Draft Basic Assessment Report

Proposed Development Framework for the Stikland South Hospital Site, Erf 6300, Bellville

VERSION: PRE-APPLICATION DRAFT
DATE: September 2025

APPLICANT
Western Cape Government: Department of Infrastructure

FOR PUBLIC PARTICIPATION FROM
11 SEPTEMBER 2025 TO 13 OCTOBER 2025

Written comments should be submitted to the Environmental Assessment Practitioner, Tarryn Solomon or Anathi Skweyiya of Infinity Environmental, at the details below or online at
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DOCUMENT DETAILS

Proposed Development Framework for the Stikland South Hospital Site, Erf 6300, Bellville **Draft Basic Assessment Report**

APPLICANT

Western Cape Government: Department of Infrastructure
4th Floor, 9 Dorp Street, Cape Town, 8001

ENVIRONMENTAL ASSESSMENT PRACTITIONER

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Report Purpose

This report is prepared in compliance with the requirements of the Environmental Impact Assessment Regulations, 2014 (as amended) and is intended to:

- Present the proposed project and the need for the project.
- Describe the affected environment, to facilitate informed decision making.
- Provide an overview of the BA Process being followed, including public consultation.
- Assess the predicted positive and negative impacts of the project on the environment.
- Provide recommendations to mitigate negative impacts and to enhance the benefits of the project;
- Provide for environmental management during the implementation of the project.

VERSION HISTORY

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11 September 2025	**Draft (this report)**

Title: : Proposed Development Framework for the Stikland South Hospital Site, Erf 6300, Bellville Draft Basic Assessment Report
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DECLARATION OF EAP'S INDEPENDENCE

I, Tarryn Solomon, appointed by WCG: Department of Infrastructure as Environmental Assessment Practitioner for the Proposed Development Framework for the Stikland South Hospital Site, Erf 6300, Bellville, Western Cape, hereby declare that the information provided in this report and supporting documentation is complete and correct to the best of my knowledge; that other than fair remuneration for work performed in terms of this application I have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; that I have disclosed, to the Applicant, the specialist(s), the Competent Authority and registered interested and affected parties all material information that have or may have the potential to influence the decision of the Competent Authority; that I have ensured that information in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments; and that I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Tarryn Solomon BSc, Reg. E.A.P. 2019/1671, IAIAsa member #5838
Infinity Environmental (Pty) Ltd: Director & Principal EAP
18 years' experience in environmental management (CV in Appendix A)

EXECUTIVE SUMMARY

Background and Introduction

The proponent, the Western Cape Government: Department of Infrastructure, as the custodian of Erf 6300 – commonly referred to as the Stikland Hospital estate- is proposing to redevelop portions of this precinct. In 2010, the Western Cape Government approved the mandate for the Regeneration Programme, which includes the Stikland Hospital estate as one of its strategic focus areas. This project is currently managed by the Special Projects Directorate within the Department of Infrastructure, with the aim of maximising the social value of publicly owned land through sustainable, inclusive redevelopment.

Erf 6300 is a brownfield site with a longstanding history of institutional and community-based land use. Stikland North and South are both part of Erf 6300, separated by Old Paarl Road. The Stikland Psychiatric Hospital, located in Stikland South, and the housing in Stikland North were historically part of the broader hospital estate. Currently, the infrastructure, particularly in Stikland North, is underutilised, with large areas of land in both Stikland North and South precincts remaining vacant. Given this context, both Stikland South and North precincts have been identified as strategic areas offering opportunities for potential mixed-use development, aligning with the goals of the Regeneration Programme to unlock the full value and functionality of the Stikland Hospital estate. This report focuses on the proposal for the development of **Stikland South**.

Site Description

Stikland South is located on Erf 6300 in Stikland, Bellville. It is situated along the Provincial Main Road R101 (Old Paarl Road) to the north, De La Haye Avenue to the west, Midmar Road to the east and the railway line to the south. The property extent is approximately 114 hectares (ha), of which approximately 60 ha are vacant. The remaining ha includes the Stikland Psychiatric Hospital, Stikland Hospital Pharmacy, and Western Cape College of Nursing Metro East Campus. **Figure 2** presents the locality of the proposed development.

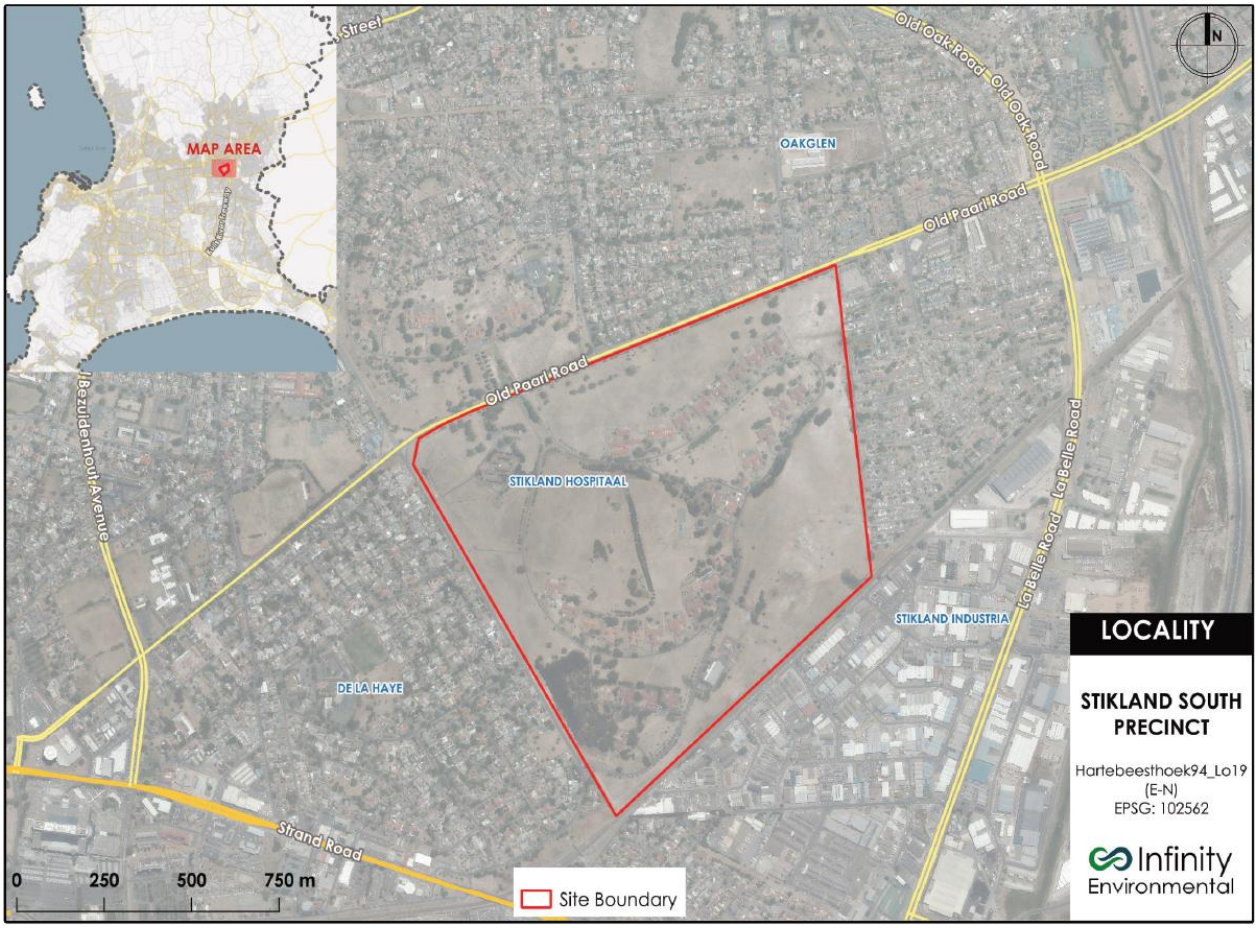


Figure 1. Locality Map

Project Proposal

Design Process

The development and drafting of the proposal followed an iterative process, which ultimately resulted in the formulation of a draft development framework for the site early in 2024. This proposal accommodated the series of wetlands and their respective buffers identified in the freshwater specialist study (Enviroswift, 2024). The draft development framework was published as part of the non-statutory public participation process (PPP) to allow for comments from stakeholders and the public, from Wednesday, 17 July 2024, to Monday, 19 August 2024.

Since the non-statutory PPP undertaken in 2024, the development framework has been revised from the development and drafting of the proposal, followed an iterative process, which ultimately resulted in the formulation of a draft development framework for the site early in 2024. This proposal accommodated the series of wetlands and their respective buffers identified in the freshwater specialist study (Enviroswift, 2024). The draft development framework was published as part of the non-statutory public participation process (PPP) to allow for comments from stakeholders and the public, from Wednesday, 17 July 2024, to Monday, 19 August 2024.

Since the non-statutory PPP undertaken in 2024, the development framework has been revised from the initial framework published for comment. The revisions were primarily driven by key environmental factors highlighted in the botanical study conducted by Nick Helme (Nick Helme Botanical Surveys, 2024 – refer to **Appendix G1**), which found that certain areas previously earmarked for development contained Medium to Very High sensitivity vegetation and were therefore unsuitable for development.

These sensitive areas have since been excluded from the development footprint and are now included within the proposed boundary for the Stikland Hospital grounds.

Additionally, a Transport Impact Assessment (TIA) has also been conducted for this application. Prior to the detailed TIA being undertaken, the views of the City's Urban Mobility Directorate (TIA & Development Control Branch) regarding trip generation assumptions for the envisaged land uses were obtained. Based on this input, a further revision to the development framework was made resulting in reduced development density. All proposed development along the eastern section of the site being removed, and the maximum building height was reduced from eight storeys to four.

Given the development constraints, the Eucalyptus Forest was investigated as an alternative for development to help offset, where possible, the loss of areas previously earmarked for development. It was confirmed that approximately 20 071m^2 of the Eucalyptus Forest along the western boundary of the site will be retained, while the remaining portion is proposed for residential development.

Stikland South Development Framework

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure. Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.

The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, commercial spaces and supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised, indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Conservation Areas

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital. A portion of the Eucalyptus Forest is proposed to be conserved due to the place-making significance associated with the trees in the southwestern portion of the site.

Environmental Assessment Process

The proposed development framework requires environmental authorisation (EA) from the competent authority, the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP). The activities requiring an EA include those set out in Table 1 overleaf, listed in terms of the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended) and the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA).

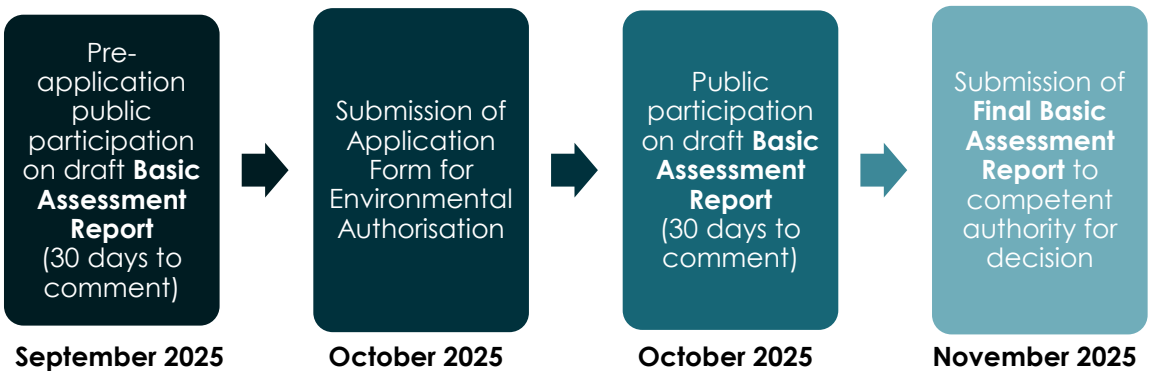
Table 1. Listed Activities applicable to the proposed development

Listed Activity	Applicability
Activity 19 of Listing Notice 1 The **infilling or depositing of any material of more than 10 cubic metres into**, **or** the dredging, excavation, **removal or moving** of soil, sand, shells, shell grit, pebbles or rock **of more than 10 cubic metres from a watercourse**;	The proposed development requires improved stormwater management to address increased runoff from additional impervious surfaces. As part of this strategy, a swale is proposed within a wetland in the south-western corner of the site to support the function of the detention pond in managing and treating stormwater. The location of the Southern Stormwater Management Swale is shown along the south-eastern boundary of the site in Section 4.7 of the Landscape Framework. Additionally, this stormwater swale will form part of the green belt right-of-way with a cycle/jogging track that will rejoin the green belt along the outside perimeter of the Stikland Psychiatric Hospital boundary. According to the freshwater specialist, this wetland—identified as 'Wetland 5' in the Aquatic Impact Assessment (**Appendix G2**)—is small, severely degraded, and ecologically isolated, and may be infilled. Therefore, the construction of the swale and the green belt cycle/jogging track will constitute the infilling of Wetland 5 and thus **trigger this listed activity**.
Activity 12 of Listing Notice 3 The **clearance of an area of 300 square metres or more of indigenous vegetation,** except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. **Western Cape**	The proposed development will require the clearance of more than 300 m^2 of indigenous vegetation, which has been confirmed by the botanist as representative of Cape Flats Sand Fynbos and Swartland Shale Renosterveld, both listed as 'critically endangered' ecosystems in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), as amended (NEM:BA). Hence, this listed activity **is triggered** by the proposed development. Refer to

Listed Activity	Applicability
i. Within **any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA** or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004.	**Appendix G1** for the Botanical Impact Assessment (Helme, 2025).

Initially, Stikland North - located on the Remainder of Erf 6300, north of Old Paarl Road was also investigated for redevelopment. An environmental screening was conducted to identify any sensitivities on the Stikland North site. No environmental sensitivities were found, and thus an Applicability Checklist was submitted to the competent authority to assess the applicability of the NEMA EIA Regulations of 2014 (as amended) to Stikland North. **The response from the DEA&DP confirmed that the development of Stikland North would not require environmental authorisation (EA). This BAR therefore focuses solely on the proposed development of the Stikland South site, located on the Remainder of Erf 6300, south of the Old Paarl Road ('the site').**

In terms of the EIA Regulations of 2014 (as amended), the proposed development of Stikland South requires an EA from the DEA&DP, and a Basic Assessment (BA) must be undertaken by an Environmental Assessment Practitioner (EAP). Infinity Environmental is appointed to manage this BA process. Key stages in the BA process are shown below.



Need and Desirability

Addressing the need and desirability of an activity is a way of ensuring development is sustainable and appropriate within its context. The need for and desirability of the proposed development is considered in this Basic Assessment Report (BAR) in terms of its level of fit with spatial planning and policy, its social context and social impacts and its response to the principles of environmental management, including the mitigation of environmental impacts of the associated activities.

The opportunity to develop Stikland South was considered due to the needs of the broader area and the amount of vacant land available. The proposed Stikland South development is envisaged to create medium-density, mixed-use, urban development opportunities that optimise the inherent potential of the site and portions thereof, while integrating respectfully within the surrounding urban fabric and on-site psychiatric functions, to provide maximum inclusivity, economic benefit and spatial transformation within the overall Cape Town socio-economic context. The proposed development of the site aligns with various planning policy documents. The current proposal also takes into account

the environmentally sensitive areas identified by the freshwater and botanical specialists. These sensitive areas will largely be conserved within the proposed new Stikland Hospital boundary.

Impact Assessment

The specialist studies and statements conducted to inform this impact assessment are listed below. All impacts identified and assessed, as well as the proposed mitigation measures and management actions, can be found in Section H of this BAR. In addition, all the mitigation and management measures proposed by the specialists, including those additional impacts and management measures identified by the EAP, have been included in the Environmental Management Programme (EMPr) [refer to Appendix H of this BAR]. Specialist reports are included under **Appendix G** of this report.

Table 2: EIA Team

Role	Organisation	Name
Environmental Assessment Practitioner	Infinity Environmental	Tarryn Solomon Anathi Skweyiya Kaylyn Heinrich Olivia Murgatroyd
Freshwater specialist	EnviroSwift	Nick Steytler
Botanical specialist	Nick Helme Botanical Surveys	Nick Helme
Heritage specialist		Cindy Postlethwayt
Socio-economic specialist	Urban Econ Development Economists	Alexandra Kempthorne Mwajuma Kamanzi
Transport specialist	HHO Consulting Engineers	Stef Naude
Bulk service engineers	HHO Consulting Engineers	Paul Levy

Freshwater: A freshwater impact Assessment was compiled by EnviroSwift Western Cape (refer to **Appendix G2**). The assessment included a site visit by the freshwater specialist to verify the presence of watercourses on site. Due to the history of disturbance on site, having been cultivated since the mid-1900s, and due to ongoing, regular mowing of the vacant areas, the freshwater specialist recommended that a geotechnical survey be performed to ultimately confirm the freshwater specialist's delineations of on-site wetlands. Towards this end, GEOSS was commissioned to undertake instead a hydropedological study, which confirmed that perching of the water table was a key hydrological driver of the wetlands and the 5 wetlands identified by the freshwater specialist were indeed present on-site. The specialist recommended planting of suitable wetland plants and the establishment of a 20 m wide buffer surrounding each wetland be undertaken, along with implementation of all other mitigation measures detailed in the impact assessment (refer to **Appendix J**). A risk assessment matrix was used to determine the level of risk posed by the proposed development. Negative impacts were found to be of a low risk class. Based on this assessment, the aquatic specialist supports the proposed development on the condition that the recommended mitigation measures are implemented.

At the time of the freshwater specialist's assessment, it was proposed that Wetland 5, located in the southern-most corner of the site, be fully infilled for development, which was accounted for in the risk assessment rating of low risk. Since then, the development framework has been revised, and Wetland 5 is now largely being retained on site. While some disturbance and partial infilling will occur to install a stormwater swale and pedestrian pathway—aligned with the Landscape Framework (see page 7 of **Appendix G8**)—this is considered less consequential than the original proposal to completely infill the wetland.

As such, the updated development framework represents an improvement in wetland conservation, reducing the extent of infilling of Wetland 5. The freshwater specialist assessed the original, more intensive proposal as the **worst-case scenario** for the wetlands on site, and still found the proposed development to pose a **low risk**. The Department of Water and Sanitation (DWS) has approved a General Authorisation for the proposed activities (WU37034) based on this worst-case scenario.

Botanical: A botanical impact assessment was prepared by Nick Helme Botanical Surveys (refer to **Appendix G1**). The assessment found that the site supports notable remnants of two Critically Endangered vegetation types, i.e. Cape Flats Sand Fynbos and Swartland Shale Renosterveld, with at least five plant Species of Conservation Concern (SoCC).

The majority of the study area is of Low botanical sensitivity, with these areas not supporting any of the recorded SoCC. However, four patches of **Very High sensitivity** were identified within the site, including one seasonal wetland. The remaining three Very High sensitivity patches support all five recorded SoCC. Surrounding and connecting these are two patches of **Medium-High sensitivity** vegetation. In the south-eastern portion of the site, three **Medium sensitivity** patches were identified, which do not support any of the SoCC except the annual *Phyllopodium capillare*.

