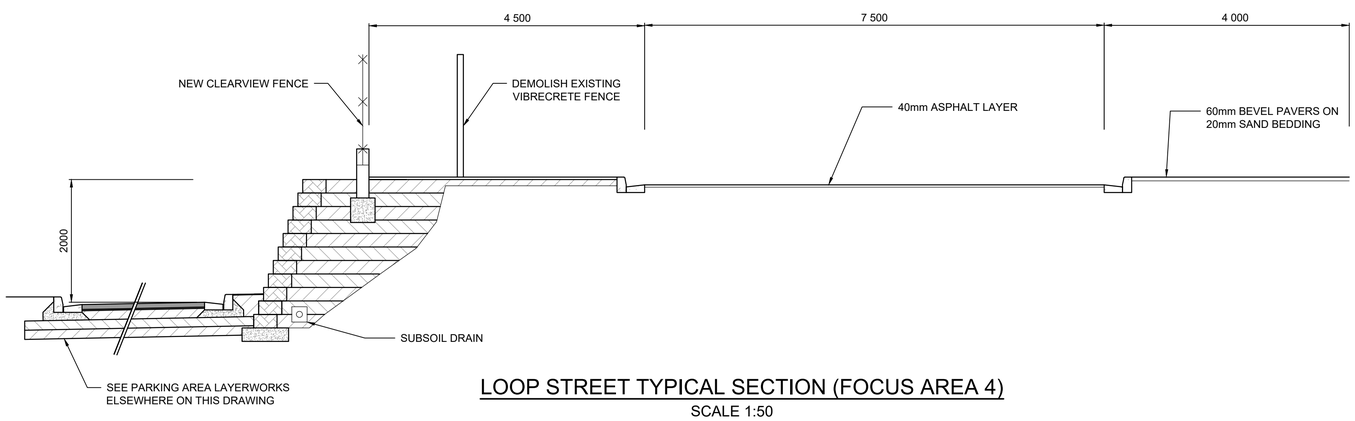
REVISION	DATE	DESCRIPTION

ENGINEER
SMEC South Africa
Member of the Surbana Jurong Group
65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA
PO BOX 8022
ROGGEBAAI 8012
SOUTH AFRICA
T +27 21 417 2900
F +27 21 417 2999
www.smec.com
Pr. Eng: NAME : _____
Pr. No : _____
SIGNATURE: .....

CLIENT
agriculture, land reform & rural development
Department: Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA
BERGRIVIER MUNICIPALITY

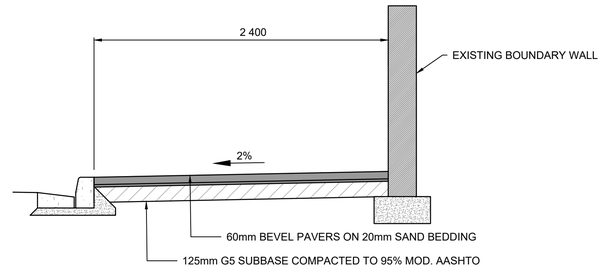
	NAME	SIGNATURES
DESIGNED	H. MAART	
DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-010	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
ROAD AND PAVING DETAILS SHEET 1	AS SHOWN	00	A1



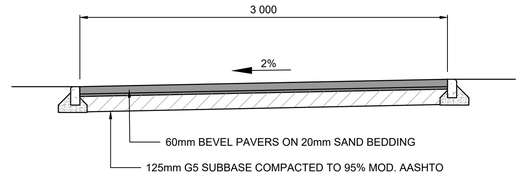
LOOP STREET TYPICAL SECTION (FOCUS AREA 4)

SCALE 1:50



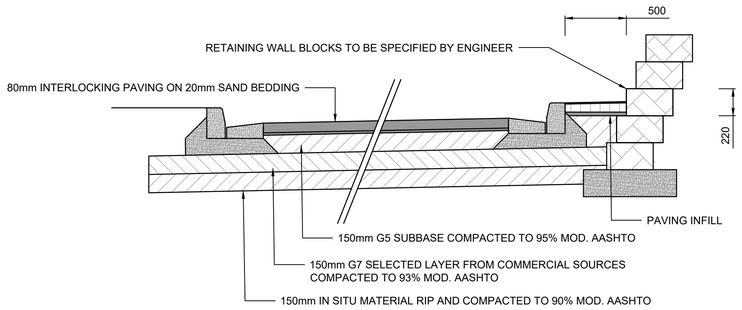
TYPICAL PEDESTRIAN WALKWAY AT WALL (FOCUS AREA 4)

SCALE 1:25



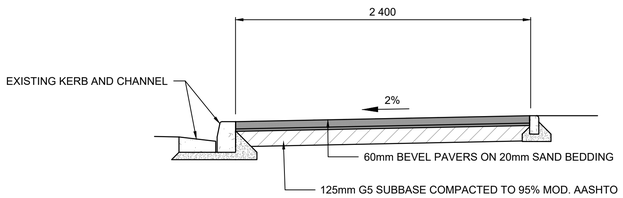
TYPICAL 3m WALKWAY (FOCUS AREA 5 & 6

SCALE 1:25



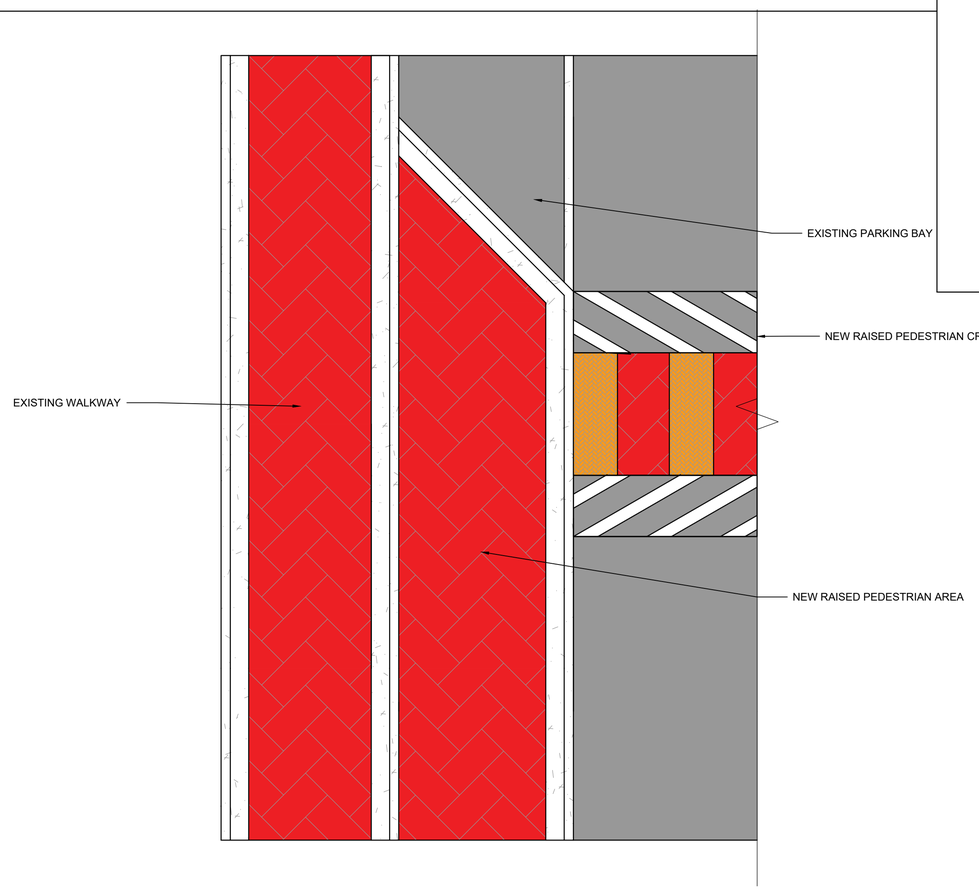
PARKING AREA LAYERWORK (FOCUS AREA 4)

