

**AGENDA of the
Portfolio Committee: Investment & Infrastructure
2 June 2022
(Also the agenda for the Mayoral Committee Meeting: 27 June 2022)**

**17.
OVERSTRAND MUNICIPALITY: KLEINMOND CBD UPGRADING PLAN, 2022**

15/1/3/4

R Kuchar

Senior Manager: Town & Spatial Planning

18 May 2022

(028) 313 8087

1. Executive Summary

The purpose of this report is to table the Overstrand Municipality: Kleinmond Central Business Upgrading Plan (CBD) for approval by Council as a guiding document with regard to the upgrading and revitalisation of the CBD of Kleinmond.

2. Service Delivery and Budget Implementation Plan Reference

Infrastructure & Planning
Town Planning / Spatial Development

3. Compliance with Strategic Priorities

Provision of democratic, accountable and ethical governance
Promotion of Tourism, Economic and Social Development

4. Delegated Authority

None

5. Legal Requirements

Local Government: Municipal Systems Act, 2000 (Act 32 of 2000)
Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)
Western Cape Land Use Planning Act, 2014 (Act 3 of 2014)
Overstrand Municipality By-Law on Municipal Land Use Planning, 2020

6. Background/Discussion/Comments/Conclusion

Background

In recent times, Kleinmond has moved away from the typical coastal holiday town to a fully-fledged integrated town, consisting of the permanent residents and tourists. Kleinmond is traversed by the R44, which also functions as the main collection Road. This aspect restricts potential development due to the ownership and mandate that is not with the Municipality but resort under the Provincial Department of Transport. This has led to a main feeder with ad hoc developments and no defined core area and or character of the town.

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The Municipality has identified need to investigate the upgrade of the Main Road to a vehicle and pedestrian friendly route to fully developed the town's potential as a community and tourist friendly town. For the process, a Steering Committee was established consisting of various provincial and local authority departments and members of the community. Attached is a list of the members of the Steering Committee (Annexure A).

A Status report was compiled in 2019 through a desk top study to gain a better understanding of Kleinmond and the role of Main Road and was workshopped with the Steering Committee. The Report was used to start the public participation process.

Mythology and scope of work:

The scope of work was established with the inception meeting between the Consultants, Decca Consulting Engineers and GAPP Architects/ Urban Designers and the Municipality. The scope of work determined was to gain a better understanding of Kleinmond and the role of the Main Road in the context of the town. This information was crucial to create a framework plan outlining development possibility to create a high-quality public environment that is pedestrian friendly and supportive businesses.

Public Participation was a critical component of the process and inputs of all participants was addressed and incorporated into the document.

The process was divided into three (3) main stages namely Technical Baseline information document, Conceptual Framework and the Upgrading and Implementation Document. This procedure was followed to ensure compliance with the scope of work and to ensure a comprehensive public participation process. The stages are discussed under point 1.1.2, page 9 of the Final Report, dated March 2022.

Public Participation Process:

To summarise the meetings and dates of the public participation process.

Two public meetings were held in May and October 2021. The objective was to brief residents of Kleinmond on the investigation, present status quo reports and obtains input of needs and concerns at an early stage of the project.

The report findings were discussed with the Project Steering Committee on November 2020 and it was decided to concentrate on three (3) focus areas namely Eastern Gateway (Main Beach, Lagoon and core CBD), Harbour Precinct and the Western Gateway (Palmiet Area). A further steering Committee meeting was held in June 2021 to comment and discussed the three Focus Areas.

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The detail comments are attached as Annexure 2, page 95 to 97 of the Report.

The public participation comment period ended 15 December 2021 for final input.

Key issues raised by the participants during the public process: Section 7.1 of the Plan

Comment:

The relocation of the existing sport facilities to a sports facility near golf course area:

Response:

None of the commenting parties are in favour of re locating the existing sport facilities in the town, but rather consolidate and upgrade the facilities at the present locations. The Lagoon area does provide the opportunity for more water based and beach sports.

Comment:

Support the bicycle lanes and Main Road Public realm upgrades.

Response:

Noted

Comment:

Re allocation of Municipal Precinct within the Kleinmond Nature Reserve.

Response:

The area is environmentally sensitive and all the necessary investigations and compliance with relevant legislation to address the viability of such a proposal will have to be undertaken.

Comment:

Parking congestion at the Main Beach during peak times

Response:

The proposal is that the overflow parking be located in the area between the Main Road and the Tennis Courts. Another proposal is that overflow parking be accommodated at the church grounds.

Comment:

The market area along Main Road be upgraded.

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Response:

The market area be moved to the area above the pipeline on a formal parking Court, adjacent the Main Road and the Shopping Complex.

Comment:

Lagoon area/ Day camp need to be upgraded and developed.

Comment:

New Market be developed, and landscaped, and additional facilities clipped onto existing building overlooking the market.

The market area proposed on the Lagoon site be made subject to an entrance fee.

Response:

The area is a public open space and thus cannot be made subject to an entrance fee. Should facilities such as a resort or accommodation be established, rental can be determined.

Discussion:

Three focus areas have been identified with each of the focus areas challenges and solutions. The detail thereof is discussed in Section 5 of the Report. The three focus areas are summarised as follows:

Focus Area 1: Eastern Gateway of Kleinmond associated with the intersection of Botrivier Road, main road and the Lagoon and Beach prescient:

- Challenge: Telkom site is being used as an informal parking area for busses.
Solution: The informal bus stop area at the Telkom site and two proposals are made to resolve the need for a bus stop in Kleinmond. One is to utilise the school property or alternatively approach Telkom and formalised the use of the property for a bus parking area.
- Challenge: Car dominance along Main Road with negative building frontages and leave the street undefined.
Solution: The solution proposed the retrofitting of existing buildings and the landscaping forecourts to activating the streets and the spaces they front. The creation of bicycle lanes and street furniture along Main Road, to make the pavements more pedestrian friendly.
- Challenge: During peak times the intersection of Botrivier and Main Roads are congested with a lack of Non-Motorized Transport facilities making crossings unsafe and difficult.
Solution: To create a NMT friendly traffic circle paved and landscaped. In order to identify the intersection of Lagoon Road with the Main Road,

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raised and paved (or initially painted) to improve pedestrian crossing safety and provides the entry point to the proposed one-way system along Strand Street as proposed by the Traffic Engineers.

- Challenge: Parking lots in front of buildings with no lighting or landscaping.
Solution: The areas be landscaped and the provision of seating and shade structures to create active interface between the areas and pedestrians.
- Challenge: Lack of parking around the lagoon.
Solution: Overflow parking on site of the Tennis Court and Church erf along Marine Drive. This solution is not possible due to the establishment of the BMX trac. The possibility of parking on the Church erf can be investigated; however remains the prerogative of the Church to make the erf available for public parking during peak periods. An alternative to the overflow parking at the lagoon and Main Beach should be investigated to redesign the present parking arrangement and to extent the existing parking areas.

Focus Area 2: Harbour Precinct

- Challenge: Undefined entrance to the Harbour Precinct.
Solution: Small gateway traffic circle with landscaping and signage creating a sense of arrival into the harbour precinct.
- Challenge: Lack of definition along the southern portion of Harbour Road.
Solution: Landscaped parking forecourt along the southern portion of Harbour Road.
- Challenge: Underutilised Public Park with a water course from the mountain.
Solution: Upgrade and extend park along the Mountain and Sea Greenway path on 13th Street. River crossing highlighted with street art.
- Challenge: Neglected canalised mountain to sea river located along the edge of the underutilised Municipal Yard and private vacant land.
Solution: Development and intensification of Municipal Yard accommodating the relocation of traffic Department and Emergency Services. Buildings must provide positive interface to the street and Sea and Mountain Greenway. Mixed use development of vacant land along 13th Street – transition zone between industry to the west and residential to the east.
- Challenge: Lack of definition of activity along Main Road.
Solution: Infill, mixed use development creating a defined and active edge along Main Road, weekend market to be relocated, intermitted

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parallel parking, NMT lanes, definition and language of landscaping to define space and street crossings.

Focus Area 3: Western Gateway at the intersection of Main and DF Malherbe Roads:

- Challenge: Undefined western entrance to Kleinmond which lacks sense of arrival.
Solution: Raised and paved traffic circle at the intersection provides the entry point into town which includes signage and landscaping.
- Challenge: Strategically located vacant land contributing to lack of activity and spatial definition.
Solution: Vacant sites to be developed and existing building to be retrofitted to include active and positive street facades.
- Challenge: Car dominant Main Road and no NMT facilities.
Solution: Level changes and landscaping which includes low edge defining walls and landscaping.
- Challenge: Lack of activity and definition along Main Road.
Solution: Positive Street interface, level changes and landscaping.

Evaluation:

Focus Area 1:

The proposal of the proposed overflow parking area adjacent to the Tennis Courts is not possible due to the establishment of the BMX Trac. The possibility to extend existing parking areas at the lagoon and Main Beach must be investigated.

The Traffic and Transport Report, (Section 6.1 of the Plan), made specific reference to a possible solution to the confusion with regard to traffic movement in the area. It is suggested that the one-way system be expanded to a parallel one-way system, with the southbound traffic along the streets along the lagoon and northbound traffic along First Street. Thus, changing the upper part of First Street from a southbound to a northbound one-way system. The use of Lagune Street as illegal parking by visitors needs to be investigated.

The relocation of the Traffic Department and Emergency Services needs to be addressed to urgently to free up space for the development of the Lagoon as a Public Amenity to the benefit of the community. It needs to be reiterated that the Lagoon area and the Main Beach be investigated in terms of the applicable legislation and a management plan be drafted to regulate the proposed uses for the area.

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Focus Area 2:

The proposed relocation of the informal market along Main Road is not a viable solution since the area indicated is on the shopping complex formal parking court and thus not available. It is proposed that the existing informal market be upgraded in terms of street furniture and landscaping.

The proposal of the upgrade and extension of the park along the water course between the Main Road and Cemetery is earmarked for possible housing development. However, this link can still be established as part of the housing development to ensure the linkage between the mountain and sea greenway.

The proposal for the infill and mixed-use development of the area between the Sports club and the Main Road is based that the informal market relocating, however the informal market can be accommodated in the proposed mixed use as per the proposal under 5.5.2 of the Report.

Focus area 3:

The proposals made are acceptable.

Conclusion

The proposals made are acceptable with a few exceptions with regard to areas that area already being utilised for other purposes, such as the parking overflow and possible housing site as discussed under the evaluation.

The traffic circles as proposed by the Traffic Engineers is a long-term project, but engagement with the Department of Transport needs to be urgently address, especially with regard to the Non-Traffic Transport Lanes and proposed parking arrangement.

7. Financial Implications

N/A

8. Staff Implications

N/A

9. Comments from other Departments, Divisions and Administrations

N/A

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10. Annexures

- Annexure A: List of the Kleinmond CBD Steering Committee
Annexure B: Kleinmond CBD Upgrading Plan

RECOMMENDATION TO THE COUNCIL:

1. that the Kleinmond CBD Upgrading Plan be approved as a guiding document to the Overstrand Spatial Development Framework, 2020 and the Overstrand Integrated Development Plan; and
2. that funding be applied for to implement the proposal.

RESPONSIBLE OFFICIAL:	H VAN DER STOEP
TARGET DATE FOR IMPLEMENTATION:	14 JUNE 2020
TARGET DATE TO INFORM APPLICANT:	N/A
TARGET DATE TO INFORM OBJECTOR:	N/A

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15/1/3/4

R Kuchar

Senior Manager: Town & Spatial Planning

18 May 2022

(028) 313 8087

**THIS MATTER SERVED BEFORE THE JOINT PORTFOLIO COMMITTEE ON
2 JUNE 2022, WHICH COMMITTEE RECOMMENDED AS FOLLOWS:**

RECOMMENDATION TO THE COUNCIL:

1. that the Kleinmond CBD Upgrading Plan be approved as a guiding document to the Overstrand Spatial Development Framework, 2020 and the Overstrand Integrated Development Plan; and
2. that funding be applied for to implement the proposal.

RESPONSIBLE OFFICIAL:

H VAN DER STOEP

TARGET DATE FOR IMPLEMENTATION:

14 JUNE 2020

TARGET DATE TO INFORM APPLICANT:

N/A

TARGET DATE TO INFORM OBJECTOR:

N/A

Annexure A

KLEINMOND CBD STEERING COMMITTEE

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KLEINMOND CBD UPGRADING PLAN

FINAL REPORT

MARCH 2022



2/13/24

DOCUMENT PREPARED BY:
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1. BACKGROUND

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1.1. INTRODUCTION

1.1.1. PURPOSE & SCOPE

The purpose of the project is to create a framework plan outlining development possibilities for the Lagoon Precinct, Kleinmond Main Road and the Harbour Precinct including type and scale of development that would be suited to the respective areas, indication of land uses and principles for public realm improvement and development.

DEVELOPMENT VISION

Create a high quality public environment that is pedestrian friendly and supportive to business.

CHALLENGES

- Understanding current challenges of access, quality of public realm and built form.
- Improve economic performance of Main Road.

TOWN CONCEPT

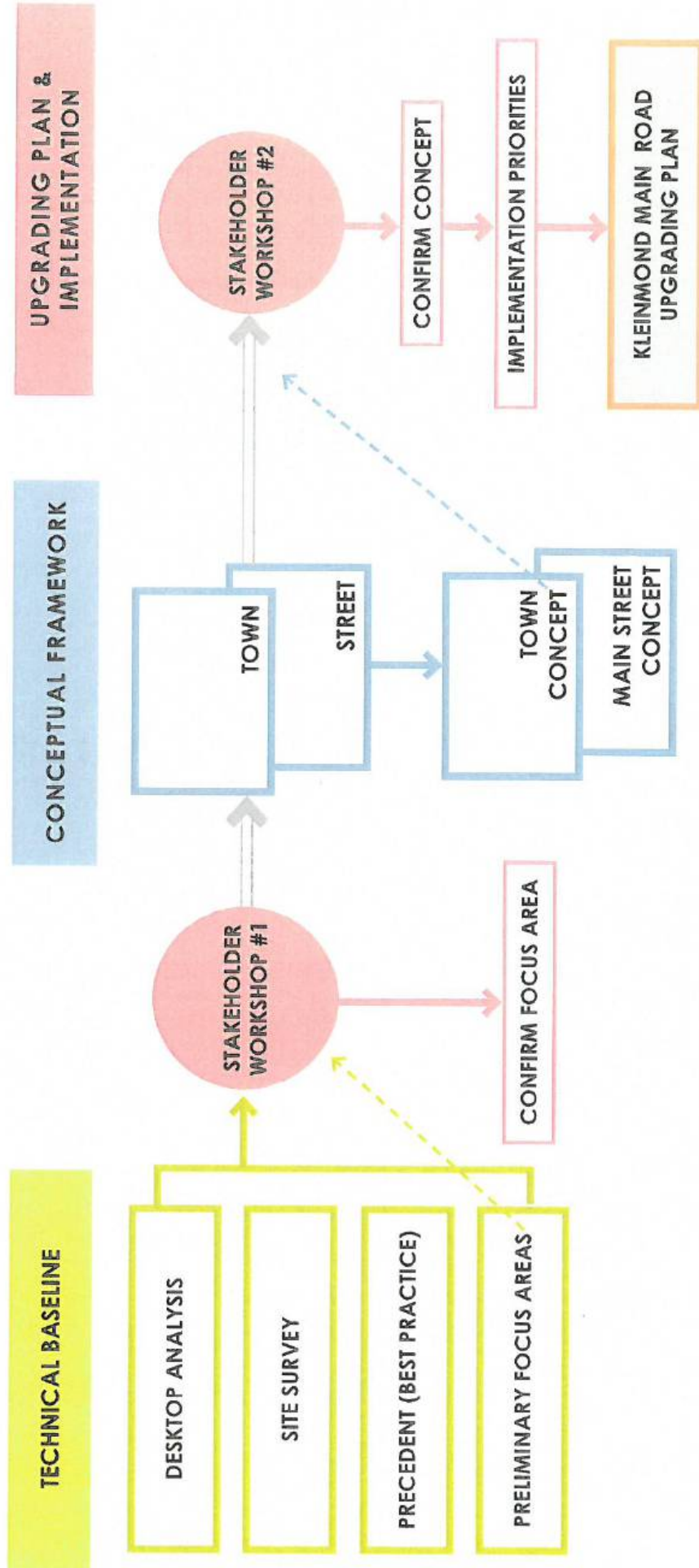
- Development town level concept illustrates the role of Main Road further described through precedent.

1.1.2. PROCESS

The investigation into the current status of the built form and public spaces of the Kleinmond CBD included the following tasks:

1. A desktop study of available reports and mapping.
2. A site survey which included photo-surveys, mapping, focus area surveys and evaluation of the buildings, activities and landscape character of each focus area.
3. Documentation of the findings of the desktop study and survey. Information is presented through a series of townscape maps and focus area evaluations in this report.
4. Preparation of overall town concept and preliminary focus areas that were circulated for comment after the Ward Committee design workshop in May 2021 (See Annexure 2)
5. Confirmation of the Focus Areas on 24 June 2021 at Ward Committee meeting.
6. Comments and inputs were consolidated into the final draft proposals which were presented to stakeholder workshops in October 2021 and circulated for public comment in the months of November and December 2021.
7. Comments were taken into account and all relevant inputs captured in this final report which is to be tabled for Council Approval in 2022.

KLEINMOND WORK PROCESS



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DIAGRAM 1. PROJECT PROCESS DIAGRAM

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1.2. URBAN DESIGN PRINCIPLES AND OBJECTIVES

The spatial vision and concept will be guided by the SPLUMA development principles, which seek to create balanced urban environments that relate well to their context and perform optimally for its users.

1.2.1. DEVELOPMENT PRINCIPLES

The proposals set out in this report are fundamentally guided by the principles promulgated by SPLUMA, i.e. spatial justice, spatial sustainability, efficiency, spatial resilience and good administration. The proposals contained in this precinct plan will inform medium to long-term strategic interventions that promote the development of spatially and economically integrated environments that are:

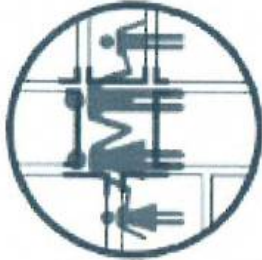
- Inclusive
- Safe and secure
- Walkable
- Mixed-use and diverse
- Economically vibrant

1.2.2. REGENERATION OBJECTIVES

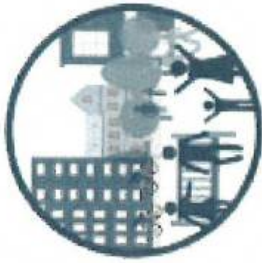
The following regeneration objectives guide the evaluation of the current CBD conditions and will inform the focus area proposals going forward.

1. Create streets that allows for mixed traffic but place priority on the pedestrian.
2. Introduce landscaping to create a high-quality and active environment that encourages users to spend more time by providing safe walking conditions, shelter from the elements, trees, seating and lighting.
3. Create safe pedestrian environments using level crossings, wide sidewalks and paved surfaces
4. Create vibrant and safe environments with positive, active and attractive building frontages and street interface qualities
5. Allow for seasonal flexibility for parking requirements creating multi-functional, integrated parking & loading bays
6. Accommodate stormwater drainage within the landscaping of the street and public spaces
7. Identify development and redevelopment opportunities on strategic land.

DEVELOPMENT PRINCIPLES



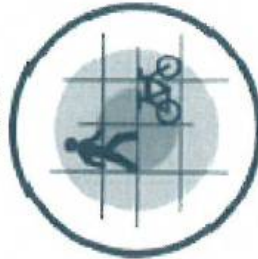
INCLUSIVE



CHARACTER & SENSE OF PLACE



SAFE & SECURE



WALKABLE



MIXED USE & DIVERSE

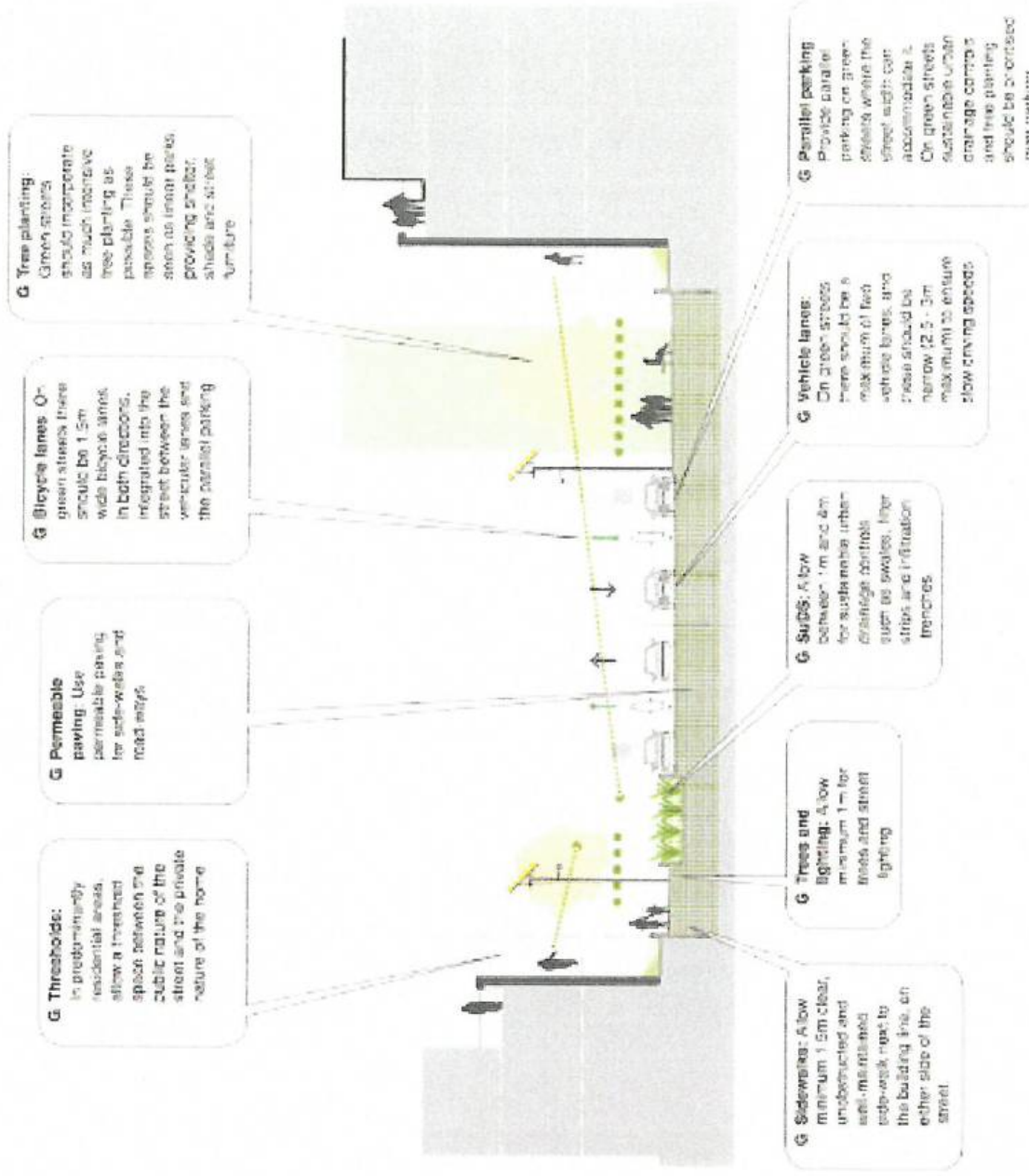


ECONOMICALLY VIBRANT

1.2.3. BEST PRACTICE AND PRECEDENT

STREETS TO ACCOMMODATE A RANGE OF USES:

- Pedestrians and cyclists
- Public transport
- Private vehicles
- Sustainable Urban Drainage
- Landscaping and tree planting
- Parking



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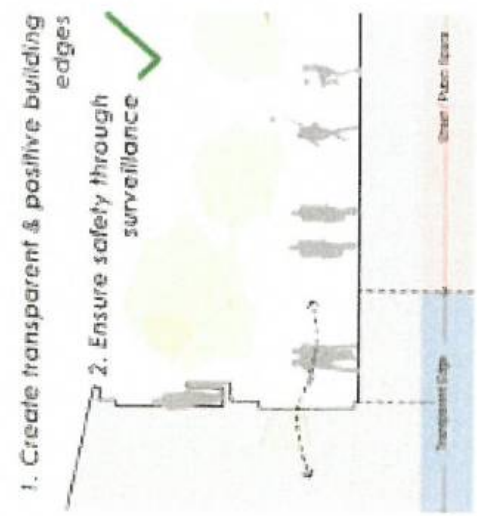
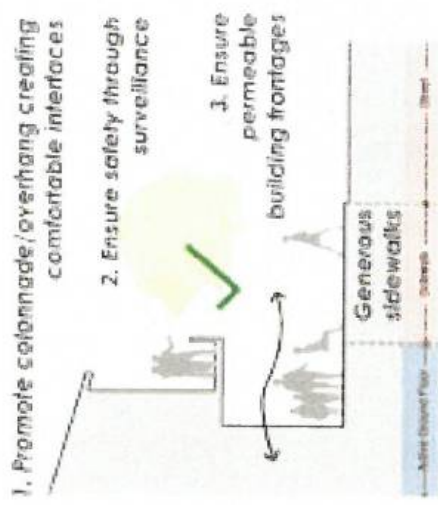
PEDESTRIAN FRIENDLY STREETS

- Generous sidewalks
- Seating
- Places to linger
- Spill out café spaces
- Safe crossing places



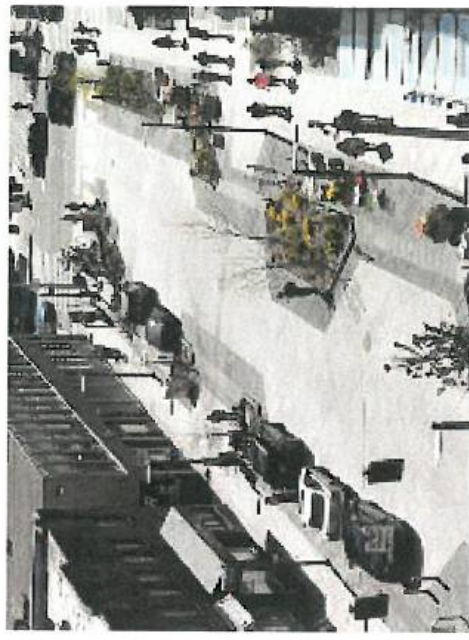
STREET & BUILDING INTERFACE

- Spill-out activities between shops / cafés and sidewalks
- Visual connection between street and ground floor activities
- Limited blank facades



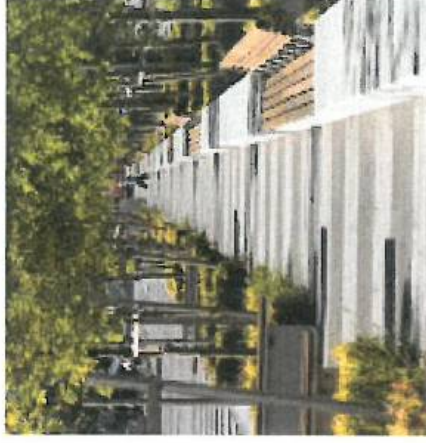
MULTIFUNCTIONAL AND INTEGRATED PARKING

- Integrated street parking and landscaping
- Well landscaped, multi-functional parking courts that can be used for alternative activities



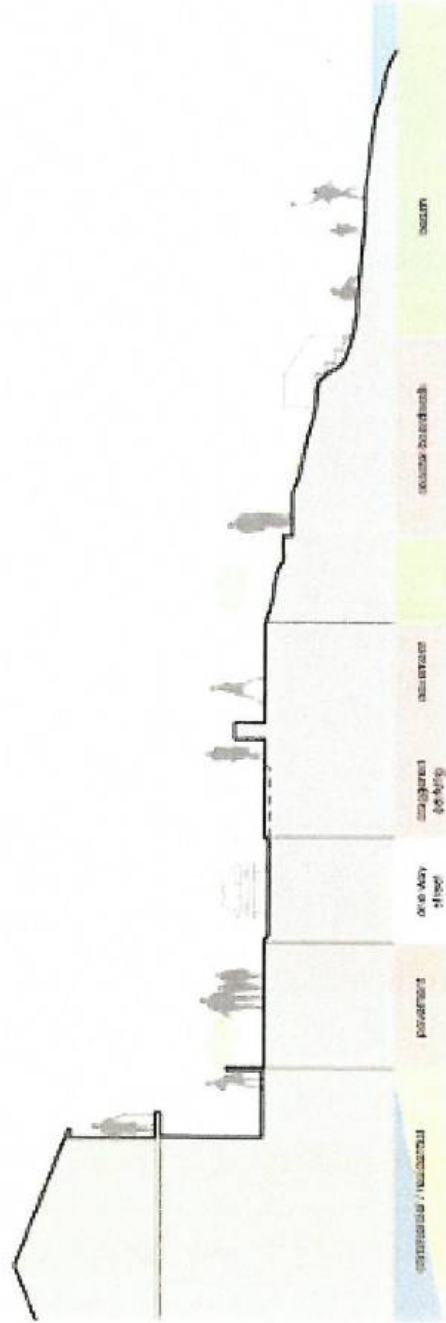
COASTAL EDGE

- Generous public promenade
- Seating
- View / lookout points
- Event spaces



STREET FURNITURE

- Simple, practical and robust materials
- Coherent family of elements that creates local identity
- Pedestrian scaled lighting located to make spaces feel safer
- Create places to stay and linger



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2. TOWNSCAPE OVERVIEW

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2.1. TOWNSCAPE PUBLIC REALM

2.1.1. LAYOUT AND DESIGN ORIGINS

2.1.1.1 HERITAGE

Kleinmond is predominantly a holiday town which has its roots in the 18th/19th century as a fishing village. It developed between the mouths of the Bot River and Palmiet River and around 1860 became a holiday destination for farmers in the Caledon district. Figure 1 illustrates the layout and design origins of the town.

The primary focus of heritage values lies in the dramatic visual and environmental setting and the sense of balance between natural landscape and settlement. Mountains, rivers, a combination of a rocky and sandy shoreline, and the extensive coastal fynbos are all important contributors to the sense of place. There are few conservation worthy structures, the highest graded 3A and 3B (local heritage site), with the natural and scenic setting dominant over the architectural fabric.

Since 1902 the cypress tree at the Kleinmond Lagoon (the Preekboom) was used as a Christmas Tree and has historical, social and aesthetic significance. A proposed special conservation area includes the coastal strip linking the commonage area at the river mouth to the harbour at Jongensklip including the first row of erven facing onto the coastal walkway.

2.1.1.2 LANDMARKS, NODES AND GATEWAYS

Gateway entrances into Kleinmond are poorly defined with only small signs to signal to a visitor they are entering the town. The gateway into the Harbour Precinct shares the same characteristics, and can easily be missed.

2.1.1.3 KEY INFORMANTS

- The mountain and coastal scenic setting is the primary heritage asset.
- A balance between the natural landscape and settlement is required
- Poorly defined gateways into Kleinmond create a lack of sense of arrival into the town.
- The coastal strip between the harbour and the river mouth must be protected.