The revised development framework includes the retention of a portion of Medium-High sensitivity vegetation as open space, while approximately 0.40 ha of Medium-High sensitivity vegetation, located in the north eastern portion, is expected to be cleared for road development. All other botanically sensitive areas are proposed to be retained within the Stikland Hospital boundary.

A comment on the revised proposal was obtained from the botanical specialist, addressing changes to the original development framework assessed. According to the specialist, the impacts during the construction and operational phases are manageable, especially with the proposed mitigation measures. This comment is detailed in a supplementary letter appended to the original Botanical Impact Assessment.

Heritage: The Heritage Impact Assessment (HIA) was conducted by Cindy Postlethwayt (**Appendix G3**) revealed that the primary significance of the original Stikland Hospital site lies in its social significance as an institution serving a particularly marginalised sector of society, the failures of which can impact society as a whole. Although this is important, it does not fit the definition of intangible cultural heritage and should not be a matter for the heritage sector to regulate. For this reason, the institution and linked uses are considered ungradable in the absence of other attributes of heritage significance.

In terms of landscape, the significant trees and tree groupings, including the Eucalyptus woodlot on Stikland South are in some part historic, and more generally provide important place-making opportunities. Thus, these significant trees and tree groupings were characterised with a grading of 3C. The heritage specialist assigned a grading of 3A to the High to Medium sensitivity botanical areas identified as part of the botanical assessment.

The HIA concluded that the negative impacts associated with the proposed development can be mitigated to a low significance. Mitigation measures recommended by the heritage specialist include the following:

- A more detailed Tree Management Plan is required as part of the planning approval process for implementation.

- A qualified and experienced Arborist must be involved in the implementation /execution of the Tree Management Plan.
- Implementation of the Landscape design guidelines and requirements per Landscape Framework and mitigations as per Forest Assessment.

Following the commenting period on the BAR, the HIA will be submitted to HWC for consideration by the HWC Impact Assessment Committee (IACOM), and the final comment will be included with the final BAR.

Landscape Framework Plan: A Landscape Master Plan (LFP) was prepared for the Stikland South development by Viridian Consulting (Pty) Ltd (**Appendix G8**). This framework will guide the development process and includes comprehensive landscape guidelines. Key considerations of the LFP include preserving the botanical and freshwater value of the environmentally sensitive areas, integrating with the surrounding environment and retaining large mature trees as far as possible.

Socio-economic: The proposed Stikland South development, through its construction and operation, is envisaged to result in both positive and negative socio-economic impacts. The net positive socio-economic impacts associated with the construction and operation of the proposed development outweigh its net negative socio-economic effects. The proposed development is also anticipated to have a positive impact on the local economy and employment creation, leading to the diversification of the economy and a reduction in the unemployment rate. Essentially, the proposed development is considered acceptable with no major issues from a socio-economic perspective since the proposed development will make provision for affordable, Social Housing, as well as open market housing, supported by a school and community facilities. Although the no-go alternative in this case would mean that the negative impacts associated with the proposed development such as nuisance effects and others, this alternative would also mean that the positive benefits associated with the proposed development will not be realised. The positive impacts therefore outweigh any negative ones, making the development preferable to the no-go alternative, on condition that the recommended mitigation measures are implemented.

Transport: A TIA was conducted by HHO Consulting Engineers (**Appendix G4**). It was determined that the increase in vehicle trips generated can be accommodated by the surrounding road network with the implementation of the road upgrades indicated in the City's Right-of-Way Plan, and with the inclusion of the extension of De la Haye Avenue to link with Bill Bezuidenhout Avenue, which will substantially improve the connectivity of the local area and the traffic modelling undertaken by the City in the greater Bellville area, which took into account development on the Stikland South site. Additionally, the assessment anticipates the upgrading of Old Paarl Road with some amendments. Recommendations are made for the design of each intersection, granting access to the site. This impact is determined by the EAP to be a negative impact of Low-Medium significance after mitigation.

Bulk services: A Civil Engineering Bulk Services Assessment Report was conducted by HHO Consulting Engineers, and a Baseline Report for Electrical infrastructure was conducted by Triocon Consulting Engineers (Pty) Ltd (refer to **Appendix G6 and G7**). These reports assessed the demand of the proposed development on electricity, potable water, foul sewer, solid waste management and stormwater. It was determined that municipal services have the capacity to handle the potable water demand, foul sewer demand, and solid waste demand produced by the development, and recommendations are made to reduce the demand on the municipal infrastructure. However, it was found that the City does not have the capacity to supply electricity without the necessary upgrades to the electrical

infrastructure. The proposed development will also require new stormwater infrastructure to manage the increased runoff.

It is recommended that stormwater and electrical infrastructure upgrades be made to accommodate the increase in demand. Confirmation must also be sought from the City of Cape Town on the available capacity of service infrastructure.

Table 3: Summary of Key Impacts

Impact	Description
Construction Phase Impacts	
Loss of wetland habitat	Part of depression Wetland 5 will be infilled and lost as a result of the proposed southern stormwater swale on the south-eastern boundary of the site, which will also form part of the green belt right of way cycle / jogging track.
Alteration of flow regime	Removal of mowed vegetation in preparation for construction has the effect of reducing flow velocity and flood peaks into and within the receiving wetlands.
Increased erosion and sedimentation	During vegetation clearing and/or excavations, soils would be destabilised thereby becoming more prone to erosion.
Water quality impairment	Potential contamination of the wetlands due to the use of construction materials upslope of wetlands.
Loss of biota	Loss of biota due to infilling of wetlands and construction activities within or in close proximity to wetlands.
Botanical impacts	The proposed development will result in permanent loss and degradation of a portion of Medium-High indigenous vegetation within the development footprint.
Dust, noise, and vibration impacts	The proposed construction activity will produce temporary dust, noise, and vibration impacts.
Visual impacts	Aesthetic impacts of construction activities on the patients and workers of Stikland Hospital and surrounding neighbours.
Waste impacts	If inappropriately handled, waste produced during construction may cause pollution of the surrounding environment.
Contaminated stormwater impacts	Impacts of contaminated stormwater by surface runoff to the wetlands during construction.
Traffic impacts	Construction phase traffic impacts are anticipated as heavy vehicles and other construction traffic access and leave the site via Old Paarl Road and the wider road networks.
Temporary increase in production and GDP	The capital expenditure of the proposed development would equate to a direct, indirect, and induced impact on production and new business sales within the local area.
Creation of temporary employment	The construction of the proposed development will create direct employment during construction, where contractors, sub-contractors, and professional staff will recruit labour.
Temporary increase in household income	The proposed developments will create employment positions during construction, generating revenue for the affected households within the surrounding local areas through direct, indirect and induced effects.
Temporary increase in social conflicts due to an influx of people during construction	The influx of job seekers and the introduction of new labour may result in social conflicts between local labour and external labour. Additionally, the influx of labour in the area will lead to incidents of crime, noise, and illicit land occupation, particularly by unskilled labourers and those seeking employment who cannot afford housing in the primary area.
Heritage buildings	The proposed development could ultimately entail the demolition of buildings older than 60 years. All have been assessed as Not Conservation Worthy and impacts are assessed as Low.
Negative impacts on trees to be retained in the development	It can be expected that during the construction phase of the proposed mixed-use development trees, their root zone and canopy may protrude into the extent of construction disturbance and require protection
Operational phase impacts	
Biota gains	Ceasing to mow the vegetation within the wetlands and associated buffer zones will benefit the biota in these areas.

Impact	Description
Disturbance of wetland habitat	Disturbance of the wetland habitat as a result of the edge effects associated with the predominant land use (residential) would be probable given the proximity of the wetlands to the various residential buildings.
Alteration of flow regime	The extent of hard impermeable surfaces such as parking areas and roads will increase stormwater run-off across the proposed site. Additionally, any persistent leaks from any of the pipelines (potable water supply or sewerage) would increase water inputs into the wetlands.
Water quality impairment	Given the possibility of sewage pipelines installed upslope of the wetlands, there is a risk that raw effluent would be discharged into the receiving wetland(s) in the event that the pipeline is damaged and/or due to lack of maintenance, or leaks.
Sustainable increase in production and GDP in national and local economy	The impact is created through the production and consumption multiplier effect. The production effect occurs when demand for goods requires operational inputs, stimulating business sales within the region. The consumption effect arises from increased household incomes of permanent employees at the project site, leading to higher household spending.
Sustainable impact on employment	The proposed development will create direct employment opportunities through the operation and management of the mixed-use development.
Sustainable increase in household income	The proposed development will create employment positions within the local region, which will generate personal income and be sustained for the entire project's lifespan.
Sustainable impact on urban regeneration	As the project progresses into its operational phase, it will create a vibrant mixed-use environment that promotes economic activity, enhances accessibility, and promotes community engagement.
Provision of affordable and social housing	Enablement of affordable housing on a strategic public land asset close to public transport and employment opportunities is anticipated to have various positive impacts, including improving living standards and economic opportunity for buyers /tenants; and maximising the use of publicly owned land in the public interest.
Sense of place	The proposed development entails 4 storey buildings and is likely to negatively impact the sense of place within the predominantly single-storey residential suburbs surrounding the site. This change introduces a visual contrast and modifies the character of the area.
Traffic impacts	The proposed development will impact on the surrounding road network. Additional traffic can be expected on the local road network due to trips generated by the proposed new development.
Negative impacts upon trees to be retained	The development may disrupt the visual landscape and alter the current low-density feel of the site.

Table 4: Significance of impacts

Impact	Impact Significance		
	No-Go Alternative	Preferred Alternative	
		Without mitigation	With mitigation
Construction Phase Impacts			
Loss of wetland habitat	**None**	**Low (negative)**	**Low (negative)**
Alteration of flow regime	**None**	**Low (negative)**	**Very Low (negative)**
Increased erosion and sedimentation	**None**	**Low (negative)**	**Very Low (Negative)**
Water quality impairment	**None**	**Low (negative)**	**Very Low (negative)**
Loss of biota	**Low (negative)**	**Medium (negative)**	**Low (negative)**

Impact	Impact Significance		
	No-Go Alternative	Preferred Alternative	
		Without mitigation	With mitigation
Botanical impacts	Neutral	Medium (negative)	Low (negative)
Dust, noise, and vibration impacts	None	Medium (negative)	Very Low (negative)
Visual impacts	None	Low (negative)	Very low (negative)
Waste generation	None	Medium (negative)	Low (negative)
Contaminated stormwater	None	Medium (negative)	Low (negative)
Traffic congestion	None	Medium (negative)	Low(negative)
Temporary increase in production and gross domestic product	None	Medium (positive)	Medium (positive)
Creation of temporary employment	None	Medium (positive)	Medium to High (positive)
Temporary increase in household income	None	Medium (positive)	Medium to High (positive)
Temporary increase in social conflicts due to an influx of people during construction	None	Medium (negative)	Medium (negative)
Demolition of buildings older than 60 years	None	Low (negative)	Low (negative)
Negative impacts on trees to be retained in the development	None	Medium to High (negative)	Low (negative)
Operational Phase Impacts			
Biota gains	Low (negative)	Low (positive)	Medium (positive)
Disturbance of wetland habitat	None	Low (negative)	Very low (negative)
Alteration of flow regime	None	Medium (negative)	Very low (negative)
Botanical impacts	Neutral	Low (negative)	Low positive
Water quality impairment	None	Medium (negative)	Very low (negative)
Sustainable increase in production and GDP in national and local economy	None	Medium to High (positive)	Medium to High (positive)
Sustainable impact on employment	None	Medium (positive)	Medium to High (positive)
Sustainable increase in household income	None	Medium (positive)	High (positive)
Sustainable impact on urban regeneration	None	Medium (positive)	Medium to High (positive)
Provision of affordable and social housing	None	Medium to High (positive)	High (positive)
Sense of place	None	Medium (negative)	Low (negative)
Traffic impacts	None	Medium (negative)	Low (negative)
Negative impacts upon trees to be retained	None	Medium to High (negative)	Low (negative)

EAP's Recommendation

Based on the findings of this Basic Assessment, it is the opinion of the EAP that there are no 'fatal flaws' from an environmental perspective. It is the opinion of the EAP that although negative impacts are unavoidable during the construction and operational phases of the proposed project, with the implementation of the mitigation measures proposed, these impacts will be mitigated to acceptable levels. The proposed mixed-use development aligns with various planning policy documents and addresses a societal need through the provision of social and affordable housing opportunities. High-sensitivity botanical and wetland areas have been excluded from development, allowing these areas to be maintained for their ecological and social value. **Provided that the specified mitigation measures are applied effectively, it is recommended that the project receive EA in terms of the NEMA EIA Regulations of 2014 (as amended).**

To ensure the effective implementation of the mitigation and management actions, an EMPr is included as **Appendix H** of this Draft BAR. The mitigation measures necessary to ensure that the project is planned, constructed, and operated in an environmentally responsible manner are listed in this EMPr. The EMPr should be updated regularly and provide clear and implementable measures for the establishment and operation of the proposed development.

There are no significant uncertainties or gaps in knowledge relating to the assessment and mitigation measures, other than those specifically listed in the relevant specialist studies. Taking into consideration the findings of the various specialist studies, it is the EAP's reasoned opinion that the proposed activity **should receive an EA** in terms of the EIA Regulations of 2014 (as amended), subject to the following conditions:

- The EMPr forming part of this BAR must be implemented during the design, construction and operational phases of the proposed development.
- An independent Environmental Control Officer must be appointed for the duration of the construction phase and must carry out the responsibilities of that role as defined in the EMPr.
- A Traffic Management Plan must be drafted, approved and implemented as specified in the EMPr.
- It is proposed that the EA be granted for a period of 5 years and that its validity end upon completion of the construction maintenance period, twelve months after completion of the upgrades, given that none of the listed activities has an operational component.

Public Participation

Potential interested and affected parties (I&APs) have been identified, including immediate adjacent landowners and occupiers, ward councillors, municipal officials, relevant state departments and organs of state. Notification letters have been emailed or hand-delivered to all identified interested and affected parties, informing them of the proposal and the opportunity to comment on the Draft BAR.

We invite any members of the public who feel they are affected by or have an interest in the proposed project to comment on the Draft BAR and to register as **I&APs**. All registered I&APs will receive communication regarding the proposed project and will be notified of any future opportunities for comment. I&APs are required to provide contact information and a declaration of any interest they may have in the application to register.

A 30-day public participation process will end on 13 October 2025.

Interested and affected parties are invited to review the Draft Basic Assessment Report and **comment** using any of the following methods:

Online at **www.infinityenv.co.za/Stikland**

By email to **comments@infinityenv.co.za**

By WhatsApp message to **060 524 7676**

An Open House will be held on Thursday, 18 September 2025, at the Dunatos Remedial School from 3pm to 7pm.

The 30-day commenting period will start on Thursday, 11 September 2025 and end on Monday, 13 October 2025.

For more information, to comment, or to arrange alternative ways of participating, please contact the Environmental Assessment Practitioner, Tarryn Solomon or Anathi Skweyiya of Infinity Environmental, at the details above.

Processing of Personal Information

We are required by the EIA Regulations of 2014 (as amended) and the NEMA to maintain a register of I&APs, including people who have commented, attended meetings, or requested registration. This requires us to collect and process certain personal information as defined in the Protection of Personal Information Act, 2013 (Act No. 4 of 2013), as amended. The following personal information has been collected for the purpose of public participation from identified I&APs and will be collected from anyone who comments or registers:

- Name, contact details and address;
- A copy of any comments submitted; and
- Details of any interest declared in the granting or refusal of the application.

Should you register and/or comment, your name and your comments will be included in published documents. Your contact details, address, and interest declaration will be provided to the competent authority and must also be provided to any appellants in the event that the EA is appealed in terms of the Appeal Regulations, GNR 5985 of 2025. Personal information will be stored by Infinity Environmental (Pty) Ltd at 2 Fir Street, Observatory 7925, and on a password-secured cloud storage system, which may include servers outside the Republic of South Africa. You may at any time request access to or rectify this personal information by contacting us at info@infinityenv.co.za.

Visit www.infinityenv.co.za/legal to view our Privacy Policy

CONTENTS

ABBREVIATIONS & ACRONYMS

BAR	Basic Assessment Report
CBA	Critical Biodiversity Area
DEA&DP	Western Cape Department of Environmental Affairs and Development Planning
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIS	Ecological Importance and Sensitivity
EMF	Environmental Management Framework
EMPr	Environmental Management Programme
ESA	Ecological Support Area
GA	General Authorisation
GDP	Gross Domestic Product

ha	hectare
HWC	Heritage Western Cape
I&AP	Interested and Affected Party
ICMA	Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
IDP	Integrated Development Plan
L/s	litres per second
mm/annum	millimetres per annum
NEMBA	National Environmental Management: Biodiversity Act (Act 10 of 2004)
NFEPA	National Freshwater Ecosystem Protection Assessment
NHRA	National Heritage Resources Act (Act 25 of 1999)
NID	Notice of Intent to Develop
p.a.	per annum
PES	Present Ecological State
PPP	Public Participation Process
Pr. Sci. Nat.	Professional Natural Scientist
SA	South Africa
SCC	Species of Conservation Concern
SDF	Spatial Development Framework
SDP	Spatial Development Plan
SWSA	Strategic Water Source Area
TIA	Transport Impact Assessment
ToR	Terms of Reference
WCBSP	Western Cape Biodiversity Spatial Plan
WCG	Western Cape Government
WULA	Water Use Licence Application

BASIC ASSESSMENT REPORT REQUIREMENTS

Requirements as per Appendix 1 of the 2014 NEMA EIA Regulations (GN R326, as amended)

Appendix 1 requirement	Section of BAR
1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include-	
(a) details of – i. the EAP who prepared the report; and ii. the expertise of the EAP, including a curriculum vitae;	**A** ***EAP is EAPASA-registered***
(b) the location of the activity, including (i) the 21-digit Surveyor General code of each cadastral land parcel; (ii) where available, the physical address and farm name; (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties;	**B – 4.6** **B – 4.4** **B – 4.7**
I a plan which locates the proposed activity or activities applied for as well as associated structures and infrastructure at an appropriate scale; or, if it is- (i) a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) on land where the property has not been defined, the coordinates within which the activity (iii) is to be undertaken;	**Appendix B1**
(d) a description of the scope of the proposed activity, including (i) all listed and specified activities triggered and being applied for; and (ii) a description of the activities to be undertaken including associated structures and infrastructure;	**D** **B - 4.4**
(e) a description of the policy and legislative context within which the development is proposed including- (i) an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to this activity and have been considered in the preparation of the report; and (ii) how the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks, and instruments	**E**
(f) a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location	**E, H** **Appendix K**
(g) a motivation for the preferred site, activity and technology alternative;	**H**
(h) a full description of the process followed to reach the proposed preferred alternative within the site, including – (i) details of all the alternatives considered; (ii) details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs; (iii) a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; (iv) the environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; (v) the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts- (aa) can be reversed; (bb) may cause irreplaceable loss of resources; and	**H and I**

Appendix 1 requirement	Section of BAR
(cc) can be avoided, managed or mitigated; (vi) the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives; (vii) positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; (viii) the possible mitigation measures that could be applied and level of residual risk; (ix) the outcome of the site selection matrix; (x) if no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and (xi) a concluding statement indicating the preferred alternatives, including preferred location of the activity;	
(i) a full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including– (i) a description of all environmental issues and risks that were identified during the environmental impact assessment process; and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures;	**I**
(j) an assessment of each identified potentially significant impact and risk, including– (i) cumulative impacts; (ii) the nature, significance and consequences of the impact and risk; (iii) the extent and duration of the impact and risk; (iv) the probability of the impact and risk occurring; (v) the degree to which the impact and risk can be reversed; (vi) the degree to which the impact and risk may cause irreplaceable loss of resources; and (vii) the degree to which the impact and risk can be avoided, managed or mitigated;	**I**
(k) where applicable, a summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final report;	**I**
(l) an environmental impact statement which contains– (i) a summary of the key findings of the environmental impact assessment; (ii) a map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and (iii) a summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;	**J** **Appendix B2** **J**
(m) based on the assessment, and where applicable, impact management measures from specialist reports, the recording of the proposed impact management outcomes for the development for inclusion in the EMPr;–	**J - 2.1**
(n) any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation;–	**J - 2.2**
(o) a description of any assumptions, uncertainties, and gaps in knowledge which relate to the assessment and mitigation measures proposed;–	**J - 2.4**
(p) a reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation;–	**J - 2.3**

Appendix 1 requirement	Section of BAR
(q) where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded, and the post construction monitoring requirements finalised;	**J – 2.5**
(r) an undertaking under oath or affirmation by the EAP in relation to– (i) the correctness of the information provided in the reports; (ii) the inclusion of comments and inputs from stakeholders and I&APs; (iii) the inclusion of inputs and recommendations from the specialist reports where relevant; and (iv) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties; and	**K**
(s) where applicable, details of any financial provisions for the rehabilitation, closure, and ongoing post decommissioning management of negative environmental impacts;	**n/a**
(t) any specific information that may be required by the competent authority; and	**n/a**
(u) any other matters required in terms of section 24(4)(a) and (b) of the Act.	**n/a**

Western Cape Government

Department of Environmental Affairs and Development Planning

DRAFT BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

PROPOSED DEVELOPMENT FRAMEWORK FOR THE STIKLAND SOUTH HOSPITAL SITE, ERF 6300, BELLVILLE

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.