SCALE 1:25



TYPICAL PEDESTRIAN WALKWAY DETAIL (FOCUS AREA 4)

SCALE 1:25



MODIFICATIONS TO WALKWAY IN CALENDULA STREET (FOCUS AREA 3)

SCALE 1:50

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa
Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

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DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-011	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
ROAD AND PAVING DETAILS SHEET 2	AS SHOWN	00	A1

TABLE 1
MANHOLE CHAMBER DIAMETER

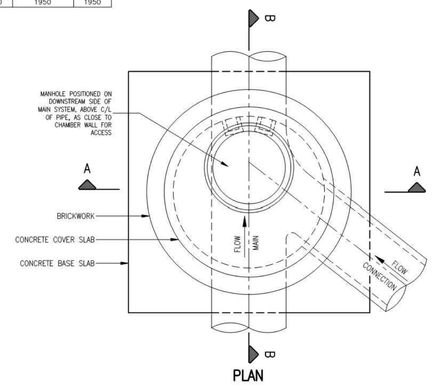
NOM. PIPE DIA. (mm)	DEPTH 'y' (m)		
	y ≤ 2.5	2.6 < y ≤ 4.0	y > 4.0
	CHAMBER DIAMETER ø (mm)		
375	1000	1250	1500
450			
525			
600	1250		
675			
750			
825	1500	1500	
900			
1050	1800	1800	1800
1200			
1350	1950	1950	1950

TABLE 2
BRICKWORK & FLOOR/BASE SLAB

DEPTH 'y' (m)	BRICKWORK (mm)	BASE/FLOOR SLAB		
		THICKNESS (mm)	CONCRETE GRADE	REINFORCING
y ≤ 2.5	220	150	20/19	NONE
2.5 < y ≤ 4.0	330	200	20/19	MESH 311
y > 4.0	330	250	25/19	MESH 395

TABLE 3
PRECAST CONCRETE RING: MINIMUM WALL THICKNESS

RING DIAMETER	WALL THICKNESS
1000	65
1250	75
1500	85
1800	95
1950	115



PLAN

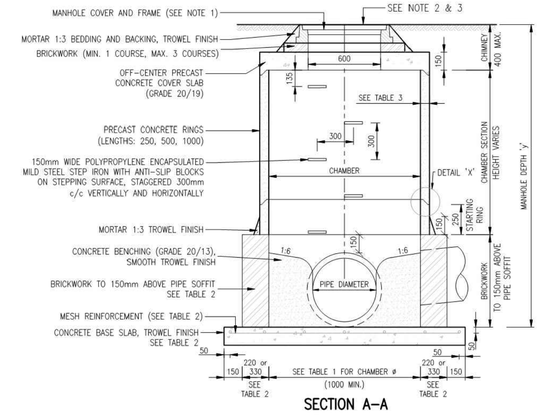
NOTES:

1. REFER TO SECTION 10.4.3 FOR MANHOLE COVER AND FRAME REQUIREMENTS.
2. HINGED MANHOLE COVERS SITUATED IN THE ROAD SHALL OPEN TOWARDS ONCOMING TRAFFIC.
3. MANHOLE COVER LEVEL:
   - ROADWAY OR FOOTWAY: LEVEL WITH FRL/FSL.
   - OPEN SPACES: 500mm ABOVE NGL (UNLESS DIRECTED OTHERWISE).MINIMUM CENTER LINE RADIUS OF BENCHING: 2.5 X PIPE DIAMETER.
4. CHIMNEY OPENING TO BE PLACED AS CLOSE TO CENTER LINE OF THE MAIN INCOMING AND OUTGOING PIPE AS POSSIBLE.
5. BRICKWORK: SEE "SPECIFICATION FOR MASONRY UNITS", SECTION 10.4.10.
6. ALL INTERNAL BRICKWORK TO HAVE SMOOTH FINISH (12mm PLASTERED WITH 1:3 MORTAR).
7. MANHOLES MUST CATER FOR ANY SITE SPECIFIC GROUND CONDITIONS. SHOULD THE MANHOLE DESIGN REQUIRE ALTERATIONS/AMENDMENTS FOR SUCH CONDITIONS, THE DESIGN MUST BE DISCUSSED WITH THE APPROVAL AUTHORITY.
8. REFER TO DRAWING SW2.3 FOR MANHOLE WITHOUT AN ACCESS SHAFT (DEEP TYPE).
9. MANHOLES FOR PIPE DIAMETERS GREATER THAN 1350mm SHALL REQUIRE A SPECIAL DESIGN.

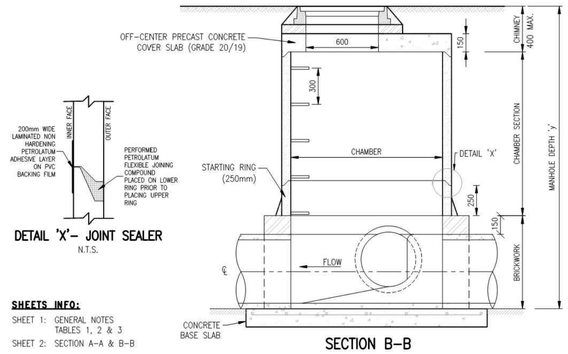
NGL: NATURAL GROUND LEVEL
FRL: FINISHED ROAD LEVEL
FSL: FINISHED SURFACE LEVEL

SHEETS INFO:

SHEET 1: GENERAL NOTES
TABLES 1, 2 & 3
SHEET 2: SECTION A–A & B–B



SECTION A–A



SECTION B–B

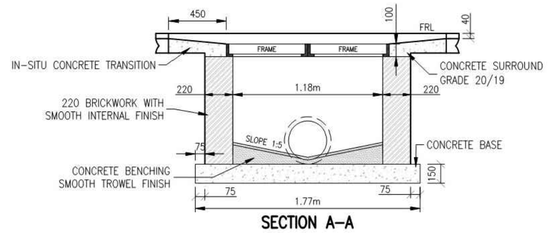
DETAIL 'X'– JOINT SEALER
N.T.S.