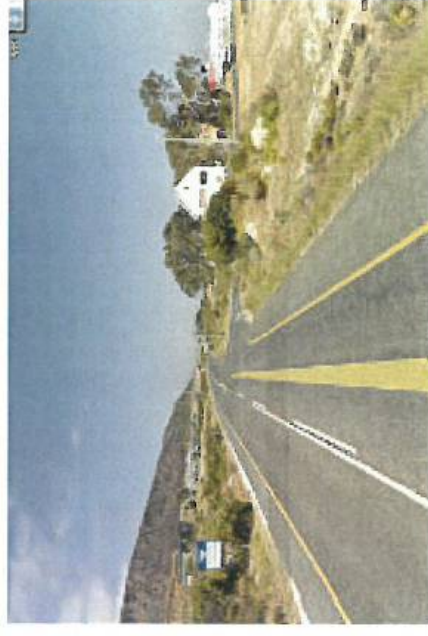


IMAGE 1. WESTERN GATEWAY INTO KLEINMOND



IMAGE 4. HARBOUR ROAD GATEWAY

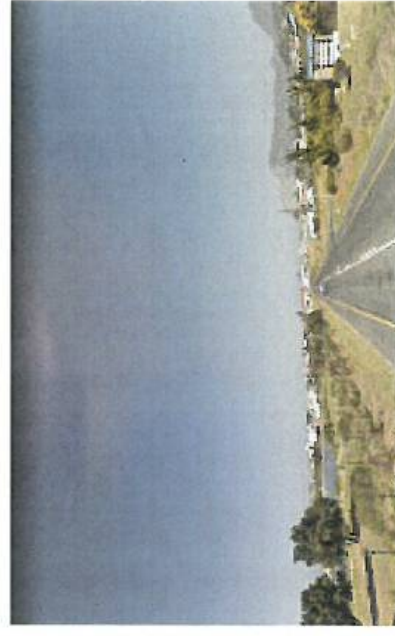


IMAGE 2. EASTERN GATEWAY INTO KLEINMOND



IMAGE 3. PREEKBOOM HISTORICAL SOCIAL AND AESTHETIC SIGNIFICANT RESOURCE

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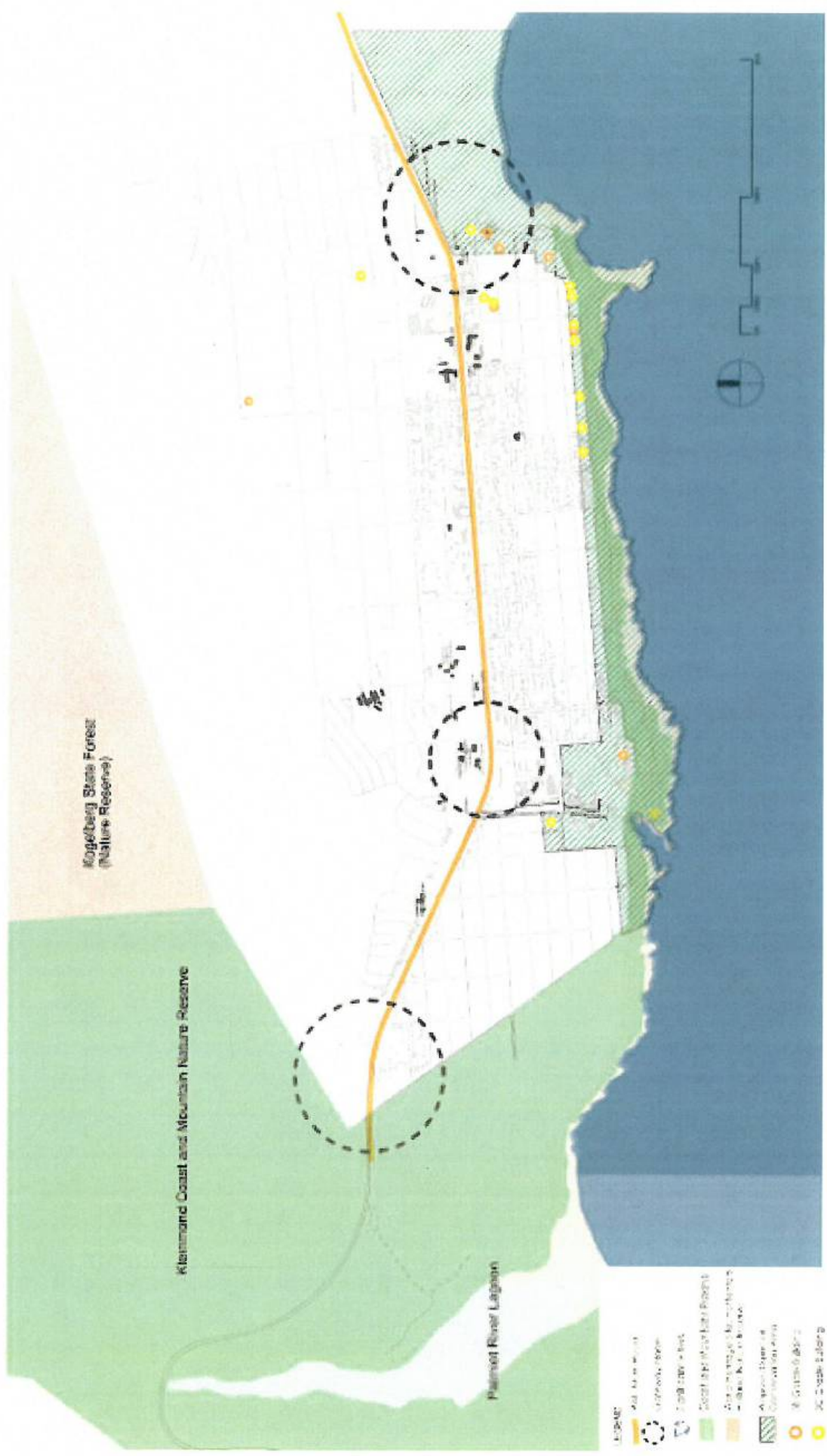


FIGURE 1. LAYOUT AND DESIGN ORIGINS

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2.1.2. LANDSCAPE AND ECOLOGY

2.1.2.1 NATURAL SYSTEMS

The Kleinmond CBD is surrounded by dramatic natural environments illustrated in Figure 2. The Kogelberg Biosphere Reserve is UNESCO recognised and is a key part of the local ecosystem, tourism character and landscape of Kleinmond. Connections with this asset should be a visible part of the CBD character and function.

The steep slopes of the mountain backdrop are visible from all parts of town and both visual and physical links are important for locals and tourism.

Several rivers and streams connect the mountains with the coast. These serve important stormwater and ecosystem services. They are also important landscape elements adding to the town character and identity.

2.1.2.2 RECREATION

- Recreation facilities in Kleinmond include:
 - Coastal footpath
 - Beach and lagoon
 - Mountain hiking paths
 - Picnic, braai and play areas at the beachfront

2.1.2.3 VIEWS AND VISTAS

Spectacular views of the mountains are visible from almost anywhere in the town. North-south allow for glimpses of the sea with views of to the west of Elephant Rock above Betty's bay and to the east of Afdakrivier and Karwyderskraal and surrounding mountains.



IMAGE 5. VIEW TO KOGELBERG MOUNTAINS



IMAGE 6. VIEW CORRIDOR TO SEA



IMAGE 7. VIEW WEST TO ELEPHANT ROCK



IMAGE 8. VIEW EAST TOWARDS AFDAKRIVIER AND KARWYDESKRAAL AND MOUNTAINS BEYOND



IMAGE 9. PARK IN BEACHFRONT RECREATION AREA



IMAGE 11. COASTAL FOOTPATH



IMAGE 10. LAGOON AND BEACH

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2.1.2.4 KEY INFORMANTS

- The mountain backdrop provides orientation as a landmark and reminder of the link between the town and nature.
- The natural river systems are under-celebrated and have the potential to add character and identity to the town.
- Kleinmond should enhance its tourist potential by focussing on the natural environment, celebrating these assets and creating links between the mountain and sea.



FIGURE 2. LANDSCAPE AND ECOLOGY

2.1.3. ACCESS AND CIRCULATION

Kleinmond's access and circulation system is illustrated in Figure 3 which highlights the movement hierarchy, pedestrian network and parking. The Kleinmond street network is characterized by a grid pattern with the most dominant block dimensions of 130m x 60m, creating a walkable and accessible environment.

Main Road and Third Avenue provide the primary east-west movement. North-south movement is limited with only a few streets providing continuous movement across Main Road. The remaining north-south routes terminate at Main Road with several routes further limiting vehicle access from the south to Main Road with a series of cul-de-sacs accommodating only pedestrian movement

Kleinmond is a linear town developed along Main Road between mountain and sea. It is approximately 4km long and is expanding in length. A lack of bicycle facilities means that the only option for many residents is to walk long distances between destinations.

Main Road is the primary movement route for both vehicles and pedestrians. Despite formal sidewalks located along its length a lack of shading elements and trees, pedestrian-scaled lighting, paving, and a prevalence of parking results in vehicle dominance.

Large parking lots on well-located land further contribute to vehicle dominance and a poor public environment limiting opportunities for activity along the Main Road.

2.1.2.5 KEY INFORMANTS

- The dominant block sizes in Kleinmond create a walkable grid but the lack of shading elements and low quality of the public realm does not promote walking.
- Lack of cycling facilities does not promote or encourage cyclists which could be a viable form of transport to cover long distances between destinations within the town.
- Main road is vehicle dominant with few NMT facilities and a prevalence of parking.
- Parking lots along main road could be better used for infill development and activation of the street.



IMAGE 12. SPAR SHOPPING CENTRE PARKING LOT



IMAGE 14. TYPICAL MAIN ROAD SIDEWALK



IMAGE 13. OK MART PARKING LOT ALONG MAIN ROAD



IMAGE 15. ROAD WITH NO THROUGHWAY

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2.2. TOWNSCAPE BUILT FORM

2.2.1. ZONING

The majority of developed land in Kleinmond is zoned for residential use as illustrated in Figure 4.

Commercial uses are clustered in nodes along the main street. A small retail and hospitality precinct is located on the Harbour Road with industrial activity to the east of this.

Large pieces of land along Main Road are zoned for open space or transport uses.

An emerging public facilities cluster is located at the entrance to Kleinmond associated with Overhills residential area.

2.2.1.1 KEY INFORMANTS

- Current zoning does not support further commercial intensification along Main Road especially between the Harbour and Lagoon mixed-use nodes.
- Where commercial zoning dominates, traffic circulation, pedestrian - vehicular conflicts and parking will need to be areas of special focus in the more detail design stage.
- The light industrial zone to the east of Harbour Road, wraps around the Harbour Restaurant Precinct. The interface between this area and the residential zone further east is an area for focussed planning and design.



IMAGE 16. RETAIL CENTRE AT INTERSECTION OF BOTRIVER & MAIN ROAD



IMAGE 17. COMMERCIAL BUILDING IN RESIDENTIAL TYPOLOGY



IMAGE 19. INDUSTRIAL AREA EAST OF HARBOUR ROAD



IMAGE 21. COMMERCIAL NODE ON MAIN ROAD



IMAGE 18. VIBRANT MIXED-USE HARBOUR ROAD

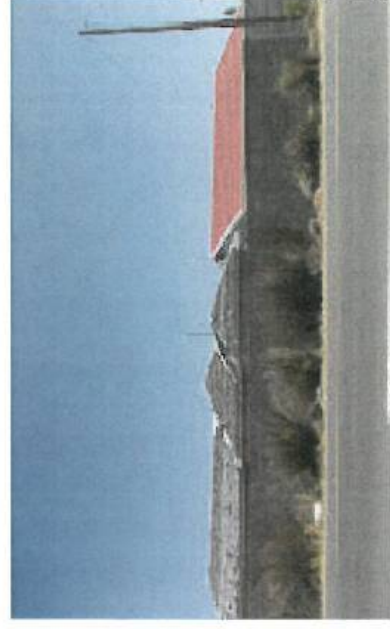


IMAGE 20. RESIDENTIAL PROPERTIES ALONG MAIN ROAD

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FIGURE 4. ZONING

2.2.2. LAND USE AND ACTIVITY

2.2.2.1 LAND USE

The study area includes a mix of retail, commercial, institutional, sporting and residential uses, as illustrated in Figure 5. Retail outlets and businesses are situated along the Main Road and Harbour Road.

Small scale retail and food stores are mainly located along Main Road while some light industry is located Harbour Road.

There are very few restaurants and coffee shops within the precinct sporadically located along Main Road and clustered along Harbour Road.

Residential use is focussed on the western end of Main road while the eastern end contains a mix of use including public facilities, retail, commercial and sports.

There are 3 nodes of public facilities located along Main Road, the largest located at the intersection of 3rd Street and Main Road including a school, police station post office, library, hall and municipal offices.

A small informal trading market is located along Main Road in-front of the Mthumkhulu Community Development Centre.

2.2.2.2 ACTIVITY

Kleinmond is a holiday destination with a large influx of visitors during seasonal periods. Businesses and facilities need to be robust and flexible to accommodate this ebb and flow of activity.

2.2.2.3 KEY INFORMANTS

- Lack of tourist attractions along Main Road.
- Commercial activity is clustered along Main and Harbour Road with minimal connection between the activities along the two.
- Dominant residential use along the western section of Main Road.



IMAGE 23. RETAIL ALONG MAIN ROAD



IMAGE 24. HARBOUR ROAD RETAIL AND RESTAURANTS



IMAGE 22. INFORMAL TRADING AREA



IMAGE 25. SUCCESSFUL EXAMPLE OF COFFEE SHOP WITH ACTIVE FRONTAGE

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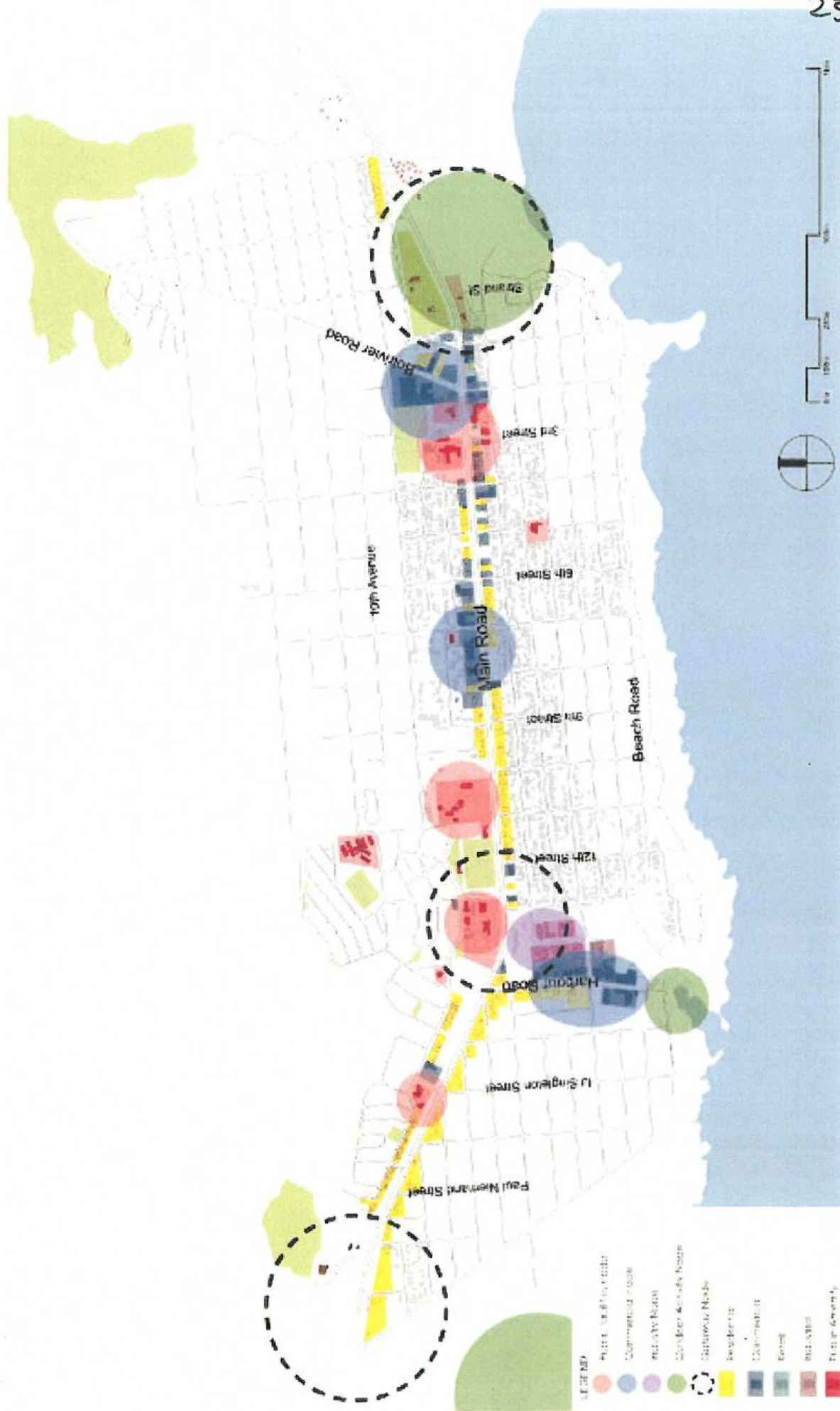


FIGURE 5. LAND USE AND ACTIVITY

2.2.3. PUBLIC STRUCTURE

2.2.3.1 PUBLIC FACILITIES

The elements of public structure are illustrated in Figure 6. Public facilities and sports facilities are mostly clustered in 2 nodes. The central node includes 2 schools, child welfare and adoption Centre, Mthimkhulu community development centre, tennis and sports club. The intersection of Main Road and Botriver Road node includes a police station school, post office, hall and library.

The eastern node containing the traffic office, toilets, sports fields, the lagoon park and beach day camp.

A cluster of open spaces and sports facilities are located on the northern side of Main Road towards the east on the site of the old show-grounds. The sports facilities are well used and well maintained.

Only small portions of Main Road and Harbour Road are active with a positive public realm. Activity is stop-start with no continuity along the street.

A coastal pathway provides a special recreation amenity allowing locals and visitors access to the coastline with a path connecting the harbour to the lagoon and beach.

2.2.3.2 KEY INFORMANTS

- There are limited green spaces and recreational amenities within the study area.
- There is a lack of street trees throughout the town.
- Public facilities and sports fields are located along Main Road occupying strategic sites that could contain development to activate the street.
- The coastal path provides a key opportunity for tourism and connection to the coast.
- Only small portions of Main Road and Harbour Road include an active street frontage and positive public realm which should be extended along Main Road



IMAGE 26. POLICE STATION LIMITED VISIBILITY FROM STREET



IMAGE 28. TOWN HALL ON MAIN ROAD



IMAGE 27. SPORTS FIELDS WITH POOR VISIBLE CONNECTION TO SURROUNDS

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- LEGEND**
-  Water supply service
 -  Non-sports field
 -  Street and/or walk system
 -  Freeway
 -  Sports route



FIGURE 6. PUBLIC STRUCTURE

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2.2.4. DEVELOPMENT POTENTIAL

2.2.4.1 VACANT, UNDERUTILISED AND PUBLICLY OWNED LAND

The location of publicly owned land (municipal and national), vacant and underdeveloped land is illustrated in Figure 7. Clusters of publicly owned land occur along Main Road, along the coastal edge and the western and eastern gateways into Kleinmond. A large portion of vacant, privately owned land is found within the Harbour Precinct

2.2.4.2 FUTURE PROJECTS

Future planned projects focussed on public assets are illustrated in Figure 9. These entail the consolidation of several public facilities into a Municipal Precinct at entrance to the Harbour Precinct at the corner of Harbour and Main Road. Moving these amenities off Main Road and away from the Lagoon frees up a significant amount of publicly owned land for more strategic development better suited to the mixed-use active character of Main Road and allowing for consolidation of sports facilities associated with Lagoon Precinct.

2.2.4.3 KEY INFORMANTS FOR DEVELOPMENT POTENTIAL

By overlaying the publicly owned, vacant land and future planned projects it is evident that the study area offers several potential opportunities for infill development illustrated in Figure 8. Opportunities for private development are identified within the Harbour Precinct and infill development to support the activation and intensification of activity along Main Road and along the Lagoon edge.



FIGURE 7. VACANT, UNDERUTILISED AND PUBLICLY OWNED LAND

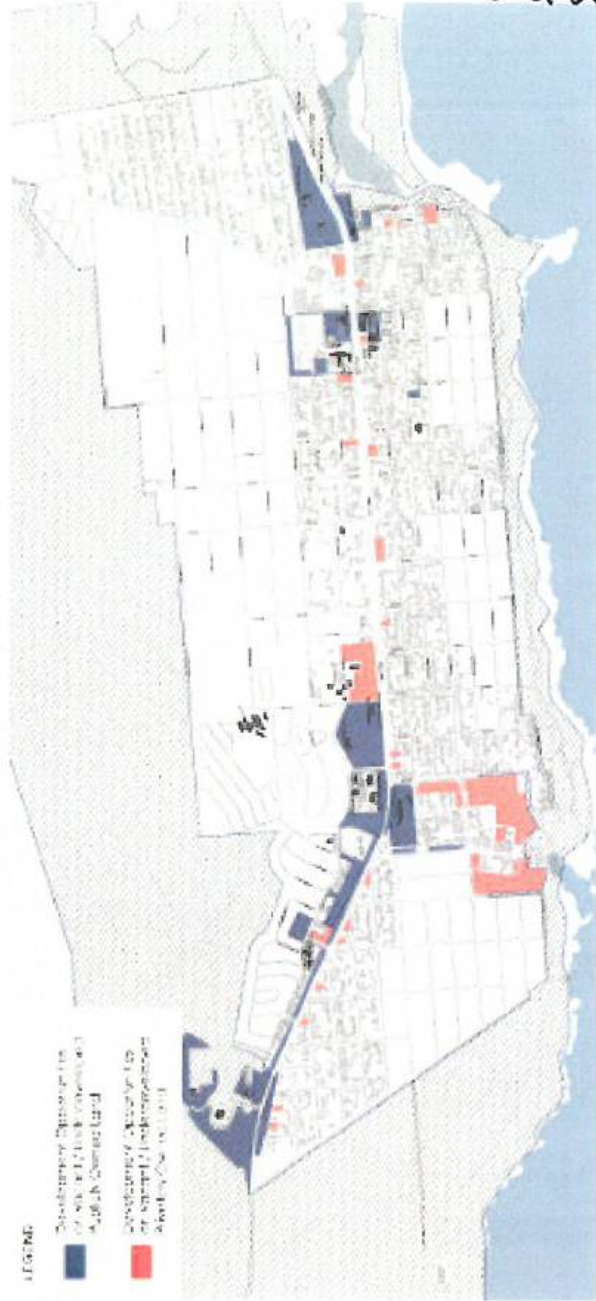


FIGURE 8. DEVELOPMENT OPPORTUNITIES

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FIGURE 9. FUTURE PROJECTS



IMAGE 29. VACANT LAND WITH RESIDENTIAL ZONING



IMAGE 30. SPORTS FIELDS ALONG PROTEA ROAD



IMAGE 31. TENNIS CLUB LAND

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3. MAIN STREET EVALUATION

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3.1. INTRODUCTION AND METHOD

3.1.1. FOCUS AREA SURVEY

Eleven focus areas were surveyed and mapped in January 2020. During this two day site survey the main road was divided into 11 Focus Areas. The physical features and activities were mapped to evaluate the urban design characteristics of each focus area.

3.1.1.1 PHYSICAL FEATURES:

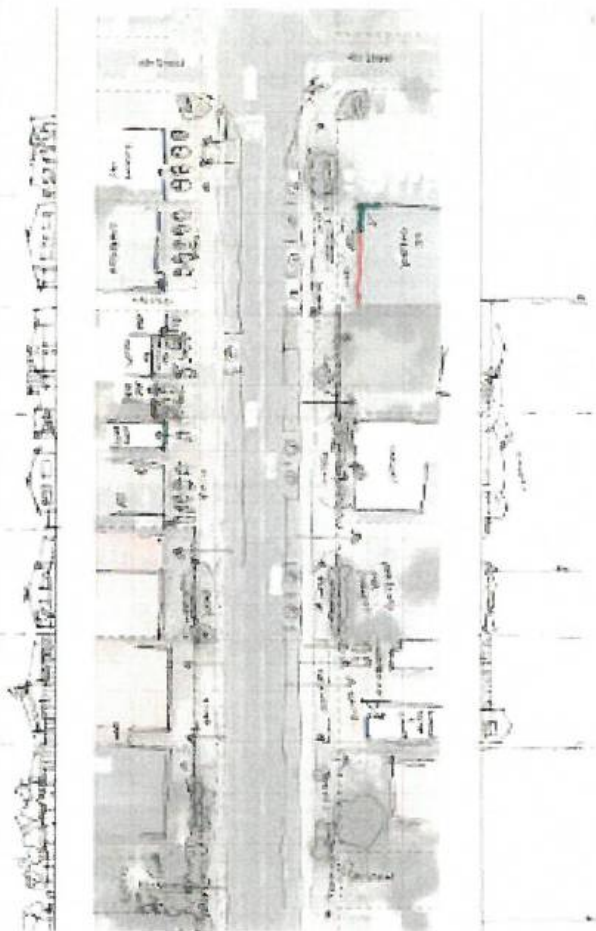
- Street interface (façade character and quality)
- Design elements (trees, street furniture, paving etc.)
- Scale and massing (height and enclosure)
- Land use (activity and land use)
- Façade character and quality,
- Public realm character and quality (tree planting, street furniture, paving)
- Dimensions of the street components,
- Height of buildings along the street,
- Property and building entrances,
- On-street parking,
- Land use and activity.

3.1.1.2 ACTIVITIES:

- Capturing the duration and type of activities of people within the focus area

CHECKLIST: information to be included

- building: total height
- building: ground floor height
- setback
- cadastral boundary
- boundary wall / fence
- road reserve total
- sidewalk
- road
- lighting
- street furniture / planting



ACTIVITY	DESCRIPTION
K	Standing
L	Waiting for Transit
M	Bench Seating
N	Secondary Seating
O	Cafe Seating
P	Bring Your Own Seating
Q	Lying Down
R	Children Playing
S	Commercial Activity
T	Cultural Activity
U	Physical Activity



FIGURE 10. EXAMPLES OF SITE SURVEY MAPPING

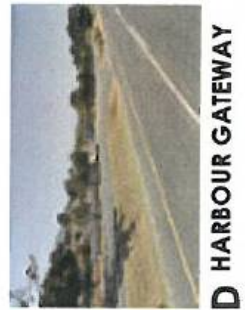
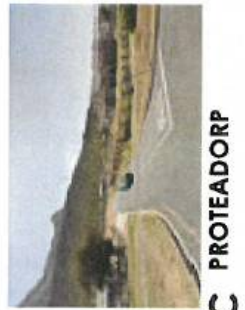


FIGURE 11. FOCUS AREA LOCATIONS

3.1.2. FOCUS AREA A: WESTERN GATEWAY



IMAGE 32. STREET VIEW OF FOCUS AREA A

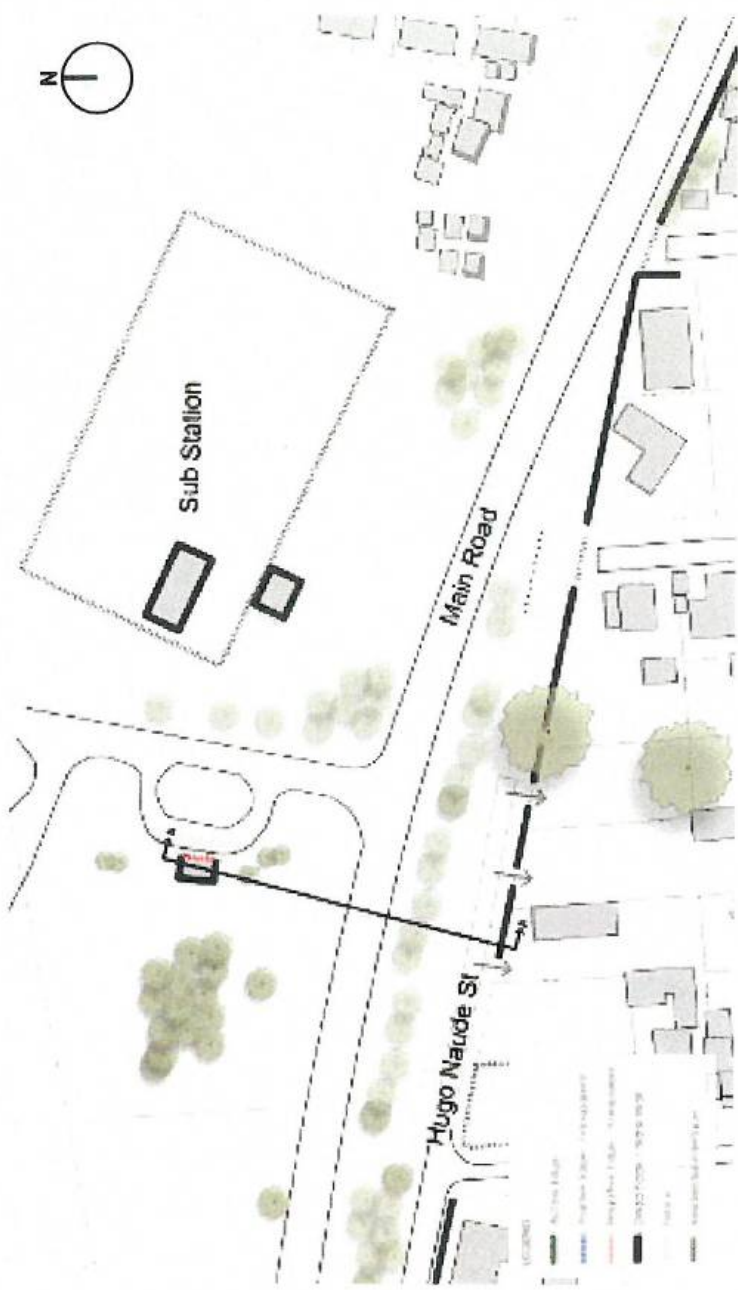


FIGURE 13. PLAN OF FOCUS AREA A

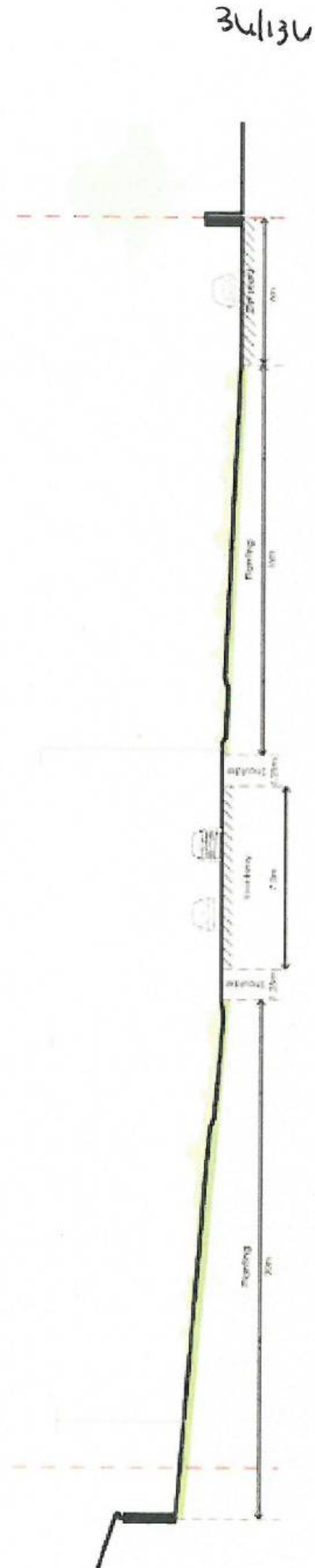


FIGURE 12. FOCUS AREA A - STREET SECTION A

3.1.3.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
Sporadic natural bush	No	Trees / Planting	No
Pedestrian walk along road	No	Street Furniture	No
Asphalt road	No	Sidewalks	No
	No	Paving	No
	No	Kerb	No
	No	Parking (Street)	No
	No	Parking (Lot)	No
	No	NMT Facilities	No
	No	Cover/Canopies / Shelter	No

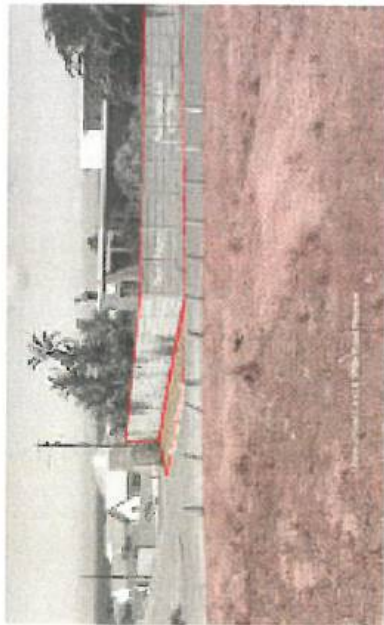


IMAGE 33. A - SOUTH INTERFACE ANALYSIS

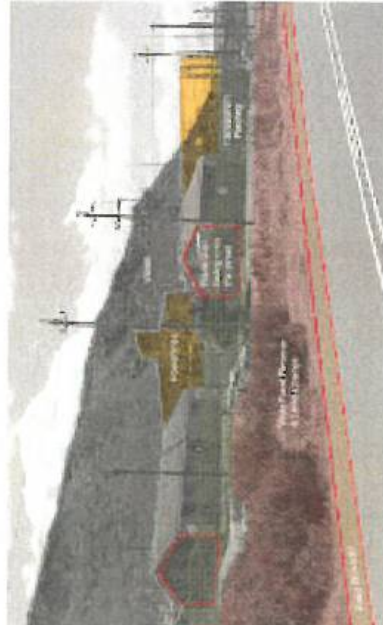


IMAGE 34. A - NORTH INTERFACE ANALYSIS



IMAGE 35. A - SOUTH STREET VIEW

3.1.3.1 STREET INTERFACE / STREET WALL

EDGE CHARACTER	Exposed	Limited	Limited	Blank
15m wide low scrub zone	Exposed	Limited	Limited	Blank
Only access via roadway	Limited	Limited	Limited	Blank
One entry road	Limited	Limited	Limited	Blank
Utility buildings dead edge	Blank	Blank	Blank	Blank

EDGE CHARACTER	Exposed	Limited	Limited	Blank
15m wide low scrub zone	Exposed	Limited	Limited	Blank
Only access via roadway	Limited	Limited	Limited	Blank
One entry road	Limited	Limited	Limited	Blank
Utility buildings dead edge	Blank	Blank	Blank	Blank