2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".

3. *Submission of documentation, reports and other correspondence:*

   The Department has adopted a digital format for corresponding with proponents/applicants or the general public. If there is a conflict between this approach and any provision in the legislation, then the provisions in the legislation prevail. If there is any uncertainty about the requirements or arrangements, the relevant Competent Authority must be consulted.

   The Directorate: Development Management has created generic e-mail addresses for the respective Regions, to centralise their administration. Please make use of the relevant general administration e-mail address below when submitting documents:

   DEADPEIAAdmin@westerncape.gov.za
   Directorate: Development Management (Region 1):
   City of Cape Town; West Coast District Municipal area;
   Cape Winelands District Municipal area and Overberg District Municipal area.

   DEADPEIAAdmin.George@westerncape.gov.za
   Directorate: Development Management (Region 3):
   Garden Route District Municipal area and Central Karoo District Municipal area

   General queries must be submitted via the general administration e-mail for EIA related queries. Where a case-officer of DEA&DP has been assigned, correspondence may be directed to such official and copied to the relevant general administration e-mail for record purposes.

   All correspondence, comments, requests and decisions in terms of applications will be issued to either the applicant/requester in a digital format via email, with digital signatures, and copied to the Environmental Assessment Practitioner ("EAP") (where applicable).

4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.

5. All applicable sections of this BAR must be completed.

6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.

7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.

9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.

10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.

11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.

12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.

13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.

14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-
    Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

    Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS	
CAPE TOWN OFFICE: **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1)** (City of Cape Town, West Coast District, Cape Winelands District & Overberg District)	**GEORGE REGIONAL OFFICE:** **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3)** (Central Karoo District & Garden Route District)
The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000	The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.	
Locality Map:	The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following: • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken. Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development **must** be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.

	• Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):
	  o Watercourses / Rivers / Wetlands
	  o Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable);
	  o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"):
	  o Ridges;
	  o Cultural and historical features/landscapes;
	  o Areas with indigenous vegetation (even if degraded or infested with alien species).
	• Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.
	• North arrow
	
	A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.

Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ **(**tick) or a **x** (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	**Maps**		
	Appendix A1:	**Locality Map**	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	N/A
	Appendix A3:	Map with the GPS co-ordinates for linear activities	N/A
Appendix B:	**Appendix B1:**	**Site development plan(s)**	✓
	Appendix B2	**A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;**	✓
Appendix C:	**Photographs**		✓
Appendix D:	**Biodiversity overlay map**		✓
Appendix E:	**Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.**		
	Appendix E1:	**Final comment/ROD from HWC**	**Pending**
	Appendix E2:	**Copy of comment from Cape Nature**	**Pending**
	Appendix E3:	**Comment from the DWS**	**Pending**
	Appendix E4:	Comment from the DEA: Oceans and Coast	N/A
	Appendix E5:	Comment from the DAFF	N/A
	Appendix E6:	**Comment from WCG: Transport and Public Works**	**Pending**
	Appendix E7:	Comment from WCG: DoA	N/A

	Appendix E8:	**Comment from WCG: DHS**	**Pending**
	Appendix E9:	**Comment from WCG: DoH**	**Pending**
	Appendix E10:	**Comment from DEA&DP: Pollution Management**	**Pending**
	Appendix E11:	**Comment from DEA&DP: Waste Management**	**Pending**
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	**Pending**
	Appendix E13:	Comment from DEA&DP: Air Quality	N/A
	Appendix E14:	Comment from DEA&DP: Coastal Management	N/A
	Appendix E15:	**Comment from the local authority**	**Pending**
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	**Pending**
	Appendix E17:	Comment from the District Municipality	N/A
	Appendix E18:	Copy of an exemption notice	N/A
	Appendix E19	Pre-approval for the reclamation of land	N/A
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	N/A
	Appendix E21:	**Proof of land use rights**	✓
	Appendix E22:	Proof of public participation agreement for linear activities	N/A
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.**		✓
Appendix G:	**Specialist Report(s)**		
	Appendix G1:	**Botanical Impact Assessment by Nick Helme Botanical Surveys (2025)**	✓
	Appendix G2:	**Freshwater Ecological Assessment by EnviroSwift (2024)**	✓

	Appendix G3:	**Heritage Impact Assessment by Cindy Postlethwayt (2025)**	✓
	Appendix G4:	**Transport Impact Assessment by hho Consulting Engineers (2025)**	✓
	Appendix G5:	**Socio-Economic Impact Assessment by Urban Econ Development Economists**	✓
	Appendix G6:	**Civil Engineering Bulk Services Assessment Report by ARG Design (2025)**	✓
	Appendix G7:	**Electrical Baseline Report by Triocon Consulting Engineers (2025)**	✓
	Appendix G8:	**Landscape Framework by Viridian Consulting Landscape Architects (2025)**	✓
Appendix H:	**EMPr**		✓
Appendix I:	**Screening tool report**		✓
	Site Sensitivity Verification Report		
Appendix J:	**The impact and risk assessment for each alternative**		✓
Appendix K:	**Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline**		✓
Appendix…..	Any other attachments must be included as subsequent appendices		N/A

SECTION A: SITE DESCRIPTION & RECEIVING ENVIRONMENT

Highlight the Departmental Region in which the intended application will fall	**CAPE TOWN OFFICE: REGION 1**		GEORGE OFFICE: REGION 3
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	(Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Western Cape Government: Department of Infrastructure		
Name of contact person for Applicant/Proponent (if other):	Mr Brett Blackburn		
Company/ Trading name/State Department/Organ of State:	Western Cape Government: Department of Infrastructure		
Company Registration Number:	N/A		
Postal address:	4th Floor, 9 Dorp Street		
	Cape Town		Postal code: 8001
Telephone:	021 467 9343		Cell: -
E-mail:	Brett.Blackburn@westerncape.gov.za		Fax: N/A
Company of EAP:	Infinity Environmental (Pty) Ltd		
EAP name:	**Tarryn Solomon (Reg EAP)** Anathi Skweyiya (Cand EAP), Kaylyn Heinrich (Cand EAP), Olivia Murgatroyd (Cand EAP)		
Postal address:	Suite 17, Private Bag X11,		
	Mowbray		Postal code:
Telephone:	021 834 1602		Cell: 7705
E-mail:	tarryn@infinityenv.co.za		Fax: -
Qualifications:	BSc Environmental and Water Science (+18 years experience)		
EAP registration no:	**Tarryn Solomon (Reg EAP): 2019/1671** Anathi Skweyiya (Cand EAP): 2022/4635, Kaylyn Heinrich (Cand EAP): 2023/6727, Olivia Murgatroyd (Cand EAP): 2024/8454		
Duplicate this section where there is more than one landowner Name of landowner:	Western Cape Government: Department of Infrastructure		
Name of contact person for landowner (if other):	Mr Brett Blackburn		
Postal address:	4th Floor, 9 Dorp Street		
	Cape Town		Postal code: 8001
Telephone:	021 467 9343		Cell: -
E-mail:	Brett.Blackburn@westerncape.gov.za		Fax: -
Name of Person in control of the land:	N/A		
Name of contact person for person in control of the land:	Mr Brett Blackburn		
Postal address:	4th Floor, 9 Dorp Street		
	Cape Town		Postal code: 8001

Telephone:	021 467 9343	Cell: -
E-mail:	Brett.Blackburn@westerncape.gov.za	Fax: -

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	City of Cape Town Metropolitan Municipality	
Contact person:	Ms Maurietta Stewart	
Postal address:	Floor 8, 44 Wale Street (c/o Wale and Long Streets)	
	Cape Town	Postal code: 8001
Telephone	021 400 6529	Cell: -
E-mail:	Maurietta.Stewart@capetown.gov.za	Fax: -

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INCLUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	**New**	✓	Expansion	
2.	Is the proposed site(s) a brownfield or greenfield site? Please explain.				

The site for the proposed development, Remainder of Erf 6300, has been largely developed with existing structures on the site, including the Stikland Hospital, which is secure and fenced off. Considering the historical use of the site for agriculture and the clearance of vegetation for the construction of the existing hospital, the site is therefore considered a brownfield site. Although the botanist confirmed that the site supports patches of Cape Flats Sand Fynbos and Swartland Shale Renosterveld vegetation (both of which are classified as Critically Endangered in terms of Section 52 of the National Environmental Management Act, 2004 (Act No. 10 of 2004), as amended (NEM:BA), vacant and vegetated areas within the hospital property are regularly maintained with periodic mowing.

3.	**For Linear activities or developments**				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives.				m²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	**Starting point co-ordinates for all alternatives**				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	**Other developments**				
4.1.	Property size(s) of all proposed site(s):				**1141051m²**
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				**6564m²**
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				**316909m²**
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).				

PROJECT BACKGROUND

The proponent, the Western Cape Government: Department of Infrastructure, is the custodian of Erf 6300, also known as the Stikland Hospital estate, and proposes to redevelop portions of this precinct south of the Old Paarl Road (i.e., Stikland South). In 2010, the Western Cape Government approved the mandate for the Regeneration Programme, which includes the Stikland Hospital estate. This project is currently managed by the Special Projects Directorate within the Department of Infrastructure, with the aim of maximizing the social value of publicly owned land.

Erf 6300 is a brownfield site with a history of institutional and community developments. Stikland North and South are both part of Erf 6300, separated by Old Paarl Road. The Stikland Psychiatric Hospital, located in Stikland South, and the housing in Stikland North were historically part of the hospital. The infrastructure, particularly in Stikland North, is underutilised, and large areas of land in both Stikland North and South remain vacant. As a result, both Stikland South and North precincts have been identified as areas offering opportunities for mixed-use development.

Stikland South is located on Erf 6300 in Stikland, Bellville. It is situated south of the Provincial Main Road R101 (Old Paarl Road), De La Hay Avenue to the west, Midmar Road to the east and the railway line to the South. The property extent is approximately 114 ha, of which approximately 60 ha are vacant; the remaining hectares include the Stikland Psychiatric Hospital, Stikland Hospital Pharmacy, and Western Cape College of Nursing Metro East Campus. **Figure 2** presents the locality of the proposed development, as indicated by the red polygon.

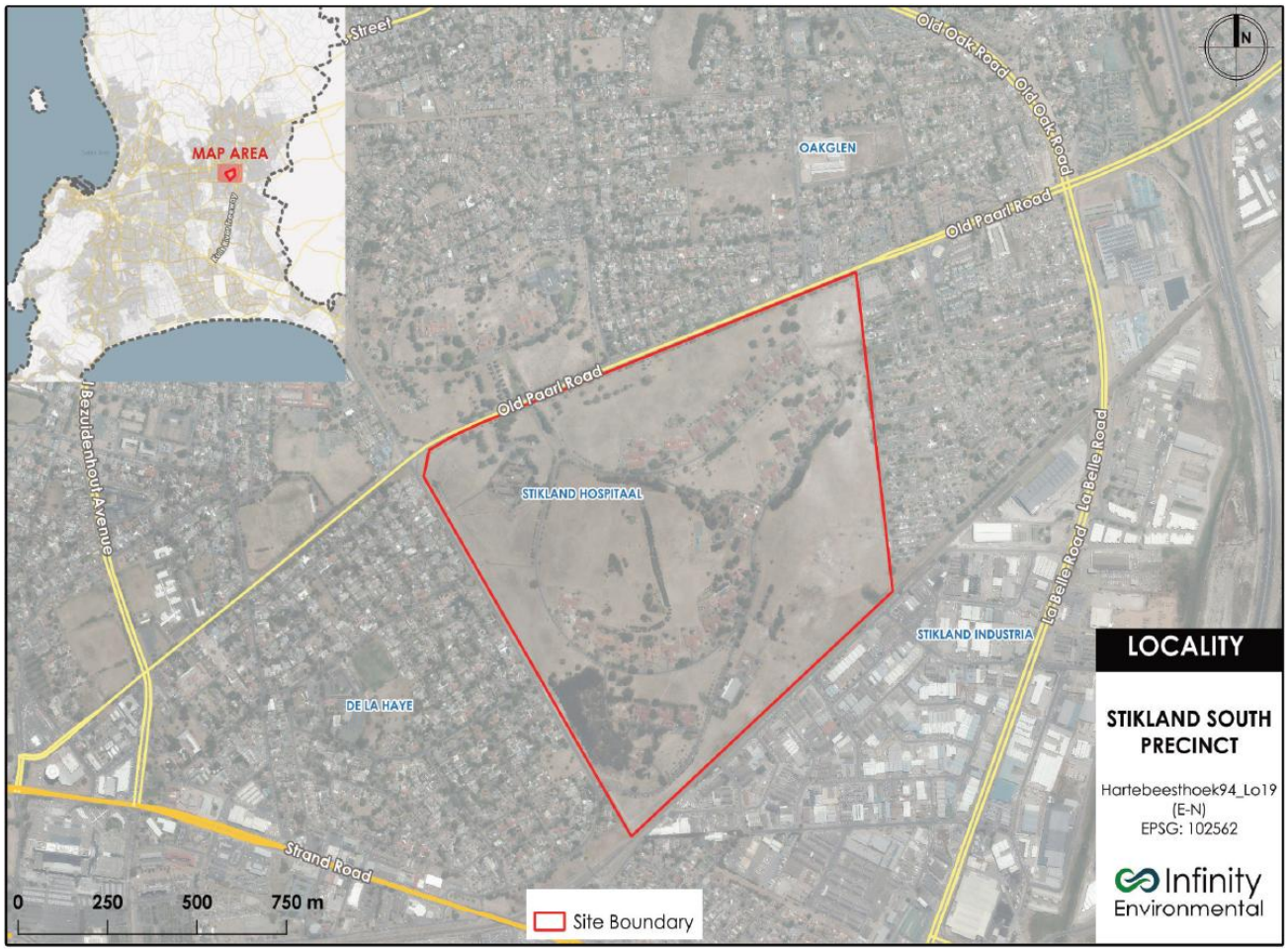


Figure 2. Locality Map

Proposed development of Stikland North

Initially Stikland North - located on the Remainder of Erf 6300, north of Old Paarl Road - was also investigated for redevelopment. An environmental screening was conducted to identify any sensitivities on the Stikland North site. No environmental sensitivities were found and thus an Applicability Checklist was submitted to the competent authority to assess the applicability of the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended) and the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA) to Stikland North. The response from the Department of Environmental Affairs and Development Planning (DEA&DP) confirmed that the development of Stikland North would not require environmental authorisation (EA).

PROJECT PROPOSAL

Proposed development of Stikland South (current environmental application for EA)

The opportunity to develop Stikland South was considered due to the needs of the broader area and the amount of vacant land available. The proposed Stikland South development is envisaged to create medium-density, mixed-use, urban development opportunities that optimise the inherent potential of the site and portions thereof, while integrating respectfully within the surrounding urban fabric and on-site psychiatric functions, to provide maximum inclusivity, economic benefit and spatial transformation within the overall Cape Town socio-economic context. The current proposal also takes into account the environmentally sensitive areas identified by the freshwater and botanical specialists. These sensitive areas will largely be conserved within the proposed development, as the entire south-eastern area of the site is excluded from the development framework.

Design Process

The development and drafting of the proposal followed an iterative process, which ultimately resulted in the formulation of a draft development framework for the site early in 2024. This proposal accommodated the series of wetlands and their respective buffers identified in the freshwater specialist study (Enviroswift, 2024). The draft development framework was published as part of the non-statutory public participation process (PPP) to allow for comments from stakeholders and the public, from Wednesday, 17 July 2024, to Monday, 19 August 2024.

Since the non-statutory PPP undertaken in 2024, the development framework has been revised from the initial framework published for comment. The revisions were primarily driven by key environmental factors highlighted in the botanical study conducted by Nick Helme (Nick Helme Botanical Surveys, 2024 – refer to **Appendix G1**), which found that certain areas previously earmarked for development contained Medium to Very High sensitivity vegetation and were therefore unsuitable for development. These sensitive areas have since been excluded from the development footprint and are now included within the proposed boundary for the Stikland Hospital grounds.

Additionally, a Transport Impact Assessment (TIA) has also been conducted for this application. Prior to the detailed TIA being undertaken, the views of the City's Urban Mobility Directorate (TIA & Development Control Branch) regarding trip generation assumptions for the envisaged land uses were obtained. Based on this input, a further revision to the development framework was made, resulting in reduced development density. All proposed development along the eastern section of the site is being removed, and the maximum building height was reduced from eight storeys to four.

Given the development constraints, the Eucalyptus Forest was investigated as an alternative for development to help offset, where possible, the loss of areas previously earmarked for development.

It was confirmed that approximately 20 071m² of the Eucalyptus Forest along the western boundary of the site will be retained, while the remaining portion is proposed for residential development.

Stikland South Development Framework

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure.

Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.