SHEETS INFO:

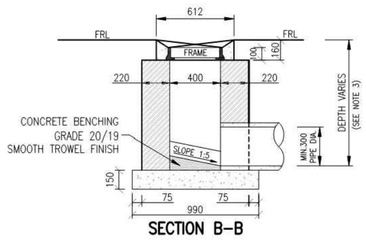
SHEET 1: GENERAL NOTES
TABLES 1, 2 & 3
SHEET 2: SECTION A–A & B–B

STORMWATER MANHOLE WITHOUT ACCESS SHAFT (SHALLOW TYPE)

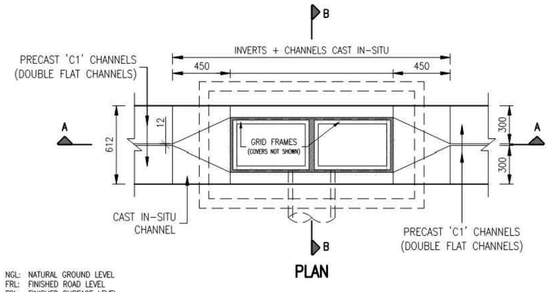
N.T.S



SECTION A–A



SECTION B–B



PLAN

NOTES: CONCRETE GRADES

BASE/FLOOR	20/19
BENCHING	20/19
IN-SITU CAST CHANNEL	25/19

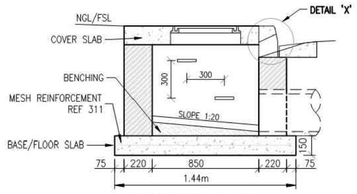
GENERAL NOTES:

1. HINGED COVERS ARE TO OPEN TOWARDS SIDEWALK AND NOT THE ROAD.
2. BENCHING NOT REQUIRED IN SANDY AREAS.
3. CATCHPIT DEPTH:
   - MINIMUM = 0.75m
   - MAXIMUM = 1.20m
3. BRICKWORK: SEE SECTION 10.4.10 "SPECIFICATION FOR MASONRY UNITS".
4. ALL INTERNAL BRICKWORK TO HAVE SMOOTH FINISH.

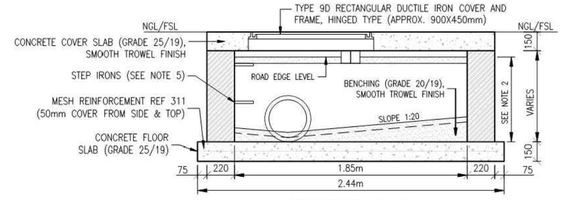
NGL: NATURAL GROUND LEVEL
FRL: FINISHED ROAD LEVEL
FSL: FINISHED SURFACE LEVEL

STORMWATER CATHCPIT TYPE D2: DOUBLE GRID INLET

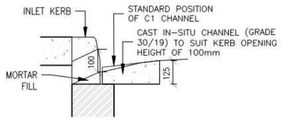
N.T.S



SECTION B–B



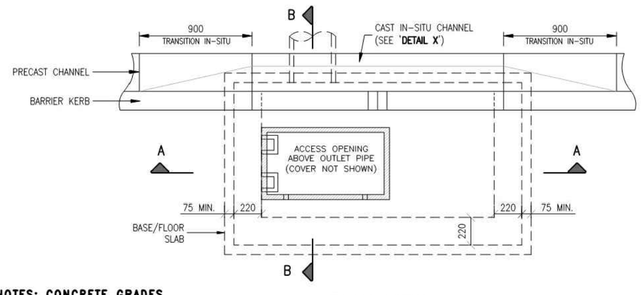
SECTION A–A



DETAIL 'X'

GENERAL NOTES:

1. HINGED COVER TO OPEN AWAY FROM ROADWAY.
2. CATCHPIT DEPTH (RELATIVE TO ROAD EDGE LEVEL):
   - MINIMUM = 0.75m
   - MAXIMUM = 1.20m
3. BRICKWORK: SEE SECTION 10.4.10 "SPECIFICATION FOR MASONRY UNITS".
4. ALL INTERNAL BRICKWORK TO HAVE SMOOTH FINISH.
5. REFER TO DRAWING SW4 FOR INLET KERB DETAILS.



PLAN VIEW

NOTES: CONCRETE GRADES

BASE/FLOOR	25/19
BENCHING	20/13
IN-SITU CAST CHANNEL	30/19

NGL: NATURAL GROUND LEVEL
FRL: FINISHED ROAD LEVEL
FSL: FINISHED SURFACE LEVEL

STORMWATER CATCHPIT TYPE B: DOUBLE KERB INLET

N.T.S

CONCEPT DESIGN

REVISION	DATE	DESCRIPTION

ENGINEER

SMEC South Africa
Member of the Surbana Jurong Group

65 RIEBEEK STREET
CAPE TOWN 8001
SOUTH AFRICA

PO BOX 8022 **T** +27 21 417 2900
ROGGEBAAI 8012 **F** +27 21 417 2999
SOUTH AFRICA **www.smec.com**

Pr. Eng: NAME : _____ SIGNATURE: .....
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	NAME	SIGNATURES
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DRAWN	Y. ISAACS	
CHECKED	R. BAATJES	

PROJECT	CONTRACT NO.	C1807	
PIKETBERG PRECINCT PLAN CONCEPT ENGINEERING DRAWINGS	DRAWING No.	C1807-W-P-012	
PLAN DESCRIPTION	SCALE	REV.	PAPER SIZE
STORMWATER DETAILS	AS SHOWN	00	A1

Annexure D

Preliminary Costing

FOCUS AREA	Focus Area 1	Focus Area 2	Focus Area 3	Focus Area 4	Focus Area 5	Focus Area 6
PRELIMINARY	R3 140 000,00	R1 360 000,00	R1 240 000,00	R1 320 000,00	R1 300 000,00	R2 020 000,00
GENERAL	R602 200,00	R250 300,00	R175 800,00	R192 600,00	R120 000,00	R398 000,00
STORMWATER DRAINAGE	R683 200,00	R162 400,00	R90 450,00	R394 200,00	R56 640,00	R56 640,00
WATER RETICULATION	R68 950,00	R22 500,00	R13 310,00	R26 100,00	R10 140,00	R10 140,00
ROADS	R5 458 400,00	R1 496 700,00	R772 300,00	R2 329 420,00	R508 560,00	R1 102 680,00
WALKWAYS	R1 734 000,00	R781 200,00	R1 106 000,00	R630 400,00	R526 000,00	R517 600,00
ANCILLARY ROADWORKS	R362 000,00	R70 500,00	R114 250,00	R55 000,00	R101 500,00	R43 000,00
CONCRETE WORKS	R0,00	R3 400 000,00	R0,00	R675 000,00	R0,00	R21 000 000,00
LANDSCAPING	R5 820 000,00	R3 375 000,00	R2 487 000,00	R3 999 000,00	R2 143 000,00	R2 143 000,00
ELECTRICAL	R448 000,00	R372 000,00	R209 000,00	R186 000,00	R175 000,00	R175 000,00
SUB TOTAL	18 316 750,00	11 290 600,00	6 208 110,00	9 807 720,00	4 940 840,00	27 466 060,00
10% Contingency	1 831 675,00	1 129 060,00	620 811,00	980 772,00	494 084,00	2 746 606,00
Sub total	20 148 425,00	12 419 660,00	6 828 921,00	10 788 492,00	5 434 924,00	30 212 666,00
20% Professional Fees	4 029 685,00	2 483 932,00	1 365 784,20	2 157 698,40	1 086 984,80	6 042 533,20
Sub total	24 178 110,00	14 903 592,00	8 194 705,20	12 946 190,40	6 521 908,80	36 255 199,20
15% VAT	3 626 716,50	2 235 538,80	1 229 205,78	1 941 928,56	978 286,32	5 438 279,88
Grand Total	**27 804 826,50**	**17 139 130,80**	**9 423 910,98**	**14 888 118,96**	**7 500 195,12**	**41 693 479,08**

- All costs are based on the drawings provided in **Annexure C**.
- The summary table above includes a 20% professional fee, however professional fees are not included in the detailed costings for the individual Focus Areas (refer overleaf).
- The costing was conducted in the absence of services data and an engineering survey (including contour survey).