NEGATIVE POSITIVE

3.1.4. FOCUS AREA B: OVERHILLS PALMIET



IMAGE 36. FOCUS AREA B - STREET VIEW



IMAGE 37. FOCUS AREA B - STREET VIEW

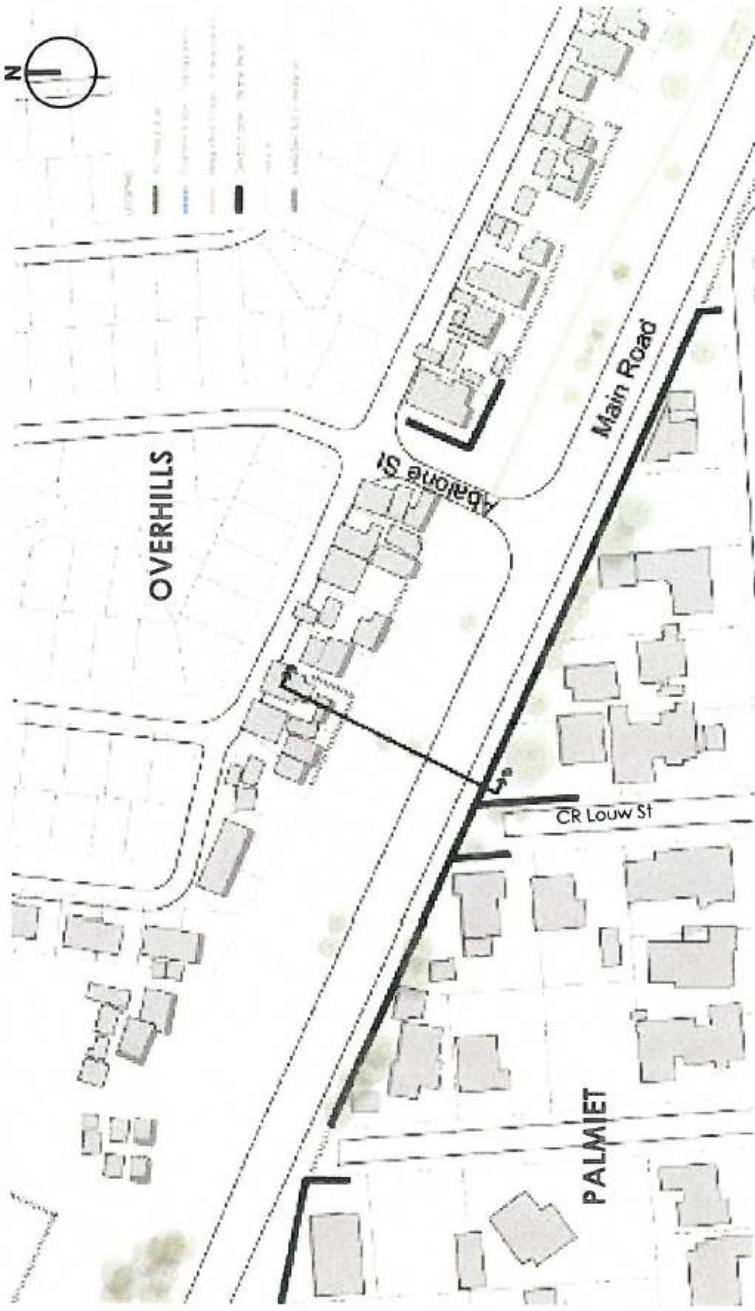


FIGURE 15. FOCUS AREA B - PLAN

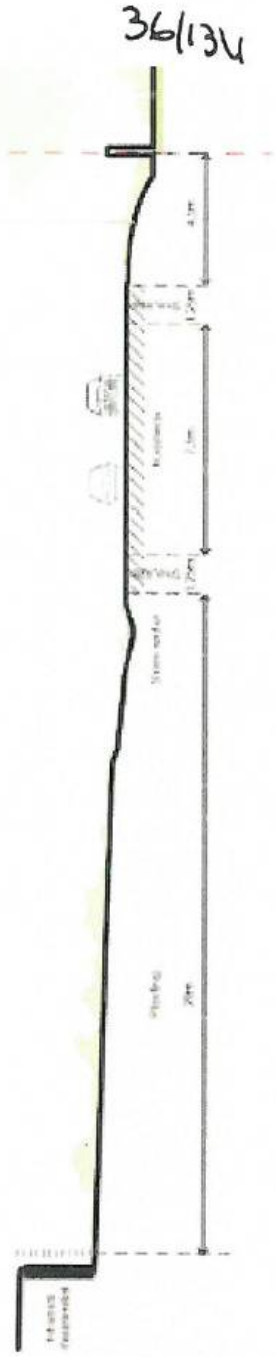


FIGURE 14. FOCUS AREA B - STREET SECTION B

3.1.5.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
Natural bush on berm	No	TREES / PLANTING	No
	No	STREET FURNITURE	No
Footpath on berm	Informal	SIDEWALKS	No
Asphalt road	No	PAVING	No
	No	KERB	No
	No	PARKING (STREET)	No
	No	PARKING (LOT)	No
	No	NMT FACILITIES	No
	No	COVER/CANOPIES / SHELTER	No
			Uncut grass verge
			Pedestrian walk along road
			Asphalt road

3.1.5.1 STREET INTERFACE / STREET WALL

	Berm	EDGE CHARACTER	Exposed
2.5m high berm	Limited	PEDESTRIAN ACCESS POINTS	Limited
Only access via roadway	Limited	VEHICULAR ACCESS POINTS	No
One entry road	Blank	INTERFACE TYPOLOGY	Blank
Informal housing - dead edge facing away from road			3m wide low scrub zone
			Access via bollarded street
			Street blocked by bollards
			High residential wall

3.1.5.1 SCALE AND MASSING

	Undefined	BLOCK SIZES	65-135m
Informal housing	Undefined	SITE WIDTHS	35-65m
	Varies	BUILDING WIDTHS	20m
Informal housing	Random	FACADE CONTINUITY / VARIETY	Weak
	300m	INTERSECTION SPACING	-
Informal housing 18m from road, 2.5m above road	>20m	SETBACKS / BUILDING PLACEMENT	>15m
	3-4m	HEIGHT	4 - 6m
Large setback / low height	Weak	SENSE OF ENCLOSURE	Weak
			Concrete wall, no variety
			No through access
			Residential wall 3m from road, house in middle of plot
			1 to 2 storey residential
			Large residential setback

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NEGATIVE POSITIVE



IMAGE 40. B - NORTH STREET INTERSECTION



IMAGE 39. B - NORTH STREET INTERSECTION



IMAGE 38. B - BERM ALONG NORTH EDGE OF STREET

3.1.6. FOCUS AREA C: PROTEADORP



IMAGE 41. FOCUS AREA C - STREET VIEW



FIGURE 18. FOCUS AREA C - PLAN

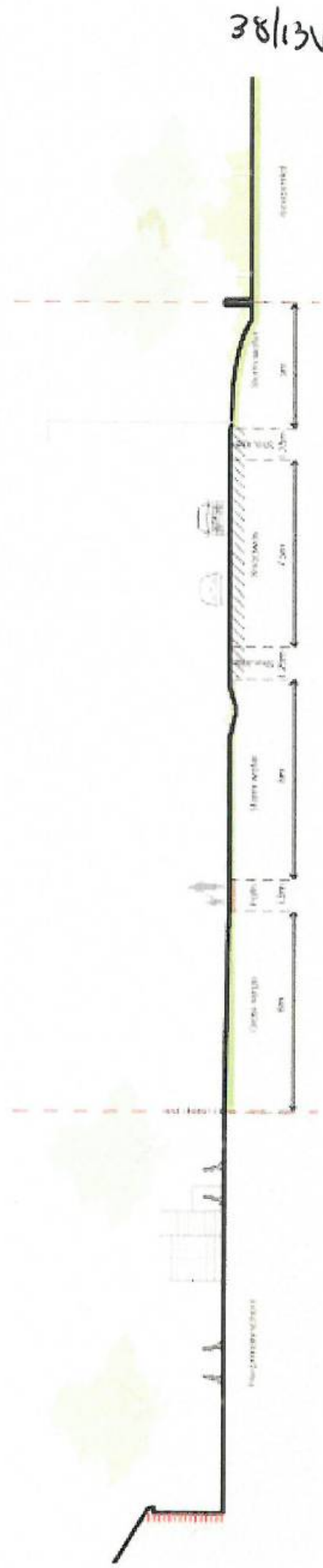


FIGURE 16. FOCUS AREA C - STREET SECTION C

3.1.7.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
Natural bush on berm	No	TREES / PLANTING	No
	No	STREET FURNITURE	No
Footpath 3m from road	Yes	SIDEWALKS	No
Asphalt road / sidewalk	No	PAVING	No
	No	KERB	No
	No	PARKING (STREET)	No
Parking separated by fence	No	PARKING (LOT)	No
Pedestrian footpath	Yes	NMT FACILITIES	No
	No	COVER/CANOPIES / SHELTER	No

WALLEDGE CHARACTER	PEDESTRIAN ACCESS POINTS	VEHICULAR ACCESS POINTS	INTERFACE TYPOLOGY
Limited	Limited	Limited	Blank
Limited	Limited	Limited	Blank
Inactive	Inactive	Limited	Blank

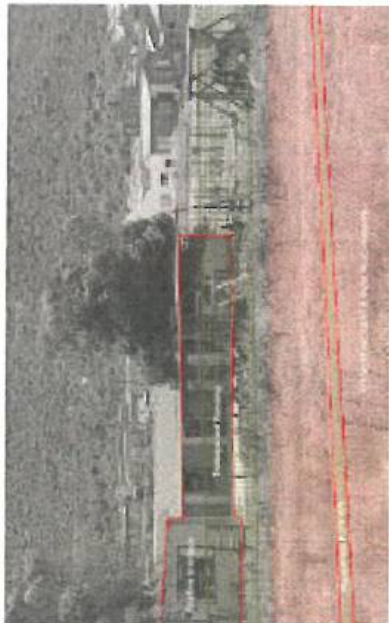


IMAGE 42. C - NORTH INTERFACE ANALYSIS

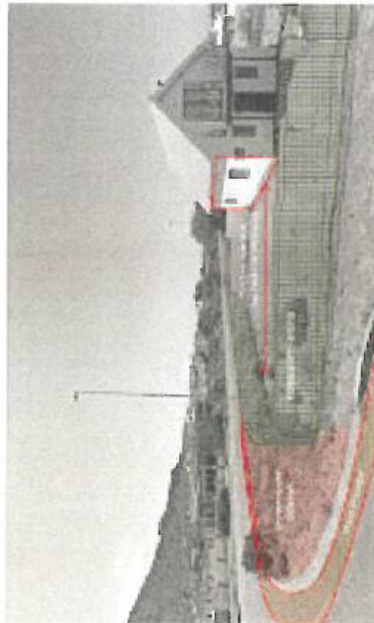


IMAGE 43. C - SOUTH INTERFACE ANALYSIS



IMAGE 44. C - NORTH STREET VIEW

3.1.7.1 SCALE AND MASSING

BLOCK SIZES	300m	65-135m
SITE WIDTHS	35-65m	35-65m
BUILDING WIDTHS	Varies	20m
FACADE CONTINUITY / VARIETY	None	Weak
INTERSECTION SPACING	300m	>300m
SETBACKS / BUILDING PLACEMENT	>20m	>15m
HEIGHT	3-5m	4 - 6m
SENSE OF ENCLOSURE	Weak	Weak

NEGATIVE



POSITIVE

0.4.1.1

3.1.8. FOCUS AREA D: HARBOUR GATEWAY



IMAGE 45. FOCUS AREA D - STREET VIEW

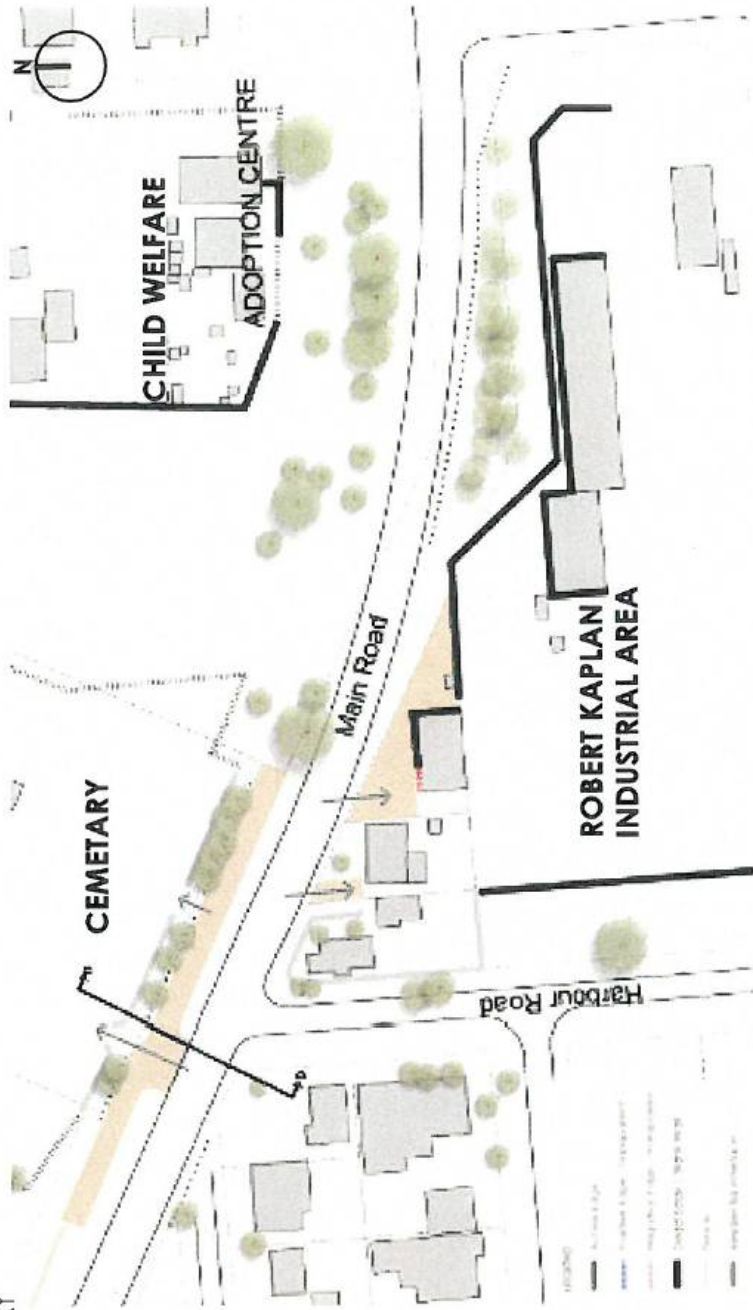


FIGURE 20. FOCUS AREA D - PLAN

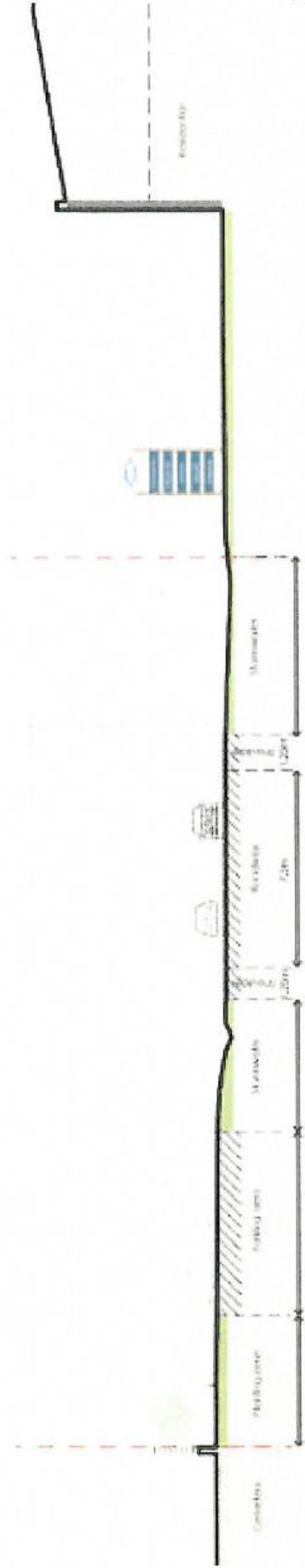


FIGURE 19. FOCUS AREA D - STREET SECTION D

3.1.9.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
Trees along graveyard wall	Yes	Trees / Planting	No
	No	Street Furniture	No
	No	Sidewalks	No
Asphalt road / sidewalk	No	Paving	No
	No	Kerb	No
	No	Parking (Street)	No
	Yes	Parking (Lot)	Yes
Pedestrian footpath	No	NMT Facilities	No
	No	Cover/canopies / Shelter	No

3.1.9.1 STREET INTERFACE / STREET WALL

	Parking	Edge Character	Setback
	Regular	Pedestrian Access Points	Regular
	Limited	Vehicular Access Points	Limited
	Inactive	Interface Typology	Inactive

3.1.9.1 SCALE AND MASSING

	Block Sizes	135 / 300m	135m ped. access only
	600m	20-45m	
	> 100m	10-20m	
Graveyard and empty site	None	Medium	Start of residential condition
Buildings spaced far apart	None	250-300m	Only one access road
	600m	5-10m	Parking in front of 10m commercial setback
20m setback to graveyard wall, no buildings behind	Large	4 - 6m	1 to 2 storey residential
-	-	Med/Low	
Large setback	Weak		

NEGATIVE

POSITIVE

IMAGE 46. D - SOUTH INTERFACE ANALYSIS 1



IMAGE 47. D - SOUTH INTERFACE ANALYSIS 2



IMAGE 48. D - NORTH STREET VIEW



3.1.10.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
New tree planting	Yes	TREES / PLANTING	No
Wooden rubbish bins	Yes	STREET FURNITURE	No
Angled for vehicle access	Yes	SIDEWALKS	Yes
Red brick market space	Yes	PAVING	No
	No	KERB	No
	Yes	PARKING (STREET)	No
	Yes	PARKING (LOT)	Yes
Pedestrian footpath	Yes	NMT FACILITIES	Yes
	No	COVER/CANOPIES / SHELTER	No



IMAGE 51. E - STREET VIEW 2

3.1.10.1 STREET INTERFACE / STREET WALL

EDGE CHARACTER	Setback
Parking	
Limited	Regular
Limited	Regular
Blank	Inactive



IMAGE 52. E - SOUTH COMMERCIAL WITH PARKING

3.1.10.1 SCALE AND MASSING

400m	BLOCK SIZES	135 / 300m	135m ped. access only
> 100m	SITE WIDTHS	20-45m	
None	BUILDING WIDTHS	10-20m	
None	FACADE CONTINUITY / VARIETY	Medium	Res. / business
400m	INTERSECTION SPACING	300m	Only one access road
18m	SETBACKS / BUILDING PLACEMENT	5-10m	Parking in front of 10m commercial setback
-	HEIGHT	4 - 6m	1 to 2 storey
Weak	SENSE OF ENCLOSURE	Med/ Low	

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IMAGE 50. E - INFORMAL TRADING



NEGATIVE POSITIVE

3.1.11. FOCUS AREA F: SEVENTH STREET



IMAGE 53. FOCUS AREA F - STREET VIEW

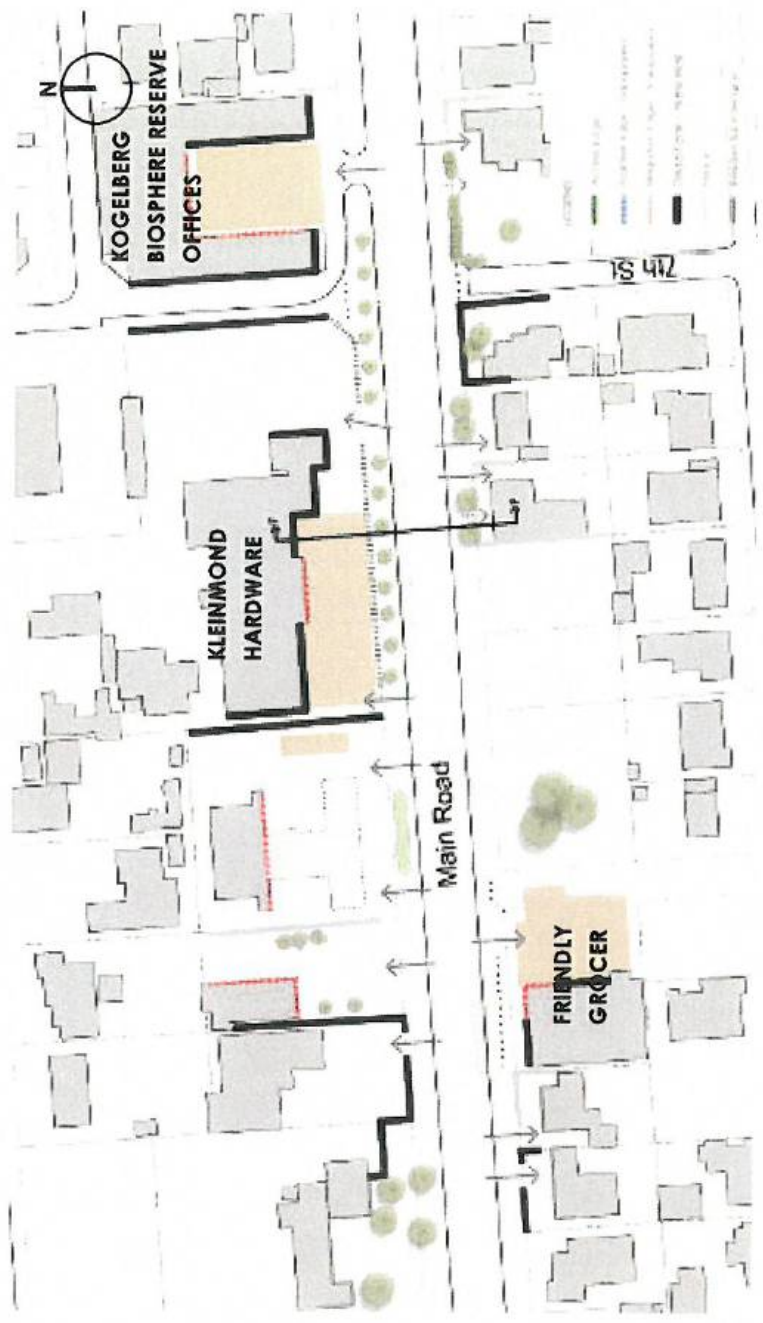


FIGURE 24. FOCUS AREA F - PLAN

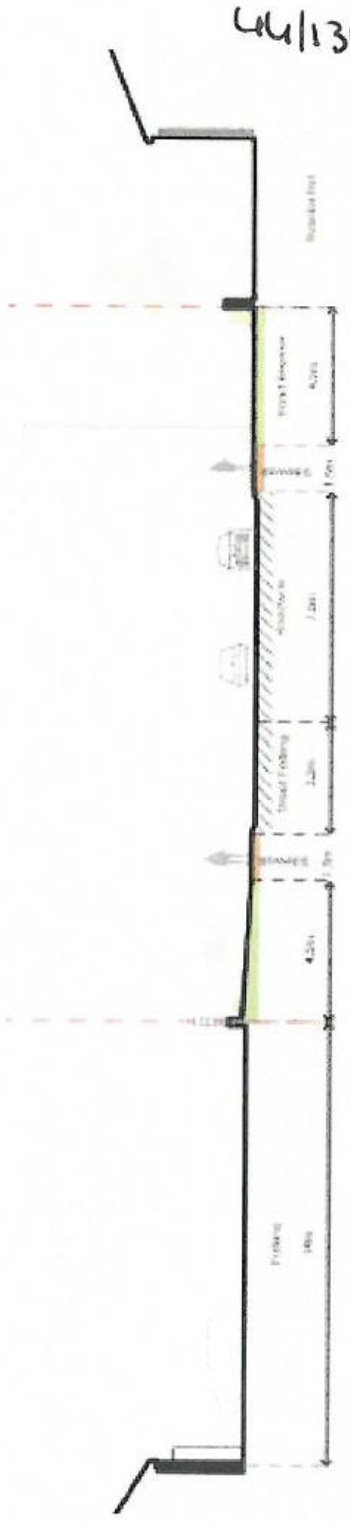


FIGURE 25. FOCUS AREA F - STREET SECTION F

3.1.1.1.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
New trees, maintained grass	Yes	TREES / PLANTING	No
Wooden rubbish bins	Yes	STREET FURNITURE	No
Angled for vehicle access	Yes	SIDEWALKS	Yes
On connecting properties	Yes	PAVING	No
	Yes	KERB	Yes
Small segment of parking	Yes	PARKING (STREET)	No
	Yes	PARKING (LOT)	Yes
Pedestrian footpath	Yes	NMT FACILITIES	Yes
	No	COVER/CANOPIES / SHELTER	No

STREET INTERFACING	WALEDGE CHARACTER	Setback	Opportunity with empty lot
Via vehicular access	Regular	Regular	Interfers with ped. activity
	Limited	Regular	Residential wall
	Transparent	Inactive	

3.1.1.1.1 SCALE AND MASSING

	270m	BLOCK SIZES	270m	135m ped. access only
	50-100m	SITE WIDTHS	18-30m	
Petrol station and nursery	20-60m	BUILDING WIDTHS	10-20m	
Variety setback conditions	Low	FACADE CONTINUITY / VARIETY	Medium	Res. / business
	400m	INTERSECTION SPACING	300m	Only one access road
	18m	SETBACKS / BUILDING PLACEMENT	5-10m	Parking in front of 10m commercial setback
	4-10m	HEIGHT	4 - 6m	1 to 2 storey
	Medium	SENSE OF ENCLOSURE	Med	

NEGATIVE POSITIVE

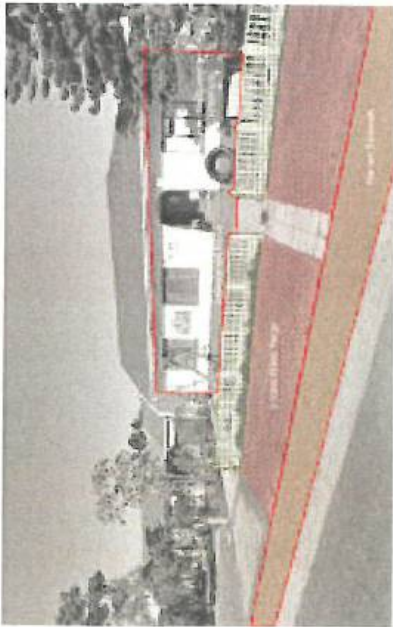


IMAGE 54. F - SOUTH INTERFACE ANALYSIS



IMAGE 56. F - NORTH INTERFACE ANALYSIS



IMAGE 55. F - PETROL STATION NORTH OF STREET

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G.A.P.

3.1.12. FOCUS AREA G: FOURTH STREET / OK



IMAGE 57. FOCUS AREA G - STREET VIEW



IMAGE 58. SPAR CENTRE PARKING LOT



FIGURE 26. FOCUS AREA G - PLAN

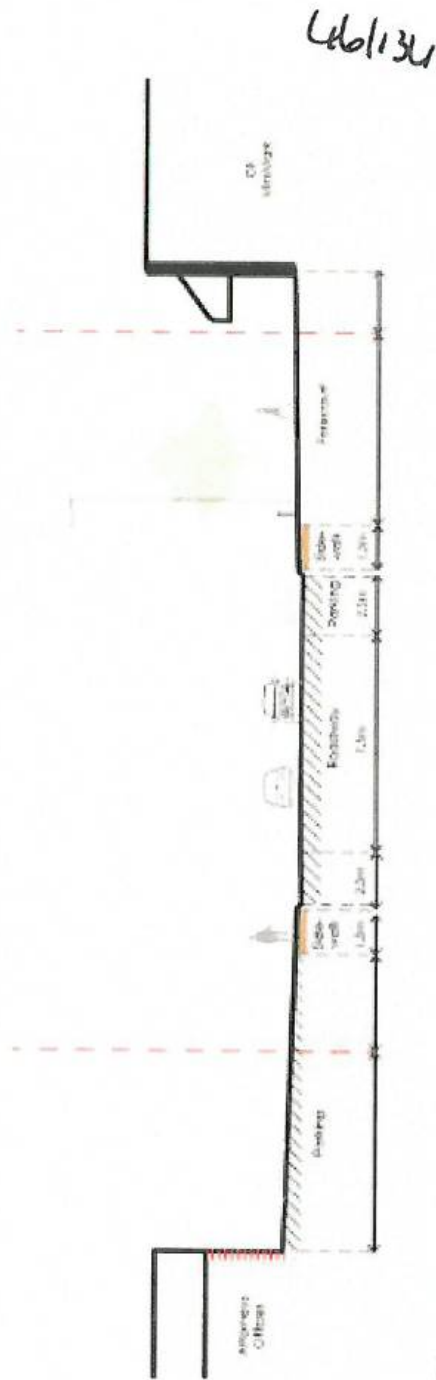


FIGURE 27. FOCUS AREA G - STREET SECTION G

3.1.12.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
New trees, grass verge	Yes	TREES / PLANTING	Yes
Signpost rubbish bins	Yes	STREET FURNITURE	Yes
Angled for vehicle access	Yes	SIDEWALKS	Yes
On connecting properties	No	PAVING	No
	Yes	KERB	Yes
	Yes	PARKING (STREET)	Yes
Within police station / SPARV	Yes	PARKING (LOT)	Yes
Pedestrian footpath	Yes	NMT FACILITIES	Yes
	No	COVER/CANOPIES / SHELTER	No

3.1.12.1 STREET INTERFACE / STREET WALL

Via vehicular access	Grass	EDGE CHARACTER	Grass
Interfers with ped. activity	Limited	PEDESTRIAN ACCESS POINTS	Regular
	Continuous	VEHICULAR ACCESS POINTS	Regular
	Inactive	INTERFACE TYPOLOGY	Inactive
			Town hall inactive facade

3.1.12.1 SCALE AND MASSING

135m ped. access only	135m	BLOCK SIZES	135m
	50-100m	SITE WIDTHS	18-30m
	15-25m	BUILDING WIDTHS	10-20m
Variety setback conditions	Low	FACADE CONTINUITY / VARIETY	Medium
	135m	INTERSECTION SPACING	135m
Inconsistent setback conditions	Varied	SETBACKS / BUILDING PLACEMENT	5-10m
1 storey	4-6m	HEIGHT	4 - 10m
	Medium	SENSE OF ENCLOSURE	Med

NEGATIVE POSITIVE

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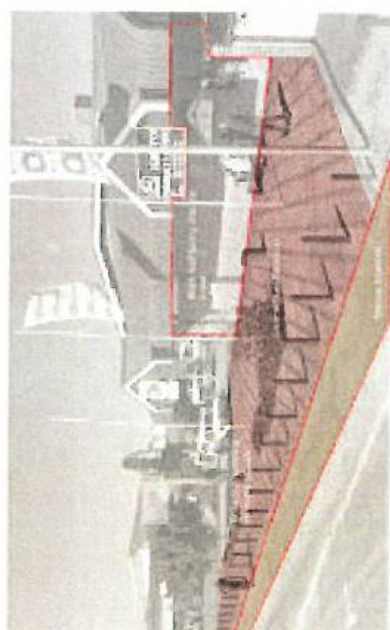


IMAGE 60. G - SOUTH INTERFACE ANALYSIS

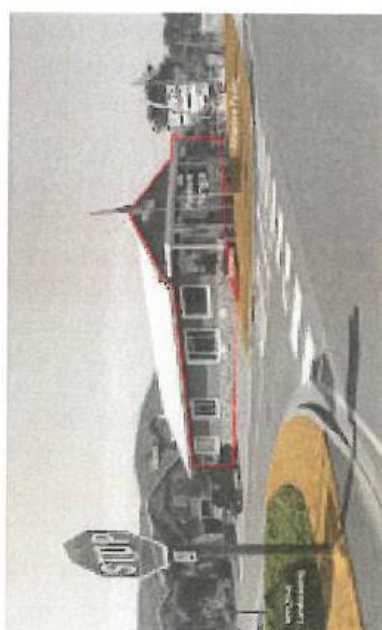


IMAGE 61. G - NORTH INTERFACE ANALYSIS



IMAGE 59. G - NORTH STREET VIEW

3.1.13. FOCUS AREA H: SECOND STREET SPAR



IMAGE 62. FOCUS AREA H - STREET VIEW



IMAGE 63. FOCUS AREA H - SPAR PARKING LOT

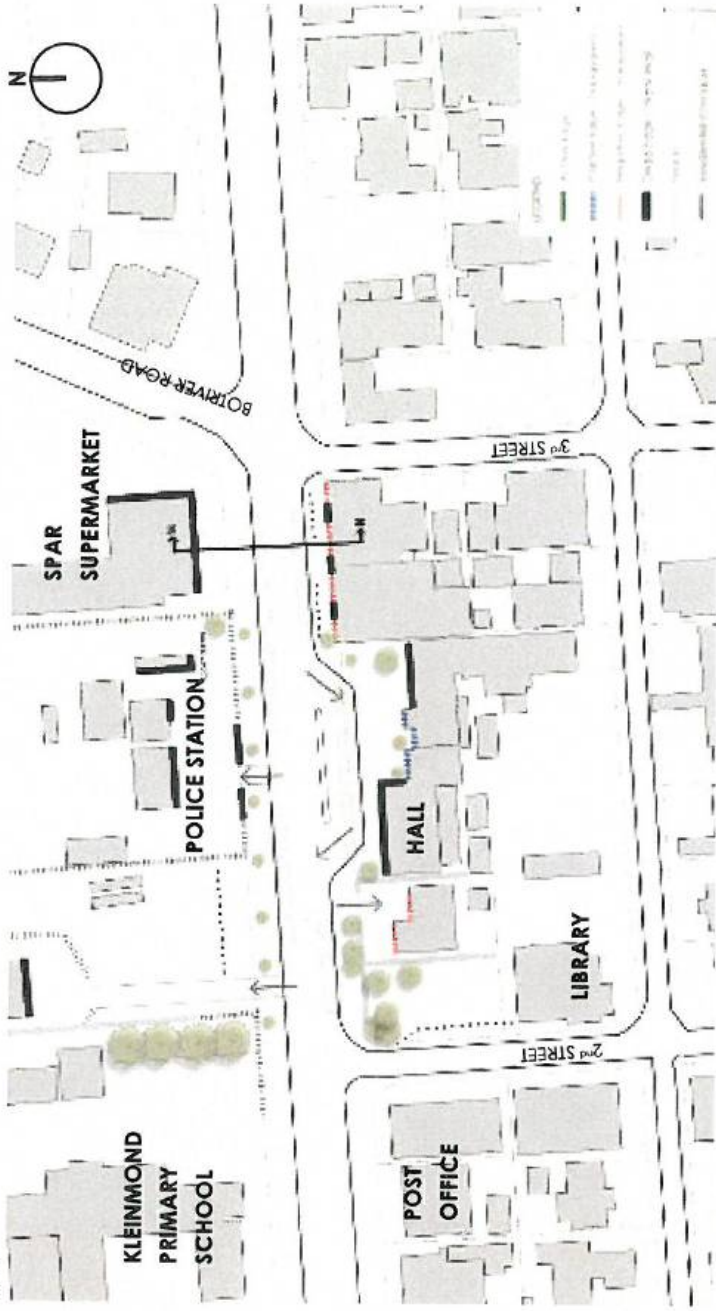


FIGURE 28. PLAN OF FOCUS AREA H



FIGURE 29. STREET ELEVATION CONDITIONS



FIGURE 30. SECTION THROUGH STREET AND OVERLOOKING BUILDINGS IN FOCUS AREA H

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3.1.1.3.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
New trees, grass verge	Yes	TREES / PLANTING	Established trees at intervals
Concrete rubbish bins	Yes	STREET FURNITURE	Signpost rubbish bins
Angled for vehicle access	Yes	SIDEWALKS	Angled for vehicle access
On connecting properties	NO	PAVING	
	Yes	KERB	Yes
	Yes	PARKING (STREET)	Yes
Within police station /SPARV	Yes	PARKING (LOT)	Asphalt along town hall
Pedestrian footpath	Yes	NMT FACILITIES	Pedestrian footpath
	NO	COVER/CANOPIES / SHELTER	NO

STREET	WALEDGE CHARACTER	SHOPS
3.1.1.3.1 STREET INTERFACE	Limited	Shops
Via vehicular access	Continuous	Regular
Interfers with ped. activity	Inactive	Regular
		Inactive

3.1.1.3.1 SCALE AND MASSING

135m ped. access only	135m	BLOCK SIZES	135m
	50-100m	SITE WIDTHS	18-30m
	15-25m	BUILDING WIDTHS	10-20m
Variety setback conditions	Low	FACADE CONTINUITY / VARIETY	Medium
	135m	INTERSECTION SPACING	135m
Inconsistent setback conditions	Varied	SETBACKS / BUILDING PLACEMENT	5-10m
1 storey	4-6m	HEIGHT	4 - 10m
	Medium	SENSE OF ENCLOSURE	Med

NEGATIVE POSITIVE

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G.A.P.P.