The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, and commercial spaces supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised, indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections, with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

The development framework is presented in **Figure 3. overleaf.**

Conservation Areas

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital. A portion of the Eucalyptus Forest is proposed to be conserved due to the place-making significance associated with the trees in the southwestern portion of the site.

Figure 3. Proposed Development Framework

LANDSCAPE FRAMEWORK PLAN

A Landscape Master Plan (LFP) prepared for the Stikland South development by Viridian Consulting (Pty) Ltd. This framework will guide the development process and includes comprehensive landscape guidelines. Key considerations of the LFP include preserving the botanical and freshwater value of the environmentally sensitive areas, integrating the proposed development with the surrounding environment and retaining large mature trees within the site as far as possible.

The LFP proposes measures to manage development impacts, such as enhancing biodiversity through planting with indigenous species, maintaining a green connection and removing alien invasive species on site. The LFP proposes the following design guidelines and requirements for the various sections of the development and summarises the key elements as follows:

Green Belt and Recreational Spaces:

- **Green Belt & Cycle/Jogging Track**: Extensive tree planting, ensuring a continuous green belt with a cycle/jogging track. Follow wetland buffers and setbacks.
- **Recreational Spaces**: Include active (play areas, bike tracks, gym equipment) and passive (walking paths, boardwalks, seating) recreational spaces.
- **Sports Fields**: Must be water-wise, durable, and suitable for intensive use (consider artificial turf), available for community use outside school hours.
- **Tree Planting**: Plant trees in parking areas (1 tree per 4 parking bays) and along the green belt for shade and screening.
- **Tree Management**: The Eucalyptus Forest needs a tree management plan, including pruning and root zone management, under arborist guidance.
- **Private Recreation Spaces**: Develop small gardens and relaxation areas within walk-up clusters.
- **Adventure Park**: Activities may include Acrobranch, outdoor climbing walls, and cross-fit. Provide a management and service node with ablution facilities, event pavilion, and parking.

Infrastructure and Access:

- **Central Service Area**: Provide staff facilities, parking, and at least one vehicular entrance for access and emergency services.
- **Fencing**: Use visually permeable fencing along Old Paarl Rd, Stikland Hospital, and De La Haye Rd boundaries. Ensure interfaces with surrounding buildings allow visibility of the park.
- **Utility Areas**: Screen utility areas adjacent to public open spaces.
- **Entrance Design**: Create defined, signposted entrances at De La Haye Rd and the green belt, with controlled access at certain times.

Environmental and Ecological Management:

- **Stormwater Swale**: Integrate the stormwater swale with the green belt by connecting to the green belt around the Stikland psychiatric hospital. Follow City of Cape Town (CoCT) Sustainable Urban Drainage Systems (SUDS) planting list for vegetation and provide a Non-motorised Transport (NMT) route along the swale and Stikland Rd extension.
- **Sensitive Areas**: Adhere to the design and management guidelines for Sensitive Botanical and Conservation Areas (refer to **Appendix G1**). Very High, High and Medium sensitivity botanical areas should remain undisturbed and managed for long-term conservation. Mowing frequency must be guided by a suitably qualified specialist.

- **Ecological Focus**: Minimise disturbance, enhance biodiversity, and manage botanically assessed sensitivity areas as conservation areas on-site. Avoid ecological impacts that could trigger a biodiversity offset.

Additional Requirements:

- **Irrigation**: Use well-point water tank systems for irrigation.
- **Materials**: Use durable, low-maintenance materials for playground equipment, paving, and surfaces.

PROPOSED SERVICES

- **Electrical Infrastructure**

The City has limited capacity (11 kiloVolts [kV]) and will not be able to supply the additional capacity required for the proposed development (estimated to be 20.75 Megavolt-Amperes (MVA) based on the City's Design Load Parameters, which is 4,04 kilo-volt-ampere [KVA] After Diversity Maximum Demand [ADMD]) without infrastructure upgrades, which include the following:

- Appropriate switching station sites are required to internally distribute the electrical supply for the proposed development
- The five switching station sites, 20m x 14m each, must be included on the plan for the subdivision and must be rezoned, registered, and transferred free of charge to the City.
- The City requires the switching station sites to be placed within the proposed development, on the erf boundary and adjacent to public roads. The position of the switching station sites will be determined by the electrical load concentration in the area and served by each switching station.
- The switching station sites shall have direct 24-hour unrestricted vehicular access.
- A lead time of up to 24 months, from the date of a formal supply application up until such time that the necessary supply is available, will be applicable. This lead time is required for any upgrading of the bulk electrical supply at the existing Oakdale Main Substation and must be confirmed at the time of application.
- The property owner will be required to submit an electricity reticulation design report to the Director: Electricity Generation and Distribution for approval.

The proposed site has an existing 22 m servitude, a 66 kV overhead line, which will be upgraded to a 132 kV line in the future by the CoCT.

- **Transport Infrastructure**

Based on the Transport Impact Assessment, the following access points/road extensions are required:

- The existing Stikland South access on Old Paarl Road north of the site,
- The existing access to Nurses' College on De La Haye Avenue west of the site,
- A new access point to the Stikland Psychiatric Hospital on De La Haye Avenue west of the site,
- A new access point on De La Haye Avenue opposite Wenning Park,
- A new access point with the Meerlust Street Extension north of the site, and
- A new access point with the St Harrod Drive north of the site.

- **Potable water**

The site is well serviced with water infrastructure. The proposed Stikland South development will generate an estimated annual average daily demand (AADD) of 919.18 kℓ/day for potable water.

The existing DN225 water in De La Haye Avenue will likely have sufficient capacity to accommodate this demand, but this must be confirmed through a capacity assessment by the CoCT.

- **Foul Sewer**

The proposed Stikland South development is estimated to produce a foul sewer discharge demand of 840.62 kℓ/day. Sustainable wastewater practices, such as greywater recycling, will be incorporated into the detailed design to reduce pressure on the municipal system.

- **Stormwater**

The development will need to incorporate comprehensive stormwater management systems to mitigate flood risks, improve water quality, and enhance groundwater recharge opportunities. The following will need to be implemented in the design:

- detention ponds with a total storage volume of approximately 15 000 m³;
- swales with a total area of approximately 17 200 m² to complement the management and treatment of runoff by the detention pond;
- Upgrade the existing stormwater infrastructure, including pipes and culverts, to accommodate increased runoff; and
- the use of Water-Sensitive Urban Design (WSUD) techniques such as permeable pavements and rain gardens to promote infiltration and reduce runoff volumes.

- **Solid Waste Management**

Waste produced from the development is expected to consist of domestic and household waste, business and commercial waste and construction waste during the construction phase of the development. Refuse collection services are currently provided to the area. In terms of cleansing services, the City currently provides services including cleaning of illegal dumping, litter picking, servicing of street litter bins, and street sweeping. The development will increase solid waste generation due to higher population density and land use changes. However, the existing municipal waste collection and disposal system, including the Bellville South Landfill located 8 km away, is expected to accommodate this additional volume.

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.

Currently, there are six existing and new access points to the proposed site (**Figure 4**) including:

- The existing Stikland South access on Old Paarl Road north of the site (P1B);
- The existing access to Nurses' College on De La Haye Avenue west of the site (P1A),
- A new access point to the Stikland Psychiatric Hospital on De La Haye Avenue west of the site (P5),
- A new access point on De La Haye Avenue opposite Wenning Park (P4),
- A new access point with the Meerlust Street Extension north of the site (P2), and
- A new access point with the St Harrod Drive north of the site (P1C).

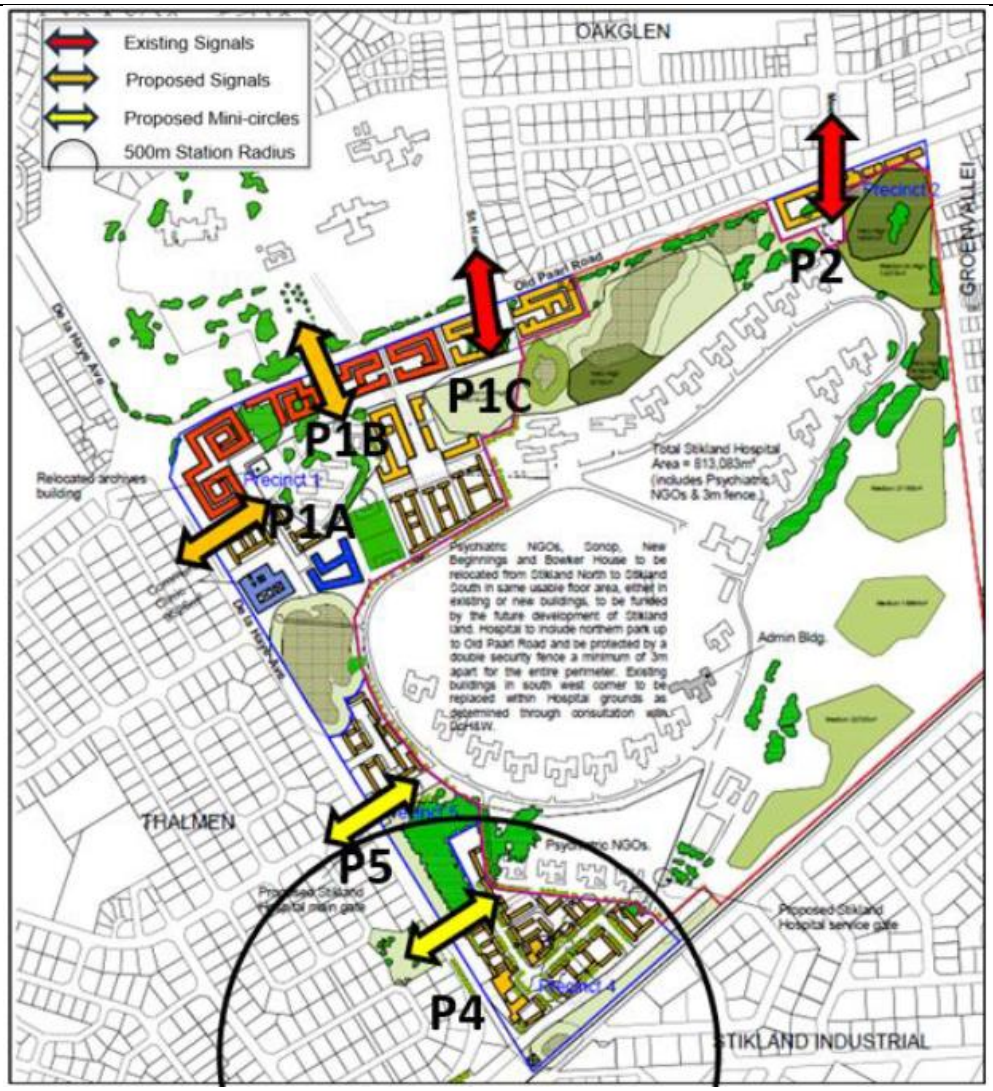


Figure 4. Current draft development framework with points of access highlighted

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	1	6	0	0	0	2	0	0	0	0	6	3	0	0	0	0	0	0

4.7.	Coordinates of the proposed site(s) for all alternatives:		
	Latitude (S)	33°	53' 46"
	Longitude (E)	18°	39' 48"

SECTION C: LEGISLATION/POLICY AND/OR GUIDELINES

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	**NO**

2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	**NO**
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	**YES**	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	**YES**	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	**NO**
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	**NO**
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	**YES**	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	**NO**
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	**NO**

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
Spatial Planning and Land Use Management Act No. 16 of 2013

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
The proposed activity is in line with a range of spatial planning and policy instruments at national, provincial, and local area scales, all of which are summarised in section E of this report. They include the provincial and municipal spatial development frameworks. Please see Section E and Appendix K for a more detailed assessment of the policy context.

5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.
DEA&DP Guideline on Public Participation (2013), and Department of Environmental Affairs Public Participation guideline in terms of NEMA EIA Regulations (2017) These guidelines were considered in the determination of appropriate public participation strategies. All public participation requirements as stipulated in the EIA Regulations have been met, with a focus on effective engagement.

DEA&DP Guideline on Alternatives (2013), and DEA Guideline on Alternatives (2014)
The provisions of the Guidelines were implemented in the Basic Assessment, through the identification and assessment of feasible and reasonable alternatives to the proposed activity, with a focus on impact minimization.

DEA&DP Guidelines on Need and Desirability (2013) and Department of Environmental Affairs Guideline on Need and Desirability (2014)

These guidelines informed the completion of Section E of this report.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

The Protocols for the Assessment and Minimum Report Content Requirements for Environmental Themes (GN 320 of 2020 and GN 1150 of 2020) came into effect on 9 May 2020 and 30 October 2020, respectively. These protocols mandate site sensitivity verifications for identified Themes on the site based on the National Environmental Screening Tool Report. These themes included in the screening tool report for the subject site:

- Agriculture Theme (high sensitivity)
- Animal Species Theme (high sensitivity)
- Aquatic Biodiversity Theme (low sensitivity)
- Archaeological and Cultural Heritage Theme (low sensitivity)
- Civil Aviation Theme (high sensitivity)
- Defence Theme (medium sensitivity)
- Palaeontology Theme (low sensitivity)
- Plant Species Theme (medium sensitivity)
- Terrestrial Biodiversity Theme (very high sensitivity)

The following assessments are also indicated in the screening tool report:

- Landscape/Visual Impact Assessment
- Hydrology Assessment
- Socioeconomic Assessment

In terms of the Protocols, the themes above require a site sensitivity verification followed by specialist assessments of confirmed sensitivities. The table below provides an overview of the site sensitivity as verified by the environmental assessment practitioner and confirms the assessment(s) which have been undertaken. Appendix I2: Site Sensitivity Verification Report provides further detail.

Theme/Assessment	Site Sensitivity verification	Outcome
Agricultural theme	The proposed site is identified as high sensitivity for the agricultural theme due to moderate to high land capability in terms of the National Land Capability dataset that takes soil type and climate into account. Historically, the site was used for agriculture. However, due to urban development	A specialist study is not required.

		pressures, it was developed to accommodate the existing hospital. In its current land-use and abutting land uses, the site is unsuitable for agriculture. Thus, impacts on agriculture is unlikely.	
Animal species theme	The site is mapped as high sensitivity for animal species due to its distribution of high sensitivity bird species and medium sensitivity of invertebrate species. The site is unlikely to provide suitable habitat for the animal species identified by the screening tool as the site does not possess any of the habitat conditions required by those species.	The high sensitivity rating is disputed. No specialist assessment is required.	
Aquatic Biodiversity Theme:	The screening tool report mapped the site as a low sensitivity for the aquatic biodiversity theme. An initial freshwater assessment was conducted, with its recommendation to undertake a geotechnical survey, as the vegetation was regularly mowed, which reduced the efficacy of using vegetation as a determinant of identifying wetlands. A deeper intrusive investigation was required to confirm whether an impermeable subsurface layer was causing perched conditions and also assist with identifying hydromorphic soils and ultimately confirm the delineations. A hydrogeological study was subsequently undertaken and confirmed the presence of five natural wetlands.	The rating of low sensitivity is disputed. The site has high aquatic sensitivity, and such an aquatic assessment was undertaken.	
Archaeological and Cultural Heritage	The site is mapped as low sensitivity for the archaeological and cultural heritage theme. A notification of intent to develop was submitted to HWC since the site constitutes activities listed in terms of Section 38 of the National Heritage Resources and the response confirmed that the development would impact on heritage resources.	A heritage impact assessment was undertaken (see Appendix G3)	
Civil Aviation Theme:	The screening tool report mapped the site as high sensitivity for the civil aviation theme. The site is classified as having a high sensitivity due to being "within 15km of a civil aviation radar" and being "within 8 and 15km from a major civil aviation aerodrome".	A specialist study is not required.	

	The proposed development does not exceed the limits and restrictions set out by the South African Civil Aviation Authority. For these reasons, the proposed project site has no civil aviation related sensitivities. The high sensitivity rating is disputed, and a low sensitivity rating is confirmed. A compliance statement will not be prepared.		
Defence Theme:	The site is classified as having medium sensitivity due to its proximity to a military and defence site. The proposed site is located around 11km north of the Wentz forces military base and about 18km west if the SAS Wingfield. The military bases are relatively far from the proposed development and are separated by various suburbs. Therefore, it is highly unlikely that the proposed development will interfere with defence operations. The medium sensitivity rating is disputed, and a compliance statement or a specialist study is not required.	A specialist study is not required.	
Palaeontology Theme:	The site is mapped as having a low sensitivity due to features with a low paleontological sensitivity. Given the history of extensive land transformation of the site, it is highly unlikely that any intact fossils remain in the area. These would likely have been disturbed or destroyed during earlier activities. The HIA does not recognise any possible fossils onsite. Therefore, a palaeontological study will not be undertaken.	A specialist study is not required.	
Plant species Theme:	The site is classified as having a medium plant species sensitivity due to the presence of low to medium sensitivity vegetation. The site contains patches of critically endangered indigenous vegetation (i.e. remnants of Cape Flats Sand Fynbos and Swartland Shale Renosterveld) with at least five plant Species of Conservation Concern. The medium sensitivity rating is disputed as the site contains very high sensitive plant species.	A Botanical assessment was undertaken.	

Terrestrial Biodiversity Theme:	The site is classified as having very high sensitivity due to presence of Cape Flats Sand Fynbos (Critically Endangered) and Swartland Shale Renosterveld (Critically endangered). Based on the ground-truthing by the botanical specialist, it can be confirmed that remnants of these vegetation types are present on site.	A Botanical assessment was undertaken
Additional specialist study from Screening Tool): Landscape/Visual Impact Assessment	A visual impact assessment will not be conducted as there is limited visual significance besides the mature trees and woodlot on site, most of which will be retained.	A specialist study is not required.
Additional specialist study from Screening Tool: Hydrology	A stormwater management plan is to be developed for the site likely during detailed design.	A specialist study is not required.
Additional specialist study from Screening Tool): Socio-Economic Assessment	A socio-economic study has been undertaken.	A socio-economic study has been undertaken

SECTION D:APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
Activity 19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	The proposed development will require partial infilling of Wetland 5, located in the southwestern corner of the site, to accommodate the construction of a stormwater swale and the Non-Motorised Transport route envisaged along its edge.
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. Western Cape i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;	The proposed development will require clearance of more than 300m^2 of Medium-High sensitivity areas of indigenous vegetation to accommodate access roads along the northern boundary of the site.

Note:
- The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
- Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Category A**	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant **Listed Activity(ies)**	Describe the portion of the proposed development to which the applicable listed activity relates.

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

Stikland South Development Framework

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure. Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.

The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, and commercial spaces supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised, indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas, the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Conservation Areas

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital. A portion of the Eucalyptus Forest is proposed to be conserved due to the place-making significance associated with the trees in the southwestern portion of the site.

2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

The current zoning is Community 2 - Regional. The site is within an urban area but will require rezoning to permit the proposed uses. The Municipal Planning By-Law (2015) imposes restrictions on building height and bulk. An appropriate zoning (likely to be mixed-use) will be selected based on the development proposal, and an application made to the City of Cape Town to rezone accordingly.