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 6

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R400 000,00	R400 000,00
	Establishment on site	Sum	1	R80 000,00	R80 000,00
	Facilities for engineer and contractor	Sum	1	R200 000,00	R200 000,00
	Time related items	month	6	R60 000,00	R360 000,00
	Supervision and survey	month	6	R120 000,00	R720 000,00
	Health and Safety	Sum	1	R80 000,00	R80 000,00
	Environmental requirements	Sum	1	R80 000,00	R80 000,00
	Labourintensive requirements	Sum	1	R100 000,00	R100 000,00
2.0	**GENERAL**				
	Remove existing concrete foundation	m²	0	R100,00	R0,00
	Remove existing kerbs	m	700	R30,00	R21 000,00
	Remove existing trees	No	10	R3 000,00	R30 000,00
	Remove existing electrical cables	m	0	R20,00	R0,00
	Remove pipelines	m	0	R40,00	R0,00
	Temporary protection of services	m	40	R500,00	R20 000,00
	Carting away of items above (within freehaul)	m³	400	R30,00	R12 000,00
	Traffic Accommodation	Sum	1	R300 000,00	R300 000,00
	Site Clearance	m²	1000	R15,00	R15 000,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m³	10	R130,00	R1 300,00
	Pipe bedding	m³	4	R85,00	R340,00
	New concrete pipes 450mm dia.	m	10	R700,00	R7 000,00
	New concrete pipes 600mm dia.	m	0	R1 200,00	R0,00
	New catchpits	No	0	R8 000,00	R0,00
	New manholes	No	0	R8 000,00	R0,00
	New headwalls	No	6	R8 000,00	R48 000,00
	Grid inlets	No	0	R12 000,00	R0,00
	Modify existing structures	No	0	R7 000,00	R0,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R5 000,00	R5 000,00
	Excavation for pipes	m³	20	R140,00	R2 800,00
	Pipe bedding	m³	4	R85,00	R340,00
	New 20mm Polycop pipe	m	0	R20,00	R0,00
	New 75mm dia. uPVC pipes	m	20	R100,00	R2 000,00
	New 100mm dia. uPVC pipes	m	0	R130,00	R0,00
5.0	**ROADS**				
	Asphalt patches	m²	100	R150,00	R15 000,00
	Base repairs	m³	10	R600,00	R6 000,00
	Earthworks	m³	220	R140,00	R30 800,00
	Base Course	m³	0	R400,00	R0,00
	Subbase	m³	160	R300,00	R48 000,00
	In-situ material	m³	160	R40,00	R6 400,00
	Tack coat	l	3200	R15,00	R48 000,00
	New 40mm asphalt overlay	m²	3200	R150,00	R480 000,00
	Testing	Sum	1	R60 000,00	R60 000,00
	Pedestrian crossing	No	0	R20 000,00	R0,00
	Lay new kerbs type Fig 12	m	800	R180,00	R144 000,00
	Lay new kerbs type Fig 3	m	800	R220,00	R176 000,00
	Lay new kerbs type Fig 14	m	400	R220,00	R88 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers)	m²	0	R200,00	R0,00
	Lay new colour pavers (80mm interlockers)	m²	0	R260,00	R0,00
	Lay new cobble pavers	m²	0	R240,00	R0,00
	Cut 80mm interlocking paving	m	0	R20,00	R0,00
	Lay tactile blocks at vehicle/pedestrian interface	m²	8	R60,00	R480,00
6.0	**WALKWAYS**				
	Excavation	m³	200	R120,00	R24 000,00
	Subbase	m³	100	R300,00	R30 000,00
	Saw cut existing paving and concrete	m	20	R180,00	R3 600,00
	Lay new colour pavers (60mm bevels)	m²	2300	R200,00	R460 000,00
	Lay new colour pavers (60mm interlockers)	m²	0	R260,00	R0,00
	Lay new cobble pavers	m²	0	R240,00	R0,00
	Lay coloured hot asphalt premix-fine	m²	0	R170,00	R0,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	8	R1 250,00	R10 000,00
	Road markings - lines	m	400	R15,00	R6 000,00
	Road markings - symbols	m²	30	R900,00	R27 000,00
	Pedestrian crossing painting	Sum	0	R2 000,00	R0,00
8.0	**CONCRETE WORKS**				
	Pedestrian Bridge	Sum	1	R21 000 000,00	R21 000 000,00
9.0	**LANDSCAPING**				
	High Spec Planting	m²	0	R1 500,00	R0,00
	Medium Spec Planting	m²	0	R550,00	R0,00
	Low Spec Planting	m²	2500	R350,00	R875 000,00
	Trees (100L)	No	0	R7 500,00	R0,00
	Trees (150L)	No	0	R8 000,00	R0,00
	Trees (200L)	No	80	R8 500,00	R680 000,00
	Steel Cage for Trees	No	80	R4 500,00	R360 000,00
	Planter boxes (3000mm)	No	0	R2 500,00	R0,00
	Planter boxes (4000mm)	No	0	R3 500,00	R0,00
	Bollars (steel)	No	0	R1 200,00	R0,00
	Bollars Precast Concrete	No	16	R3 000,00	R48 000,00
	1600x500x500mm Precast Concrete Bence	No	10	R6 000,00	R60 000,00
	600X600X900mm Precat Concrete Bin	No	20	R6 000,00	R120 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	20	R6 000,00	R120 000,00
	New elctrical cables	m	250	R80,00	R20 000,00
	New sleeves	m	250	R140,00	R35 000,00

Sub Total	R27 466 060,00
10% Contingency	R2 746 606,00
Sub Total	R30 212 666,00
15% VAT	R4 531 899,90
Grand Total	R34 744 565,90