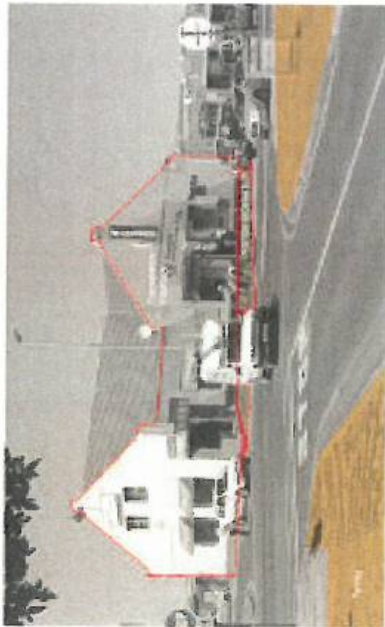


IMAGE 66. H - INTERFACE ANALYSIS

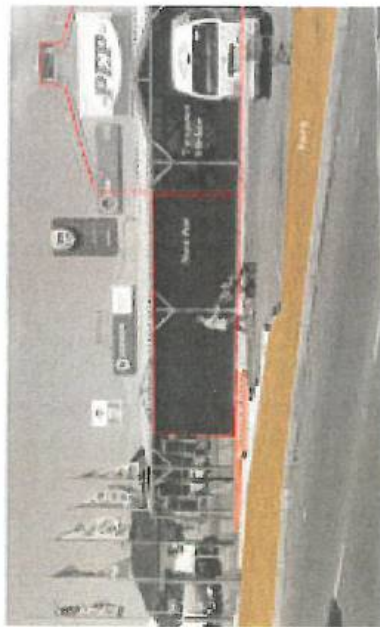


IMAGE 65. H - NORTH INTERFACE ANALYSIS



IMAGE 64. H - VIEW OF NORTH SPAR PARKING ACCESS

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3.1.14. FOCUS AREA I: LAGOON STREET



IMAGE 67. POOR GATEWAY CHARACTER AT EASTERN CBD ENTRANCE



IMAGE 68. CARS AND PARKING DOMINATE STREETScape AT EASTERN CBD GATEWAY



FIGURE 32. PLAN OF FOCUS AREA I

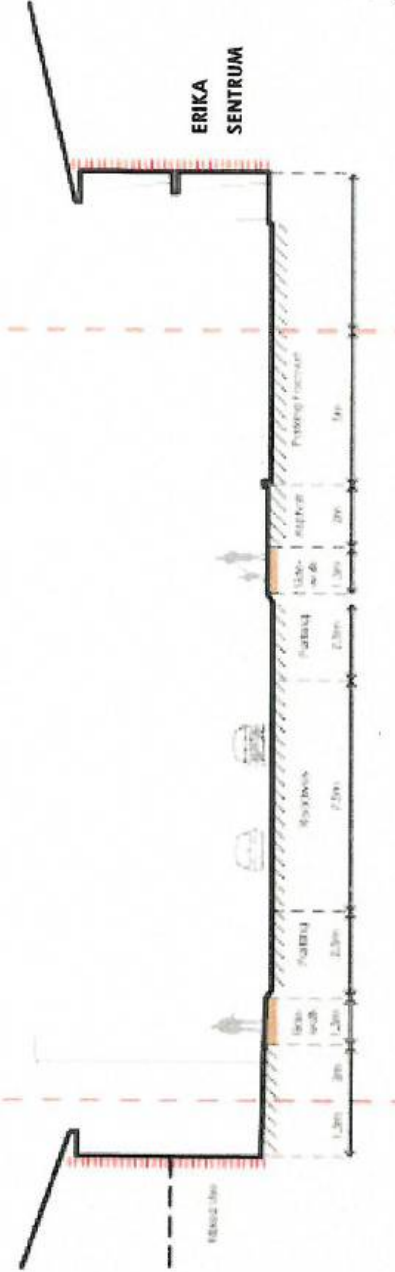


FIGURE 31. STREET SECTION OF FOCUS AREA I

3.1.14.1 STREET DESIGN ELEMENTS

NORTH		SOUTH	
Grass empty lots	Yes	TREES / PLANTING	No
Angled	No	STREET FURNITURE	Yes
Grass along edge sidewalk	Yes	SIDEWALKS	Yes
	No	PAVING	No
	Yes	KERB	Yes
	Yes	PARKING (STREET)	Yes
Informal parking on grass	Yes	PARKING (LOT)	Yes
Pedestrian footpath	Yes	NMT FACILITIES	Yes
	No	COVER/CANOPIES / SHELTER	Yes

STREET	WALEDGE CHARACTER	Shops
3.1.14.1 SCALE AND MASSING		Asphalt zone before blgs.
135m ped. access only	Limited	Regular
Via vehicular access	Regular	Regular
Via intersection	Regular	Regular
Active interface to east	Varied	Inactive

3.1.14.1 SCALE AND MASSING	BLOCK SIZES	Shops
135m ped. access only	135m	135m
Via vehicular access	50-100m	18-30m
Via intersection	25m	10-20m
Active interface to east	Low	Medium
	135m	135m
	Varied	5m
	4m	4-8m
	Low	Med

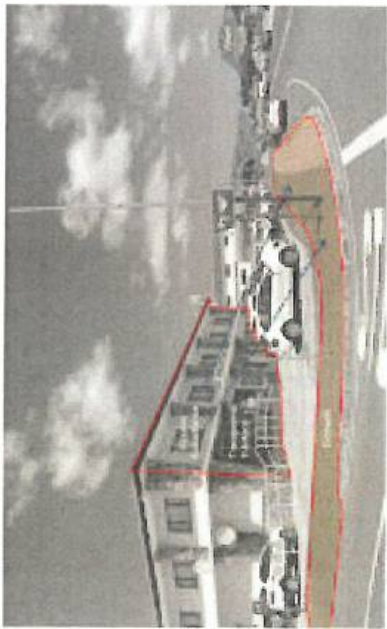


IMAGE 69. 1 - ERIKA SENTRUM STREET INTERFACE CONDITIONS



IMAGE 70. 1 - MUNICIPAL BUILDING INTERFACE CONDITIONS



IMAGE 71. 1 - MAIN STREET-HARBOR ROAD INTERSECTION

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3.1.15.1 STREET DESIGN ELEMENTS

EAST		WEST	
Lagoon edge park	Yes	Trees / Planting	No
	No	Street Furniture	No
	No	Sidewalks	Yes
	No	Paving	No
	Yes	Kerb	No
	Yes	Parking (Street)	No
	Yes	Parking (Lot)	Yes
Walkable green space	Yes	NMT Facilities	No
Trees in park space	Yes	Cover/canopies / Shelter	No

3.1.15.1 STREET INTERFACE POINTS	WEDGE CHARACTER	Res.	Directly on parking lot
Access road to campsite	PEDESTRIAN ACCESS POINTS	Regular	
Active usage area	VEHICULAR ACCESS POINTS	Regular	Interfere with park interface
	INTERFACE TYPOLOGY	Res.	Balconies overlooking park

3.1.15.1 SCALE AND MASSING

	BLOCK SIZES	60m	
	SITE WIDTHS	30m	
	BUILDING WIDTHS	20-30m	
Park	FACADE CONTINUITY / VARIETY	Medium	Continuous but monotonous
	INTERSECTION SPACING	60m	
Inconsistent setback conditions	SETBACKS / BUILDING PLACEMENT	0m	No setback from parking lot, bldgs. setback 5-10m
1 storey	HEIGHT	4-8m	1 storey
Park at good scale	SENSE OF ENCLOSURE	Good	

NEGATIVE  POSITIVE

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GAPP



IMAGE 74. J - INTERFACE ANALYSIS



IMAGE 75. J - TRAFFIC DEPT OFFICES



IMAGE 76. J - PARK AND LAGOON

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FIGURE 34. FOCUS AREA K - PLAN

3.1.16. FOCUS AREA K: HARBOUR ROAD



IMAGE 78. FOCUS AREA K - STREET VIEW

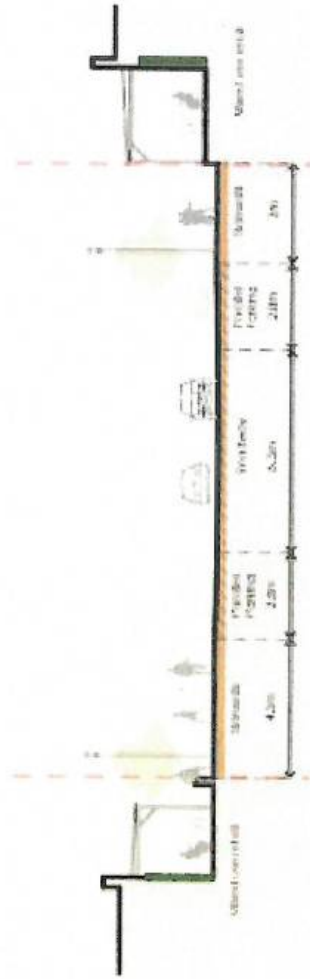


IMAGE 77. FOCUS AREA K - STREET SECTION L

3.1.1.6.1 STREET DESIGN ELEMENTS

EAST		WEST	
	Yes		No
Benches and low walls	Yes	Street Furniture	Yes
	Yes	Sidewalks	Yes
Grey cobble whole street	Yes	Paving	Yes
Single surface street	No	Kerb	No
	Yes	Parking (Street)	No
In lots behind buildings	Yes	Parking (Lot)	Yes
Walkable green space	Yes	NMT Facilities	No
Trees in park space	Yes	Cover/Canopies / Shelter	No

3.1.1.6.1 STREET INTERFACE / STREET WALL

	EDGE CHARACTER	
Via vehicular access	Strong	Strong
	Strong	Strong
	Regular	Regular
	Active	Active

3.1.1.6.1 SCALE AND MASSING

	65m	Block Sizes	65m
	20-40m	Site Widths	30m
	8-30m	Building Widths	40m
Strong articulation / variety	Strong	Facade Continuity / Variety	Strong
	65m	Intersection Spacing	65m
Consistent, well scaled setback with spill out space	5m	Setbacks / Building Placement	5m
1-2 storey	4-8	Height	4-8m
	Good	Sense of Enclosure	Good

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NEGATIVE POSITIVE



IMAGE 79. K - INTERFACE ANALYSIS

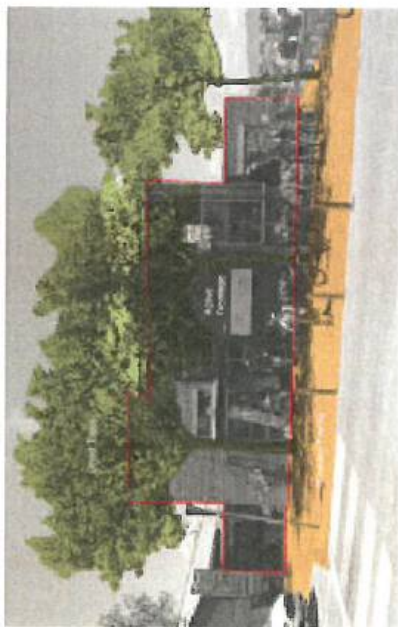


IMAGE 80. K - INTERFACE ANALYSIS 2



IMAGE 82. K - RAISED ACTIVE RESTAURANT FRONTAGE

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3.2. FOCUS AREA PRIORITISATION

Results of stakeholder engagements and workshops resulted in 3 focus areas being chosen for further design attention.

The three chosen focus areas are made up of smaller analysis focus areas:

- Focus Area 2 includes smaller focus areas D, E and K.
- Focus Area 3 includes smaller focus areas H, I and J.

FOCUS AREA 1



FOCUS AREA 2:



FOCUS AREA 3



FIGURE 35. FOCUS AREA PRIORITISATION

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4. CONCEPT

4.1. TOWN CONCEPT

The Town concept is illustrated in Figure 37 overleaf. It indicates a series of nodes associated with the clustering of community facilities, retail, and tourism activity. Main Road is the connecting spine linking the nodes together.

A series of mountain to ocean links allow for opportunities to celebrate the environmental assets of the town and contribute to its sense of place.

Public realm upgrades occur along key movement routes creating an NMT friendly, comfortable, and attractive street network which promotes walking and cycling.

The coastal pathway is reinforced linking together 3 tourist activity nodes associated with the Lagoon and beach, Harbour and Kleinmond Coast, and Mountain nature reserve.

Retail and commercial activity is consolidated and focussed within three nodes reinforcing existing activity and associated with key north-south movement routes.

4.1.1. MAIN IDEAS:

1. Main road as a high quality public space with clear entrance gateways where the connection between mountain and sea is celebrated
2. Improve the quality of the street space and built form interface starting in the priority focus areas
3. Incentivize development and upgrading of private and public land parcels within focus areas



FIGURE 37. CLEAR GATEWAYS INTO KLEINMOND AND CONNECTION TO MOUNTAIN AND SEA



FIGURE 38. HIGH QUALITY STREET SPACE AND BUILT FORM INTERFACE



FIGURE 39. INCENTIVIZE DEVELOPMENT AND UPGRADING OF PRIVATE AND PUBLIC LAND PARCELS



4.2. BRIEF FOR PHASE 1 FOCUS AREA 1

4.2.1. KEY CHALLENGES AND OBJECTIVES

- Vehicle dominated Main Road with lack of shading and seating elements.
- Low quality of public realm and few NMT facilities, with street edge dominated by parking.
- Inactive commercial building interfaces along Main Road, with visually impermeable shopfronts, often blanked off by signage or blinds.
- Provide guidelines for shop entrances and facades to create more continuity for the street edge along Main Road.
- Locate parking on one side of the street where possible to create more space for sidewalks and street furniture.
- Integrate loading zones into the street design after consultation with local landlords and business owners.
- Engage local artists and business owners in design / upkeep of street furniture and landscaping along Main Road.

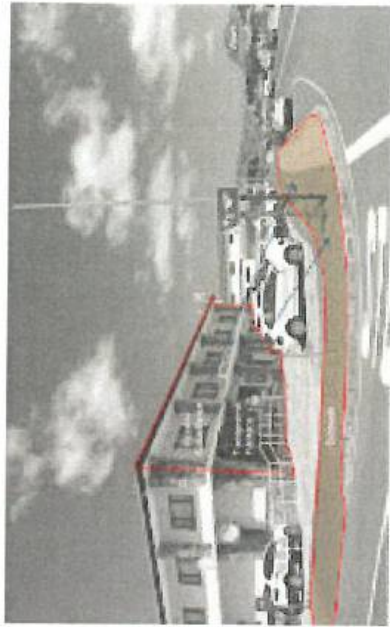
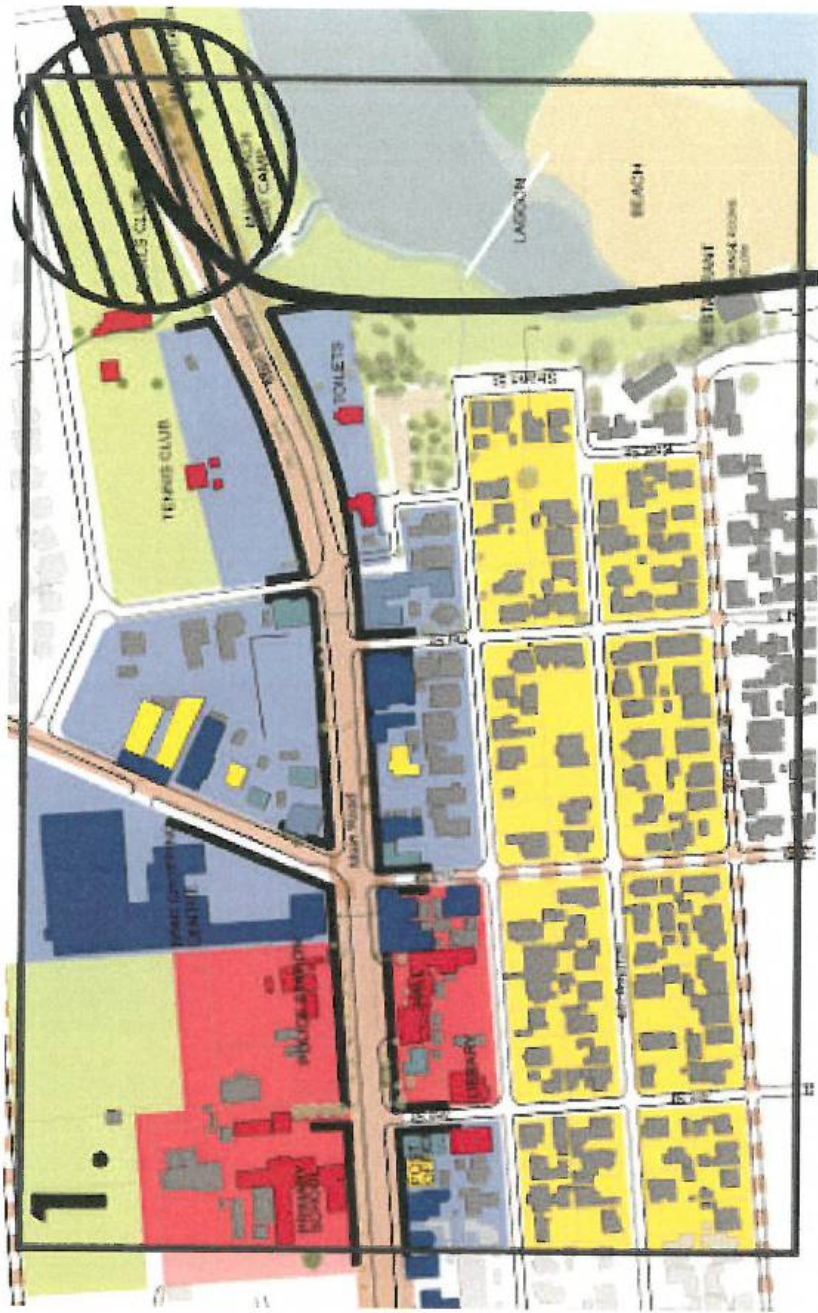


IMAGE 83. ERIKA SENTRUM STREET INTERFACE CONDITIONS



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4.2.2. FOCUS AREA 1

Focus Area 1 should include proposals focussed on:

- Main Road public realm upgrades;
- Consolidating the retail / mixed-use node at the intersection of Botriver Road and Main Road;
- Consolidating the public facilities cluster and tourism node at the lagoon and beach;
- Celebrating the crossing of the river/stream on Main Road; and
- Creating connections to the coast and mountain.



IMAGE 84. ACTIVE STREET FRONTAGE AND SIDEWALK



IMAGE 85. IMPROVED PEDESTRIAN REALM INCLUDING BICYCLE LANE AND TREE PLANTING



IMAGE 86. PAVED PEDESTRIAN CROSSING AND INTERSECTION



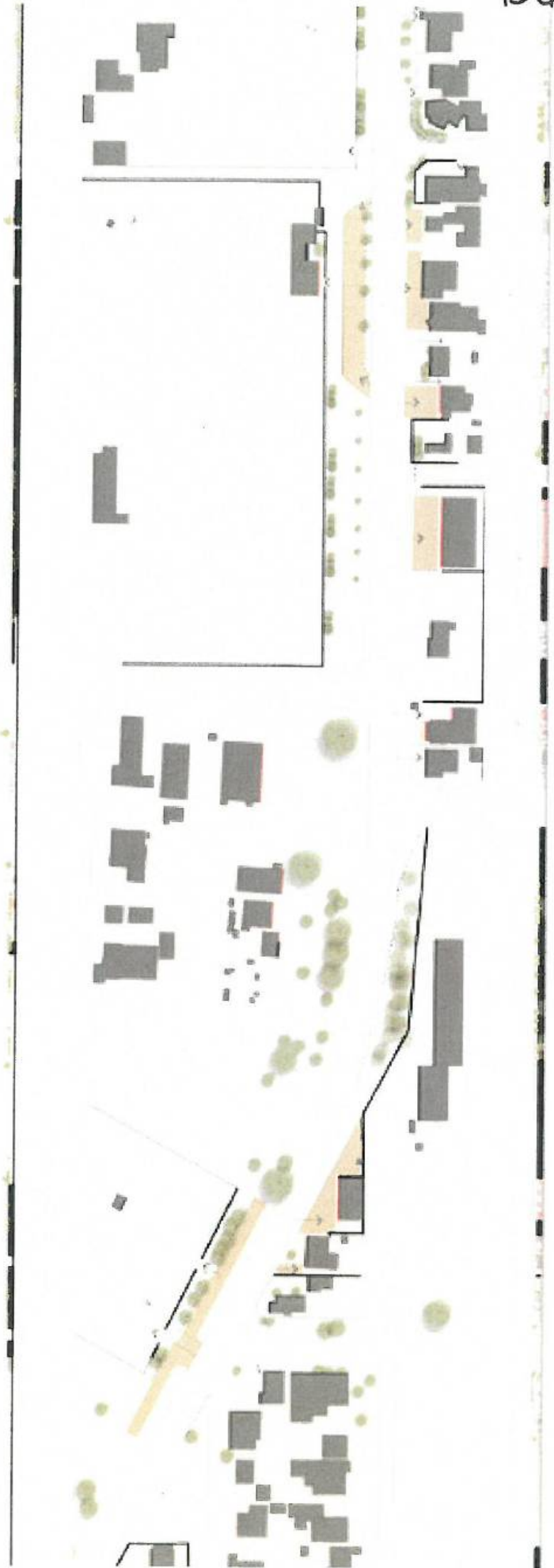
IMAGE 87. IMPROVED PUBLIC REALM ALONG KEY ROUTES

FIGURE 40. FOCUS AREA 1

4.3. BRIEF FOR PHASE 1 FOCUS AREA 2

4.3.1. KEY CHALLENGES & OBJECTIVES

- Poorly marked entrance to Harbour Road precinct from Main Road, with low quality public realm.
- Predominance of residential typology street interfaces and blank walls creates inactive street edge.
- Isolated and unshaded informal trading can be upgraded to create positive connection between Main Road and Harbour Road.



4.3.2. FOCUS AREA 2

Focus Area 2 should include proposals focussed on:

- Main Road and Harbour Road public realm upgrades
- Promoting and activating the emerging retail / mixed-use node at the intersection of Harbour Road and Main Road;
- Consolidating the public facilities cluster on Main Road
- Creating a strong connection between Main Road and the existing Harbour Precinct
- Creating a gateway into the Harbour Precinct
- Celebrating the river/stream crossing on Main Road

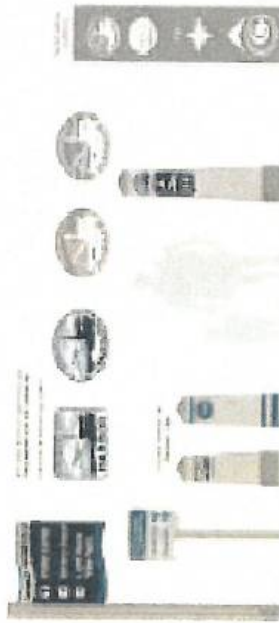


IMAGE 88. FAMILY OF SIGNAGE



IMAGE 89. TREES PROVIDING SHADE

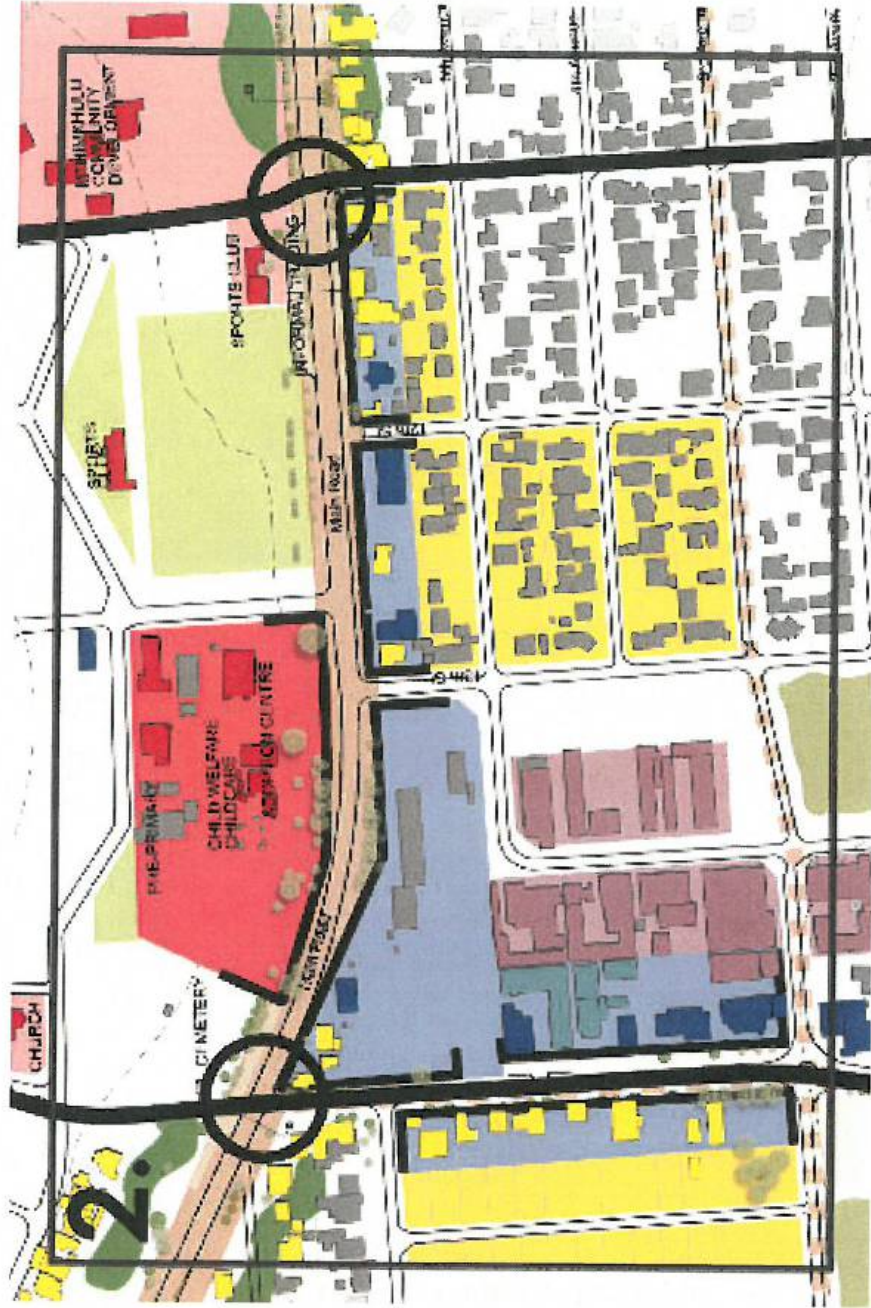


FIGURE 41. FOCUS AREA 2



IMAGE 90. CELEBRATING RIVER CROSSING - LIGHT INTERVENTION



IMAGE 91. CONSOLIDATED ACTIVITY ALONG MAIN ROAD

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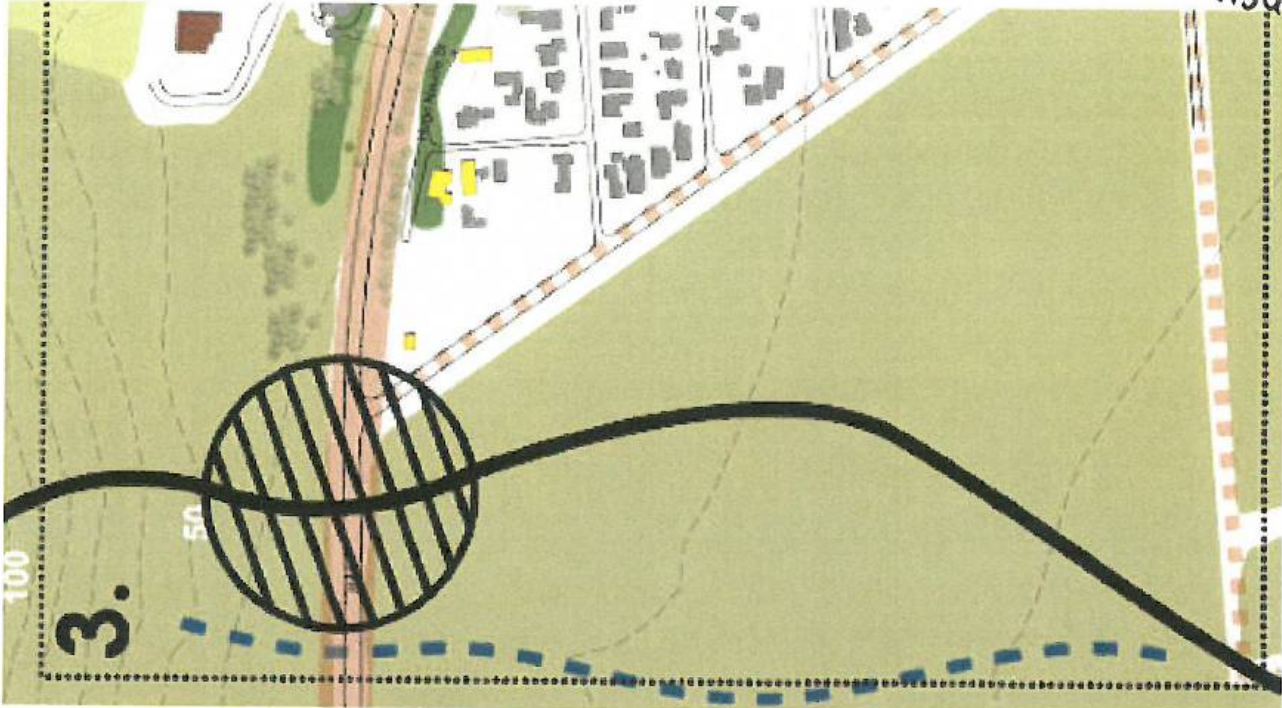
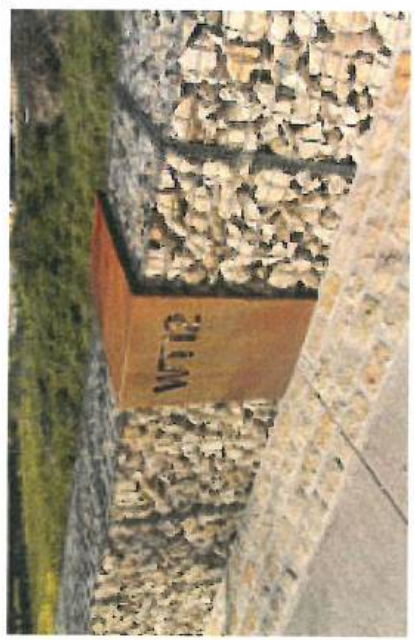


FIGURE 42. FOCUS AREA 3



- 4.4. FOCUS AREA 3**
- Focus Area 3 should include proposals focussed on:
- Creating a gateway and sense of arrival into Kleinmond on Main Road.
 - Main Road public realm upgrades
 - Celebrating the river/stream crossing on Main Road



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4.5. TRANSPORT CONCEPT

The transport concept is shown in the illustration overleaf. The main ideas include:

- Three new pedestrian-friendly, traffic circles. The first at the western gateway into the town allowing for opportunities to easily distribute traffic from Main Road into parallel secondary streets. The second at the Harbour Road and Main Road intersection signalling the entrance to the Harbour Precinct. Third at the intersection of Boitruvier and Main Road proposed to alleviate peak season traffic at this busy intersection. Both traffic circles will be landscaped with clear pedestrian crossing to ensure they are NMT friendly.
- A series of clearly defined pedestrian crossings along Main Road and key points;
- A new bicycle path along the length of Main Road between Hugo Naude Street and Swarttrivier Road. Clear signage, road-signs and markings is very important along this route;
- Public realm upgrades including lighting, tree planting, and landscaping along Main Road and key pedestrian routes throughout the town;
- Improved lighting and safety measure along the pathway from Cemetery to Thirteenth Street or extension of NMT route along the edge of Main Road which will require excavations to existing embankment;
- New formalized access point to the coastal pathway at the end of 7th Street;
- Proposed circular one-way system along Strand and 1st Street to alleviate seasonal traffic;



IMAGE 94. NMT FRIENDLY TRAFFIC CIRCLE



IMAGE 95. CLEARLY MARKED AND PAVED PEDESTRIAN CROSSING



IMAGE 96. SEPARATE PEDESTRIAN PATHWAY AND BICYCLE LANE INCLUDING LANDSCAPING

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- Overflow parking for the coastal pathway within the church parking on 7th Street and the beach and lagoon on the land next to the tennis courts on the north side of Main Road.
- Overflow parking for the lagoon precinct at the sports club.
- Improved under-road pedestrian crossings connecting the new sports precinct at the lagoon to the overflow parking and existing sports club.