3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

The proposal includes land uses (retail and commercial) as well as building dimensions that fall outside the approved activities for the current zoning (Community 2 – Regional). An appropriate zoning (likely to be mixed-use) will be selected based on the development proposal, and an application made to the City of Cape Town to rezone accordingly.

4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.

The Provincial Spatial Development Framework (PSDF) sets out to provide a shared spatial development vision for both the public and private sectors. It is a critical tool that is used by provincial and local authorities to guide land use, infrastructure development, and spatial transformation in the region.

The proposed development aligns with 2 core policies outlined in the Western Cape Provincial Spatial Development Framework (PSDF), 2014:

Policy S3: Promote Compact, Mixed Use and Integrated Settlements

The population density for the Western Cape is concentrated in urban areas, and subsequently, service delivery and infrastructure are also concentrated in these urban areas. Isolated settlements located further from city centres are declining, and service delivery to these isolated areas is hindered due to distance and cost. Mono-functional, low-density, scattered developments have been identified as a hindrance to efficient and effective service delivery and are also deemed to have limited economic impact due to being disconnected from the existing network of infrastructure and services. Therefore, the Western Cape PSDF has identified high-density, multi-purpose developments as part of the strategy "*to minimise environmental impacts, reduce the costs and time impacts of travel and enhance provincial and municipal financial sustainability in relation to the provision and maintenance of infrastructure, facilities and services*" (2014:83). The 2014 PSDF summary references the 2009 PSDF, in which the average density is proposed to increase to 40-60 dwelling units (du) per hectare (2014: 83).

The proposed development is a medium-density, mixed-use development that is proposed for existing vacant land in an urban area, well-located within existing infrastructure and service networks. The proposed development also includes social services that will benefit the broader public, such as affordable and social housing, supported by a school and community facilities. The western edge alongside De La Haye Avenue is being considered for a possible community clinic and new Main Entrance to the existing Stikland Hospital. Two wetlands and a portion of Medium-High sensitivity botanical space will be accommodated within the development framework. The majority of the botanically sensitive spaces will remain undeveloped and managed as part of the new Stikland Hospital boundary.

Policy S5: Promote Sustainable, Integrated and Inclusive Housing in Formal and Informal Markets

Apartheid-era spatial planning has resulted in the physical marginalised of certain demographic groups. Restructuring the spatial landscape post-Apartheid still poses a significant challenge, since "*over the past 15 years, fewer than 2 500 new State funded social housing rental and rent-to-buy units were provided*" (PSDF, 2014:89), and there exists a housing backlog of 500 000 backyard dwellers. This highlights the urgency of the need for affordable and social housing in the Western Cape. However, location is a key factor that needs to be considered in the implementation of affordable and social housing, as locating these projects near the urban periphery will perpetuate exclusion from the economic and social opportunities located at the urban core. Thus, the PSDF acknowledges the need

to strategically utilise well-located, state-owned land in the effort to meet the Western Cape's affordable and social housing needs.

The proposed development framework includes 2682 residential units. It also proposes the development of a school, as well as other social services (clinic, urban green spaces, and access to commercial opportunities). The development is bordered by the R101 to the north, providing easy access to major highways (less than 1km to the east is the R300, which provides access to the N1). Less than 3km to the west of the proposed development is the Bellville Metrorail Station, and less than 3km to the east is the Brackenfell Railway Station. There are multiple schools, places of worship, shops and various other economic and social opportunities in the broader Stikland area. Thus, the proposed development provides affordable and social housing in a well-located area, facilitating access to economic and social opportunities.

4.2	The Integrated Development Plan of the local municipality.

The City of Cape Town has published their Integrated Development Plan (IDP) for the 2022-2027 period. The IDP is the central strategy of the City of Cape Town and communicates the City's long-term vision, including how it is to be achieved. The City's five-year implementation plan is informed by 16 objectives. The objectives that the proposed Stikland development aligns with are discussed below.

Objective 7: Increased Supply of Affordable, Well-Located Homes

"The City is committed to significantly increasing access to affordable and well-located housing. It will do this by supporting a housing market that can deliver at scale to meet the needs of Cape Town's population, and prioritising the release of City-owned land for affordable housing." (Page 42)

The IDP identifies the shortage of sufficient affordable and social housing opportunities as a pressing issue impacting the City's overall health and progress, and it hinders efforts to address the effects of Apartheid-era spatial planning. In addition, population growth in the City, and subsequent increase in households, has also impacted the delivery of affordable and social housing. "*Households grew from an estimated 1,07 million in 2011 to 1,46 million in 2021. The Cape Town housing market, including both private and public housing developers, has not been able to keep up with the demand for housing, leading to a growing number of informal dwellings in the City*." (Page 22)

The IDP acknowledges that the City must take all possible measures to support the rapid construction of both formal and informal homes by the private sector, ensuring an adequate housing supply to meet the needs of Capetonians.

The proposed development aligns with the City's objective to provide access to affordable and well-located housing. The proposed Stikland South development includes 2682 housing units. As previously mentioned, the location of affordable and social housing developments is important to carefully consider to ensure these developments are integrated into the City, and do not perpetuate Apartheid-era exclusionary spatial practices. The site is also located close to major access routes (R300), public transport, and the broader Stikland suburb has many schools, places of worship and shops. The development itself also proposes two schools and a community clinic, ensuring access to crucial social services.

Objective 9: Healthy and Sustainable Environment

- *"The City is committed to protecting, restoring and managing its natural areas to ensure their long-term sustainability. The municipality recognises that its green infrastructure is important to*

Cape Town's resilience to climate change, and for reducing the impact of shock events such as floods and heatwaves." (Page 43).

The IDP acknowledges the need to balance urban development with environmental protection. Thus, both botanical and freshwater specialist studies have been conducted to understand the sensitivity of the ecology on site. Much of the southeastern section of the site will remain undeveloped, and proposed development areas have been carefully designed around identified environmental sensitivities.

4.3.	The Spatial Development Framework of the local municipality.

City of Cape Town Municipal Spatial Development Framework (2023)

The City of Cape Town's approved 2023 MSDF is a framework for long-term growth and development. It includes a spatial vision, policy parameters, and development priorities to support Cape Town in achieving a reconfigured and inclusive spatial form and structure.

The site of the proposed Stikland South development is located in the urban inner core as defined in the CCT Municipal SDF (page 60). The desired land use outcome for these areas classified as the urban inner core is for a variety of dense land uses to be implemented in conjunction with existing and future public transportation infrastructure development (page 61).

The proposed Stikland South development aligns with the following policy statements outlined in the Municipal SDF as part of the Municipality's spatial strategies:

Spatial Strategy 1: Plan for inclusive economic growth and improve access to economic opportunities

- *Policy 9.1: "Plan for phasing of contextually appropriate land use diversification and intensification along development corridors and nodes, and informed, prioritised and phased bulk engineering infrastructure provision" (p. 144).* The development is bordered by the R101 to the north, providing easy access to major highways (less than 1km to the east is the R300, which provides access to the N1). Less than 3km to the west of the proposed development is the Bellville Metrorail Station, and less than 3km to the east is the Brackenfell Railway Station. The location of the development (which includes commercial, office and residential land use) is connected to the broader transport network via the R101/ Old Paarl Road, enabling access to employment and economic opportunities.

Spatial Strategy 2: Manage urban growth, and create a balance between urban development, food security and environmental protection

- *Policy 18.3: "Land development proposals and decision making to consider biodiversity connectivity, and the protection and reinforcement of existing critical natural assets and biodiversity linkages, where possible" (p. 148).* All identified and delineated wetlands on the site will be retained. Two wetlands will be retained along the western and southern edges of the site, as well as a portion of the Medium-High sensitivity botanical spaces identified in the botanical assessment. The remainder of the wetland areas and botanically sensitive areas will be included and managed in the proposed new Stikland Hospital property boundary. Thus, the proposed development has incorporated the mitigation hierarchy into its design to ensure the impact on biodiversity on site is reduced.

Spatial Strategy 3: Building an inclusive, integrated, vibrant and healthy city

- *P24.4 Support and encourage land development that makes provision for the multifunctional use of social facilities, places for cultural practices, recreational spaces and public institutions. This contributes towards increased efforts to ensure accessible and equitable distribution of social facilities (p.152).* This policy ultimately aims to ensure various social services are clustered together and are easily accessible to the public, with a specific focus on integrating previously marginalised groups. The proposed development includes social facilities such as a school and a community clinic. The development also includes space for parks as recreational spaces where botanical sensitivities preclude development. These facilities will all be within close proximity to the affordable and social housing units.

- *Policy 25: Support and enable programmes to enhance and facilitate access to land and housing supply in Cape Town, acknowledging that access to well-located social and community facilities and well-functioning public open spaces are important for redress and integration (p.152).* The proposed affordable and social housing will diversify the types of residential developments available in the Stikland area.

4.4.	The Environmental Management Framework applicable to the area.

Tygerberg Integrated District Spatial Development and Environmental Management Framework (2023)
As a medium-term plan (spanning approximately 10 years), the Tygerberg Integrated DSDF and EMF informs spatial development within the district. It sets policy guidance for the nature and form of development, influencing land use and environmental decisions with greater detail than the Municipal Spatial Development Framework (MSDF). Additionally, it informs both strategic public and private investments and helps prioritise development for more specific local area planning.

The Tygerberg District is split up into smaller sub-districts, each with its own area-specific development guidelines. Stikland falls within sub-district number 2 and is specifically mentioned in the Tygerberg District EMF as a potential New Development Area (NDA). Development guidelines indicated for the Stikland area include:

- *"Consolidation and redevelopment of the psychiatric hospital into a smaller, more manageable and less extensive area. Redevelopment/consolidation of current hospital buildings may occur in vacant portions of the precinct north of Old Paarl Road and in parts of the precinct south of Old Paarl Road (preferably the area along the Kraaifontein railway line).*
- *Mixed-use development in the form of commercial/office/residential development along portions abutting Old Paarl Road.*
- *Residential components should include a range of housing typologies, including more affordable and inclusionary housing.*
- *Medium- to high-density residential development on portions of the precinct that are available for development. Portions of land fronting onto De La Haye Avenue should be considered for residential development, thereby creating a development link from Old Paarl Road to Stikland Station."(p. 95)*

The proposed development aligns with the development guidelines outlined for Stikland in that it proposes mixed-use, medium-density land uses, including social and affordable housing. This is mapped as New Development Areas (NDAs) within the sub-district 2 map.

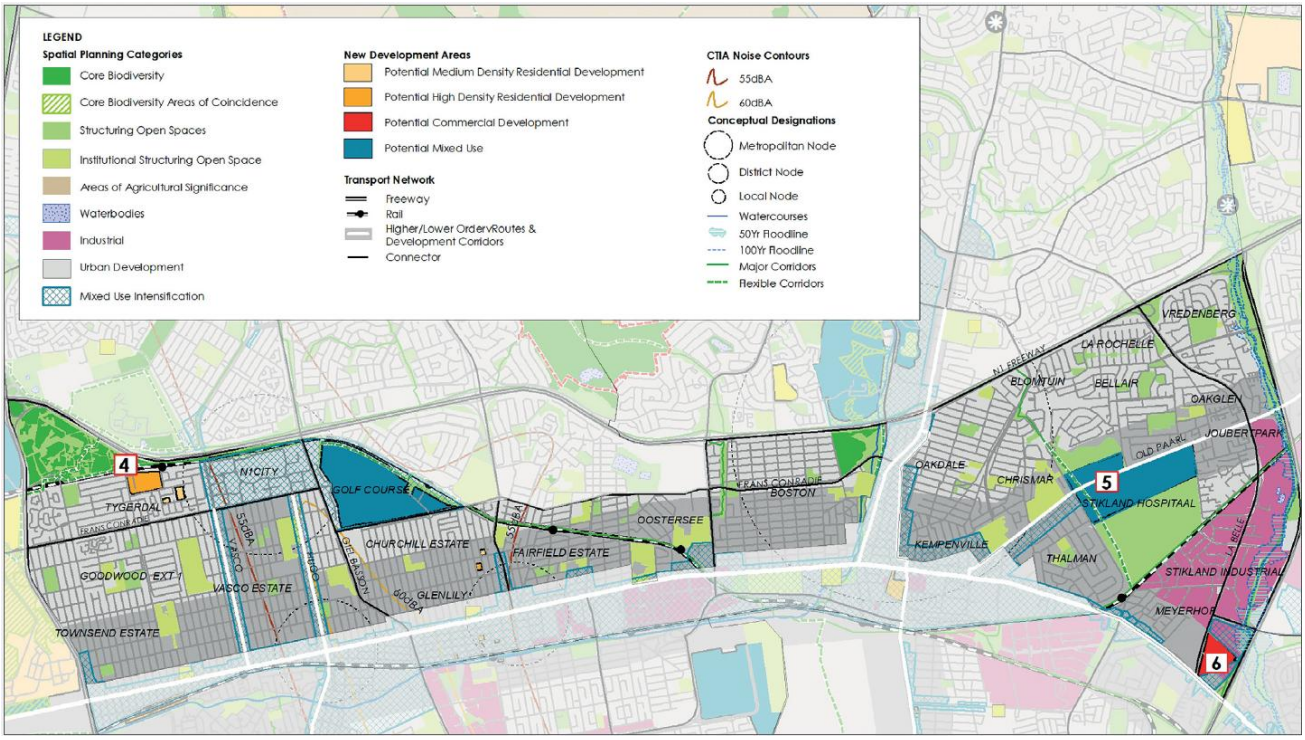


Figure 5. Sub-district 2 map taken from the Tygerberg District SDP/EMF (page 97)

Areas of Coincidence (page 40)

The combined SDF and EMF for the Tygerberg District provide guidelines for different Spatial Planning Categories (SPC), which inform development considerations for different environmental contexts. The project site falls within the Green Infrastructure areas mapped in the EMF, however the area has also been identified, as previously mentioned, for densification and mixed-use development within the NDAs mapped for sub-district 2. However, high-sensitivity terrestrial and aquatic biodiversity features were identified by the specialist studies conducted onsite. Thus, the relevant SPC for the project area would be Biodiversity and Structuring Open Spaces: Sites of Coincidence. This is described as where ***core biodiversity and new development areas co-exist***. The guidelines and management priorities are listed below:

1. *Areas of coincidence are where there is compelling urban efficiency, social and economic reasons to pursue development and where core biodiversity may be impacted as a result. Where New Development Areas are proposed that impact Critical Biodiversity areas will not be considered inconsistent with the District Plan.*
2. *In such cases, development on the site will not be considered inconsistent with the District Plan.*
3. *These areas will be subject to the requirements of Environmental Authorisation.*
4. *Conservation and sound environmental management principles must be demonstrably considered in the development plans.*
5. *Developments in these areas must provide evidence of environmental studies and processes undertaken that validates an evidence base of the environmental assets and mitigation measures.*
6. *Where existing development approvals are in place, agreed environmental management and mitigation measures must be adhered to.*

The above-mentioned guidelines and management priorities are fulfilled by the Environmental Authorisation process currently underway. Environmental management principles are demonstrated in the specialist studies undertaken and the incorporation of their recommendations into the development framework, the application of the mitigation hierarchy (See Section I.8 for more detail) and the inclusion of environmental management measures in the EMPr.

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

Freshwater and Aquatic Biodiversity Specialist Findings

A wetland delineation was undertaken by GEOSS, and seven wetlands were identified within the site footprint. Subsequently, a detailed freshwater ecological assessment was undertaken by the freshwater specialist, which noted the presence of five natural wetlands, while the additional two areas exhibiting wetland characteristics identified by GEOSS were found to be of artificial origins. Three of the five wetlands that have been identified on-site have been included in the proposed new boundary for the Stikland Hospital. The wetland along the western edge of the site along De La Haye Road, and the wetland at the southernmost point of the site, have been incorporated into the proposed Development Framework (Appendix B) and will form public botanical spaces.

Botanical Specialist Findings

A botanical assessment with an updated impact statement was undertaken for the proposed development framework. Most of the patches of medium to very high sensitivity vegetation identified in the botanical assessment have been included in the proposed new boundary for the Stikland Hospital, except for approximately 13 272m^2 of the northern Medium-High sensitivity patch, which will be included in the development framework as an open space. The botanical specialist has recommended that an ecological management plan be drawn up for the conservation areas on the property by a suitably qualified botanical expert.

6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

The Western Cape Biodiversity Spatial Plan (which includes the City of Cape Town Biodiversity Network) desired management objectives and guidelines have been given for locating land uses within CBAs. Prior to the botanical specialist's site inspection, no CBAs had been mapped for the site. However, upon identification of areas of SCC with varying degrees of sensitivity across the site, this information was submitted to CCT and their BioNet was subsequently updated.

The botanical areas rated as 'medium to high' and 'very high' sensitivity are mapped on the CCT BioNet as CBA1a, and areas rated as medium sensitivity by the botanical specialist are rated as CBA1c.

Various categories on the CCT BioNet Map have distinct management objectives based on their biodiversity priority (CCT Bioregional Plan, 2015). In general, areas of high biodiversity priority should be kept in a healthy and functioning state, while areas of lower priority may be used for other land purposes. The two threatened ecosystems (Cape Flats Sand Fynbos and Swartland Shale Renosterveld) identified on site have been gazetted as Critically Endangered. The majority of the botanical sensitivities have been included in the proposed new property boundary for the Stikland South Hospital site, which excludes development as part of this proposal. Approximately 0.40ha of Medium-High sensitivity vegetation is anticipated to be developed for roads. Two wetlands – one along De La Haye Avenue and one in the southernmost corner of the site – and a portion of Medium-High sensitivity vegetation (located in the northern section of the site) are included in the development framework as

urban green spaces. These areas will remain undeveloped. Thus, the development framework aligns with the general philosophy of the Western Cape Biodiversity Spatial Plan in that it largely avoids the impacts of proposed urban development on sensitive ecosystems by largely excluding the botanical areas from the development area and conserving these spaces.

7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.

The proposed redevelopment is located approximately 16km from the coast and is not subject to the ICMA.

8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.

The Screening Report is attached and will be submitted with the application form.

9.	Explain how the proposed development will optimise vacant land available within an urban area.

The proposed activity will optimise the use of existing vacant state-owned land within an urban area by developing a portion of it for various community, commercial, and residential uses.

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.

The proposed redevelopment includes the adaptive reuse of existing buildings and the maximisation of the use of state-owned land within an urban area.

11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).

Electrical Infrastructure

A baseline report was conducted for the electrical infrastructure of the proposed redevelopment of Stikland South. It was determined that the City has limited capacity (11kV) and will not be able to supply the additional capacity required for the proposed development (estimated to be 20.75MVA based on the City's Design Load Parameters, which is 4.04kVA ADMD) without infrastructure upgrades (see Table 1 below). Therefore, the City has recommended the following for infrastructure upgrades:

- Appropriate switching station sites are required to internally distribute the electrical supply for the proposed development
- The five switching station sites, 20m x 14m each, must be included on the plan for the subdivision and must be rezoned, registered, and transferred free of charge to the City.
- The City requires the switching station sites to be placed within the proposed development, on the erf boundary and adjacent to public roads. The position of the switching station sites will be determined by the electrical load concentration in the area and served by each switching station.
- The switching station sites shall have direct 24-hour unrestricted vehicular access.
- A lead time of up to 24 months, from the date of a formal supply application up until such time that the necessary supply is available, will be applicable. This lead time is required for any upgrading of the bulk electrical supply at the existing Oakdale Main Substation and must be confirmed at the time of application.
- The property owner will be required to submit an electricity reticulation design report to the Director: Electricity Generation and Distribution for approval.