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 5

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R400 000,00	R400 000,00
	Establishment on site	Sum	1	R80 000,00	R80 000,00
	Facilities for engineer and contractor	Sum	1	R200 000,00	R200 000,00
	Time related items	month	4	R60 000,00	R240 000,00
	Supervision and survey	month	4	R60 000,00	R240 000,00
	Health and Safety	Sum	1	R40 000,00	R40 000,00
	Environmental requirements	Sum	1	R40 000,00	R40 000,00
	Labourintensive requirements	Sum	1	R60 000,00	R60 000,00
2.0	**GENERAL**				
	Remove existing concrete foundation	m²	60	R100,00	R6 000,00
	Remove existing kerbs	m	0	R30,00	R0,00
	Remove existing trees	No	10	R3 000,00	R30 000,00
	Remove existing electrical cables	m	0	R20,00	R0,00
	Remove pipelines	m	0	R40,00	R0,00
	Temporary protection of services	m	40	R500,00	R20 000,00
	Carting away of items above (within freehaul)	m³	400	R30,00	R12 000,00
	Traffic Accommodation	Sum	1	R40 000,00	R40 000,00
	Site Clearance	m²	800	R15,00	R12 000,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m³	10	R130,00	R1 300,00
	Pipe bedding	m³	4	R85,00	R340,00
	New concrete pipes 450mm dia.	m	10	R700,00	R7 000,00
	New concrete pipes 600mm dia.	m	0	R1 200,00	R0,00
	New catchpits	No	0	R8 000,00	R0,00
	New manholes	No	0	R8 000,00	R0,00
	New headwalls	No	6	R8 000,00	R48 000,00
	Grid inlets	No	0	R12 000,00	R0,00
	Modify existing structures	No	0	R7 000,00	R0,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R5 000,00	R5 000,00
	Excavation for pipes	m³	20	R140,00	R2 800,00
	Pipe bedding	m³	4	R85,00	R340,00
	New 20mm Polycop pipe	m	0	R20,00	R0,00
	New 75mm dia. uPVC pipes	m	20	R100,00	R2 000,00
	New 100mm dia. uPVC pipes	m	0	R130,00	R0,00
5.0	**ROADS**				
	Asphalt patches	m²	0	R150,00	R0,00
	Base repairs	m³	0	R600,00	R0,00
	Earthworks	m³	440	R140,00	R61 600,00
	Base Course	m³	120	R400,00	R48 000,00
	Subbase	m³	140	R300,00	R42 000,00
	In-situ material	m³	200	R40,00	R8 000,00
	Tack coat	l	800	R15,00	R12 000,00
	New 40mm asphalt overlay	m²	800	R150,00	R120 000,00
	Testing	Sum	1	R60 000,00	R60 000,00
	Pedestrian crossing	No	0	R20 000,00	R0,00
	Lay new kerbs type Fig 12	m	500	R180,00	R90 000,00
	Lay new kerbs type Fig 3	m	200	R220,00	R44 000,00
	Lay new kerbs type Fig 14	m	100	R220,00	R22 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers)	m²	0	R200,00	R0,00
	Lay new colour pavers (80mm interlockers)	m²	0	R260,00	R0,00
	Lay new cobble pavers	m²	0	R240,00	R0,00
	Cut 80mm interlicking paving	m	0	R20,00	R0,00
	Lay tactile blocks at vehicle/pedestrian interface	m²	16	R60,00	R960,00
6.0	**WALKWAYS**				
	Excavation	m³	350	R120,00	R42 000,00
	Subbase	m³	280	R300,00	R84 000,00
	Saw cut existing paving and concrete	m	1000	R180,00	R180 000,00
	Lay new colour pavers (60mm bevels)	m²	1100	R200,00	R220 000,00
	Lay new colour pavers (60mm interlockers)	m²	0	R260,00	R0,00
	Lay new cobble pavers	m²	0	R240,00	R0,00
	Lay coloured hot asphalt premix-fine	m²	0	R170,00	R0,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	8	R1 250,00	R10 000,00
	Road markings - lines	m	100	R15,00	R1 500,00
	Road markings - symbols	m²	100	R900,00	R90 000,00
	Pedestrian crossing painting	Sum	0	R2 000,00	R0,00
8.0	**CONCRETE WORKS**				
	None				
9.0	**LANDSCAPING**				
	High Spec Planting	m²	0	R1 500,00	R0,00
	Medium Spec Planting	m²	0	R550,00	R0,00
	Low Spec Planting	m²	2500	R350,00	R875 000,00
	Trees (100L)	No	0	R7 500,00	R0,00
	Trees (150L)	No	0	R8 000,00	R0,00
	Trees (200L)	No	80	R8 500,00	R680 000,00
	Steel Cage for Trees	No	80	R4 500,00	R360 000,00
	Planter boxes (3000mm)	No	0	R2 500,00	R0,00
	Planter boxes (4000mm)	No	0	R3 500,00	R0,00
	Bollars (steel)	No	0	R1 200,00	R0,00
	Bollars Precast Concrete	No	16	R3 000,00	R48 000,00
	1600x500x500mm Precast Concrete Bence	No	10	R6 000,00	R60 000,00
	600X600X900mm Precat Concrete Bin	No	20	R6 000,00	R120 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	20	R6 000,00	R120 000,00
	New elctrical cables	m	250	R80,00	R20 000,00
	New sleeves	m	250	R140,00	R35 000,00
				Sub Total	R4 940 840,00
				10% Contingency	R494 084,00
				Sub Total	R5 434 924,00
				15% VAT	R815 238,60
				Grand Total	R6 250 162,60