IMAGE 92. LANDSCAPED NMT SIDEWALK INCLUDING LIGHTING AND TREE PLANTING



IMAGE 93. DEMARCATED BICYCLE LANE PROTECTED FROM STREET BY LANDSCAPING AND RAISED KERBS



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5. FOCUS AREA PROPOSALS

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5.1. FOCUS AREA 1

Focus area 1 is located on the eastern side of Kleinmond associated with the intersection of Botrivier Road, Main Road and the Lagoon and Beach precinct.

5.1.1. CURRENT CHALLENGES

Focus Area 1 accommodates a range of uses including retail, public facilities and recreational amenities. However there are a number of spatial and functional challenges that are preventing the focus area from reaching its full potential. These are illustrated in the following images and sections

1. Telkom site is currently being used as an informal school bus drop & pick up creating some traffic and safety issues.
2. The car dominance along Main Road is reinforced by the existing public facilities with negative frontages, parking lots along the street edge and buildings set back from the street. There is a lack of activity along these areas and the street remains spatially undefined.
3. During peak times the intersection of Botrivier and Main Roads is congested with a lack of NMT facilities making crossing difficult and unsafe.
4. Strategically located vacant/underutilised, privately owned land contributes to the lack of activity and spatial definition within FA 1.
5. Parking lots in front of buildings along Main Road with no lighting or landscaping contribute to the feeling of car dominance.
6. There is a lack of parking around Lagoon and beach during peak times resulting in people parking on curbs or private land.



IMAGE 97. TELKOM SITE ON MAIN ROAD



IMAGE 100. VACANT LAND ALONG MAIN ROAD



IMAGE 98. WIDE, CAR ORIENTATED MAIN ROAD



IMAGE 101. ERIKA SENTRUM LOCATED ON MAIN ROAD



IMAGE 99. INTERSECTION OF BOTRIVIER AND MAIN ROAD



IMAGE 102. CONGESTED LAGOON AND BEACH PARKING

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BEFORE

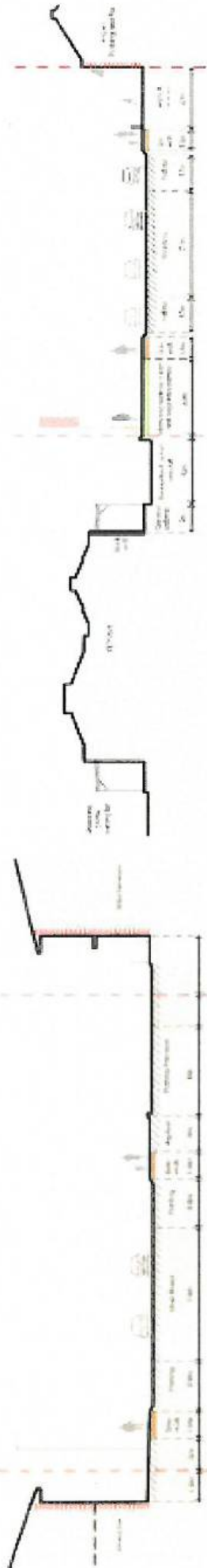


FIGURE 45. FOCUS AREA 1 - EXISTING SECTION H-I

AFTER

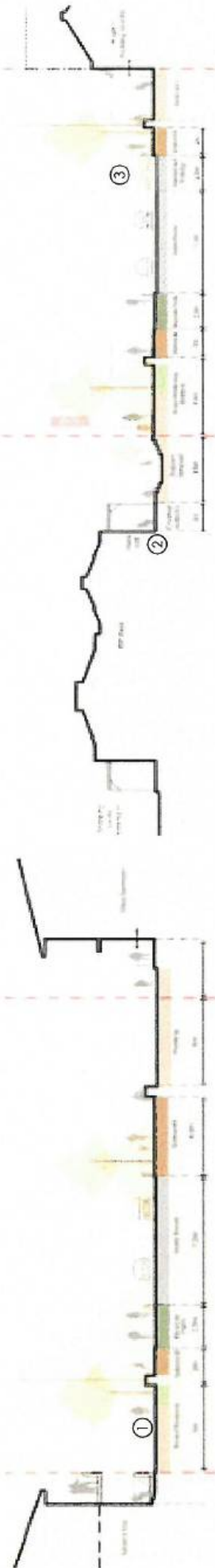
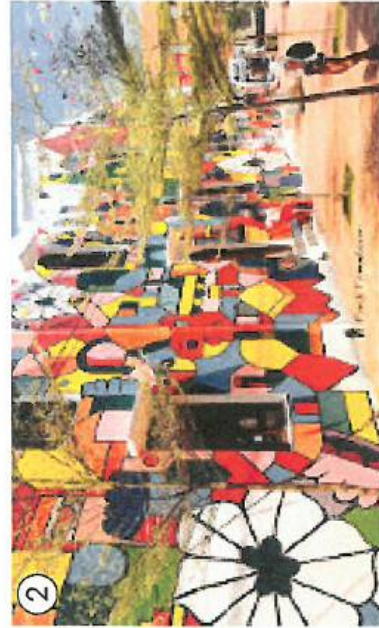


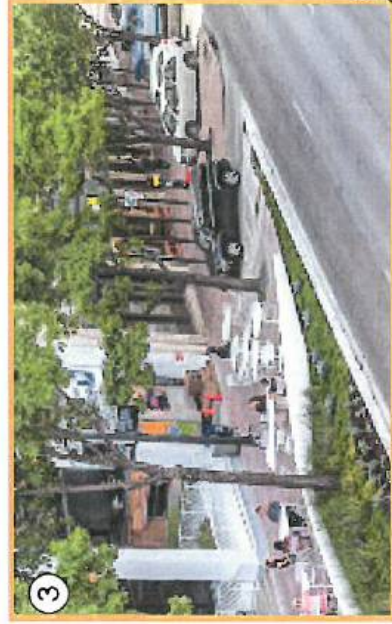
FIGURE 46. FOCUS AREA 1 - PROPOSED SECTION H-I



1. Upgraded public realm along Main Road includes pedestrian sidewalk, 2-way bicycle lane, lighting and landscaping.



2. Mural to activate previously blank/negative building edge



3. Intermittent parallel parking and widened, landscaped sidewalk ensures both cars & people are accommodated.

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5.1.2. PROPOSED SOLUTION

The design solution for Focus Area 1 is shown in in Figure 54 and further illustrated with precedent overleaf. The following solutions are proposed:

- Two options have been considered for the location and configuration of the **school bus stop**. Option 1 the bus travels along 4th Street turning into 8th Street, stops on the school property and loops back onto 4th via 6th Street. The second option proposes a rental agreement with Telkom to continue to use their property and formalise the bus stop. Access is taken straight off Main Road with space on the site for both bus and parent parking. (Detail design of each option is shown in Annexure 1.)



FIGURE 49. OPTION 1



FIGURE 50. OPTION 2

- Public facilities** with positive and active interfaces and landscaped forecourts, activating the streets and spaces they front.
- Properties illustrated in blue identified for **intensification and densification**. Vacant sites to be developed, existing buildings to be retrofitted to include active and positive street facades.

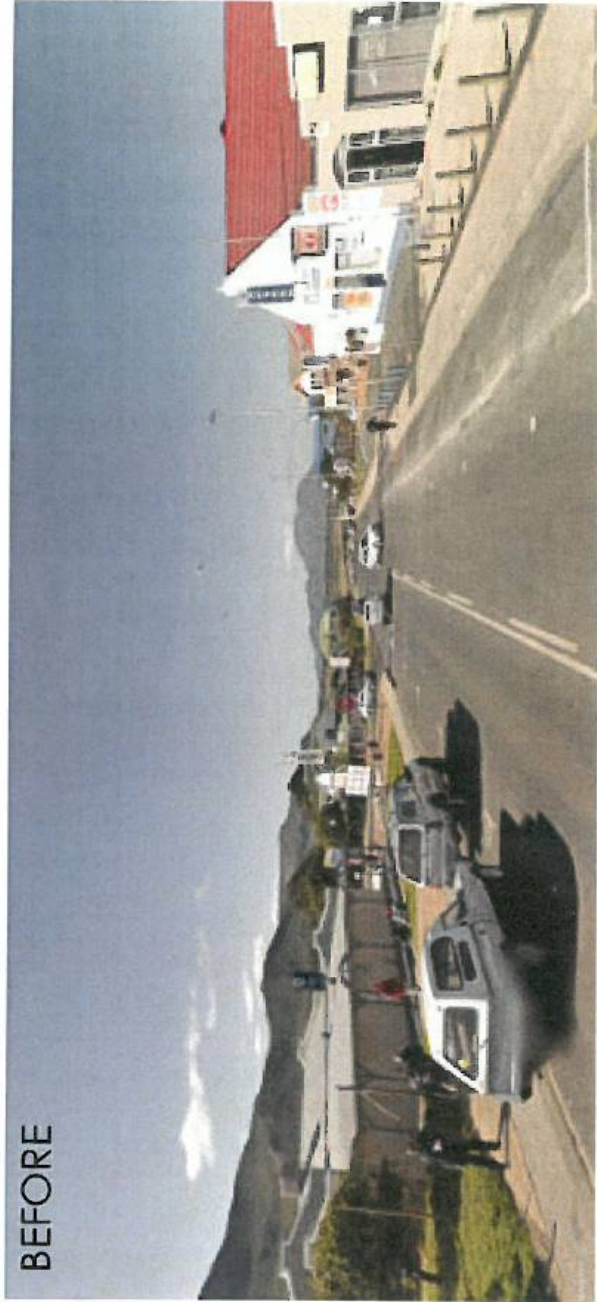


FIGURE 51. FOCUS AREA 1 - EXISTING STREET VIEW

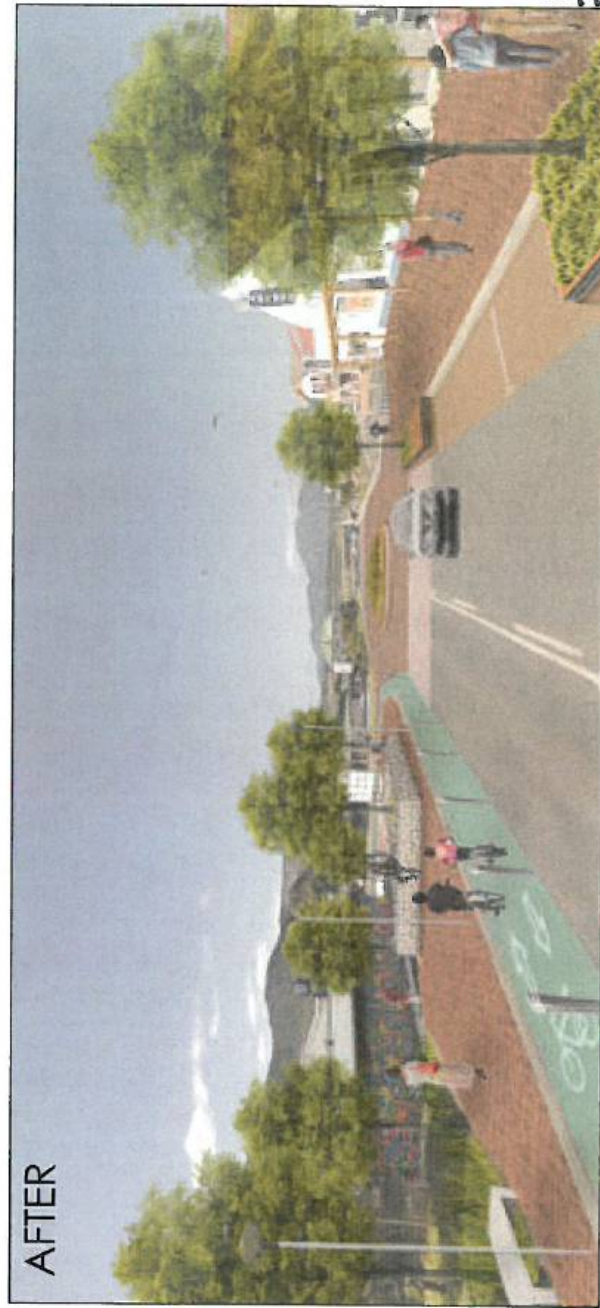


FIGURE 52. FOCUS AREA 1 - PROPOSED STREET VIEW

7. **Retrofit existing buildings** to include active and positive street facades. Existing parking and pavement areas including landscaping, shading and public realm upgrades.
8. **New NMT friendly traffic circle**, paved and landscaped to ease traffic congestion at busy intersection.
9. **Raised and paved** (or initially just painted) **street intersection** of Lagoon St and Main Rd improves pedestrian crossing safety and provides the entry point to the proposed one-way system along Strand Street.
10. **Landscaped overflow parking** for peak periods. New pedestrian crossing creating safe connection across Main Road
11. **New beach sport facility** with spectator seating, low walls defining edge and upgraded toilets. Traffic department moved to Municipal Yard
12. **New market** on leveled & landscaped area. Performance and additional facilities clipped onto existing building overlooking market
13. **Pedestrian underpass** path, formalised and separated from river by gabion wall. Street art indicating under-road river crossing.



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FIGURE 53. FOCUS AREA 1 DESIGN PROPOSAL

5.2. FOCUS AREA 2

Focus area 2 is centrally located along Main Road at the intersection of Harbour, Main Road and the Harbour precinct.

5.2.1. CURRENT CHALLENGES

The current challenges associated with Focus Area 2 are described in the text below and illustrated in the following images and drawings overleaf.

1. Undefined entrance to the Harbour Precinct from Main Road. Wide road with no NMT facilities or spatial definition created by development.
2. Lack of definition along the southern portion of Harbour Road with predominantly 1 storey buildings setback from the street edge by 10m
3. Underutilised public park with a water course from the mountain to the sea running through it
4. Neglected canalised mountain to sea river located along the edge of the underutilised Municipal Yard and private vacant land on 13th Street.
5. Lack of spatial definition and activity along Main Road: Large strip of Municipally owned vacant land along edge of sports club and opposite buildings set back from street with parking in-front.
6. Wide street section including underutilised informal trading area in-front of sports club on Main Road.



IMAGE 103. ENTRANCE TO HARBOUR PRECINCT



IMAGE 104. HARBOUR ROAD WITH LARGE BUILDING SETBACK



IMAGE 105. UNDERUTILISED AND UNDER-CELEBRATED PUBLIC PARK



IMAGE 106. MUNICIPAL YARD AND VACANT LAND ON 13TH STREET



IMAGE 107. UNDEFINED MAIN ROAD



IMAGE 108. INFORMAL TRADING AREA ON MAIN ROAD

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FIGURE 54. FOCUS AREA 2: CURRENT CHALLENGES

BEFORE



FIGURE 55. FOCUS AREA 2 - SECTION D-D



FIGURE 57. FOCUS AREA 2 - SECTION E1-E1

AFTER



FIGURE 56. FOCUS AREA 2 - PROPOSED SECTION D-D

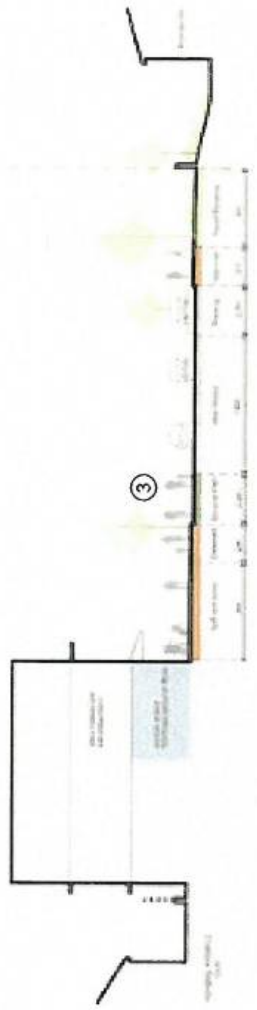


FIGURE 58. FOCUS AREA 2 - PROPOSED SECTION E1-E1



1. Upgrade and expand park along the Mountain to Sea Greenway path on 13th Street. River crossing highlighted with street art.



2. Small, gateway traffic circle with landscaping and signage creating a sense of arrival into the harbour precinct



3. Upgraded public realm along Main Road includes pedestrian sidewalk, 2-way bicycle lane, lighting and landscaping.

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5.2.2. PROPOSED SOLUTION

The design solutions for Focus Area 2 are shown in Figure 62 and further illustrated with precedent, street sections and views. The following solutions are proposed:

- 4. **Development & intensification of Municipal Yard** accommodating relocated Traffic Department and Emergency Services. Buildings must provide positive interface to the street and Mountain to Sea Greenway
- 5. **Mixed-use development on vacant land along 13th Street** - transition zone between industry to the West and residential to the East



FIGURE 59. FOCUS AREA 2 - EXISTING STREET VIEW

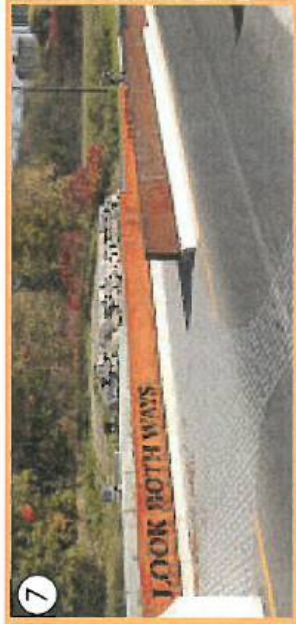


FIGURE 60. FOCUS AREA 2 - PROPOSED STREET VIEW

6. **Weekend market** on landscaped parking court above existing pipeline. Existing market moved to this location.



7. **Language of low walls, paving and landscaping** to define space, announce entrance and street crossing.



8. **Extension of existing Harbour Road landscape and reconfiguration** from Luckhoff Street to Main Road

9. **Infill, mixed use development** creating defined and active edge along Main Road.



10. **Intermittent parallel parking** and widened, landscaped sidewalk ensures both cars & people are accommodated.



11. **Multi-purpose, landscaped parking forecourt** defined by low walls



12. **Landscaped parking forecourt along southern portion of Harbour Road** and widened, landscaped sidewalk ensures both cars & people are accommodated along Main Road



13. **Positive development interface** fronting onto Mountain to Sea Greenway swale system and footpath.



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FIGURE 61. FOCUS AREA 2 DESIGN PROPOSAL

5.3. FOCUS AREA 3

Focus area 3 is located at the western entrance to Kleinmond at the intersection of Main and DF Malherbe Roads.

5.3.1. CURRENT CHALLENGES

The current challenges associated with Focus Area 3 are described in the text below and illustrated in the following images and drawings overlaid.

1. Undefined western entrance into Kleinmond, lacks of sense of arrival
2. Strategically located vacant/underutilised land contributing to lack of activity and spatial definition
3. Car dominant Main Road with no NMT facilities
4. Lack of activity and definition along Main Road; properties have blank walls or fencing and buildings are set-back from the street edge.

5.3.2. PROPOSED SOLUTION

The designs solutions for Focus Area 2 are shown in Figure 69 and further illustrated with precedent, street sections and views. The following solutions are proposed:

1. **Positive street interface.** Buildings must provide positive interface to the street and create a defined and active edge along DF Malherbe Road.
2. **New housing development on Main Road** with positive and active interfaces and landscaped



IMAGE 109. MAIN ROAD VIEW - WESTERN ENTRANCE TO KLEINMOND



IMAGE 111. MAIN ROAD



IMAGE 110. VACANT LAND



IMAGE 112. BLANK WALLS FACING MAIN ROAD



FIGURE 64. FOCUS AREA 3 CURRENT CHALLENGES



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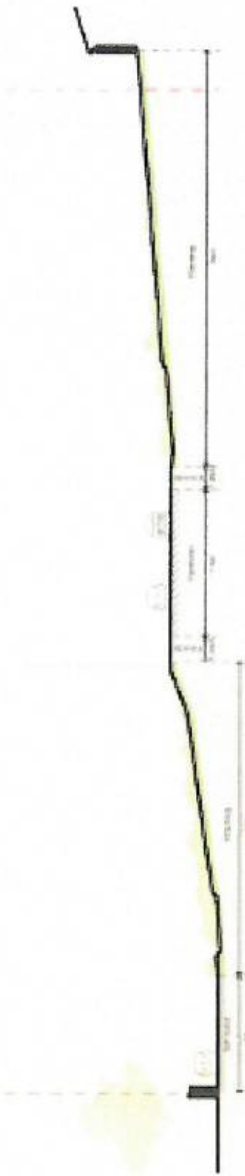


FIGURE 62. FOCUS AREA 3 - EXISTING SECTION A2-A2

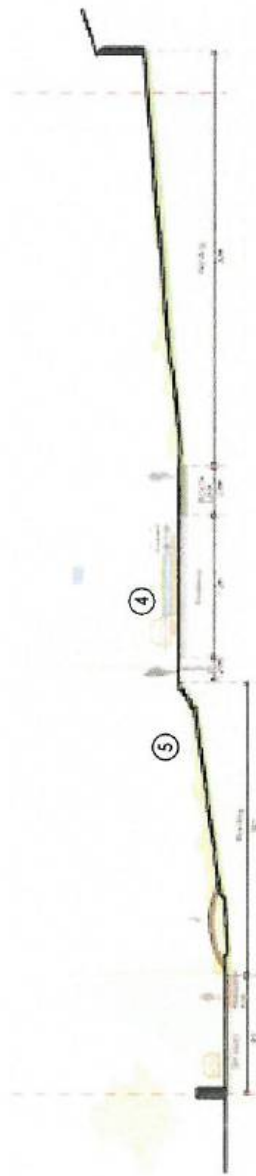
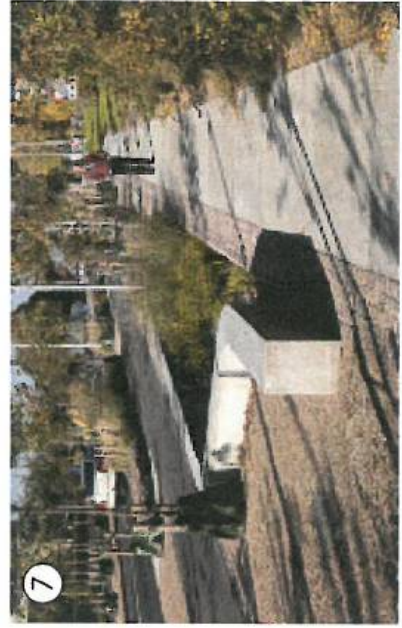


FIGURE 63. FOCUS AREA 3 - PROPOSED SECTION A2-A2



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entrances, activating the streets and spaces they front.

3. **Properties illustrated in blue identified for intensification and densification.** Vacant sites to be developed, existing buildings to be retrofitted to include active and positive street facades.

4. **Raised and paved traffic circle** at intersection of DF Malherbe Rd and Main Rd provides the entry point into the town allowing for opportunities to easily distribute traffic from Main Road into parallel secondary streets. Includes signage and landscaping.

5. **Level changes** alongside Main Road are mitigated by gabion/stone walls and natural planting - the landscape language used throughout the town

6. **Positive development interface** fronting onto Main Road storm water system and landscaping.

7. **Upgrade public realm** - Low edge defining walls and sustainable urban drainage alongside paved sidewalks

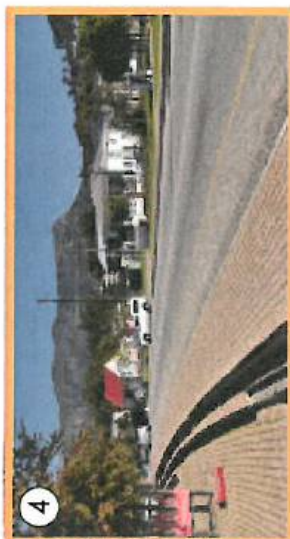


FIGURE 65. FOCUS AREA 3 DESIGN PROPOSAL



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6. ANNEXURE 1: TRAFFIC & TRANSPORT PLANNING

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6.1. STREET NETWORK AND HIERARCHY

The Kleinmond street network is testament to the town's development through the past century. The grid pattern of the first permanent settlement can be seen in the area south of Main Road, between the Kleinmond lagoon and the harbour precinct. The layout of later neighbourhoods, like those north of Main Road, between Botrivier Road and Eleventh Street, were also based on a grid pattern, but with larger street blocks and some short links and cul-de-sac breaking the pattern. The area west of the harbour precinct has a similar street layout. Due to the grid pattern, the street networks in these areas have many intersections with Main Road: some spaced rather closely. While conventional transport planning focuses on the disadvantage of additional delays caused by such a multitude of intersections on a through road, there is another school of thought that accentuates the advantage of traffic being dispersed through a grid pattern, which means that the number of intersections may be high, but the traffic volume on each side street is low. In such a case, the delays for right turning vehicles on the through road should also be low.

Neighbourhoods that were added later, like Heuningklouf and Overhills, have looped street networks with a single access point on the main road leading to a ring road and smaller loops serving the properties. These layouts are less permeable, but the fewer intersections support mobility on Main Road.

The main disadvantage of such a patchwork of street network types is that there are no streets other than Main Road that provide a continuous route from east to west. Different neighbourhoods

can be distinguished based on street network patterns. By drawing in the links between the different neighbourhoods, some form of hierarchy emerges. It is not suggested that the status of linking streets should be changed, but care should be taken to at least keep these links open so that not all inter-neighbourhood traffic is forced onto Main Road.

6.2. MAIN ROAD

Kleinmond Main Road was investigated as part of the 2012 Overstrand Transport Masterplan. The focus of the Masterplan was on measures that would ensure mobility on the R44 and R43 that run through most of the Overstrand towns. The multitude of intersections and individual erf accesses on Kleinmond Main Road (R44) do pose a threat to mobility and therefore proposals were identified that would reduce the impact thereof. One measure to decrease delays on a through road is to minimise the number of right turn or U-turn movements. Towards this end, the Masterplan proposed the provision of a kerbed median island along the centre of Main Road, with median breaks provided at selected intersections only. Roundabouts were proposed at intersections with side streets of higher importance, such as DF Malherbe Road and Botrivier Road - which would also serve to create a sense of arrival - as well as Harbour Road.

The provision of a median island has the advantage of serving as a refuge for crossing pedestrians and can also be landscaped to provide some greenery and vertical elements to an otherwise wide and featureless road cross-section that is conducive to speeding. The disadvantage is that the paved shoulder / parallel

parking on at least one side of the road would have to be sacrificed to create space for the median.

Main Road in its current configuration will have sufficient capacity to carry traffic at reasonable service levels of the foreseeable future and the improvements suggested in the Masterplan will only be required when delays increase to an extent where mobility is impeded. The focus can therefore be placed on other modes (pedestrians and cyclists) and different aspects (greenery, aesthetics) in the short to medium term. These improvements do, however, need to be compatible with the future planning for the road.



IMAGE 113. PAVED PEDESTRIAN CROSSING WITH MEDIAN TO
REDUCE CROSSING LENGTH

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6.3. IMPORTANT INTERSECTIONS

Main Road / Botrivier Road / Second Avenue: This is the intersection with the worst service level on Main Road. Two options were investigated to reduce delays and improve service levels. The first was to remove stop control from Main Road, which carries a far higher traffic volume than the side streets. The disadvantage of this proposal would be that pedestrians would have to wait for safe gaps in the Main Road traffic stream before crossing. The preferred solution is to provide a roundabout with pedestrian crossings on all four approaches. This will improve service levels for vehicular traffic while still providing a safer crossing opportunity for pedestrians. Other advantages of a roundabout are that it doesn't cause unnecessary delays during the off-peak; it is maintenance free (except for landscaping); it is not dependent on the power network; and there are fewer conflict points than at a regular four-legged intersection, making it safer for vehicles.

Main Road / Harbour Road: The entrance to Harbour Road is signposted, but despite this fact it is not immediately apparent to a motorist that it is an important turnoff. The acute angle (less than 90 degrees) between Main Road East and Harbour Road means that westbound motorists essentially look past the intersection when approaching and not into the side street. The signage pylon is set back from Main Road and looks more like it is part of the property on the south-western corner than a sign directing traffic towards a tourist destination. One option would be to provide a roundabout here also, as it would force traffic to slow down and take in the surrounds, including the signage. Another option would be to provide tourism signs on the south-western corner directing traffic towards a tourist destination.

6.4. PEDESTRIANS AND CYCLISTS

An unfortunate legacy of earlier spatial planning policies is that the lower income, higher density neighbourhoods – where private vehicle ownership is also low – are located at the western end of the town, while the commercial hub is located towards the eastern end. The consequence is that many residents walk between the western and eastern ends of Main Road. There are surfaced sidewalks on both sides of Main Road from Thirteenth Street to First Street and a surfaced walkway between Abalone Street and the cemetery. A paved footpath with a pedestrian bridge across the stream runs about 30 metres north of Main Road, linking the walkway at the cemetery and the Main Road sidewalk starting just before Thirteenth Street. The footpath is well used, but may be unsafe after dark as it is not visible from Main Road or Nemesia Avenue. It was also noted that some pedestrians prefer to walk along Main Road's paved shoulder. See images 100 and 101. The extension of the Main Road sidewalk to the termination of the walkway at the cemetery may be costly, because the ground directly north of the road is at a higher level than the road which means that excavations will be required to fit in a sidewalk. The exercise should however be considered, as it would benefit a large number of Kleinmond residents.



IMAGE 114. PEDESTRIAN FRIENDLY TRAFFIC ROUNDABOUT WITH PEDESTRIAN CROSSINGS ON ALL FOUR APPROACHES



IMAGE 115. PAVED PEDESTRIAN CROSSING WITH KERB BUMP OUTS TO REDUCE CROSSING LENGTH



IMAGE 116. PEDESTRIAN WALKWAY FROM CEMETERY TO THIRTEENTH STREET. NOTE BRIDGE ACROSS THE STREAM



IMAGE 117. PEDESTRIAN PREFERRED TO WALK ALONG MAIN ROAD RATHER THAN FOOTPATH 30 METRES NORTH

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traffic along First Street. Changing the upper part of First Street from a southbound to a northbound one-way will be most significant adjustment. The proposed changes are shown in Figure 45.

6.5. ACCESS TO THE RECREATIONAL AREA AT THE LAGOON

provision of an exclusive cycle lane along Main Road should be considered.

Another pedestrian hot spot that requires attention is where people cross Main Road in the vicinity of Lagoon Street. It is proposed that a pedestrian crossing should be provided on Main Road just east of Lagoon Street. This location is preferred, because there are fewer vehicles turning from Lagoon Street onto Main Road Eastbound, than turning onto Main Road Westbound, which means that the probability of vehicle / pedestrian conflict will be less.

The July 2018 Overstrand Sustainable Transport Plan identified Ninth Avenue / Heide Street / Protea Road / Nemesia Avenue route as another important east - west link for pedestrians. There is a sidewalk along Nemesia Avenue to J Singleton Street, but nowhere else along the route. See image 103. Future road upgrades on these streets should include the provision of a paved sidewalk.

A significant number of cyclists – both recreational and commuter – ride along Main Road, either on the paved shoulder (yellow line) or on the sidewalk. The former is preferable, but parallel parking obstructs the lane at some points. Riding on the sidewalk may be safer for the cyclist, especially slower cyclists, but poses a hazard to pedestrians. Providing a dedicated cycle lane along the Main Road will also improve the sterile feeling of Main Road. It is suggested that the



IMAGE 118. DEDICATED BICYCLE ROUTE

6.6. ACCESSING THE COASTAL FOOTPATH

The coastal footpath runs from the parking area at the lagoon mouth eastwards along the top of the cliffs and rocks to the harbour. Formal pedestrian entry points are located:

- at the lagoon parking area,
- near the eastern end of Beach Road, where cars use the turning circle at the end of the street as informal parking area;
- at the southern end of Second Street;
- near the southern end of Third Street, where there is a formal parking area;
- at the southern end of Fourth Street;
- near the southern end of Eleventh Street;
- off Lower Beach Road

In addition, there are a number of informal entry points between Sixth Street and Eleventh Street. Parking is available at the locations mentioned above, as well as at the harbour precinct where the footpath terminates. Official entry points are marked with information signs. The provision of tourism signs on Beach Road, showing formal pedestrian access points and parking areas will help to make the footpath more obvious. Dedicated parking for the coastal path is limited, but there is little room for additional formal

The streets and accesses serving the parking areas along the lagoon are rather confusing to the uninitiated driver, with a number of loops and one-way streets. During December holiday periods, motorists also park along these access roads, making navigation even more tricky. Traffic is currently directed in a roughly circular pattern, with inbound traffic travelling mostly in a southerly direction on the streets nearest to the lagoon, and returning northwards via First Street and Second Street. The streets near the lagoon area are rather narrow (5,5 metres or less), making it difficult to accommodate two-way traffic in addition to parked cars. It is suggested that the existing one-way system should be expanded to a parallel one-way system, with southbound traffic along the streets along the lagoon and northbound

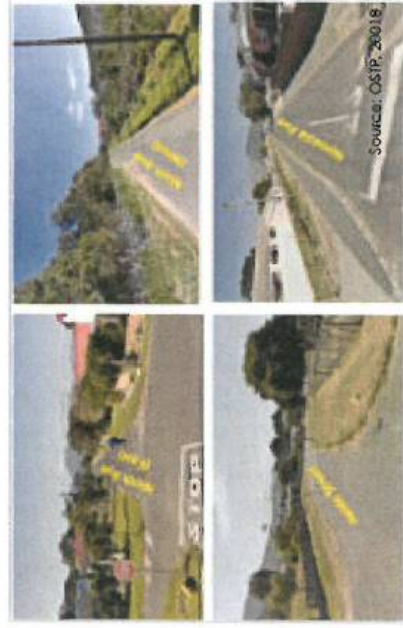
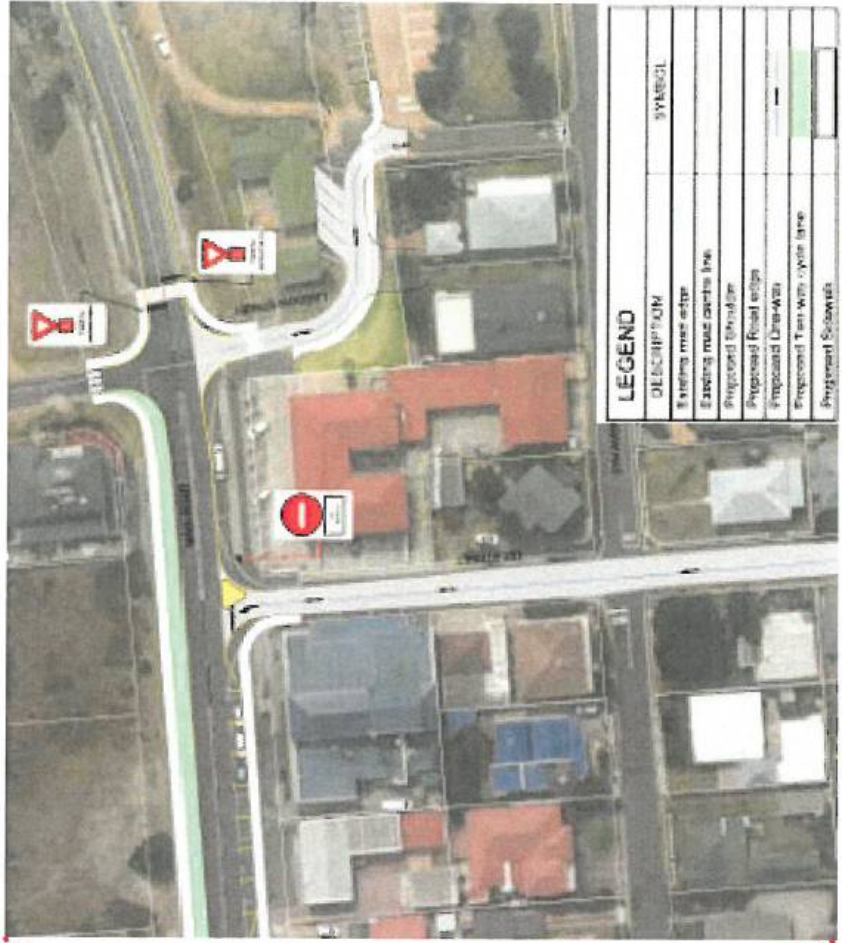


IMAGE 119. SECONDARY EAST-WEST ROUTE USED BY PEDESTRIANS



LEGEND	SYMBOL
Two way two lane road	[Brown line]
One way one lane road	[Yellow line]
Direction arrow	[Arrow]



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parking areas. The municipality may want to discuss the utilisation of the church parking areas in Third Street and Third Avenue for hikers and beach goers when it is not being used for church-related purposes. The churches may benefit by charging a parking fee during peak seasons.