The proposed site has an existing 22m servitude, a 66kV overhead line which will be upgraded to a 132kV line in the future by the City of Cape Town.

Table 1. Load estimate (Triocon Consulting, 2025)

DESCRIPTION	QUANTITY	UNIT LOADING (kVA)	TOTAL LOAD (kVA)
Estimated residential units	2682	4.04	10835.37
Allowance for existing infrastructure, offices and retail	1	8930.89	8930.89
Allowance for auxiliary services (streetlights etc)	1	988.31	988.31
Sub-total			20754.57
Discount existing NMD			1000.00
TOTAL ADDITIONAL LOAD			**19754.57**

Transport Infrastructure

The proposed development framework includes the following access points, as shown in **Figure 4** above:

- The existing Stikland South access on Old Paarl Road north of the site,
- The existing access to Nurses' College on De La Haye Avenue west of the site,
- A new access point to the Stikland Psychiatric Hospital on De La Haye Avenue west of the site,
- A new access point on De La Haye Avenue opposite Wenning Park,
- A new access point with the Meerlust Street Extension north of the site, and
- A new access point with the St Harrod Drive north of the site.

A transport impact assessment (TIA) was undertaken for the proposed development. The TIA determined that the development could generate approximately 2 673 vehicle trips per hour during the AM peak hour, and 3 688 vehicle trips per hour in the PM peak hour. The distributional direction of trips is expected to be balanced.

Intersections & Links

The analysis in the TIA assesses the adequacy of the limited improvements to the road network in the vicinity of Stikland envisaged in the City of Cape Town Public Right of Way Plan (2022) to accommodate the proposed development on the Stikland South site. The traffic analysis of all the key intersections with Old Paarl Road and De la Haye Avenue indicates that their overall performance is expected to be at least acceptable with respect to levels of service (LOS D and better), with the implementation of road upgrades identified in the TIA.

From a link capacity perspective, the analysis indicates that with the upgrading of Old Paarl Road, future scenario flows should be accommodated within its capacity limits. Peak directional flows along De la Haye Avenue could exceed the capacity of a two-lane road, which could initiate the planned extension of Belrail Road into the site, linking with Old Paarl Road opposite Meerlust Street.

The access on De la Haye Avenue serving the primary P1 node will need to be signalised. Its spacing relative to Old Paarl Road is sub-standard (180), falling short of the 275m spacing required for signals on a Class 4 road in an intermediate development environment. The access may have to be shifted southward to more closely comply with the spacing guidelines.

Public & NMT

A modal share analysis indicates that private transport users could comprise 68% of total movement demand, public transport users 18%, and Non-Motorised Transport (NMT) users 14%. At this stage of the

planning phase, it is sufficient to note that the number of public transport users could be approximately 1 000 passengers. The overall private transport modal share is considered high, which aligns with the "worst case scenario" projected trip generation assumed for the assessment.

Parking

The provision of on-site parking at the ratios stipulated for a standard zone would not be feasible (95% of the site), as the development model does not allow for extensive structured parking to be provided. Proposed parking ratios at 1 bay/unit for open market housing, 0.8 bays/unit for first home finance housing, and 0.6 bays/unit for social housing require a departure application from the zoning requirements.

Potable Water

A Civil Engineering Bulk Services Assessment was conducted by HHO Engineers for the potable water infrastructure around the site and the capacity available for the proposed development of Stikland South. It was determined that the site is well serviced with water infrastructure. The anticipated annual average daily demand of potable water is 919.18kℓ/day (Table ***17.*** below). However, the City of Cape Town still needs to determine availability for this development. The recommendations are:

- That a detailed demand assessment must be conducted to ensure available capacity by the City,
- To ensure connection fees are budgeted, and
- Water conservation measures, such as low-flow fixtures must be implemented for water management purposes.

Table 5. Stikland South estimated potable water demand

LAND USE	UNIT	QUANTITY	WATER USAGE PER UNIT (kℓ/day)	WATER AADD (kℓ/day)	WATER PEAK FLOW (ℓ/s)	MINIMUM FIRE FLOW PER HYDRANT (ℓ/s)
Micro Business (Retail)	ha	2.9	21.00	59.90	2.50	25
Trip Attracting business (Office)	ha	4.1	21.00	86.04	3.59	25
Educational – School	ha	5.1	20.00	102.74	4.28	25
Roads	m^2	101925.0	0.00	0.00	0.00	-
Residential (4-8 storey; 50m^2 units)	No.	2682.0	0.25	670.50	27.94	25
TOTAL				**919.18**	**38.30**	

Stormwater

The proposed development at Stikland will have a notable impact on stormwater management, primarily due to the increase in impervious surfaces and the associated runoff. The development will need to incorporate comprehensive stormwater management systems to mitigate flood risks, improve water quality, and enhance groundwater recharge opportunities. It will require the design of upgraded infrastructure and the integration of sustainable water management practices to align with environmental goals and regulatory standards.

Recommendations:

- Implement detention ponds with a total storage volume of approximately 15000m³ to meet quality and quantity objectives.
- Implement swales with a total area of approximately 17500m² to complement the management and treatment of runoff by the detention pond.
- Upgrade the existing stormwater infrastructure, including pipes and culverts, to accommodate increased runoff.
- Consider the use of Water-Sensitive Urban Design (WSUD) techniques such as permeable pavements and rain gardens to promote infiltration and reduce runoff volumes.
- Regular maintenance of the stormwater system, including trash racks and sediment traps, to ensure long-term functionality.

Foul Sewer

A Civil Engineering Bulk Services Assessment was conducted for the foul sewer discharge demand and infrastructure for Stikland South. It was determined that Stikland South is serviced by infrastructure in the immediate vicinity and discharges into the Belville Waste Water Treatment Works, which has a maximum capacity of 75Mℓ per day, with approximately 15Mℓ per day available for treatment. It is anticipated that the foul sewer annual average daily demand will be 840.692kℓ/day (Table 2 below), thus there are no capacity constraints with regard to foul sewer discharge demand and infrastructure. However, capacity must still be confirmed with the City. Recommendations for the foul sewer of Stikland South development are:

- There must be confirmation of the infrastructure condition and capacity of the WWTP bordering the site,
- The foul sewer for this development must align with the City's sewer master plan, and
- Sustainable water practices, including greywater recycling, must be considered.

Table 6. Stikland South estimated foul sewer demand

LAND USE	UNIT	QUANTITY	FS USAGE PER UNIT (kℓ/day)	FS AADD (kℓ/day)	FS DWP FLOW (ℓ/s)	FS WWP FLOW (ℓ/s)
Micro Business (Retail)	ha	2.9	16.80	47.92	1.11	1.28
Trip Attracting business (Office)	ha	4.1	16.80	68.83	1.59	1.83
Educational – School	ha	5.1	13.00	66.78	1.55	1.78
Roads	m²	101925.0	0.00	0.00	0.00	0.00
Residential (4-8 storey; 50m² units)	No.	2682.0	0.25	657.09	15.21	17.49
TOTAL				**840.62**	**19.46**	**22.38**

Solid Waste Management

Waste produced from the development is expected to consist of domestic and household waste, business and commercial waste and construction waste during the construction phase of the development. Refuse collection services are currently provided to the area. In terms of cleansing services, the City currently provides services including cleaning of illegal dumping, litter picking, servicing of street litter bins, and street sweeping. The additional demand that will be created by the

proposed development cannot be catered to under the current capacity. Additional resources to meet future service demands will be included in the directorate's plans.

Recommendations:

- An Integrated Waste Management Plan (IWMP) must be developed and implemented to address all aspects of waste collection, storage, and recycling.
- On-site storage facilities, such as mobile refuse bins and bulk containers, must be provided to ensure effective waste segregation and collection.
- Relevant City initiatives that promote waste reduction and recycling must be incorporated.
- Roads and associated infrastructure must be designed to accommodate access for waste collection vehicles.
- Adequate resources must be allocated for street cleaning and litter management to prevent blockages in stormwater and sewer systems.

Service confirmation letters are required and will be appended with the submission of the final BAR.

12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
Please see Appendix K.	

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1.	Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.
Not applicable as the activity is not a linear activity.	
2.	Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

PRE-APPLICATION PUBLIC PARTICIPATION (JULY – AUGUST 2024)

A pre-application public participation process was a 30-day commenting period conducted from Wednesday, 17 July 2024 to Monday, 19 August 2024. The aim of this period was to publicise and present the draft development framework for the redevelopment of portions of the Stikland South Precinct on the Remainder of Erf 6300.

A background information document was compiled for distribution to identified and potential interested and affected parties (I&APs) to inform them on the project proposal, draft development framework, applicable legislation, environmental statutory process, ways to participate, as well as an invitation to attend an open day which was held on Wednesday, 31 July 2024 at the Dunatos Remedial School, Stikland, Bellville. The open day was a poster display and allowed interested and affected parties to ask questions and comment on the proposed development.

Please see Appendix F for the details of the Pre-application public participation undertaken. Comments obtained during this phase have been recorded and responded to in Appendix F and summarised in Section F.6 below.

STATUTORY PUBLIC PARTICIPATION (CURRENT STAGE: SEPTEMBER – NOVEMBER 2025)

Potential Interested and affected parties

The EIA Regulations define potential interested and affected parties as including –

(i) the occupiers of the site and the owner or person in control of the site
(ii) owners, persons in control of, and occupiers of land adjacent to the site
(iii) the municipal councillor of the ward in which the site is situated and any organisation of ratepayers that represents the community in the area;
(iv) the municipality which has jurisdiction in the area;
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and
(vi) any other party as required by the competent authority;

All potential I&APs will be notified by email or hand delivery of the public participation process on 11 September 2025.

Notification of registered I&AP's

A database of registered interested and affected parties (I&APs) has been created. Potential I&APs a invited to register their interest in this application, should they wish to receive further notifications.

Notification of adjacent landowners and occupiers

Adjacent landowners and occupiers of the site will be notified by hand delivery and/or post of the public participation process.

Notification of municipal councillors and community organisations

The site is in Ward 3, Subcouncil 6 of the City of Cape Town Municipality. Identified community-based organisations will also be notified via email.

Organs of state having jurisdiction in respect of any aspect of the activity

As part of the environmental impact assessment public participation process, organs of state which administer related legislation are provided with an opportunity to comment on the Basic Assessment Report. Each organ of state will be notified of the availability of the draft BAR for comment via email,

which includes a link containing the report and associated appendices. The organs of state to be consulted are listed in item 3 below.

Media notices
A media notice will be published in the Tygerburger (weekly local newspaper) on 11 September 2025, notifying the general public of the application and a 30-day commenting period.

Site notices
Site notices will be placed on the property by the EAP, complying with regulatory requirements.

Report availability
The draft Basic Assessment Report and associated appendices will be made available on the project website at www.infinityenv.co.za/StiklandSouth

A copy of the report will be available for public viewing at the City of Cape Town Bellville Public Library from 11 September 2025 to 13 October 2025.

Open House
An Open House will be held on Thursday, 18 September 2025 at the Dunatos Remedial School. The professional team will be available to answer questions and concerns the public may have about the proposed development.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.
The State Departments and Organs of State to be consulted on the draft BAR include: • The Department of Environmental Affairs and Development Planning • Department of Environmental Affairs and Development Planning: Pollution and Chemical Management Directorate • City of Cape Town: Environmental and Heritage Department (Tygerberg District) • Provincial Department of Human Settlements: Branch Human Settlements, Department of Infrastructure • National Department of Water and Sanitation • Cape Nature • Heritage Western Cape (HWC). In terms of HWC, the HIA will be submitted to them for consideration by the HWC Impact Assessment Committee (IACOM), and the final comment will be included with the FBAR. • Department of Environmental Affairs and Development Planning: Waste Management Licensing Sub-directorate The above-mentioned State Departments and Organs of State were notified of the non-statutory public participation process and will be notified of the dBAR publication for comment.
4. If any of the State Departments and Organs of State were not consulted, indicate which and why.
All relevant State Departments and Organs of State will be consulted.
5. If any of the State Departments and Organs of State did not respond, indicate which.

To be confirmed on the completion of the public participation process

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

Below is a summary of the comments received during the **pre-application public participation process in July-August 2024.** These are answered in detail in the PPPR (Appendix F).

- The Interested and Affected Parties (I&APs) of Stikland generally oppose the redevelopment.
- The I&APs of Stikland oppose the development of social and affordable housing due to the increased risk of crime, lack of safety, increased drug and alcohol consumption, taxis and mismanagement of affordable housing developments.
- Concern regarding residents living on site **(Stikland North).**
- Concerns about the development decreasing property values and negatively affecting the residents' quality of life.
- General opposition to the construction of multi-story flats due to privacy concerns.
- Opposition to the development because of visual impacts.
- Concerns regarding the lack of traffic and infrastructure plans, as well as the capacity of public transport in the area.
- Concerns regarding the capacity of schools and infrastructure in the area, and a decline in service provision.
- Concerns regarding service capacity specifically, water, sewage, traffic, electricity and stormwater and sanitation.
- Concerns about the Psychiatric Hospital patients with regard to increased noise and access to nature.
- Concerns about pollution, namely air, land and water pollution.
- The people of Stikland are concerned about how the development will impact the natural wetlands and wildlife on the site.
- Interest in housing opportunities.
- Concerns about an increase in noise levels.
- Concerns about the impact on flora and fauna on site.
- Concerns about an increase in density from low to high.
- Interest in privatising Stikland North **(Stikland North).**
- Interest in the development property cost.
  Concerns about the community not receiving notifications of the development.

The revised development framework has addressed most of the concerns raised by Interested and Affected Parties (I&APs). Initially, the proposed buildings ranged from 4 to 8 storeys; however, this has now been uniformly reduced to 4 storeys across the site. This change significantly minimises the visual impact associated with building height. The reduced densities will result in accepted levels of traffic impacts at crucial intersections and lessen the demand for municipal bulk services. The development will not only consist of social housing but is intended to accommodate a range of housing opportunities, with 25% of the stock allocated to social housing, 15% to First Home Finance (FHF), and 60% to the open market. Most environmentally sensitive areas will be retained within the proposed new Hospital boundary while the ones within the development area will be incorporated as open spaces, and an ecological management plan will be prepared to ensure their long-term conservation. The NMT route and landscaping will serve as a buffer between the development and the hospital, addressing the impacts to the Psychiatric Hospital. Additionally, the framework includes provision for a school, which will help alleviate capacity constraints in surrounding schools.

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that *"Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."*

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile Report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	**YES**	NO
1.2.	Provide the name and or company who conducted the specialist study.		
A hydropedological study and wetland verification and delineation study was performed by DSA and Freshwater Consulting, respectively. These have informed the Wetland Delineation Study conducted by GEOSS.			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
The proposed project is underlain by a major intergranular aquifer according to spatial data available via Cape Farm Mapper, version 3 (2024). An intergranular aquifer is characterised by groundwater flowing in openings and void space between grains or weathered rock. The soil samples were taken 50cm below the surface. The existence of gleyic horizons in the soil profile of the site indicates lengthy periods of saturation likely related to the regional groundwater table deeper in the soil profiles (GEOSS, 2024). The foundations of the proposed development will likely intercept the upper flow path and limit its contribution to wetlands onsite, and surface sealing will also likely increase overland flow and disrupt natural flow paths (GEOSS, 2024). The study confirmed that perching of the water table was a key hydrological driver of the wetlands on the site. A detailed description of the findings of the study and recommendations are provided in Section G.5. Recommendations made by the specialists will be included in the EMPr. Should groundwater abstraction be considered at a later stage, the relevant regulations of the NWA (Act 36 of 1998) will apply.			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
The depth to groundwater is mapped to be 7.63mbgl. The proposed development is not anticipated to have any significant impact on groundwater.			

2. Surface water

2.1.	Was a specialist study conducted?	**YES**	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
Nick Steytler of EnviroSwift.			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		

Background

Identifying wetlands on the proposed site was considered difficult given that the site is mowed regularly which reduces the efficacy of using vegetation, a key determinant in wetland identification, as an informant. Accordingly, EnviroSwift recommended that a geotechnical survey be performed as a deeper intrusive investigation would confirm whether an impermeable subsurface layer was causing perched conditions and also assist with identifying hydromorphic soils and ultimately confirm the delineations indicated in the EnviroSwift Screening Report (EnviroSwift, 2023). GEOSS was then appointed by ARG Design to undertake a wetland delineation study to verify the findings of the EnviroSwift Screening Report. Toward this end, GEOSS commissioned a hydropedological study and wetland verification and delineation study which were undertaken in 2024 by DSA and the Freshwater Consulting Group (FCG), respectively. The study confirmed that perching of the water table was a key hydrological driver of the wetlands on the site and also that the wetland delineations presented by EnviroSwift (2023) were largely accurate. The wetland delineation presented by the FCG is considered the most accurate given that it is based on a hydropedological study and is accordingly used as a basis for the detailed ecological assessment.

This section draws heavily on the Enviroswift Aquatic Biodiversity Assessment Report (2024) and should be understood as excerpting or summarising this report unless otherwise referenced.

Figure 6. Wetland Delineation Map for portions A – E of Erf 6300 Stikland. Five natural wetlands are indicated by white arrows (EnviroSwift, 2024).

Findings

A brief description of each wetland identified on site follows:

- **Wetland 1:** A natural seasonal depression wetland (1.51 ha) located along the western boundary of Erf 6300. It is believed that this wetland is a remnant of a larger wetland system that historically extended beyond the current western boundary of the site.

- **Wetland 2:** A small natural hillslope seep (0.08 ha) located west of wetland 3. Mottling within the upper 50.00 cm of soils indicates seasonal subsurface water movement, which is indicative of a seasonally saturated wetland. It is believed that this wetland is fed by rainfall accumulating on the underlying clayey soils.
- **Wetland 3:** A natural, elongated hillslope seep (1.415 ha) which extends from the northern boundary of the site in a south westerly direction. Mottling within the upper 50.00 cm of soils indicates seasonal subsurface water movement which is indicative of a seasonally saturated wetland. It is believed that this wetland is fed by rainfall accumulating on the underlying clayey soils.
- **Wetland 4:** A natural depression wetland (0.39 ha) with gleyed soils in the upper 50.00 cm of soils. The presence of gleyed soils indicate permanent saturated conditions. The wetland is present within a concave portion of the site and appears to experience saturation for longer periods of time than wetland 3.
- **Wetland 5:** A natural depression wetland (0.08 ha) on the southern border of the property. It is believed that this wetland experiences slightly unnaturally wet conditions due to the nearby railway creating a barrier. The presence of mottles within the upper 50.00 cm of soils are indicative of seasonal water movement and it is believed that a shallow clay layer (~40.00 cm depth) has resulted in a perched wetland system.