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 4

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R400 000,00	R400 000,00
	Establishment on site	Sum	1	R80 000,00	R80 000,00
	Facilities for engineer and contractor	Sum	1	R200 000,00	R200 000,00
	Time related items	month	4	R60 000,00	R240 000,00
	Supervision and survey	month	4	R60 000,00	R240 000,00
	Health and Safety	Sum	1	R40 000,00	R40 000,00
	Environmental requirements	Sum	1	R40 000,00	R40 000,00
	Labourintensive requirements	Sum	1	R80 000,00	R80 000,00
2.0	**GENERAL**				
	Remove existing concrete channel	m	0	R30,00	R0,00
	Remove existing kerbs	m	600	R30,00	R18 000,00
	Remove existing trees	No	4	R3 000,00	R12 000,00
	Remove existing electrical cables	m	0	R20,00	R0,00
	Remove pipelines	m	40	R40,00	R1 600,00
	Temporary protection of services	m	100	R500,00	R50 000,00
	Carting away of items above (within freehaul)	m^3	200	R30,00	R6 000,00
	Traffic Accommodation	Sum	1	R60 000,00	R60 000,00
	Site Clearance	m^2	3000	R15,00	R45 000,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m^3	120	R130,00	R15 600,00
	Pipe bedding	m^3	60	R85,00	R5 100,00
	New concrete pipes 450mm dia.	m	100	R700,00	R70 000,00
	New concrete pipes 600mm dia.	m	0	R1 200,00	R0,00
	New catchpits	No	4	R8 000,00	R32 000,00
	New manholes	No	4	R8 000,00	R32 000,00
	Grid inlets	No	10	R12 000,00	R120 000,00
	Modify existing structures	No	10	R7 000,00	R70 000,00
	Subsoil drain	m	330	R150,00	R49 500,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R5 000,00	R5 000,00
	Excavation for pipes	m^3	60	R140,00	R8 400,00
	Pipe bedding	m^3	20	R85,00	R1 700,00
	New 20mm Polycop pipe	m	160	R20,00	R3 200,00
	New 75mm dia. uPVC pipes	m	0	R100,00	R0,00
	New 100mm dia. uPVC pipes	m	60	R130,00	R7 800,00
5.0	**ROADS**				
	Asphalt patches	m^2	500	R150,00	R75 000,00
	Base repairs	m^3	200	R600,00	R120 000,00
	Earthworks	m^3	700	R140,00	R98 000,00
	Base Course	m^3	550	R400,00	R220 000,00
	Subbase	m^3	550	R300,00	R165 000,00
	In-situ material	m^3	550	R40,00	R22 000,00
	Tack coat	l	2500	R15,00	R37 500,00
	New 40mm asphalt overlay	m^2	2500	R180,00	R450 000,00
	Testing	Sum	1	R60 000,00	R60 000,00
	Pedestrian crossing	No	1	R20 000,00	R20 000,00
	Lay new kerbs type Fig 12	m	600	R180,00	R108 000,00
	Lay new kerbs type Fig 3	m	300	R220,00	R66 000,00
	Lay new kerbs type Fig 14	m	600	R220,00	R132 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers)	m^2	3700	R200,00	R740 000,00
	Lay new colour pavers (80mm interlockers)	m^2	0	R260,00	R0,00
	Lay new cobble pavers	m^2	60	R240,00	R14 400,00
	Cut 80mm interlicking paving	m	40	R20,00	R800,00
	Lay tactile blocks at vehicle/pedestrian interface	m^2	12	R60,00	R720,00
6.0	**WALKWAYS**				
	Excavation	m^3	60	R120,00	R7 200,00
	Subbase	m^3	60	R300,00	R18 000,00
	Saw cut existing paving and concrete	m	10	R180,00	R1 800,00
	Lay new colour pavers (60mm bevels)	m^2	3000	R200,00	R600 000,00
	Lay new colour pavers (60mm interlockers)	m^2	0	R260,00	R0,00
	Lay new cobble pavers	m^2	0	R240,00	R0,00
	Lay coloured hot asphalt premix-fine	m^2	20	R170,00	R3 400,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	4	R1 250,00	R5 000,00
	Road markings - lines	m	800	R15,00	R12 000,00
	Road markings - symbols	m^2	40	R900,00	R36 000,00
	Pedestrian crossing painting	Sum	1	R2 000,00	R2 000,00
8.0	**CONCRETE WORKS**				
	Retaining wall	m^2	600	R500,00	R300 000,00
	Fill behind retaining wall	m^3	1500	R250,00	R375 000,00
9.0	**LANDSCAPING**				
	High Spec Planting	m^2	0	R1 500,00	R0,00
	Medium Spec Planting	m^2	2500	R550,00	R1 375 000,00
	Low Spec Planting	m^2	0	R350,00	R0,00
	Trees (100L)	No	30	R7 500,00	R225 000,00
	Trees (150L)	No	0	R8 000,00	R0,00
	Trees (200L)	No	80	R8 500,00	R680 000,00
	Steel Cage for Trees	No	80	R4 500,00	R360 000,00
	Planter boxes (3000mm)	No	0	R2 500,00	R0,00
	Planter boxes (4000mm)	No	0	R3 500,00	R0,00
	Bollars (steel)	No	20	R1 200,00	R24 000,00
	Bollars Precast Concrete	No	10	R3 000,00	R30 000,00
	1600x500x500mm Precast Concrete Bence	No	10	R6 000,00	R60 000,00
	600X600X900mm Precat Concrete Bin	No	10	R6 000,00	R60 000,00
	Clearview fence	m^2	450	R2 500,00	R1 125 000,00
	Turnstile gate	Sum	1	R60 000,00	R60 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	20	R6 000,00	R120 000,00
	New elctrical cables	m	300	R80,00	R24 000,00
	New sleeves	m	300	R140,00	R42 000,00
				Sub Total	R9 807 720,00
				10% Contingency	R980 772,00
				Sub Total	R10 788 492,00
				15% VAT	R1 618 273,80
				Grand Total	R12 406 765,80

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 3

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R400 000,00	R400 000,00
	Establishment on site	Sum	1	R80 000,00	R80 000,00
	Facilities for engineer and contractor	Sum	1	R140 000,00	R140 000,00
	Time related items	month	4	R60 000,00	R240 000,00
	Supervision and survey	month	4	R60 000,00	R240 000,00
	Health and Safety	Sum	1	R40 000,00	R40 000,00
	Environmental requirements	Sum	1	R40 000,00	R40 000,00
	Labourintensive requirements	Sum	1	R60 000,00	R60 000,00
2.0	**GENERAL**				
	Remove existing concrete channel	m	0	R30,00	R0,00
	Remove existing kerbs	m	200	R30,00	R6 000,00
	Remove existing trees	No	12	R3 000,00	R36 000,00
	Remove existing electrical cables	m	60	R20,00	R1 200,00
	Remove pipelines	m	40	R40,00	R1 600,00
	Temporary protection of services	m	60	R500,00	R30 000,00
	Carting away of items above (within freehaul)	m^3	200	R30,00	R6 000,00
	Traffic Accommodation	Sum	1	R80 000,00	R80 000,00
	Site Clearance	m^2	1000	R15,00	R15 000,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m^3	20	R130,00	R2 600,00
	Pipe bedding	m^3	10	R85,00	R850,00
	New concrete pipes 450mm dia.	m	10	R700,00	R7 000,00
	New concrete pipes 600mm dia.	m	0	R1 200,00	R0,00
	New catchpits	No	3	R8 000,00	R24 000,00
	New manholes	No	2	R8 000,00	R16 000,00
	Grid inlets	No	1	R12 000,00	R12 000,00
	Modify existing structures	No	4	R7 000,00	R28 000,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R5 000,00	R5 000,00
	Excavation for pipes	m^3	20	R140,00	R2 800,00
	Pipe bedding	m^3	6	R85,00	R510,00
	New 20mm Polycop pipe	m	20	R20,00	R400,00
	New 75mm dia. uPVC pipes	m	20	R100,00	R2 000,00
	New 100mm dia. uPVC pipes	m	20	R130,00	R2 600,00
5.0	**ROADS**				
	Asphalt patches	m^2	50	R150,00	R7 500,00
	Base repairs	m^3	10	R600,00	R6 000,00
	Earthworks	m^3	150	R140,00	R21 000,00
	Base Course	m^3	0	R400,00	R0,00
	Subbase	m^3	300	R300,00	R90 000,00
	In-situ material	m^3	100	R40,00	R4 000,00
	Tack coat	l	1000	R15,00	R15 000,00
	New 40mm asphalt overlay	m^2	1000	R180,00	R180 000,00
	Testing	Sum	1	R60 000,00	R60 000,00
	Pedestrian crossing	No	2	R20 000,00	R40 000,00
	Lay new kerbs type Fig 12	m	800	R180,00	R144 000,00
	Lyay new kerbs type Fig 3	m	200	R220,00	R44 000,00
	Lay new kerbs type Fig 14	m	200	R220,00	R44 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers)	m^2	400	R200,00	R80 000,00
	Lay new colour pavers (80mm interlockers)	m^2	0	R260,00	R0,00
	Lay new cobble pavers	m^2	140	R240,00	R33 600,00
	Cut 80mm interlicking paving	m	70	R20,00	R1 400,00
	Lay tactile blocks at vehicle/pedestrian interface	m^2	30	R60,00	R1 800,00
6.0	**WALKWAYS**				
	Excavation	m^3	400	R120,00	R48 000,00
	Subbase	m^3	60	R300,00	R18 000,00
	Saw cut existing paving and concrete	m	1000	R180,00	R180 000,00
	Lay new colour pavers (60mm bevels)	m^2	3000	R200,00	R600 000,00
	Lay new colour pavers (60mm interlockers)	m^2	1000	R260,00	R260 000,00
	Lay new cobble pavers	m^2	0	R240,00	R0,00
	Lay coloured hot asphalt premix-fine	m^2	0	R170,00	R0,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	12	R1 250,00	R15 000,00
	Road markings - lines	m	350	R15,00	R5 250,00
	Road markings - symbols	m^2	100	R900,00	R90 000,00
	Pedestrian crossing painting	Sum	2	R2 000,00	R4 000,00
8.0	**CONCRETE WORKS**				
	None				
9.0	**LANDSCAPING**				
	High Spec Planting	m^2	0	R1 500,00	R0,00
	Medium Spec Planting	m^2	2500	R550,00	R1 375 000,00
	Low Spec Planting	m^2	0	R350,00	R0,00
	Trees (100L)	No	20	R7 500,00	R150 000,00
	Trees (150L)	No	20	R8 000,00	R160 000,00
	Trees (200L)	No	10	R8 500,00	R85 000,00
	Steel Cage for Trees	No	50	R4 500,00	R225 000,00
	Planter boxes (3000mm)	No	20	R2 500,00	R50 000,00
	Planter boxes (4000mm)	No	20	R3 500,00	R70 000,00
	Bollars (steel)	No	60	R1 200,00	R72 000,00
	Bollars Precast Concrete	No	20	R3 000,00	R60 000,00
	1600x500x500mm Precast Concrete Bence	No	20	R6 000,00	R120 000,00
	600X600X900mm Precat Concrete Bin	No	20	R6 000,00	R120 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	22	R6 000,00	R132 000,00
	New elctrical cables	m	350	R80,00	R28 000,00
	New sleeves	m	350	R140,00	R49 000,00