FIGURE 66. PROPOSED FLOW DIRECTION AT LAGOON PRECINCT

04/13/21

7. ANNEXURE 2: RECORD OF STAKEHOLDER ENGAGEMENT

7.1. PHASE 3 STAKEHOLDER COMMENTS ON TOWN CONCEPT, ANALYSIS AND FOCUS AREA IDENTIFICATION - 20 MAY 2021

“share your comments and ideas”

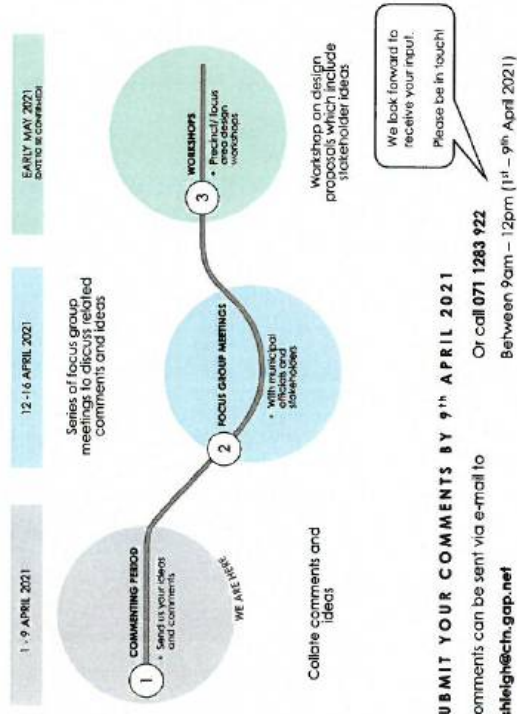
Kleinmond CBD Upgrading Plan

Project Update:

In 2019 Overstrand Municipality initiated a planning process for the upgrading of Kleinmond CBD focusing on the character and economic prospects of the town, with an emphasis on Main Road. The purpose of the plan is to confirm the town's long-term vision and to identify and design the first phase projects for implementation. Following activity and traffic field surveys in 2019, the team mapped the issues and engaged with the ward committee and officials to confirm the main issues and vision for the CBD. Three first phase focus areas were identified at a stakeholder workshop in November 2020. The team is now in the process of developing proposals for the selected focus area.

Engagement Process:

Over the next 2 weeks we invite you to share your comments and ideas on both the draft document and future proposals for each focus area. The diagram below illustrates the engagement process going forward.



KLEINMOND CBD URBAN UPGRADE: Phase 3 Stakeholder Comments on Town Concept, Analysis and Focus Area Identification

COMMENTING BODY / INDIVIDUAL	COMMENT
Mike Botha – On behalf of Kleinmond Beach Sport Association	<ol style="list-style-type: none"> Area between 2 ablation blocks on main beach/lagoon to be demarcated for beach sport venue (volleyball, beach badminton and beach netball) Desmond Lakey from OM approved proposal (7th April) Includes: <ul style="list-style-type: none"> Levelling of terrain Securing area with edge treatment (wall/curbs) Small pavilion lockers and storage Upgrading of existing ablation block Landscaping Moving of Traffic offices
Mike Botha – as individual	<ol style="list-style-type: none"> Does not support moving bowls and tennis club – high risk for image of town, fear of invasions, no guarantees for future development Current soccer and netball complex should not be transferred – political history of facility must be respected, close to many players and 2 schools. Rather be upgraded and developed (pavilions and more facilities needed) Upgrade the trading post and fresh product marketplace on Main Street – approach province for authorization and financial support, been in IDP for years, find alignment with new policy for informal traders, eye-sore on Main Rd Include a multi-functional auditorium for the town – facility to host cultural events (town hall not sufficient) Insufficient parking around beach/lagoon during peak season – require 100 parking places, identify parking areas for busses and taxis New housing opportunities on the southern side of the R44 near the beach to raise funds for other projects
Tamzyn Zweig – Overstrand Municipality – Environmental Management Section (EMS)	<ol style="list-style-type: none"> Request for a skateboard park and BMX track between two ablation blocks at main/lagoon beach (area is suitable and less likely to require EIA) The EMS does not support the relocation of Municipal Precinct within Kleinmond Mountain and Coastal Nature Reserve.

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FIGURE 67. ENGAGEMENT FLYER

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<p>3. Extension of coastal footpaths may trigger a NEMA EIA process (Regulation Listed Activities) and require authorisation from DEA DP.</p>	<p>1. Opposed to moving the existing sports precinct to Golf Course area. More affordable to upgrade precinct and expand into Mthimkulu Complex</p> <p>2. Support 2 traffic circles at entrances to town</p> <p>3. Support a third circle going into Harbour Rd with prominent signage to Harbour</p> <p>4. Proposes moving the existing casual taxi rank in front of Pep at Spar to a more formal rank sited in the Spar rear parking area</p> <p>5. Support cycle paths and upgrading of Main Road</p>
<p>Shane Alberts</p>	
<p>Councillor Grant Cohen</p>	<p>1. Supports the idea for sports at the beach front area</p> <p>2. Highlights need for more parking during peak times</p> <p>3. Suitable project for the day camp needs to be implemented e.g. accommodation for hire on the lagoon, a water park or market.</p> <p>4. Improve walkway under R44 to connect sports areas on either side.</p> <p>5. Move Traffic and Law Enforcement offices to the current Municipal Yard as well as the Disaster Management Centre. Yard can then also be used for Learners and Driver's license testing (attractor of visitors to town)</p> <p>6. Need to identify a site for a new auditorium venue. Perhaps also upgrade town hall and increase capacity</p> <p>7. Support Main Road public realm upgrades</p> <p>8. Some form of traffic calming at entrance to town near ABSA building required</p> <p>9. Parking lot at Spar needs attention</p>

SUMMARY OF KEY COMMENTS:

General:

1. Support for bicycle lanes and Main Road public realm upgrades.
2. No support for moving and consolidating sports and municipal facilities at proposed locations.
3. Town requires new multi-functional auditorium space with capacity bigger than the town hall – Location unknown

Focus Area 1: East Main Road, Lagoon and Beach

1. A sports/recreation element should occur on the land between the two ablution facilities at the main beach / lagoon area (either skatepark or beach sports activities) – **NOTE** Mike Botha received approval from Desmond Lakey (Senior Manager Kleinmond Administration for beach sport proposal 7th April) while Tamzyn Zweig's comments (23rd April) referred to a skateboard park.

2. Move the traffic offices from this area to Municipal Yard to free up land and create a node for tourism and recreation at the beach/lagoon
3. Insufficient parking around beachfront during peak times
4. Spar parking lot needs a rethink – move informal taxi rank to parking at rear of Spar
5. Suitable project for the day camp needs to be implemented e.g. accommodation for hire on the lagoon, a water park or market
6. Improve walkway under R44 to connect sports areas on either side
7. Traffic calming at Bothvier Road and/or Lagoon Street

Focus Area 2: Harbour Rd Entrance and Central Main Road

1. Upgrade current market on Main Road
2. Traffic calming and prominent signage at entrance to town especially at Harbour Road
3. Traffic offices and Disaster Management Centre to be relocated to Municipal Yard to create traffic transport node e.g. testing centre and learners area

Focus Area 3: West Town Entrance

1. Traffic calming and prominent signage at entrance to town
2. The EMS does not support the relocation of Municipal Precinct within Kleinmond Mountain and Coastal Nature Reserve.

7.2. OM AND WARD COMMITTEE REVIEW OF PRECINCT PLANS - 28 JUNE 2021

KLEINMOND CBD URBAN UPGRADE: OM and Ward Committee Review of Precinct Plans

	COMMENT
General	<p>Main Ideas:</p> <ul style="list-style-type: none"> • How to refresh Kleinmond CDB – bring it to the same standard as neighbouring towns • Upgrading NMT, landscaping, addressing interface of buildings, create opportunity through development on Main Rd, transport upgrades • Creating connection between Mountain and coastline • Kleinmond – a place where you can trail run/ mountain bike (bring tourist into the town) <p>Municipal Precinct (in FA3):</p> <ul style="list-style-type: none"> • Due to environmental issues Municipal precinct is not ideal in Focus Area 3, New Proposed location – by golf course <p>The Proposals deal with three key types of interventions:</p> <ol style="list-style-type: none"> 1. Short- and medium-term implementation in the public realm 2. Guidelines for private development (existing and vacant sites) 3. Land redevelopment concepts for municipal owned land
Focus Area 1	<ul style="list-style-type: none"> • Many places where level changes – introduction of consistent language throughout the focus areas through gabion walls, signage, street art and landscaping interventions • Faisal Fakier: Referring to Peak season – can Kleinmond cope during these times? Would residents be happy with (traffic) proposals all-year round.

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1

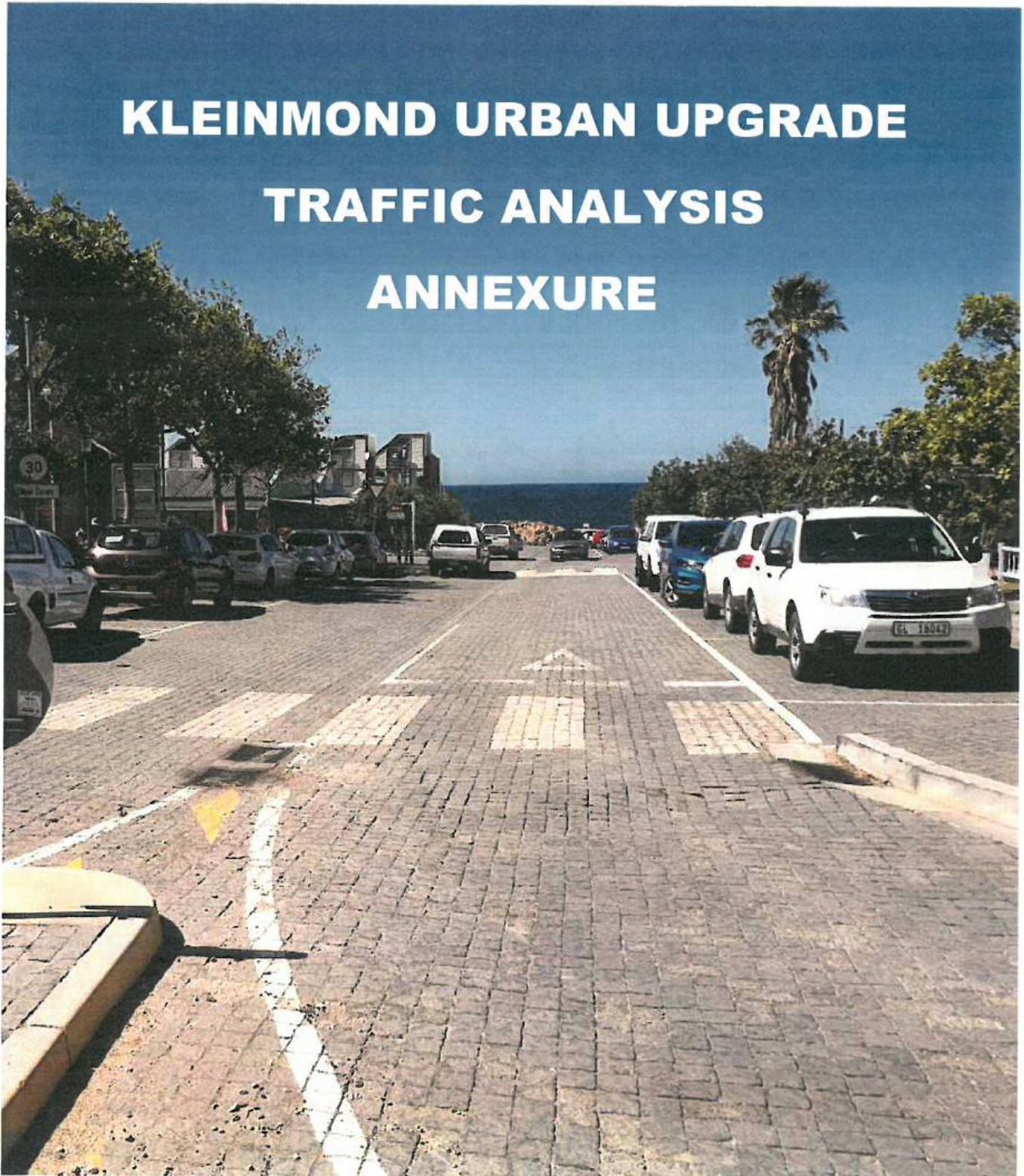
Focus Area 2	<p>Proposals:</p> <ol style="list-style-type: none"> 1. Extend Habour Rd Upgrade language up towards Main Rd 2. Transport intervention – circle creates gateway into the town with gabion walls on either side of road with signage 3. Connection from mountain side housing through park (no. 1) down to coastline <p>Dennis Hendriks: Green space between Adoption Centre and road (proposal has been made for housing)</p> <p>Number 7 (on proposed solution plan) – rock wall currently being built</p>
Focus Area 3	<ul style="list-style-type: none"> • Undefined spatially • Blank facades and dead edges <p>Proposals (to create stronger sense of character, formalise existing features, clear signage (including signage to indicate nature reserve)</p> <ol style="list-style-type: none"> 1. Creating defined edges 2. Landscaping 3. Traffic intervention – traffic circle at intersection of Main Rd and H(with signage) 4. Density existing building <p>(Relocating Municipal Precinct)</p>

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KLEINMOND URBAN UPGRADE

TRAFFIC ANALYSIS

ANNEXURE



Client:
Overstrand Municipality
16 Paterson Street,
Hermanus
028 313 8900



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GAPP architects and urban
designers
150 Longmarket Street,
Cape Town
021 424 2390



Traffic Engineers:
Deca Consulting Engineers
7 Patterson Street,
Hermanus
028 312 2292



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DRAWING INDEX

Figure 1: Affected intersections along the corridor

Drawing D371/TP01/01: Transport Town Concept – Option 1 (adjusted from the *Overstrand Transport Master Plan*)

Drawing 5: Kleinmond to Hawston (from the *Overstrand Transport Master Plan*)

Figure 2: Existing 2019 AM and PM peak hour traffic volumes and level of service

Figure 3: Existing 2019 10-hour pedestrian volumes

Drawing D371/TL01/01: Neighbourhoods and important transportation links

Drawing D371/AREA01/01: Focus Area 1 – Proposed Road Network

Drawing D371/AREA01/02: Focus Area 1 – Proposed Road Network

Drawing D371/AREA01/03: Focus Area 1 – Proposed Botrivier Road / Main Road / 2nd Street Traffic Circle

Drawing D371/AREA01/04: Focus Area 1 – Proposed bus waiting area – Option 1

Drawing D371/AREA01/05: Focus Area 1 – Proposed bus waiting area – Option 2

Drawing D371/AREA02/01: Focus Area 2 – Proposed Harbour Road / Main Road intersection Option 1

Drawing D371/AREA02/02: Focus Area 2 – Proposed Harbour Road / Main Road intersection Option 2

Drawing D371/AREA03/01: Focus Area 3 – DF Malherbe Street Layout

1. BACKGROUND

The Kleinmond Urban Upgrade study was commissioned by Overstrand Municipality to create a framework plan outlining development possibilities for the greater Kleinmond and then zooming into more detail for three focus areas as identified by the community stakeholders. The three focus areas that were identified include: The Lagoon Precinct (eastern entrance to Kleinmond), Harbour Road Precinct (biggest tourist node) and DF Malherbe Street Precinct (western entrance to Kleinmond).

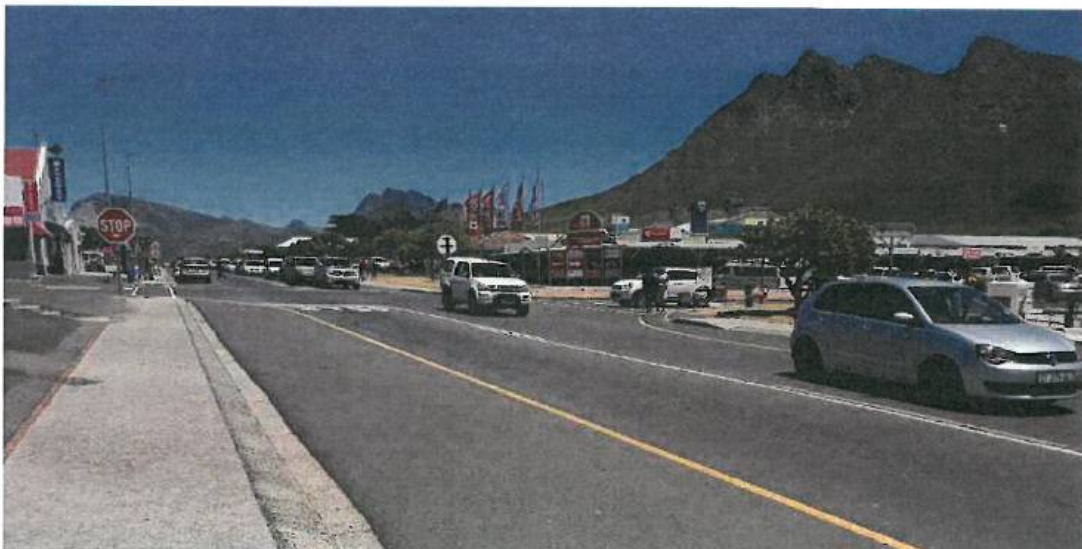
Deca Consulting Engineers were appointed to investigate the transport-related challenges within these focus areas and propose solutions that will fit in with the landscaping and urban design objectives that will optimise pedestrian and non-motorised transport and create a Kleinmond that is safe and development friendly.

This annexure reports on the investigations and proposed improvements from the traffic point of view and was incorporated into the Kleinmond CBD Upgrading Plan compiled by *GAPP Architects and Urban Designers*.

2. PROBLEM STATEMENT

Kleinmond is another of South Africa's most visited summer holiday destinations and holds within it a lot more natural beauty and potential than just the white beach, lagoon and generations of holiday houses. The problem with Kleinmond currently is that the street network is testament of the town's development throughout the past century with mainly a grid pattern and Main Road as a 'central spine' so to speak. The problem with such a street network is that there are no streets other than the 'central spine' that provide a continuous route from east to west, which leads to congestion on this 'central spine'. Because the Main Road becomes the quickest and most appealing route for motorists it becomes unfriendly for pedestrian and other modes of non-motorised transport and it causes a monotonous look with vehicle dominated areas. See **Photo 1**.

Photo 1: Vehicle dominated Main Road



The Main Road through Kleinmond is classified as a Minor Arterial (Class 3) and its main function is mobility, but since it also forms an enormous part of the character of Kleinmond, the challenge was to create traffic proposals that will balance mobility with an inviting environment for

development with safe spaces for pedestrians and other modes of non-motorised transport. Main Road is currently a two-way road with a 3,4-metre wide lane in each direction and a 2,5-metre wide shoulder with parallel parking on either side.

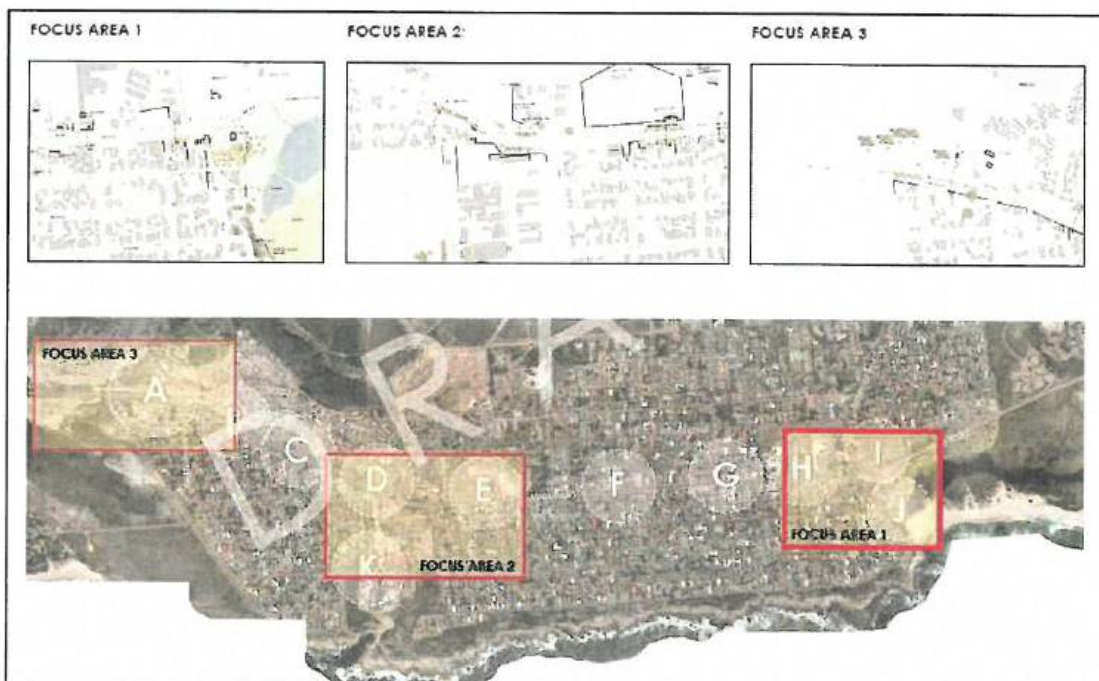
3. SCOPE OF WORK

The consultants' brief was to investigate the current situation with regards to land-use, zoning, vehicle and pedestrian movement and parking as well as urban design, and to use this information to determine shortcomings and opportunities.

During a site visit in December 2019, the traffic situation in Kleinmond as a whole was investigated and analysed. See **Figure 1** for the intersections and pedestrian areas that were analysed within the original study area and will henceforth be referred to as the corridor. Preliminary proposals were presented to the community stakeholders from where they identified three focus areas. See the identified focus areas as shown by *GAPP Architects and Urban Designers* in **Diagram 1**.

The purpose of this annexure is to report in more detail on the investigation, results and the recommendations for improvements of these focus areas with regards to the transport-related challenges. Drawings and illustrations give a visual representation of information and ideals.

Diagram 1: Identified focus areas



Source:
KLEINMOND CBD UPGRADING PLAN Draft for comment
by GAPP Architects and Urban Designers

4. PLANNING BACKGROUND

4.1 Historical planning documents consulted

A number of town planning, roads and transport studies have been undertaken in the Overstrand area over the past number of years. On the transport side, the 2012 *Overstrand Transport Master Plan* by iCE Group / EFG and the *Overstrand Sustainable Transport Programme* for Western Cape Government and Overstrand Municipality done by HHO Consulting Engineers are directly relevant.

The *Overstrand Transport Master Plan* looked at the main roads connecting towns within the Overstrand Municipal area and measures to ensure mobility on the R44 and R43. The section applicable to this annexure is the R43 from Arabella to Harold Porter Botanical Gardens. The *Overstrand Transport Master Plan*, with its main focus on mobility, proposed traffic circles at nine intersections along Kleinmond Main Road. See *Drawing D371/TP01/01*, an adjusted presentation of the *Overstrand Transport Master Plan* proposals for the section of the R43 that runs through Kleinmond.

On the urban design side, the 2020 *Investigation into available and developable land in Kleinmond and Overhills Upgrade* report by Lyners was consulted.

Ideas from all these planning documents were taken into consideration during the improvement proposal process.

4.2 Current Planning

Current planning proposals for the study area is addressed in the main report by *GAPP Architects and Urban Designers*.

5. CURRENT CHARACTERISTICS ALONG THE CORRIDOR

Kleinmond is situated between the Kogelberg mountain range and the coast and falls within the Overstrand jurisdiction. The area referred to as the corridor includes the original study area along Main Road and the three high pedestrian activity nodes shown in *Figure 1*.

The existing transport and non-motorised transport characteristics of the corridor are discussed in the following paragraphs.

5.1 Traffic

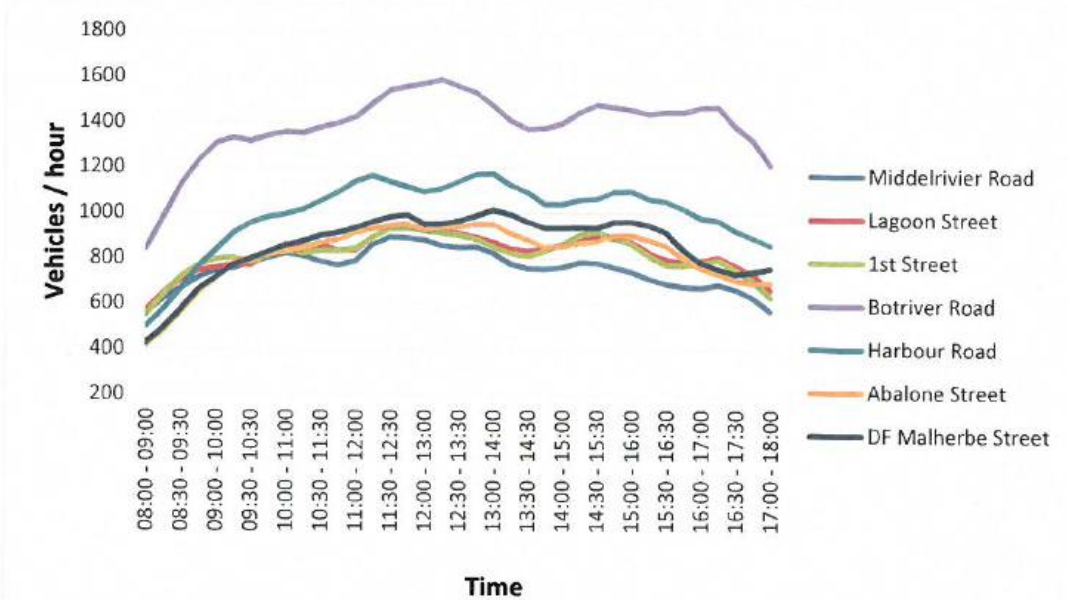
The existing traffic situation along the corridor was determined through observations and quantified through traffic counts and the computer analysis of intersections. Ten-hour traffic counts were conducted on Saturday 28 December 2019 at a number of intersections (see list below). Because Kleinmond is a well-known December holiday destination, this date was specifically chosen in order to capture peak holiday season traffic. The 2019 holiday preceded the Covid-19 pandemic and subsequent changes in traffic flow patterns and volumes. Counts were conducted at the following intersections:

- Main Road (R43) / Middelrivier Road
- Main Road / Lagoon Street
- Main Road / First Street
- Main Road / Botrivier Road / Second Street
- Main Road / Harbour Road
- Main Road / Abalone Street
- Main Road / DF Malherbe Street
- Luckhoff Street / Harbour Road
- 3rd Avenue / Strand Street

- 2nd Avenue / Strand Street

The counted volumes are shown in **Figure 2. Diagram 2** shows the daily traffic profiles at each of these intersections.

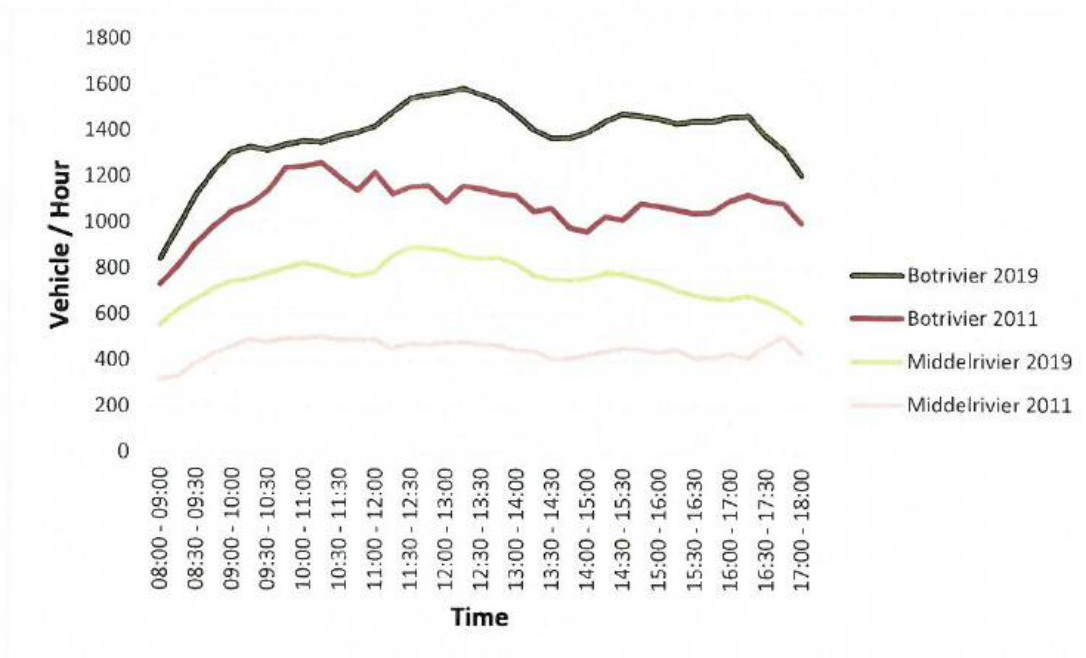
Diagram 2: Daily Traffic Profiles for December 2019



The results clearly show that the Main Road / Botriver Road / Second Street intersection is the busiest along this corridor, followed by the Harbour Road intersection. The majority of the intersections however have remarkably similar traffic profiles. All of these intersections show an absence of an early morning commuting peak. This is common during holiday times. The *Overstrand Transport Master Plan* was consulted for out of season counts. The August 2013 peak hour traffic counts at the Main Road / Botriver Road / Second Street intersection, indicated that even out of season there is no early morning peak hour but rather a late morning peak, from 10:00 to 11:00 (refer to **Drawing 5: Kleinmond to Hawston** from the *Overstrand Transport Master Plan*).

Existing 2019 traffic (as shown in **Diagram 2**) indicates that the traffic increases at a constant rate throughout the morning, reaching a peak between 09:00 and 10:00. Thereafter the traffic slowly increases further to a midday peak, with the time of midday peak period differing for each intersection. The traffic profiles indicate that from the midday peak the traffic decreases before a small third peak (afternoon peak hour) occurs between 14h30 and 15h30. The traffic profile from the 2011 December traffic counts was compared to the 2019 December traffic counts for the Main Road / Botriver Road / Second Street and Main Road / Middelrivier Road intersections and is shown in **Diagram 3**.

Diagram 3 indicates that the peak hour from 2011 to 2019 moved to a more midday peak than a late morning peak. The growth from 2011 to 2019 is also shown in **Diagram 3**. The Main Road / Middelrivier Road intersection has grown from 2011 to 2019 with 5.4% and the Main Road / Botriver Road / Second Street intersection with only 2%.

Diagram 3: Daily Traffic Profiles of December 2011 vs December 2019

The existing 2019 peak hour traffic volumes for each of the above mentioned intersections are shown in **Figure 2**. The intersections were analysed with the SIDRA computer program to obtain the service level at which each intersection operates. Intersection service levels vary from A to F, with a level of service A representing a very short delay and level of service F representing unacceptably long delays. A level of service D is generally taken as the lowest acceptable standard.

The analysis indicates that all of the intersections along the corridor, with the exception of the Main Road / Botrivier Road / Second Street intersection, operate at good service levels, even during the peak holiday season. The Main Road / Botrivier Road / Second Street intersection is all way stop controlled, with one approach lane per leg and parallel parking bays on both sides of Main Road (eastern and western approaches), as well as parallel parking along the western side of the Botrivier Road approach. Main Road has a black top width of 12 metres, Botrivier Road a width of 10 metres and Second Street a width of 6 metres. With the existing 2019 traffic volumes the SIDRA analysis shows that the western Main Road approach operates at a level of service E during the morning peak hour. During the afternoon peak hour, both the western Main Road approach and Second Street approach operate at a level of service F.