Table 7. EIS Summary of the Detailed Freshwater Ecological Assessment of the five on-site wetlands

Wetland Number	Classification	Key Ecological Services	Present Ecological State (PES)	Ecological Importance and Sensitivity (EIS)	Recommended Ecological Condition (REC)
1	Depression	Maintenance of biodiversity Flood attenuation Nutrient and toxicant assimilation Erosion control Carbon Storage	**D**	**Low/marginal**	**D**
2 & 3	Hillslope Seep	Maintenance of biodiversity Flood attenuation Nutrient and toxicant assimilation Erosion control	**C**	**Low/marginal**	**C**
4	Depression		**E**	**Low/marginal**	**D**
5	Depression		**E**	**Low/marginal**	**D**

Proposal Response

All five identified and delineated wetlands on the site will be retained. Three of the site's wetlands (wetlands 2, 3 and 4) will be managed as part of the proposed new Stikland Hospital boundary and wetland 1 will be accommodated on the western edge, alongside De La Haye Road (**Figure 6**). Wetland 5 will also be maintained in the southwestern corner of the site as part of the site's stormwater management plan, which may require partial infilling to accommodate the recommended stormwater swale and a Non-Motorised Transport route along the southern edge of the site.

Practical mitigation measures have been recommended to minimise and manage all the identified potential impacts to ensure that all impacts are reduced to either LOW or VERY LOW (-ve) significance ratings. Also, with the recommended establishment of suitable indigenous wetland vegetation within the retained wetlands and the establishment of suitable indigenous terrestrial vegetation in the buffer zones, the gains for aquatic biota would be enhanced to a MEDIUM (+ve) benefit. These mitigation measures have been included in the Environmental Management Programme (Appendix H).

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	**NO**
3.2.	Provide the name and/or company who conducted the specialist study.		
Not applicable.			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
Not applicable.			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
Not applicable.			
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		
Not applicable			

4. Biodiversity

4.1.	Were specialist studies conducted?	**YES**	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Nick Helme of Nick Helm Botanical Surveys.			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

The City of Cape Town Biodiversity Network was consulted. Prior to the specialist's site inspection, no CBAs had been mapped for the site. However, upon identification of areas of SCC with varying degrees of sensitivity, this information was submitted to CCT and their BioNet was subsequently updated.

This section draws heavily on the Botanical Assessment Report (2024).

The South African Vegetation Map was consulted as part of the Botanical Assessment that was done for the site. The study identified remnants of two Critically Endangered vegetation types (Cape Flats Sand Fynbos and Swartland Shale Renosterveld) and at least 5 plant Species of Conservation Concern (SCC):

Table 8. Plant SCCs

Species	Redlist Status	Notes
Aspalathus ternata	Near Threatened	Northeastern areas; about 60 plants in a small patch
Babiana nana ssp. *nana*	Endangered	Northern areas; about 100 plants in a small patch
Lampranthus explanatus	Near Threatened	Northeastern areas; about 50 plants
Phyllopodium capillare	Near Threatened	Eastern and southern areas; hundreds of plants; annual, widely scattered

Trachyandra sp.	Unknown, pending id.	Northern areas; <20 plants, in a small patch

The majority of the study area is of Low botanical sensitivity (see Figure 7), and these areas do not support any of the recorded Species of Conservation Concern (SoCC).

There are also significant patches of higher sensitivity. Four patches of Very High sensitivity have been mapped, one of which is a seasonal wetland (southernmost corner of the site), and the other three all support the five recorded plant Species of Conservation Concern. Surrounding and linking these are two patches of Medium to High sensitivity. In the southeast are three patches of Medium sensitivity that support none of the SoCC except the annual *Phyllopodium capillare*.

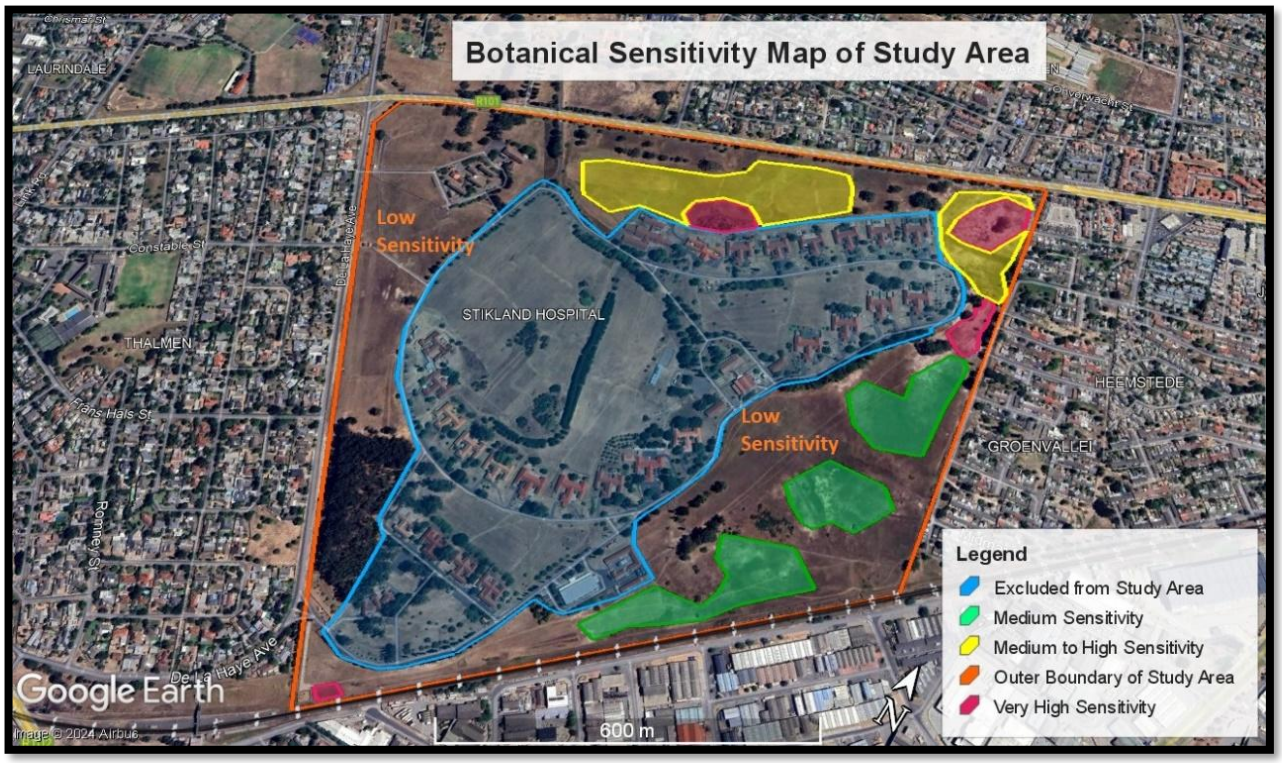


Figure 7. Botanical Constraints map of the study area. Unshaded areas within the study area are deemed to be of Low botanical sensitivity (Helme, 2024).

Conclusions

- The study area supports notable remnants of two Critically Endangered vegetation types, with at least five plant Species of Conservation Concern. At least 8ha of mostly indigenous vegetation remains in the area.
- The majority of the study area is of Low botanical sensitivity, and these areas do not support any of the recorded Species of Conservation Concern (SoCC).
- There are four patches of Very High sensitivity (see Figure 7), one of which is a seasonal wetland, and the other three all support the five recorded plant Species of Conservation Concern.
- Surrounding and linking these are two patches of Medium to High sensitivity. In the southeast are three patches of Medium sensitivity that support none of the SoCC except the annual *Phyllopodium capillare*.

Proposal Response

Majority of the botanical spaces with a sensitivity of "Medium" to "Very high" will remain undeveloped and managed as part of the new Stikland Hospital boundary, with the exception of a Medium-High sensitivity botanical space in the northern section of the site, which will form an open space within the development framework, and certain sections where roads are required. Approximately 0.40ha of Medium-High sensitivity vegetation is proposed to be cleared for roads for access to the site along Old Paarl Road. The botanical specialist has recommended a partnership with a suitably qualified ecological management organisation and that an ecological management plan be compiled to ensure the effective management of the botanically sensitive spaces. This has also been recommended as a condition of approval.

4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.

The WC Biodiversity Spatial Pan has not mapped CBAs for the site, but the CCT BioNet has, as these CBAs were informed by the botanical specialist study conducted for the site. Various categories on the CCT BioNet Map have distinct management objectives based on their biodiversity priority (CCT Bioregional Plan, 2015). In general, areas of high biodiversity priority should be kept in a healthy and functioning state, while areas of lower priority may be used for other land purposes. The proposed project aligns with these objectives as the proposed development largely avoids sensitive botanical areas.

4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.

While the proposed development framework will result in the loss of medium-high sensitivity vegetation, the proposed conservation of botanical spaces in line with an ecological management plan will allow for better management of the sensitive vegetation on site than what is currently practised (i.e., regular mowing of lawns). The proposed development would emphasise the botanical biodiversity's presence by incorporating it into open spaces connected by walking trails. A landscape management plan will be compiled to ensure the open spaces are maintained. Design informants regarding the edge treatment of the open spaces and specifications of footpaths have all been compiled to inform the detailed design stage of the proposed development.

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

The proposed development is not located within a protected area.

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

A site visit to the Stikland South site was performed by Infinity Environmental on Wednesday, 13 November 2024. The aim of this site visit was to determine if there was any evidence of endangered or protected fauna inhabiting the Eucalyptus Forest due to previous communications with the groundskeeper. The Eucalyptus Forest consists mainly of the invasive *Eucalyptus grandis*, commonly known as blue-gum.

Bird species observed and identified in the forest include:

- **Guineafowl (*Numida meleagris*)** are social birds and are widely distributed throughout South Africa. The IUCN has classified the guineafowl as Least Concern (Hockey et al., 2005; IUCN Red List of Threatened Species, 2024).
- **Southern masked weaver (*Ploceus velatus*)** is common throughout southern Africa and are found in a range of habitats. The IUCN has classified the southern masked weaver as Least Concern.
- **Yellow-billed kite (*Milvus aegyptius*)** is a bird of prey and a commonly seen migrant species in South Africa. The IUCN has classified the Yellow-billed Kite as Least Concern (Hockey et al., 2005; IUCN Red List of Threatened Species, 2024).
- **Paradise flycatcher (*Terpsiphone viridis*)** are small birds that are widely distributed in South Africa and inhabitant a variety of woodland habitats and well planted gardens. The IUCN has classified the African paradise flycatcher as Least Concern (IUCN Red List of Threatened Species. 2024).
- **Cape spurfowl (*Pternistis capensis*)** is a gamebird that is commonly found in the Western Cape province of South Africa and often found in fynbos, strandveld and renosterveld regions. The IUCN has classified the cape spurfowl as Least Concern (Hockey et al., 2005; IUCN Red List of Threatened Species, 2024; Robertson, 2024).

No other fauna was observed and/or identified in the eucalyptus forest in Stikland south during the site visit.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

Wetland Delineation Study

A hydropedological study and wetland verification and delineation study was performed in 2024 by DSA and Freshwater Consulting, respectively, as part of a wetland delineation study. The primary aims of these investigations was to confirm the location and extent of the wetlands delineated by EnviroSwift in 2023, as well as to determine whether the wetlands are naturally occurring or formed due to anthropogenic forces. This section draws heavily on the GEOSS wetland delineation study (2024) and should be understood as excerpting or summarising this report unless otherwise referenced.

Regional Geology

The Geological Survey of South Africa (now the Council for Geoscience (CGS)) has mapped the area at 1:50 000 scale (3418CD, Bellville). The geological setting is shown in **Figure 8** and the main geology of the area is listed in **Table 9**.

Table 9. Regional geological formations within the area (adapted from GEOSS, 2024)

Code	Formation	Group	Lithology
Qr	Quaternary deposits of variable age		Sandy loam
Qs	Springfontyn Formation	Sandveld Group	Unconsolidated aeolian quartzose sand, peaty in places
EDt	Tygerberg Formation	Malmesbury Group	Quartz-chlorite-sericite phyllite, minor fine-grained wacke, hornfels

According to the geological map, the site is located in an area defined by Quaternary deposits of sandy loams with localised deposits of aeolian sands from the Springfontyn Formation. These younger deposits are regionally underlain by the late-Precambrian aged sediments of the Tygerberg Formation, which were originally deposited on an ancient continental slope by submarine slumping and turbidity currents. According to the geological map (1:50 000 scale, 3418DC, Bellville), no structural features are present within the area (**Figure 8**).

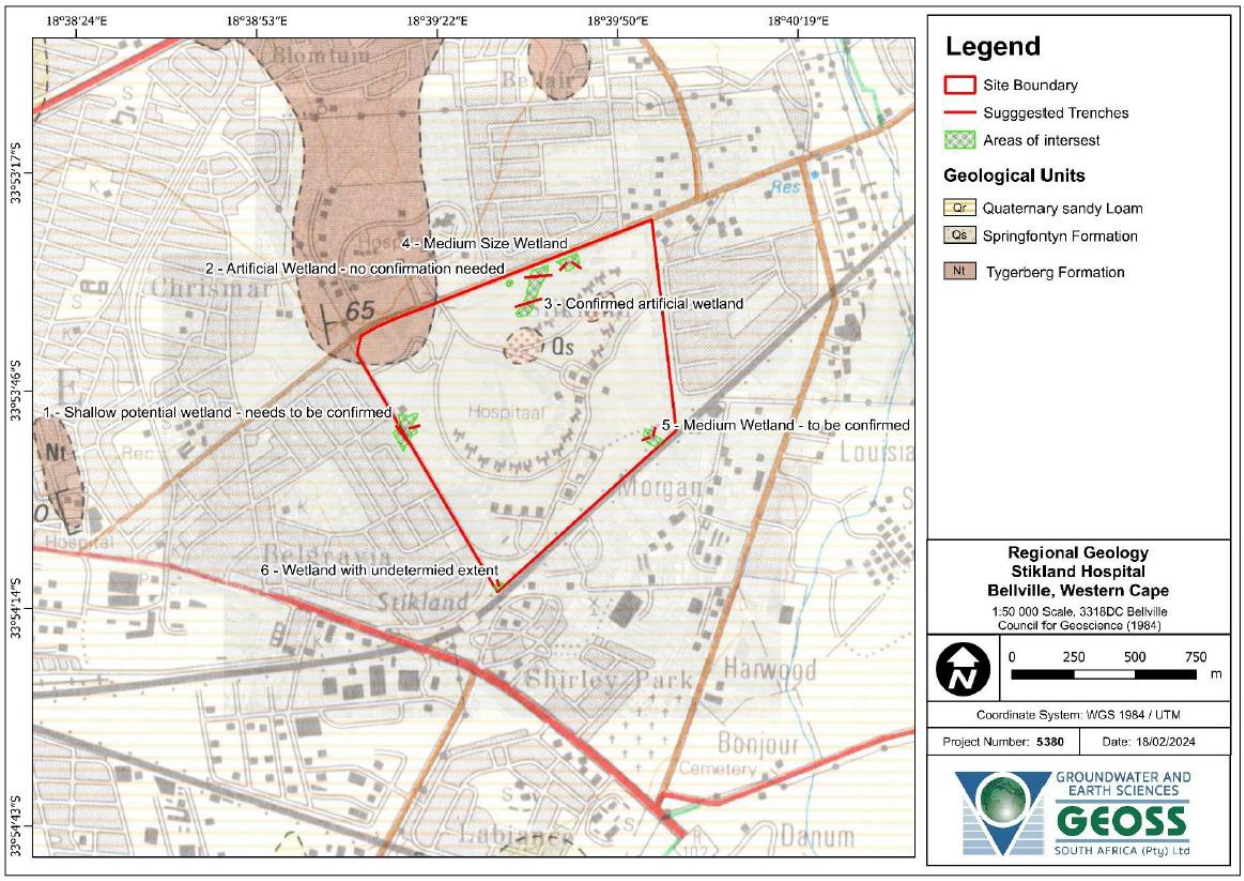


Figure 8. Geological setting of the study site overlain by wetlands (GEOSS, 2024).

Findings

The following points are a summary of the findings of the wetland verification and delineation study:

1. Several soil associations were encountered on the site which are associated with wetland conditions.
2. It was determined that an upper (A/B horizon interface) and a lower (gleyed horizons) flow path exists which are separated by local development of a prismacutatic horizon.
3. The existence of gleyic horizons indicate lengthy periods of saturation likely related to the regional groundwater table deeper in the soil profiles.
4. Foundations of the proposed development will likely intercept the upper flow path and limit its contribution to the wetland.
5. Surface sealing will also likely increase overland flow and disrupt natural flow paths.
6. Of the original six (6) wetlands identified by EnviroSwift, one (1) did not constitute a wetland and an additional two (2) wetlands were identified.
7. The position of seven (7) wetlands was confirmed and delineated, which occur on the site.

8. All of the identified wetlands are likely fed by a combination of local runoff and a connection to the regional water table.
9. Of the seven (7) confirmed wetlands, two (2) were determined to have been formed due to artificial depressions.
10. The wetlands have a long history of transformation; however, they still provide some functionality within the catchment.

Recommendations

Based on the findings, the following recommendations are made:

1. Overland flow should be reintroduced above the development area.
2. Attenuation ponds should be added in lower-lying areas.
3. Wetland Habitats should be assessed in terms of their Present Ecological State (PES) and their Ecological Importance and Sensitivity.
4. The ecological condition and importance, along with development setbacks, are to be considered in the spatial layout plan for the site.
5. Should any of the natural wetlands be infilled by $10m^3$ or the development trigger a Section 21 (c) and (i) Water Use of the National Water Act, an Environmental Impact Assessment and Water Use Authorisation will be required.
6. The layout design and management of stormwater should keep in line with the City of Cape Town's Sensitive Urban Design (WSUDS) criteria in that the volumes and quality of runoff are effectively managed.

6. Heritage Resources

6.1.	Was a specialist study conducted?	**YES**	NO
6.2.	Provide the name and/or company who conducted the specialist study.		

The Professional Heritage Practitioner, Cindy Postlethwayt, conducted the Heritage Impact Assessment.

6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.

This section draws heavily on the heritage study (2024) conducted and should be understood as excerpting or summarising this report unless otherwise referenced.

The provision of mental health services from around 1700 to 1900 in the Cape was insufficient and largely inhumane. Overcrowding in hospitals led to the transfer of patients to Robben Island where living conditions were significantly worse. Towards the end of the 1900's the State was under pressure to increase control and order of its institutions for the treatment of the mentally ill, which resulted in the construction of Valkenberg Hospital in 1891. During this time, it was considered that mental hospitals or asylums should be placed in areas with gardens or outdoor spaces to aid recovery.

The construction of Stikland began in 1960 to replace Valkenberg due to overcrowding and was intended mainly for white patients, with fewer places for coloured patients. Stikland was designed as a "villa system" with 20 villas or wards to separate white patients by sex and another 4 wards below for non-white patients. As with Valkenberg Hospital, Stikland Hospital was designed to allow patients outdoor space, but with more of a functional purpose, less security and more community facilities, which ultimately led to large portions of the site being unused as is currently seen today. Due to the site being constructed in Belville, a semi-industrial urban environment, it was difficult to provide a peaceful and tranquil area; thus, the villas were spaced far apart to create the impression of

spaciousness. Most of the vegetation in the centre of the site (predominately invasive port Jackson trees) was removed for development and the creation of gardens, which transformed the farmlands. Conversely, the vegetation on the site perimeter was retained, including the eucalyptus forest or woodlot in the southeast corner of the site that expanded significantly between 1968 and 1980.