Sub Total	R6 208 110,00
10% Contingency	R620 811,00
Sub Total	R6 828 921,00
15% VAT	R1 024 338,15
Grand Total	R7 853 259,15

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R400 000,00	R400 000,00
	Establishment on site	Sum	1	R80 000,00	R80 000,00
	Facilities for engineer and contractor	Sum	1	R140 000,00	R140 000,00
	Time related items	month	5	R60 000,00	R300 000,00
	Supervision and survey	month	5	R60 000,00	R300 000,00
	Health and Safety	Sum	1	R40 000,00	R40 000,00
	Environmental requirements	Sum	1	R40 000,00	R40 000,00
	Labourintensive requirements	Sum	1	R60 000,00	R60 000,00
2.0	**GENERAL**				
	Remove existing concrete channel	m	0	R30,00	R0,00
	Remove existing kerbs	m	450	R30,00	R13 500,00
	Remove existing trees	No	30	R3 000,00	R90 000,00
	Remove existing electrical cables	m	60	R20,00	R1 200,00
	Remove pipelines	m	40	R40,00	R1 600,00
	Temporary protection of services	m	60	R500,00	R30 000,00
	Carting away of items above (within freehaul)	m^3	800	R30,00	R24 000,00
	Traffic Accommodation	Sum	1	R60 000,00	R60 000,00
	Site Clearance	m^2	2000	R15,00	R30 000,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m^3	100	R130,00	R13 000,00
	Pipe bedding	m^3	40	R85,00	R3 400,00
	New concrete pipes 450mm dia.	m	80	R700,00	R56 000,00
	New concrete pipes 600mm dia.	m	0	R1 200,00	R0,00
	New catchpits	No	3	R8 000,00	R24 000,00
	New manholes	No	3	R8 000,00	R24 000,00
	Grid inlets	No	0	R12 000,00	R0,00
	Modify existing structures	No	3	R7 000,00	R21 000,00
	Subsoil drain	m	140	R150,00	R21 000,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R5 000,00	R5 000,00
	Excavation for pipes	m^3	60	R140,00	R8 400,00
	Pipe bedding	m^3	20	R85,00	R1 700,00
	New 20mm Polycop pipe	m	10	R20,00	R200,00
	New 75mm dia. uPVC pipes	m	20	R100,00	R2 000,00
	New 100mm dia. uPVC pipes	m	40	R130,00	R5 200,00
5.0	**ROADS**				
	Asphalt patches	m^2	50	R150,00	R7 500,00
	Base repairs	m^3	10	R600,00	R6 000,00
	Earthworks	m^3	700	R140,00	R98 000,00
	Base Course	m^3	170	R400,00	R68 000,00
	Subbase	m^3	190	R300,00	R57 000,00
	In-situ material	m^3	200	R40,00	R8 000,00
	Tack coat	l	2200	R15,00	R33 000,00
	New 40mm asphalt overlay	m^2	2200	R180,00	R396 000,00
	Testing	Sum	1	R160 000,00	R160 000,00
	Pedestrian crossing	No	0	R20 000,00	R0,00
	Lay new kerbs type Fig 12	m	900	R180,00	R162 000,00
	Lyay new kerbs type Fig 3	m	1000	R220,00	R220 000,00
	Lay new kerbs type Fig 14	m	500	R220,00	R110 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers RED)	m^2	750	R200,00	R150 000,00
	Lay new colour pavers (80mm interlockers YELLOW)	m^2	0	R260,00	R0,00
	Lay new cobble pavers	m^2	70	R240,00	R16 800,00
	Cut 80mm interlocking paving	m	160	R20,00	R3 200,00
	Lay tactile blocks at vehicle/pedestrian interface	m^2	20	R60,00	R1 200,00
6.0	**WALKWAYS**				
	Excavation	m^3	200	R120,00	R24 000,00
	Subbase	m^2	500	R300,00	R150 000,00
	Saw cut existing paving and concrete	m	40	R180,00	R7 200,00
	Lay new colour pavers (60mm bevels)	m^2	3000	R200,00	R600 000,00
	Lay new colour pavers (60mm interlockers)	m^2	0	R260,00	R0,00
	Lay new cobble pavers	m^2	0	R240,00	R0,00
	Lay coloured hot asphalt premix-fine	m^2	0	R170,00	R0,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	8	R1 250,00	R10 000,00
	Road markings - lines	m	500	R15,00	R7 500,00
	Road markings - symbols	m^2	50	R900,00	R45 000,00
	Pedestrian crossing painting	Sum	4	R2 000,00	R8 000,00
8.0	**CONCRETE WORKS**				
	Amphitheatre	Sum	1	R2 800 000,00	R2 800 000,00
	Skatepark	Sum	1	R600 000,00	R600 000,00
9.0	**LANDSCAPING**				
	High Spec Planting	m^2	0	R1 500,00	R0,00
	Medium Spec Planting	m^2	2500	R550,00	R1 375 000,00
	Low Spec Planting	m^2	0	R350,00	R0,00
	Trees (100L)	No	40	R7 500,00	R300 000,00
	Trees (150L)	No	60	R8 000,00	R480 000,00
	Trees (200L)	No	20	R8 500,00	R170 000,00
	Steel Cage for Trees	No	100	R4 500,00	R450 000,00
	Planter boxes (3000mm)	No	0	R2 500,00	R0,00
	Planter boxes (4000mm)	No	0	R3 500,00	R0,00
	Bollars (steel)	No	150	R1 200,00	R180 000,00
	Bollars Precast Concrete	No	60	R3 000,00	R180 000,00
	1600x500x500mm Precast Concrete Bence	No	25	R6 000,00	R150 000,00
	600X600X900mm Precat Concrete Bin	No	15	R6 000,00	R90 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	40	R6 000,00	R240 000,00
	New elctrical cables	m	600	R80,00	R48 000,00
	New sleeves	m	600	R140,00	R84 000,00
				Sub Total	R11 290 600,00
				10% Contingency	R1 129 060,00
				Sub Total	R12 419 660,00
				15% VAT	R1 862 949,00
				Grand Total	R14 282 609,00