Two options were considered to improve the service levels at this intersection:

- a) Two-way stop control with free flow on Main Road: This proposed layout is shown in **Diagram 4**. With this layout, all movements will improve to a level of service A during both the morning and afternoon peak hours.

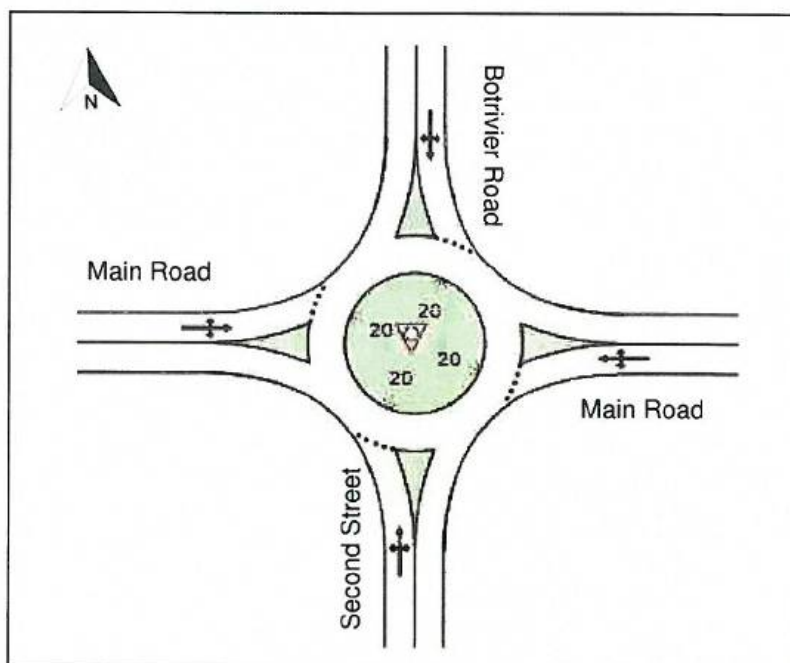
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Diagram 4: Main Road / Botrivier Road / Second Street intersection proposed layout 1



- b) Roundabout with one circulating lane: This proposed layout is shown in **Diagram 5**. All movements will operate at a level of service A during both the morning and afternoon peak hours with this proposed layout. The improvement of the intersection falls under focus area 1 and will be discussed in more detail in **Paragraph 7**.

Diagram 5: Main Road / Botrivier Road / Second Street intersection proposed layout 2



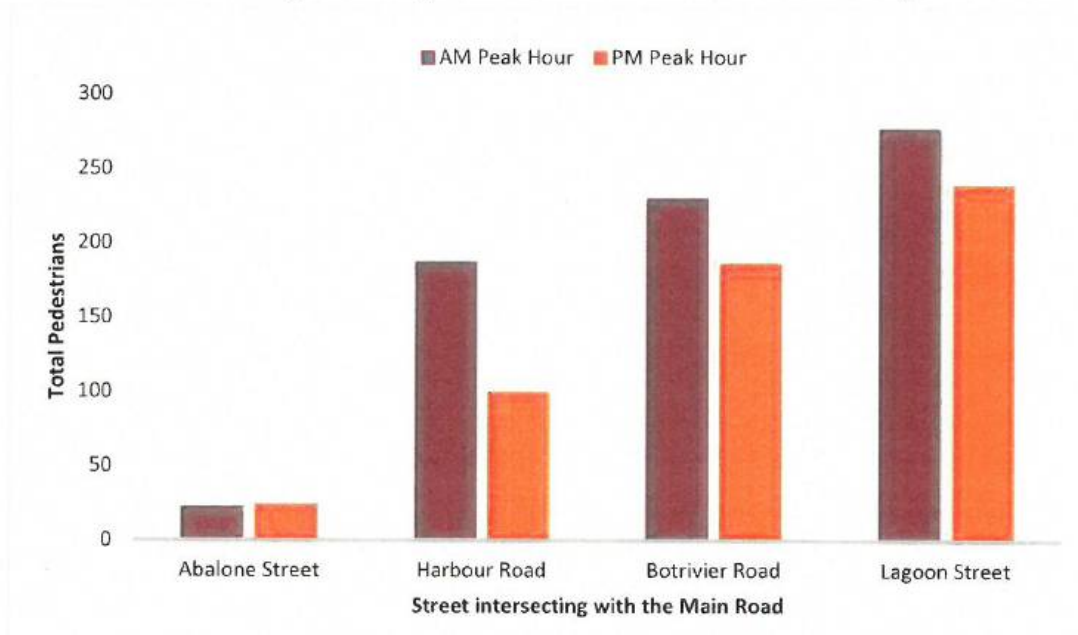
5.2 Pedestrian traffic

Pedestrian counts were done on the same day in December 2019 as the traffic counts to determine peak holiday pedestrian flow. Pedestrian counts were done at the following intersections along the corridor:

- Main Road / Lagoon Street
- Main Road / Botrivier Road / Second Street
- Main Road / Harbour Road
- Main Road / Abalone Street

From **Diagram 6**, which indicates the AM and PM peak hour pedestrian counts at each intersection, it is clear that Main Road / Lagoon Street intersection accommodates the most pedestrians with a total of 1 924 pedestrians during the ten-hour count. The total number of pedestrians at each of the above mentioned intersections is shown in **Figure 3**.

Diagram 6: AM and PM peak hour pedestrian counts at intersections along the corridor



The Main Road / Lagoon Street intersection has free-flow on Main Road and stop control on Lagoon Street. The northern leg of Lagoon Street is an exit lane only. Main Road has a blacktop width of 7,5 metres and Lagoon Street has a blacktop width of 5 metres. There are no pedestrian facilities on any of the approaches and this, combined with the high number of pedestrians at this intersection raises some concern. According to the Overstrand Zoning Scheme, the erven in the vicinity of this intersection are mostly Business Zone erven and explains the high density of pedestrians. Lagoon Street also gives access to a parking area next to the lagoon and access to the beach.

The Main Road / Botrivier Road / Second Street intersection has the second highest number of pedestrians. The current layout of this intersection does accommodate pedestrians with crossings on Botrivier Road, Second Street and the western Main Road approach.

The Main Road / Harbour Road intersection also has a high number of pedestrians, however the larger number of pedestrians are east and west bound and only a small number cross the Main Road at this intersection. There is a sidewalk along both the northern and southern sides of Main Road.

The proposed pedestrian improvements will be discussed in each applicable focus area.

5.3 Parking

Parking surveys were also done on the 28th of December 2019, at the two main tourist nodes: the Harbour and the beachfront, as shown in **Figure 1**. The parking area at the Harbour consists of three pockets: the demarcated parking area (shown in red), the gravel area to the east (shown in purple) and the gravel area to the north (shown in orange). These parking areas serve a number of restaurants and curio shops situated along Harbour Road south of the Luckhoff Street intersection. The location of the parking areas are indicated in **Diagram 7**. The purple and orange areas are used during peak season as overflow parking; the demarcated parking area has a total of 59 parking bays. **Diagram 8** indicates the number of vehicles parked during a specific time of the day.

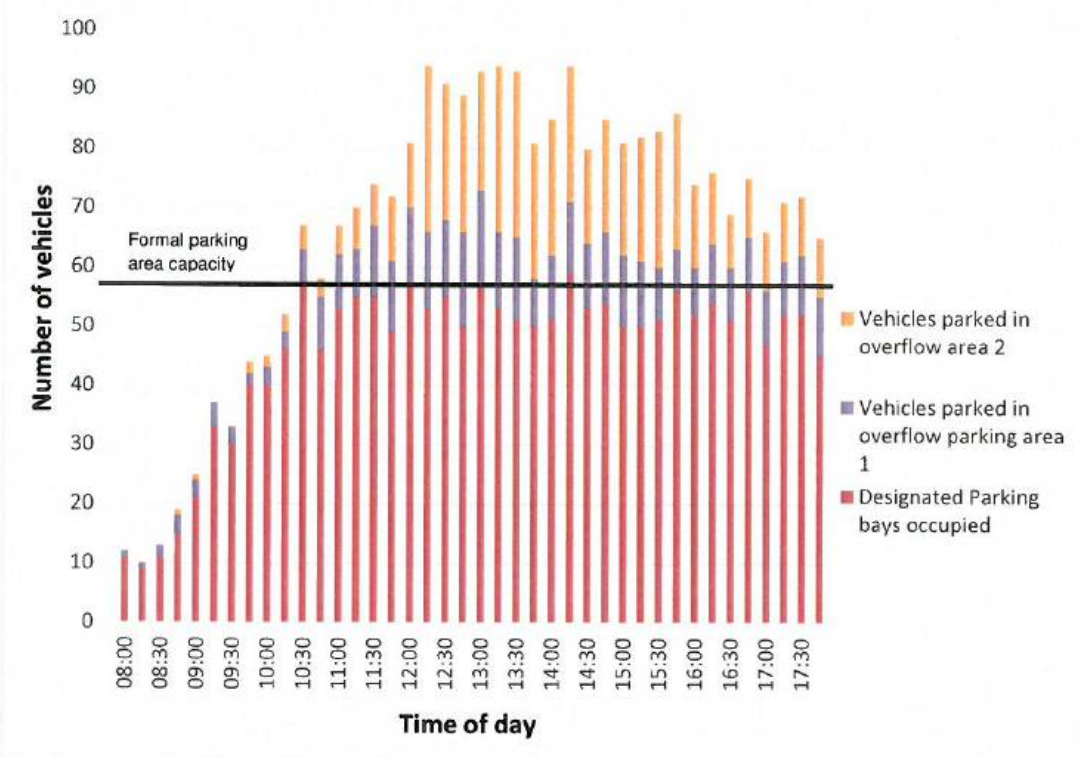
It is interesting to note that the overflow parking areas are not only used when the demarcated parking area is full. The average occupation rate of the demarcated parking area between 11:00 and 17:30 was 80%. Utilisation of the overflow parking started when the formal parking area was approximately 60% full.

Diagram 7: Harbour parking areas



11/13/20

Diagram 8: Number of vehicles parked at the Harbour parking areas between 8:00 and 18:00 on 28 December 2019



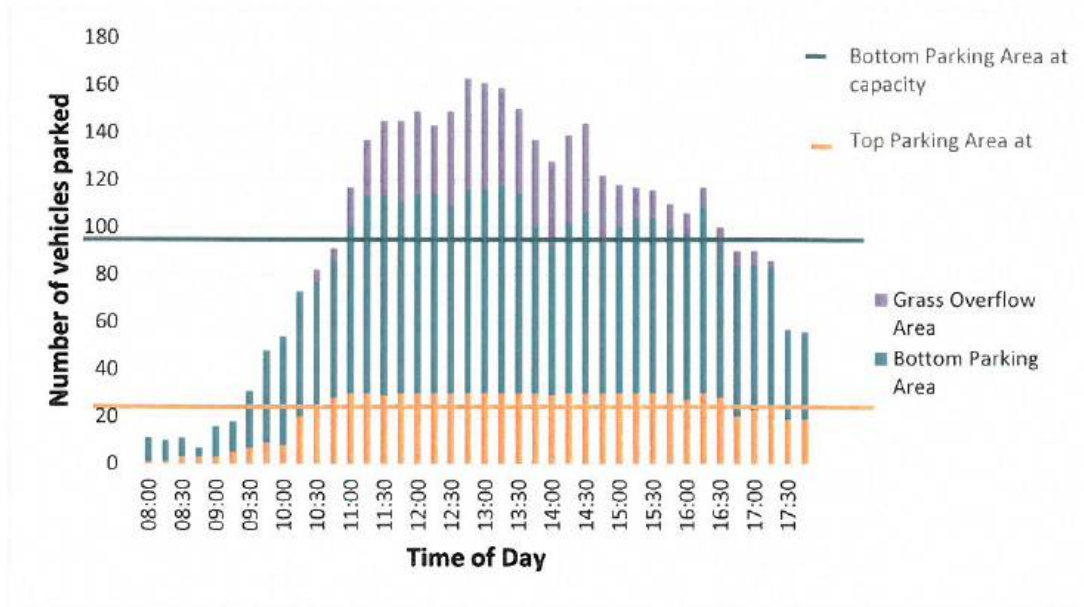
The beachfront parking area (at the lagoon) has two demarcated parking areas; the top parking area has 30 parking bays and the bottom area has 69 parking bays. The grass field adjacent to the top parking area is also used during season as overflow parking. During the survey it was observed that between 11:00 to 16:00 vehicles started parking illegally on the paving and landscape areas. See **Photo 2**. The total number of vehicles parked at the beachfront during the survey can be seen in **Diagram 9**.

Photo 2: Illegal parking on the paving and landscaping areas



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Diagram 9: Vehicles parked at the beachfront any given time during 28 December 2019



The parking occupation of both these parking nodes was more than 80% for most of the day during the survey, but it must be noted that the survey was done during peak season and represents the exception rather than the rule.

It was also noted during the corridor study that the parallel parking bays along both the northern and southern side of Main Road was underutilised

5.4 Accidents

Accident data on Main Road (R43) were obtained from the Western Cape Government for the period from January 2010 to December 2017. A summary of the reported accidents is shown in **Table 1** and the cause and type of these accidents are shown in **Table 2**. The accidents reported are within the Kleinmond urban area from kilometre mark 5 to kilometre mark 20. In the past 7 years there have been 19 accidents, of which two were fatal. The most common type of accident (37%) was where a single vehicle left the road because the driver lost control of the vehicle.

Table 1: Accident statistics for Main Road (R43) along Kleinmond

Km mark	No. of Accidents	Number of persons involved			
		No Injury	Slight Injury	Serious Injury	Fatalities
5.1 - 6.0	0	0	0	0	0
6.1 - 7.0	3	6	1	0	0
7.1 - 8.0	0	0	0	0	0
8.1 - 9.0	0	0	0	0	0
9.1 - 10.0	0	0	0	0	0
10.1 - 11.0	0	0	0	0	0
11.1 - 12.0	0	0	0	0	0
12.1 - 13.0	0	0	0	0	0
13.1 - 14.0	0	0	0	0	0
14.1 - 15.0	1	0	1	0	0
15.1 - 16.0	12	13	4	1	2
16.1 - 17.0	1	0	1	0	0
17.1 - 18.0	0	0	0	0	0
18.1 - 19.0	1	1	0	0	0
19.1 - 20.0	1	0	0	0	0
	19	19	7	1	2

Table 2: Causes of accidents at the intersections along Main Road (R43)

ACCIDENT TYPE		ACCIDENT CAUSE	
Total	Description	Total	Description
1	Accident with Animal	1	Animals in Road
3	Accident with fixed object	1	Falling asleep
		1	Slippery Road (wet)
		1	Parking on-road
1	Head / Rear-end	1	Bicycle
1	Reversing	1	Insufficient following distance
1	Side Swipe - Opposite Direction	1	Turn in face of on-coming traffic
2	Side Swipe - Same Direction	1	No sign of turning
		1	Park in dangerous space
7	Single vehicle - Left the road	7	Lost Control
3	Single vehicle - overturned	1	Lost control
		1	Mechanical Problems
		1	Tyre Burst
TOTAL accidents within the Kleinmond urban area : 19			

6. IDENTIFIED FOCUS AREAS

6.1 Focus Area 1

Focus Area 1 was identified around the eastern entrance into Kleinmond and is associated with the lagoon and beach precinct, as well as the business district. The road network that falls into Focus Area 1 is between Lagoon Street in the east and 4th Street in the west; and between 9th Avenue in the north and 2nd Avenue in the south. See **Diagram 10**.

Diagram 10: Focus Area 1



The transport-related challenges that was identified within this area is the confusing flow of traffic along Lagoon Street and the underutilised space along the lagoon. It is proposed that this area becomes a beach sport precinct. The traffic-related proposals had to accommodate the influx of vehicles and pedestrians that will make use of the proposed sport facilities. Another challenge is the Main Road / Botrivier Road / 2nd Street intersection that operates at unacceptable levels of service but is also not pedestrian friendly. The *Overstrand Transport Master Plan* was consulted to improve this challenge. The community stakeholders highlighted the fact that the Telkom site is currently being used as a bus waiting area and that there was a need form the formalisation of the drop-and-go system for the Primary and pre-school, both of which gain access off of Main Road.

6.2 Focus Area 2

Focus Area 2 is based around the intersection of Harbour Road with Main Road. This focus area focusses on municipal amenities such as the sport centre and adoption facility as well as the tourist node of Kleinmond. See **Diagram 11**.

Transport-related challenges identified in Focus Area 2 are the poorly defined Harbour Road / Main Road intersection and the lack of non-motorised facilities to accommodate tourists.

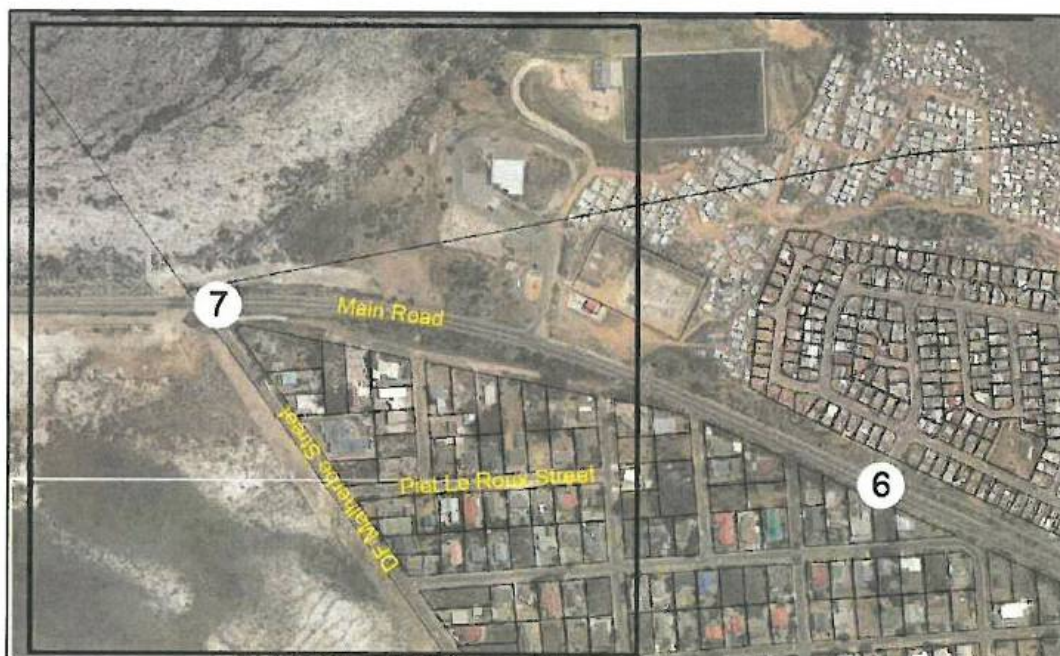
Diagram 11: Focus Area 2



6.3 Focus Area 3

The last focus area is the western entrance to Kleinmond, based around the DF Malherbe Street / Main Road intersection and the proposed new municipal precinct to the west of DF Malherbe Street. See **Diagram 12**. This focus area had more urban design-related challenges but one transport-related challenge that was highlighted was the intersection at DF Malherbe Street and Main Road, which, as the western entrance to Kleinmond, should be better defined.

Diagram 12: Focus Area 3



7. ROAD INFRASTRUCTURE IMPROVEMENT PROPOSALS

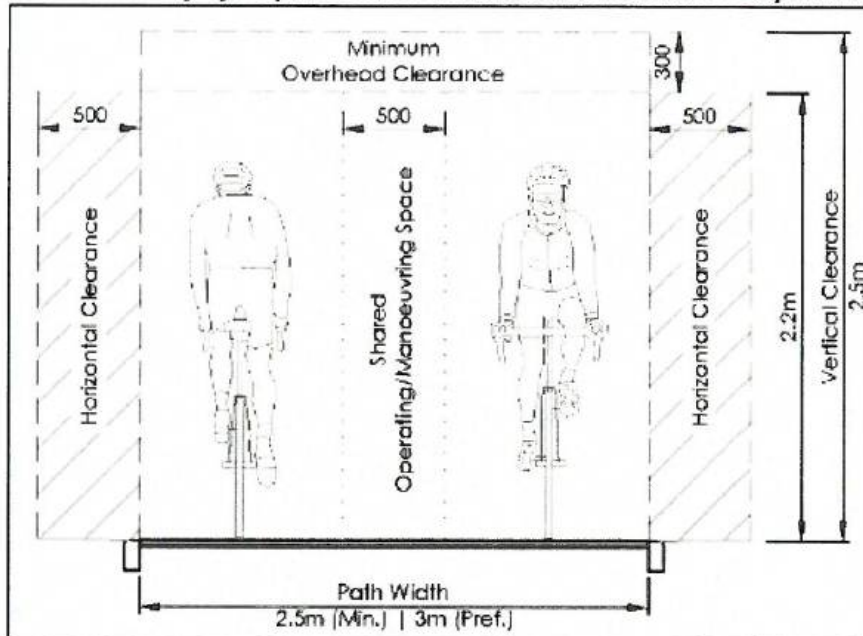
As mentioned in *Chapter 2* the roads in the older part of Kleinmond follow a grid pattern with Main Road as its 'central spine'. At the moment, the hierarchy with a strong Class 3 mobility route carrying the majority of through traffic, supported by a grid of Class 5 roads that keep inter- and intra-neighbourhood traffic off Main Road, works relatively well. A number of routes has, however, been identified to serve as potential secondary (Class 4) east-west routes if traffic volumes increase to such an extent that the capacity of the current hierarchy is exceeded. The potential links are shown in the attached **D371/TL01/01**. Third Avenue and Ninth Avenue were identified as potential east-west links and Swartrivier Road, Botrivier Road, 2nd Street, 6th Street North, 11th Street North, Harbour Road, Fynbos Street (Heuningkloof), Abalone Street (Overhills) and DF Malherbe Street as north-south links.

A number of transport-related infrastructure improvements are proposed for each focus area. The one proposal that is constant in all of the focus areas is a new cross-section for Main Road. It is proposed that the cross section should be changed as shown in **Diagram 13**, with a 3,6-metre wide vehicle lane in each direction, a 2,5-metre wide two-way cycle lane along the northern side, 2,5-metre wide parallel parking bays interspersed with landscaping along the southern side and a 2-metre wide sidewalk on both sides. With this cross-section mobility is retained but provision is made for a more non-motorised friendly environment.

Diagram 13: Proposed Main Road cross-section along the corridor



The two-way cycle lane design is based on the Class 3 Cycle Facility (*An exclusive cycle way located within the road carriageway. The route is demarcated by exclusive bicycle lane road markings*) as per the latest edition of the City of Cape Town's Standards and Guidelines for Roads & Stormwater Manual (Version 2.0 – June 2021) and should be in accordance with **Diagram 14**.

Diagram 14: Two-way cycle path vertical and horizontal clearance requirements

Source: City of Cape Town's Standards and Guidelines for Roads & Stormwater Manual (Version 2.0 – June 2021)

7.1 Road infrastructure improvement proposals for Focus Area 1

The first road infrastructure improvement proposal for Focus Area 1 is to implement a one-way couplet along Lagoon Street (southwards) and First Street (northwards). A left out only is proposed at the First Street / Main Road intersection to minimise conflict points and to encourage eastbound traffic to travel along Second Street. This proposal is shown in **Drawing D371/AREA1/01** and **D371/AREA1/02**. The proposed improvements will eliminate confusion and will attract motorists that want to return eastbound to make use of 2nd Street. It is further proposed that the Main Road / Botrivier Road / 2nd Street intersection be upgraded to a traffic circle with a 10-metre diameter central island with apron, and an inscribed diameter of 28 metres. In **Chapter 5** the option of a two-way stop controlled intersection was also discussed. Both the layouts shown in **Diagram 4** and **5** will improve the traffic service levels. The two-way stop controlled intersection indicates an improvement in traffic service levels but pedestrian service levels will deteriorate, because free-flow on Main Road would increase traffic speed on the Main Road and safe crossing for pedestrians will become more difficult. If the intersection is changed to a roundabout, pedestrians will be accommodated on all four approaches. It is therefore proposed that the Main Road / Botrivier Road / Second Street intersection layout be changed to a roundabout. The central island can be used for landscaping to create a sense of arrival. The new proposed traffic circle layout can be seen in **Drawing D371/AREA1/03**.

The last road infrastructure proposal for Focus Area 1 is a new bus waiting area for the Primary and pre-school. Two options are proposed. The first is to formalise the area that the busses currently use on the Telkom erf adjacent to the pre-school. This option is most desirable because it is accessible to parents, the pre-school and the primary school buses as well as buses transporting learners to Curro Hermanus. The parking area is adjacent to the pre-school and makes provision for formalised bus parking as well as private vehicle parking. If a pedestrian gate is installed along the eastern fence of the pre-school it would yield a much safer drop-and-go area for toddlers than the existing one off of Main Road. This option is shown in **Drawing D371/AREA1/04**.

The second option is to create a ring route for the buses along Fourth Street and onto the Primary school property, where a holding area will be provided. This option is less desirable for third parties such as Curro Hermanus and the pre-school but negotiations can be undertaken with the Primary School. See Drawing **D371/AREA1/05** for this proposal.

7.2 Road infrastructure improvement proposals for Focus Area 2

As mentioned in *Paragraph 6* there was only one transport-related challenge identified in Focus Area 2. To improve the poorly defined intersection of Harbour Road with Main Road two options were considered.

The first option is to construct a small traffic circle with a 6-metre diameter central island and an inscribed diameter of 20.5 metres. This traffic circle will be much smaller than the one proposed in Focus Area 1 and it is because its main function would be to slow down traffic and make motorists aware of their surroundings, with improved intersection functionality as a secondary goal. The island of this traffic circle ought to be traversable for heavy vehicles and can therefore not be used for landscaping. Mini roundabouts are not generally supported by the Provincial Roads Engineer on provincial roads, but the design proposal will be workshopped when this specific project proposal approaches the implementation stage. The proposed layout of the traffic circle can be seen in **Drawing D371/AREA2/01**. A pedestrian crossing is provided on the eastern Main Road approach only and will be discussed further in *Paragraph 8*. The access to the cemetery will have to be moved westwards as the traffic circle encroaches on the existing access.

The second option to make the intersection more prominent, and to make motorists aware of their surroundings is to extend the cobbled surface on Harbour Road northwards into the intersection with Main Road, as shown in **Drawing D371/AREA2/02**. With this proposal the access to the cemetery remains unchanged.

7.3 Road infrastructure improvement proposals for Focus Area 3

The DF Malherbe Street / Main Road intersection has the same challenge as the Harbour Road / Main Road intersection in Focus Area 2. The intersections are gateways to important nodes within Kleinmond but are not currently identifiable as such. It is proposed that a traffic circle should also be constructed at the DF Malherbe Street / Main Road intersection. This circle will be larger, with a centre island diameter of 12 metres with apron, and an inscribed diameter of 28 metres, as shown in **Drawing D371/AREA3/01**. This proposed layout will accentuate the sense of arrival, while maintaining mobility.

The municipality is considering making the vacant land to the west of DF Malherbe Street available for development. If this realises, access should be given off of DF Malherbe Street approximately 177 metres south of the DF Malherbe Street / Main Road intersection, aligned with Piet Le Roux Street, as shown in **Drawing D371/AREA3/01**.

8. NON-MOTORISED INFRASTRUCTURE IMPROVEMENT PROPOSALS

As shown in **Diagram 13** the new proposed Main Road cross-section is a lot more non-motorised transport friendly than the existing cross-section as it provides a two-way cycle lane on one side of the road and sidewalks on both sides of the Main Road.

The non-motorised infrastructure improvement proposals for each focus area are discussed below.

8.1 Non-motorised infrastructure improvement proposals for Focus Area 1

The processed 2019 pedestrian counts showed that the two intersections with the highest pedestrian volumes both fall within Focus Area 1. The second highest pedestrian volumes were

observed at the Main Road / Botrivier Road / 2nd Street intersection and the non-motorised improvement proposals go hand-in-hand with the proposed intersection upgrade to a traffic circle. The proposed new traffic circle layout provides pedestrian crossings on all four approaches (see **Drawing D371/AREA1/03**). The cycle lane is also accommodated and goes through the traffic circle, east and west bound. Cyclists can use the pedestrian crossings on the eastern or western Main Road approaches should they wish to cross the Main Road.

The highest number of pedestrians was however observed crossing the Main Road (north-south) at the Lagoon Street / Main Road intersection. With the new proposed one-way couplet along Lagoon Street it is proposed that pedestrian crossings be provided on the northern and southern Lagoon Street approaches and a pedestrian crossing on the eastern Main Road approach.

The pedestrian crossing proposal on Main Road entails the construction of a red brick or coloured paving pedestrian crossing as shown in **Photo 3** and **Photo 4** below. **Photo 4** is from another Western Cape city, Worcester and on a provincial road, High Street. Studies have shown that a pedestrian crossing with a red colour causes motorists to be more alert than a normal zebra crossing.^[1] A raised pedestrian crossing will not be appropriate on Main Road, which is an inter-district Provincial Main Road of which the main function is mobility. It should also be noted that the pedestrian crossing is only really needed during the peak holiday season, whereas a raised pedestrian crossing will inconvenience motorists through the whole year.

Photo 3: Example of proposed red brick pedestrian crossing to be implanted on Main Road



1. <https://www.sciencedirect.com/science/article/pii/S0386111216300024>

Photo 4: Example of red brick pedestrian crossing on High Street, Worcester looking east



A sidewalk is also proposed along Lagoon Street, following the southward one-way couplet to guide pedestrians towards the new proposed sports precinct. These proposals are shown in **Drawing D371/AREA1/01**.

8.2 Non-motorised infrastructure improvement proposals for Focus Area 2

The existing pedestrian infrastructure at the staggered Protea Road / Main Road / 13th Street intersection will not adequately serve the anticipated pedestrian desire lines. It is proposed that the existing signalised pedestrian crossing east of Protea Road should be moved to between Protea Road and 13th Street.

The reason for moving the existing pedestrian crossing is to connect to the proposed 13th Street pedestrian route that will run along the water course connecting the mountain and the sea. This is an urban design proposal for a tourist attraction in Focus Area 2. Another urban design proposal is the upgrading of the existing park on the north-eastern corner of the intersection. This means that the pedestrian desire lines will move to the west of Protea Road southbound. The 2-metre sidewalks north and south of Main Road are proposed to terminate at this pedestrian crossing. The northern sidewalk will connect to the existing walkway that runs through the park and the cemetery westward and the southern sidewalk will follow the new proposed watercourse walk, as proposed by *GAPP Architects and Urban Designers*.

A pedestrian crossing is also proposed at the Harbour Road / Main Road intersection on the eastern Main Road approach. This will connect to the existing walkway that runs through the park and cemetery, as mentioned above. These proposals are shown in **Drawing D371/AREA2/01 and D371/ AREA2/02**.

8.3 Non-motorised infrastructure improvement proposals for Focus Area 3

No pedestrian infrastructure improvements are proposed at the new DF Malherbe Street / Main Road intersection as pedestrian volumes west of Overhill Road (which is located east of DF Malherbe Road) are extremely low. It is proposed that the cycle lane continues along Main Road, through the proposed traffic circle as shown in **Drawing D371/AREA03/01**.

12/1/34

9. CONCLUSION

These transport and non-motorised transport infrastructure improvement proposals addresses all the challenges that were identified during the analysis of the Kleinmond Urban Upgrade. It is recommended that these proposals should be incorporated into the development requirements for future developments in the Kleinmond Urban area and that all detail design should be in accordance with the standards of the Western Cape Province Roads Engineer.

We trust that you will find this traffic analysis annexure in order. Please contact the undersigned should there be any queries.

Yours truly,



Renette Opperman (B. Eng Civil)
On behalf of Deca Consulting Engineers



Liezl Stodart (M.Eng Pr.Eng)



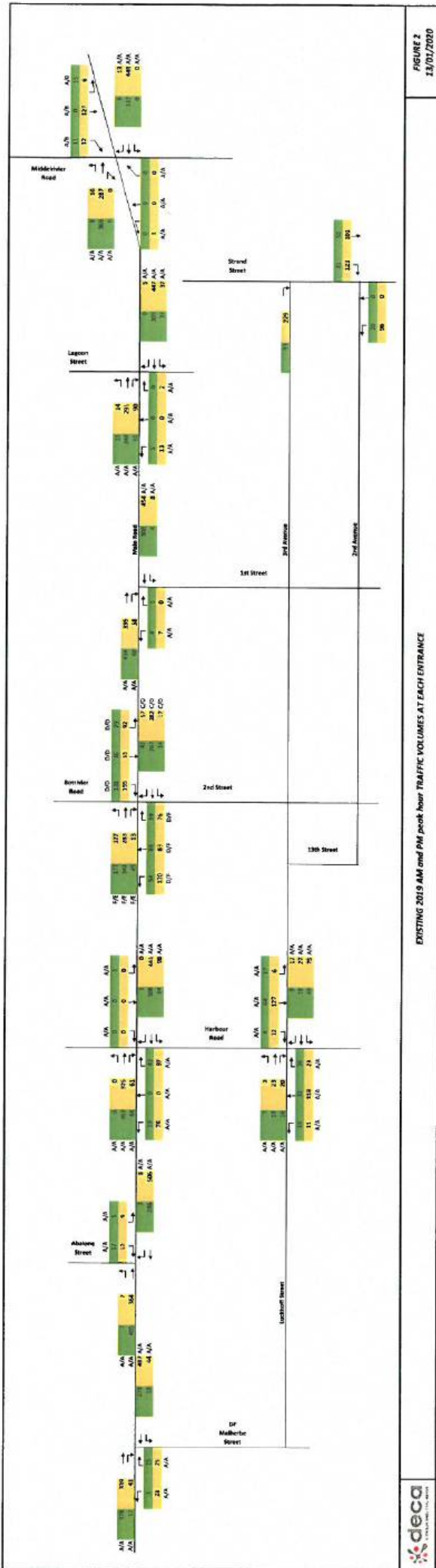
NUMBER	INTERSECTION	CONTROL MEASURE
1	Main Rd / Middlefivier Rd	●
2	Main Rd / Lagoon St	●
3	Main Rd / First St	●
4	Main Rd / Bothvier Rd / 2nd St	●
5	Main Rd / Harbour Rd	●
6	Main Rd / Abalone St	●
7	Main Rd / DF Malherbe St	●
8	Luckhoff St / Harbour Rd	●
9	3rd Ave / Strand St	●
10	2nd Ave / Strand St	●

KLEIMOND URBAN REVITALIZATION
AFFECTED INTERSECTIONS

SCALE 1:7 000 (A2)
DATE FEBRUARY 2020
PLAN NUMBER
FIGURE 1

ENGINEER **deca**
 CONSULTING ENGINEERS
 490 GLENVIEW DRIVE
 7 HILARIOUS DRIVE
 PORT ELIZABETH 6001
 T: 039 312 2319
 F: 039 312 2318
 E: info@deca.co.za

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EXISTING 2019 AM and PM peak hour TRAFFIC VOLUMES AT EACH ENTRANCE

FIGURE 2
15/01/2020



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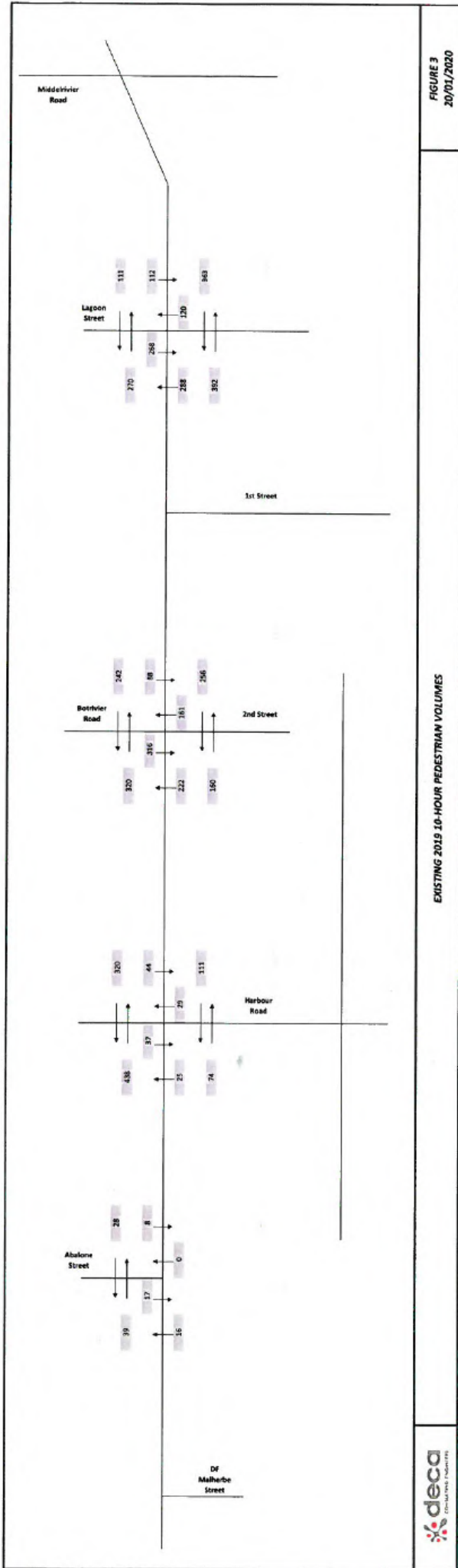
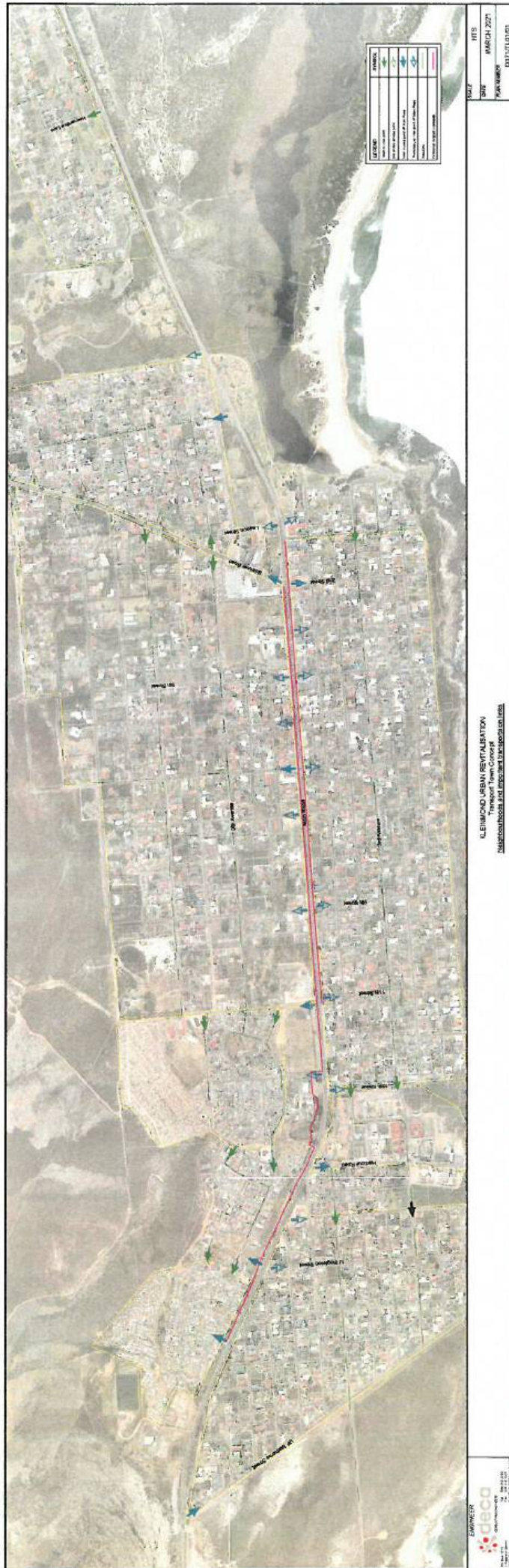


FIGURE 3
20/01/2020



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LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	---
Existing road centre line	---
Proposed Shoulder	---
Proposed Road edge	---
Proposed One-way	---
Proposed Two-way cycle lane	---
Proposed Sidewalk	---



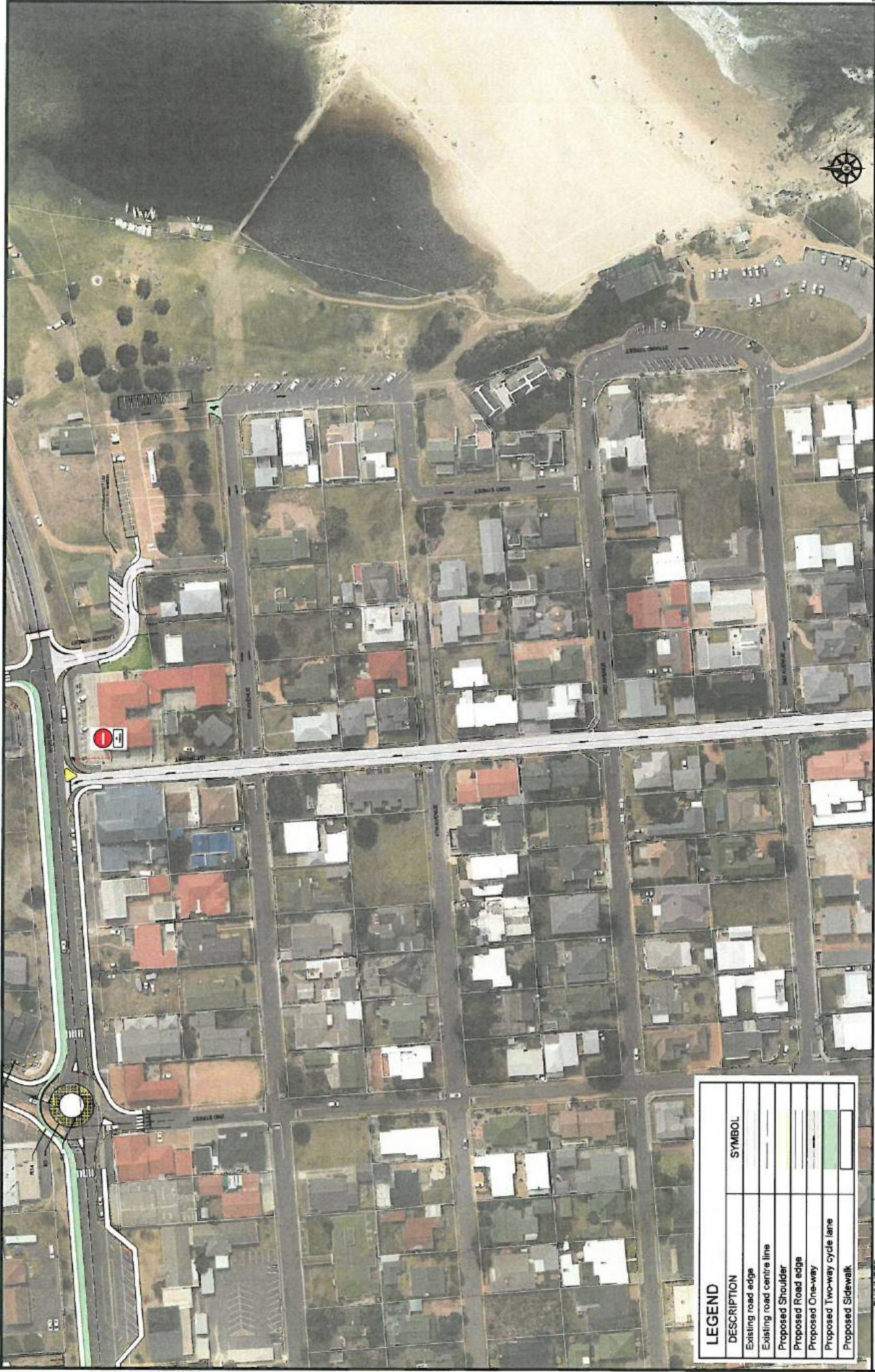
SCALE 1:1000 (A4)
 DATE AUGUST 2021
 PLAN NUMBER D371/AREA1/01

KLEINMOND URBAN UPGRADE
 FOCUS AREA 1 - PROPOSED ROAD NETWORK

ENGINEER

 CONSULTING ENGINEERS
 170 De Waverley Drive
 Waverley, Victoria 3102
 Tel: 03 9594 1222
 Email: info@deca.com.au
 www.deca.com.au

12/16/21



SCALE 1:1000 (A2)
 DATE JUNE 2021
 PLAN NUMBER D37/AREA.102

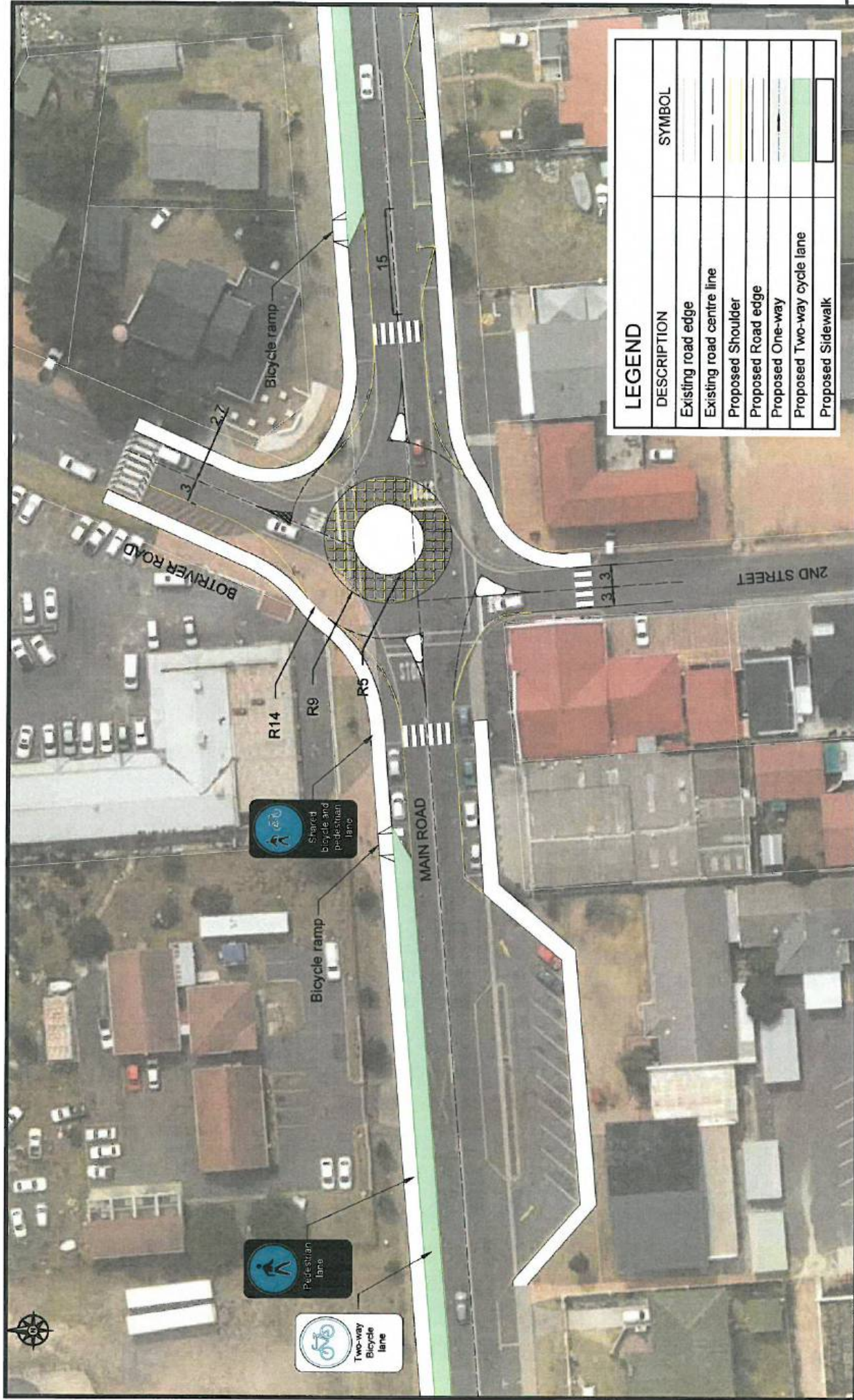
KLEINMOND URBAN UPGRADE
 FOCUS AREA 1 - PROPOSED ROAD NETWORK

LEGEND	DESCRIPTION	SYMBOL
	Existing road edge	—
	Existing road centre line	—
	Proposed Shoulder	—
	Proposed Road edge	—
	Proposed One-way	—
	Proposed Two-way cycle lane	—
	Proposed Sidewalk	—

ENGINEER

deca
 CONSULTING ENGINEERS
 77 Bona Vista Street
 Singapore 119603
 Tel: +65 6339 2000
 Fax: +65 6339 2001
 Email: info@deca.com.sg

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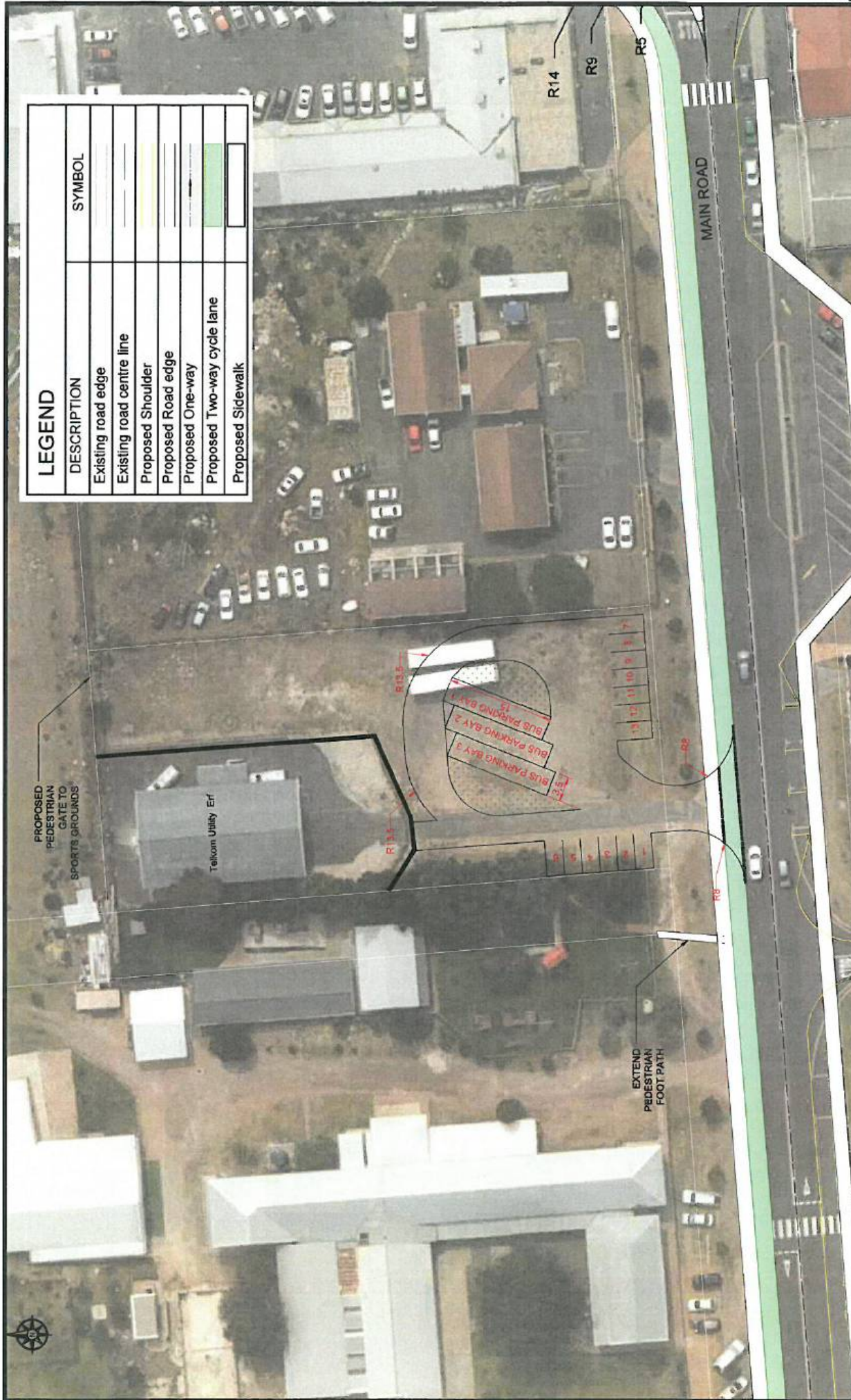
LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	
Existing road centre line	
Proposed Shoulder	
Proposed Road edge	
Proposed One-way	
Proposed Two-way cycle lane	
Proposed Sidewalk	

SCALE 1:500 (A3)
 DATE AUGUST 2021
 PLAN NUMBER D371/AREA1/03

KLEINMOND URBAN UPGRADE
 FOCUS AREA 1 - PROPOSED BOTRIVER ROAD / MAIN ROAD / 2ND STREET TRAFFIC CIRCLE

ENGINEER

deca
 CONSULTING ENGINEERS
 100 BAYVIEW STREET
 CAPE TOWN 8001
 TEL: 021 412 2292
 E-MAIL: info@deca.co.za



LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	---
Existing road centre line	---
Proposed Shoulder	---
Proposed Road edge	---
Proposed One-way	---
Proposed Two-way cycle lane	---
Proposed Sidewalk	---

KLEINMOND URBAN UPGRADE
FOCUS AREA 1 - PROPOSED BUS WAITING AREA OPTION 1

ENGINEER **deca** CONSULTING ENGINEERS
 440 Boks 4173
 Newclare Street
 Newclare 7700
 Tel: 033 332 2296
 Email: info@deca.co.za

SCALE: 1:500 (A3)
 DATE: JUNE 2021
 PLAN NUMBER: D371/AREA1/04



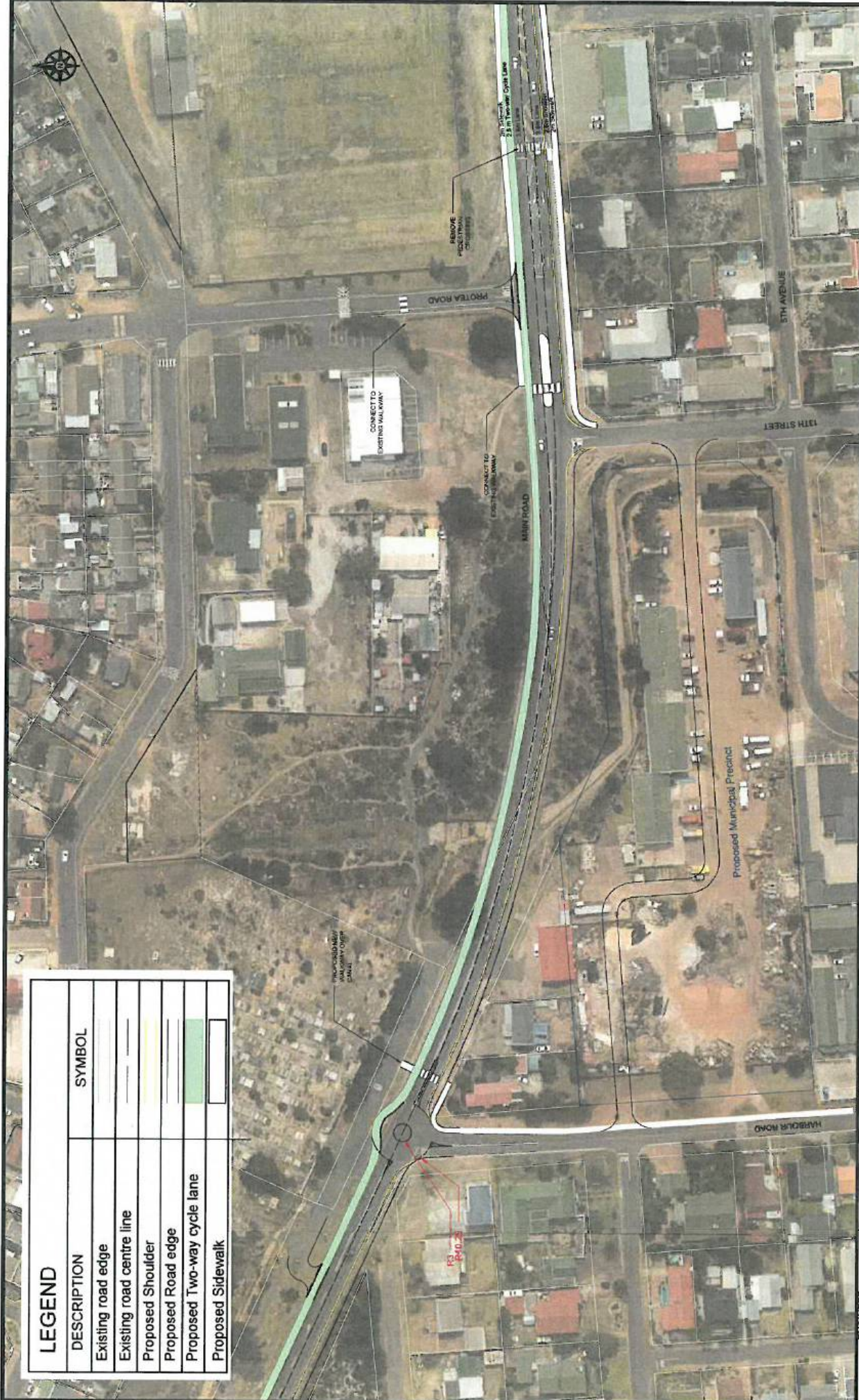
LEGEND	DESCRIPTION	SYMBOL
	Bus Front Wheel Tracks	
	Bus Back Wheel Tracks	
	Bus Body Tracks	
	Existing Road Edge	
	Proposed Bus road markings	

SCALE	1:1000 (A3)
DATE	JUNE 2021
PLAN NUMBER	D371/AREA1/05

KLEINMOND URBAN UPGRADE
 FOCUS AREA 1 - PROPOSED BUS WAITING AREA OPTION 2

ENGINEER

deca
 CONSULTING ENGINEERS
 1770
 Highway
 Fredericton
 NB
 Canada
 Tel: 506-332-2282
 Email: info@deca.ca



LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	—
Existing road centre line	—
Proposed Shoulder	—
Proposed Road edge	—
Proposed Two-way cycle lane	—
Proposed Sidewalk	—

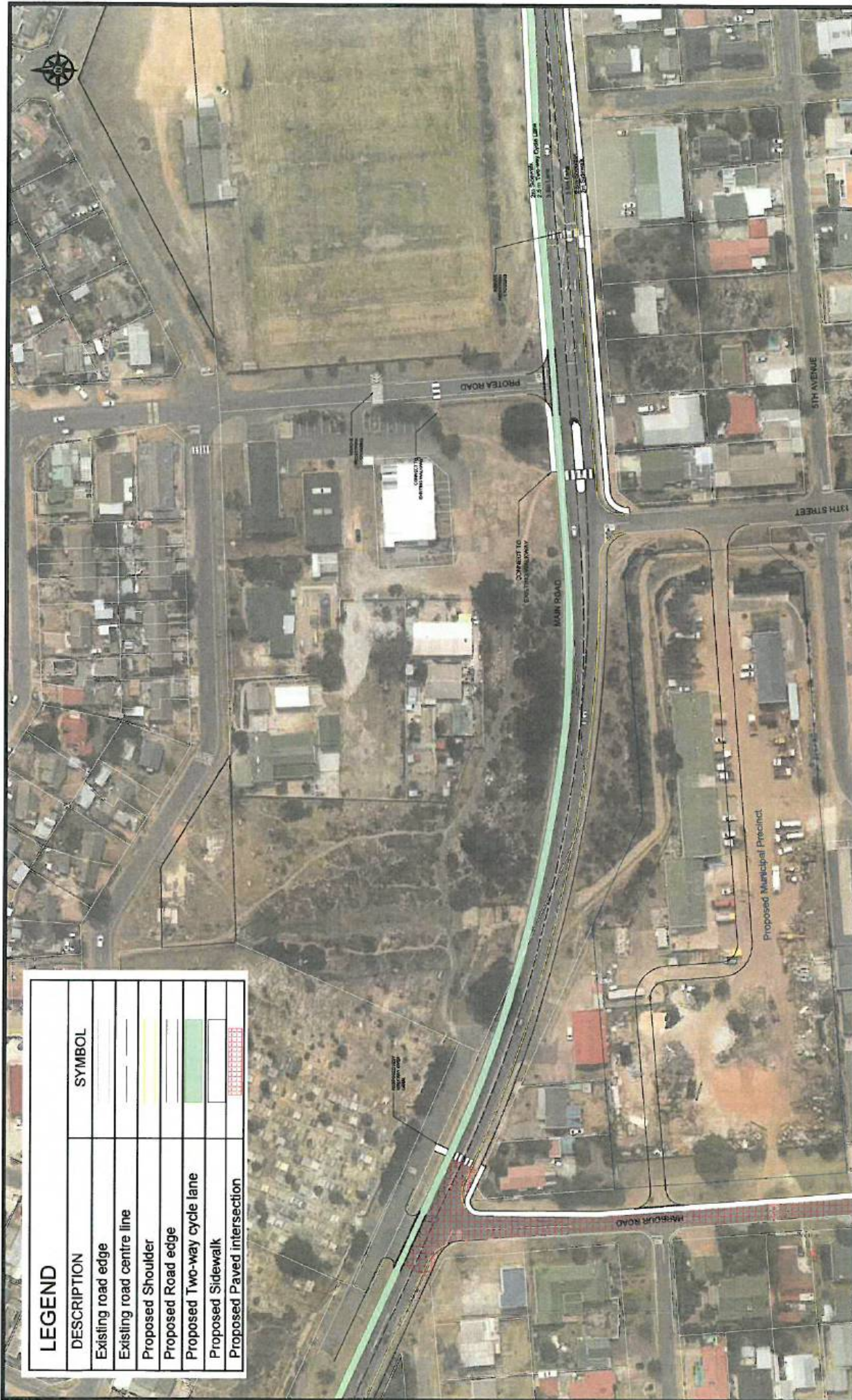
SCALE 1:1200 (A3)
 DATE JUNE 2021
 PLAN NUMBER D371/AREA2/01

KLEINMOND URBAN UPGRADE
 FOCUS AREA 2 - PROPOSED HARBOUR ROAD / MAIN ROAD INTERSECTION - OPTION 1

ENGINEER

 CONSULTING ENGINEERS
 174 010 110 2200
 174 010 110 2200
 174 010 110 2200

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SCALE	1:1200 (A3)
DATE	JUNE 2021
PLAN NUMBER	D371/AREA2/02

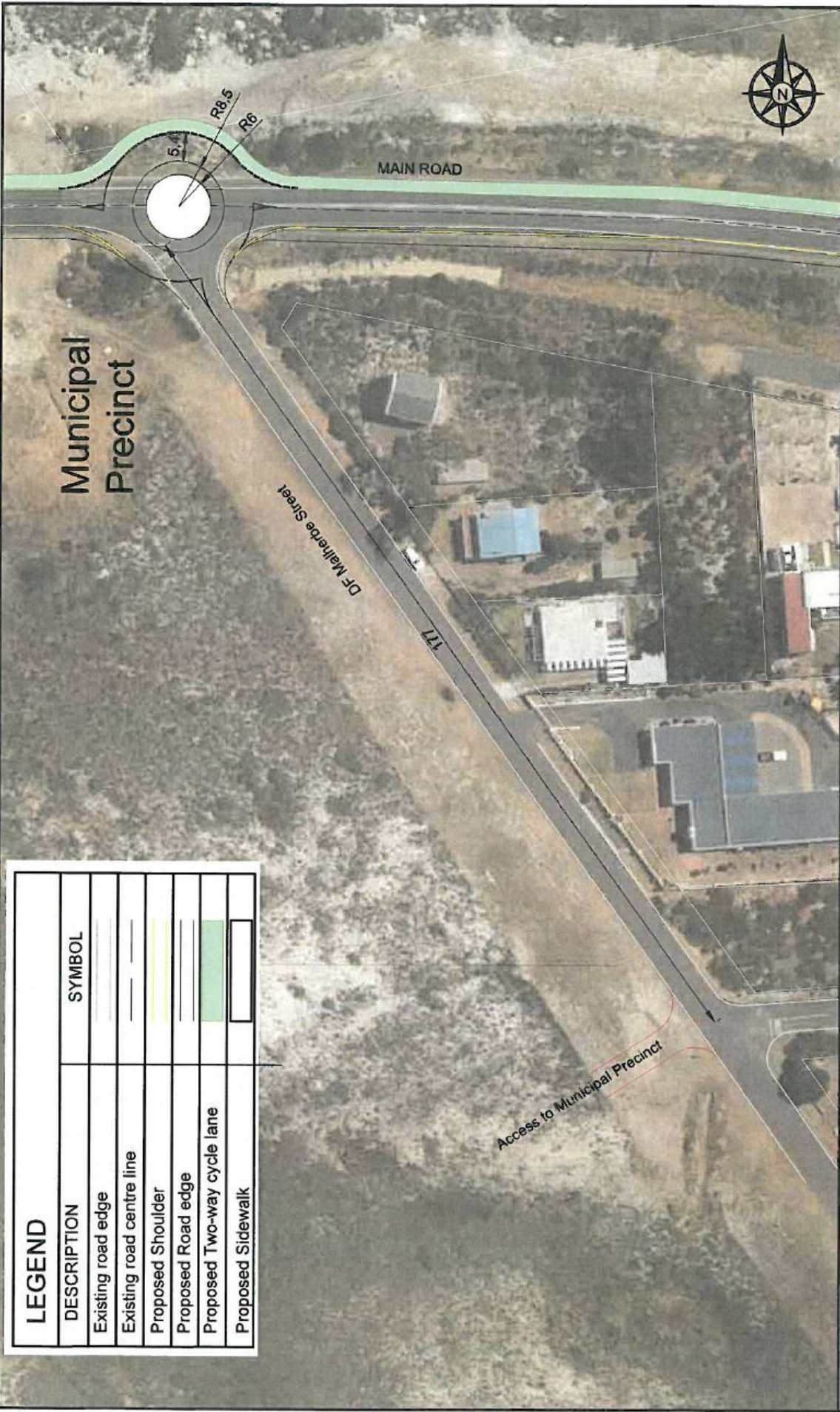
KLEINMOND URBAN UPGRADE
 FOCUS AREA 2 - PROPOSED HARBOUR ROAD / MAIN ROAD INTERSECTION - OPTION 2

LEGEND	SYMBOL
Existing road edge	—
Existing road centre line	—
Proposed Shoulder	—
Proposed Road edge	—
Proposed Two-way cycle lane	—
Proposed Sidewalk	—
Proposed Paved intersection	—

ENGINEER

 CONSULTING ENGINEERS
 7 Fildes Street
 Haverhill
 T: 031 312 2290
 Email: info@deca.co.nz

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LEGEND	
DESCRIPTION	SYMBOL
Existing road edge	— — — — —
Existing road centre line	— — — — —
Proposed Shoulder	— — — — —
Proposed Road edge	— — — — —
Proposed Two-way cycle lane	— — — — —
Proposed Sidewalk	— — — — —

SCALE
1:1 000 (A4)
PLAN NUMBER
D371/AREA3/01

KLEINMOND URBAN UPGRADE
Focus Area 3 - DF Malherbe Street Layout

ENGINEER **deca**
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