PROJECT: PIKETBERG PRECINCT PLAN
PRELIMINARY COSTING FOR FOCUS AREA 1

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	**PRELIMINARY AND GENERAL**				
	Contractual requirements	Sum	1	R600 000,00	R600 000,00
	Establishment on site	Sum	1	R160 000,00	R160 000,00
	Facilities for engineer and contractor	Sum	1	R200 000,00	R200 000,00
	Time related items	month	10	R80 000,00	R800 000,00
	Supervision and survey	month	10	R100 000,00	R1 000 000,00
	Health and Safety	Sum	1	R120 000,00	R120 000,00
	Environmental requirements	Sum	1	R120 000,00	R120 000,00
	Labourintensive requirements	Sum	1	R140 000,00	R140 000,00
2.0	**GENERAL**				
	Remove existing concrete channel	m	1300	R30,00	R39 000,00
	Remove existing kerbs	m	3000	R30,00	R90 000,00
	Remove existing trees	No	30	R3 000,00	R90 000,00
	Remove existing electrical cables	m	80	R20,00	R1 600,00
	Remove pipelines	m	40	R40,00	R1 600,00
	Temporary protection of services	m	100	R500,00	R50 000,00
	Carting away of items above (within freehaul)	m^3	1000	R30,00	R30 000,00
	Traffic Accommodation	Sum	1	R300 000,00	R300 000,00
	Site Clearance	m^2	0	R15,00	R0,00
3.0	**STORMWATER DRAINAGE**				
	Excavation for pipes	m^3	300	R130,00	R39 000,00
	Pipe bedding	m^3	120	R85,00	R10 200,00
	New concrete pipes 450mm dia.	m	280	R700,00	R196 000,00
	New concrete pipes 600mm dia.	m	20	R1 200,00	R24 000,00
	New catchpits	No	16	R8 000,00	R128 000,00
	New manholes	No	12	R8 000,00	R96 000,00
	Grid inlets	No	10	R12 000,00	R120 000,00
	Modify existing structures	No	10	R7 000,00	R70 000,00
4.0	**WATER RETICULATION**				
	Repairs to broken water pipes	Sum	1	R30 000,00	R30 000,00
	Excavation for pipes	m^3	100	R140,00	R14 000,00
	Pipe bedding	m^3	30	R85,00	R2 550,00
	New 20mm Polycop pipe	m	200	R20,00	R4 000,00
	New 75mm dia. uPVC pipes	m	80	R100,00	R8 000,00
	New 100mm dia. uPVC pipes	m	80	R130,00	R10 400,00
5.0	**ROADS**				
	Asphalt patches	m^2	400	R150,00	R60 000,00
	Base repairs	m^3	180	R600,00	R108 000,00
	Earthworks	m^3	1000	R140,00	R140 000,00
	Base Course	m^3	60	R400,00	R24 000,00
	Subbase	m^3	200	R300,00	R60 000,00
	In-situ material	m^3	20	R40,00	R800,00
	Tack coat	l	13000	R15,00	R195 000,00
	New 40mm asphalt overlay	m^2	13000	R180,00	R2 340 000,00
	Testing	Sum	1	R300 000,00	R300 000,00
	Pedestrian crossing	No	6	R20 000,00	R120 000,00
	Lay new kerbs type Fig 12	m	900	R180,00	R162 000,00
	Lyay new kerbs type Fig 3	m	3000	R220,00	R660 000,00
	Lay new kerbs type Fig 14	m	1700	R220,00	R374 000,00
	Lay new barrier + channel	m	0	R350,00	R0,00
	Lay new colour pavers (80mm interlockers)	m^2	2200	R200,00	R440 000,00
	Lay new colour pavers (80mm interlockers)	m^2	1600	R260,00	R416 000,00
	Lay new cobble pavers	m^2	40	R240,00	R9 600,00
	Cut 80mm interlicking paving	m	800	R20,00	R16 000,00
	Lay tactile blocks at vehicle/pedestrian interface	m^2	550	R60,00	R33 000,00
6.0	**WALKWAYS**				
	Excavation	m^3	300	R120,00	R36 000,00
	Fill material under new paving behing kerb	m^3	400	R100,00	R40 000,00
	Saw cut existing paving and concrete	m	2000	R180,00	R360 000,00
	Lay new colour pavers (60mm bevels)	m^2	4000	R200,00	R800 000,00
	Lay new colour pavers (60mm interlockers)	m^2	1600	R260,00	R416 000,00
	Lay new cobble pavers	m^2	200	R240,00	R48 000,00
	Lay coloured hot asphalt premix-fine	m^2	200	R170,00	R34 000,00
7.0	**ANCILLARY ROADWORKS**				
	Road signs	No	40	R1 250,00	R50 000,00
	Road markings - lines	m	2000	R15,00	R30 000,00
	Road markings - symbols	m^2	300	R900,00	R270 000,00
	Pedestrian crossing painting	Sum	6	R2 000,00	R12 000,00
8.0	**CONCRETE WORKS**				
	None				
9.0	**LANDSCAPING**				
	High Spec Planting	m^2	500	R1 500,00	R750 000,00
	Medium Spec Planting	m^2	500	R550,00	R275 000,00
	Low Spec Planting	m^2	500	R350,00	R175 000,00
	Trees (100L)	No	80	R7 500,00	R600 000,00
	Trees (150L)	No	80	R8 000,00	R640 000,00
	Trees (200L)	No	80	R8 500,00	R680 000,00
	Steel Cage for Trees	No	240	R4 500,00	R1 080 000,00
	Planter boxes (3000mm)	No	50	R2 500,00	R125 000,00
	Planter boxes (4000mm)	No	50	R3 500,00	R175 000,00
	Bollars (steel)	No	200	R1 200,00	R240 000,00
	Bollars Precast Concrete	No	100	R3 000,00	R300 000,00
	1600x500x500mm Precast Concrete Bence	No	50	R6 000,00	R300 000,00
	600X600X900mm Precat Concrete Bin	No	80	R6 000,00	R480 000,00
10.0	**ELECTRICAL**				
	Street Poles with light fittings	No	60	R6 000,00	R360 000,00
	New elctrical cables	m	400	R80,00	R32 000,00
	New sleeves	m	400	R140,00	R56 000,00
			Sub Total		R18 316 750,00
			10% Contingency		R1 831 675,00
			Sub Total		R20 148 425,00
			15% VAT		R3 022 263,75
			Grand Total		R23 170 688,75