The operations of Stikland South are currently nearly identical to when the hospital was established. All buildings will be retained on Stikland South, except for the administrative building in the southwest portion of the site that will be demolished (**Figure 9**) and the uses relocated on the site.

There are no identified heritage resources of significance and therefore no heritage constraints to the development of the site. There are however, historical elements including the High botanical vegetation, trees on site older than 60 years and the Eucalyptus woodlot. Although the Stikland South site does not consist of an extensive landscape, the Eucalyptus woodlot in the southwestern corner is considered to have low significance due to its contribution to the character of the environment. Due to the nature of the woodlot, a detailed study was done to categorise the trees, and a Forest Assessment and Tree Management Survey were done (See Appendix G3). The Eucalyptus woodlot will be partially retained. The botanical significance of Stikland South also played a significant role in designing the proposed development. This site supports two critically endangered vegetation types, with at least five plant species of conservation concern. Thus, the proposed grading of the High to medium sensitivity areas on the site is IIIA (high significance). Due to its significance, no very high sensitivity vegetation will be removed.

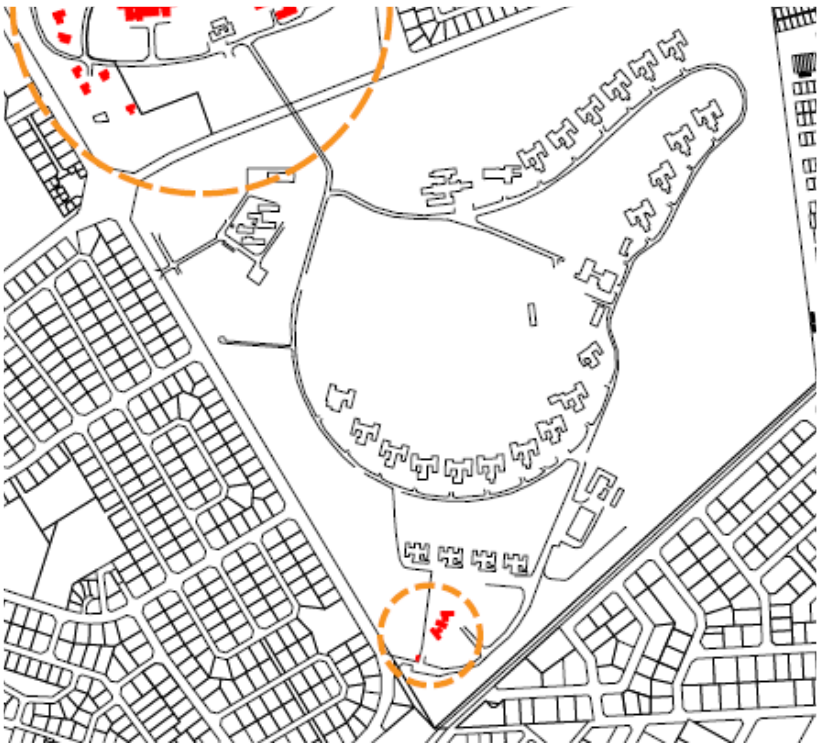


Figure 9. Buildings proposed to be demolished in Stikland South and North.

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

Stikland South's heritage significance was assessed under the section 2 criteria of the National Heritage Resources Act (1999).

Stikland Psychiatric Hospital:

- **Medical (scientific) significance:** In the context of psychiatric institutions in South Africa, Stikland is seen as significant due to its medical and architectural history. Stikland was the first psychiatric institution built during the de-institutionalisation of these facilities, that was purpose-built and contributed significantly to research and training for mental health professions.

- **Architectural and historical:** Stikland Hospital was an essential medical response that incorporated key features into its design (i.e., the Villa Model that allowed for separation of patients by psychiatric condition and sex) and exemplified global treatments and management of the mentally ill. The buildings remain intact to this day, and the layout is mostly the same. There is no noteworthy architecture; however, it is described as utilitarian with a functional design with a mid-century modern aesthetic similar to that of the surrounding area. The historical significance of the site is considered to be low with a grading of NCW (No research potential or other cultural significance).

- **Aesthetic and landscape:** There is limited visual significance besides the mature trees and woodlot on site, some of which are older than 60 years and thus have historical significance. The eucalyptus woodlot and other mature trees on site can be considered historic and provide some place-making opportunities on site. The proposed grading is IIC (low heritage significance). A portion of the Eucalyptus Forest will be retained.

- **Social:** People with mental health problems are one of the most marginalised sectors of society worldwide. The provision of humane mental health care and facilities by the State is not always appropriate or sufficient, Stikland has and continues to provide critical care to those in need. The analysis by the heritage practitioner revealed that the key significance of the original Stikland Hospital site rests in its social significance as an institution that serves a marginalised sector of society. Regardless of the hospital's social importance, it does not fit the definition of intangible cultural heritage as defined in Section 2 of the National Resources Heritage Act (1999). Therefore, the social significance of the site should not be regulated by heritage sector.

- **Botanical:** Stikland south supports two Critically Engendered vegetation types with at least five Species of Conservation Concern (SoCC). A large portion of the site (8ha) supports indigenous vegetation with around 4 sections of very high sensitivity vegetation. The proposed grading of the areas supporting high to medium sensitivity vegetation is IIA (high heritage significance) and thus the high sensitivity vegetation will be retained.

The site is not considered historically, naturally and/or culturally significant.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.

This section draws heavily on the Urban Econ Development Economists' socio-economic impact assessment (2024) and should be understood as excerpting or summarising this report unless otherwise referenced.

Stikland South Psychiatric Hospital is located in Stikland, a small area in Bellville within the Tygerberg Planning District. It is a medical institution serving both the local community and the surrounding metropolitan area, all within the City of Cape Town, hence, for the analysis of the social profile of the proposed development, the above-mentioned study areas have been taken into account.

Population and Households

Table 10 provides an overview of the population and households in the Stikland, Bellville, Tygerberg PD, and City of Cape Town (CoCT).

Table 10. Population and Households (2023)

Aspects	Stikland[1]	Bellville	Tygerberg PD	City of Cape Town
Population	218	136 908	854 010	4 853 997
Households	64	42 638	215 821	1 369 703
Ave Household size	3	3	4	4

[1]Stikland Industrial excluded due to land use exclusively for commercial use. Stikland Hospital excluded due to data inaccuracy.

(Urban-Econ Via Quantec (EasyData), 2024)

The Tygerberg PD, includes areas like Bellville and Stikland, is a densely populated district with a total population of 854 010 people and 215 821 households. Bellville, a key area within the district, houses approximately 136 908 people across 42 638 households. In contrast, Stikland, which is more industrially focused, has a smaller population of 218 and 64 households.

The annual population growth rate across all study areas is projected at 2.0%, which is significant given the existing population base. This steady growth will likely result in increased demand for housing, employment, and services in the coming years. The proposed mixed-use development will help accommodate this growing population by providing residential and commercial spaces. This will also potentially alleviate the pressure on existing infrastructure and create economic opportunities for local residents.

Age

The age profile of Stikland, Bellville, Tygerberg PD, and City of Cape Town are highlighted in **Figure 10**.

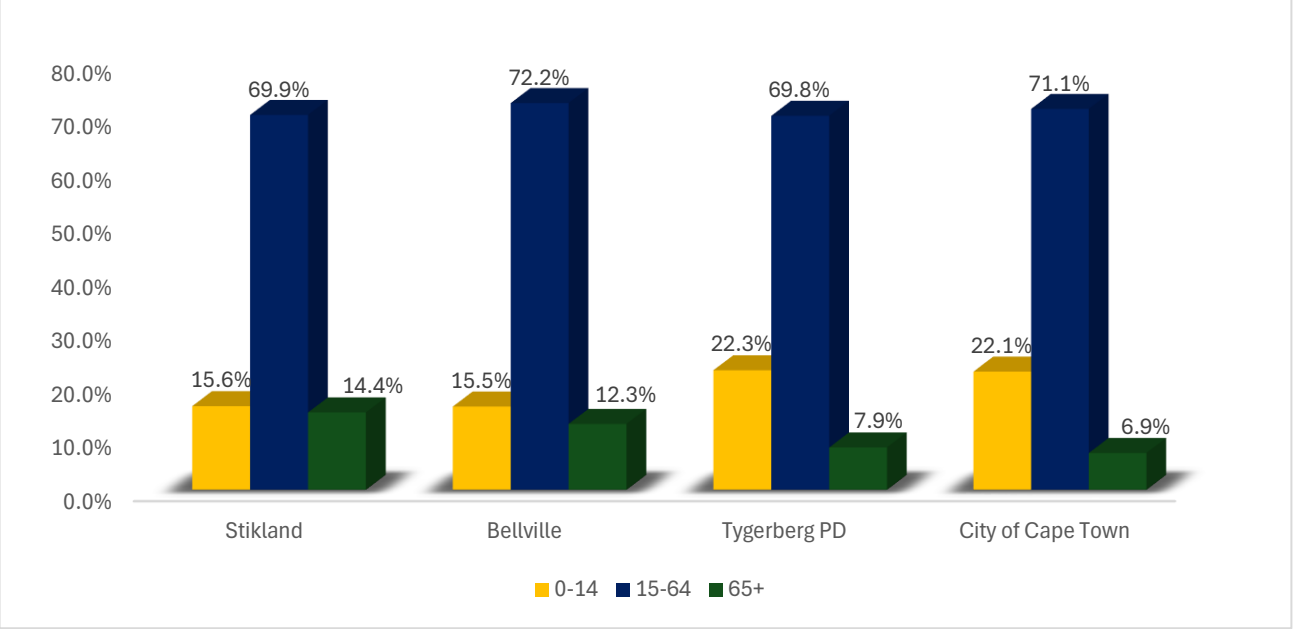


Figure 10. Age Profile (2023)

(Urban-Econ Via Quantec (EasyData), 2024)

In Stikland, 69.9% of the population falls within the economically active age group (15-64 years), which is slightly lower than Bellville (72.2%), but comparable to Tygerberg (69.8%) and slightly lower than the City of Cape Town (71.1%). This reflects a strong labour force in Stikland, indicating a demand for employment opportunities and commercial services in the proposed development.

Education

Table 11 below illustrates the estimated highest level of education for people older than 20 in Stikland, Bellville, Tygerberg PD, and the City of Cape Town.

Table 11. Level of Education (Age 20+), 2023

Category	Stikland	Bellville	Tygerberg PD	City of Cape Town
No Schooling	7.2%	0.7%	7.2%	5.4%
Some Primary Education	0.9%	0.9%	4.8%	4.7%
Completed Primary	1.5%	0.5%	3.6%	3.1%
Some High School	14.5%	7.5%	30.5%	31.4%
Grade 12	42.0%	17.5%	32.5%	33.1%
Higher	34.0%	18.7%	14.5%	16.2%
Other	0.0%	54.1%	7.0%	6.2%

(Urban-Econ Via Quantec (EasyData), 2024)

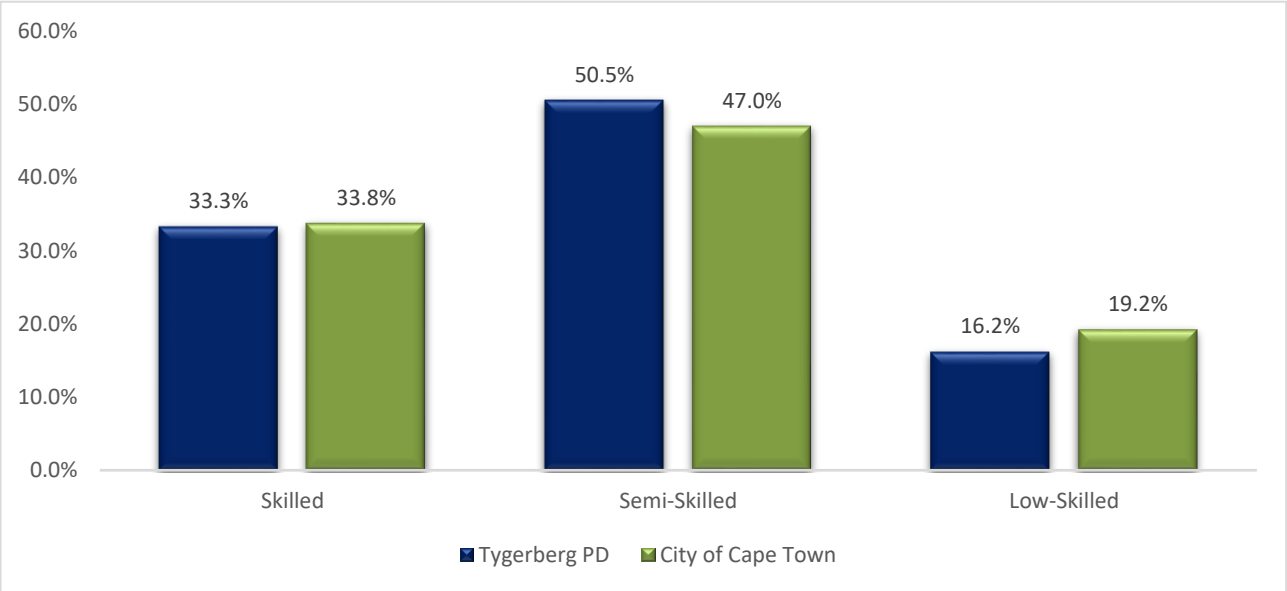
Approximately 17.5% of Bellville's population has completed Grade 12, and 18.7% holds higher education qualifications. These figures highlight the area's potential to support a wide range of economic activities, from retail and commercial services to administrative and technical jobs. In contrast, Tygerberg PD shows a slightly higher portion of individuals who have completed Grade 12 (32.5%) but a lower rate of higher education (14.5%). This suggests that while the broader Tygerberg

PD may have more residents who complete secondary school, Bellville surpasses it in terms of access to and completion of post-secondary education, making the Bellville area more attractive for professional or specialised industries.

Stikland, being a more industrially focused area, has 42% of its population completing Grade 12, but it is characterised by a smaller overall population and a workforce more aligned with technical or industrial sectors, given its high percentage of higher education attainment (34%).

Skills

Figure 11 below provides an indication of the skills profile in the Tygerberg PD and the CoCT. *Information relating to skills level in the PSA is not available as information is obtained through Census 2011 and skill-related data is not provided.*



(Urban-Econ Via Quantec (EasyData), 2024)

Figure 11. Skills Level (2023)

Many workers in the Tygerberg PD are estimated to be semi-skilled (50.5%), followed by highly skilled individuals (33.3%), and the lowest proportion of low-skilled individuals (16.2%). A similar trend is observed in the CoCT, where most workers are semi-skilled (47.0%), followed by skilled workers (33.8%), and low-skilled workers (19.2%). Individuals classified as semi-skilled and skilled are more likely to secure employment.

Employment

Table 12 highlights the estimated profile of labour in terms of people who are between the ages of 15 and 64 who are employed, unemployed or not economically active in Stikland, Bellville, Tygerberg PD, and the CoCT.

Table 12. Employment Profile (2023)

Aspect	Stikland	Bellville	Tygerberg PD	City of Cape Town
Employed	56.9%	53.3%	48.4%	46.5%
Unemployed	5.8%	1.1%	13.0%	15.1%

Not economically Active	37.3%	45.6%	38.6%	38.4%

(Urban-Econ Via Quantec (EasyData), 2024)

The employment profile across the study areas shows distinct differences. As one of the smaller population areas within Bellville, Stikland, has a strong employment rate of 56.9%, surpassing Bellville (53.3%), Tygerberg PD (48.4%), and the CoCT (46.5%). However, Stikland also has a slightly higher unemployment rate of 5.8%, compared to Bellville's 1.1%, although both remain below the figures seen in Tygerberg PD (13.0%) and the CoCT (15.1%). Stikland's "not economically active" population, at 37.3%, is somewhat lower than Bellville (45.6%) but is in line with the broader Tygerberg PD and CoCT averages. This data suggests that while Stikland has a relatively engaged workforce, there is still a notable portion of the population not participating in the labour market.

Dwellings

Dwelling units in an area can provide an indication of future demands for accommodation as well as the level of development in the area. **Table *13*** outlines the dwelling types in Stikland, Bellville, and CoCT.

Table 13. Dwelling Types (2023)

Type of Dwelling	Stikland	Bellville	City of Cape Town
House or brick structure on a separate stand or yard	22.2%	66.2%	56.3%
Traditional dwelling/hut/structure made of traditional materials	0.0%	0.3%	0.4%
Flat in a block of flats	77.8%	17.1%	9.9%
Town/cluster/semi-detached house (simplex, duplex or triplex)	-	9.4%	9.6%
House/flat/room, in backyard	-	1.5%	1.5%
Informal dwelling/shack, in backyard	-	1.5%	7.0%
Informal dwelling/shack, NOT in backyard, e.g., in an informal/squatter settlement	-	0.2%	13.5%
Room/flatlet not in backyard but on a shared property	-	1.9%	1.0%
Other/unspecified/NA	-	1.9%	0.7

(Urban-Econ Via Quantec (EasyData), 2024)

The analysis of dwelling types in the study areas reveals distinct housing patterns that inform socio-economic development strategies. In the CoCT, 56.3% of households reside in houses, while 13.5% live in informal dwellings, indicating challenges with housing security. Bellville has a higher percentage of houses (66.2%) and a notable demand for flats (17.1%), suggesting a preference for suburban living. In contrast, Stikland features a high concentration of residents in flats (77.8%), catering to a workforce seeking affordable housing, with a minimal presence of houses or brick structures (22.2%).

Household Income

Table 14 shows a summary of the household income of the above-mentioned areas.

Table 14. Summary of Annual Household Income (2023)

Income Category	Stikland	Bellville	City of Cape Town
Low Income (R0- R71 977)	17.2%	19.6%	47.1%
Medium Income (R71 978 – R575 819)	70.3%	48.2%	39.3%
High Income (R575 820 – R4 606 551 plus)	12.5%	32.3%	13.6%

(Urban-Econ Via Quantec (EasyData), 2024)

The analysis of household income in Stikland, Bellville, and the CoCT shows notable differences among these areas. In Stikland, a substantial portion of the population comprises middle-income earners (70.3%), followed by low-income earners (17.2%) and high-income earners (12.5%). The higher-income earners are mainly concentrated in Stikland Industrial and Stikland North, where commercial developments and well-maintained residential properties attract individuals with higher disposable incomes. In contrast, Bellville has a more balanced income distribution, with 48.2% of residents classified as middle-income earners, 32.3% as high-income earners, and 19.6% as low-income earners. Wealthier areas in Bellville include neighbourhoods like Pine Park and Pinehurst, which feature more upscale housing options and amenities. On the other hand, the overall CoCT primarily comprises low-income earners (47.1%), followed by middle-income earners (39.3%) and high-income earners (13.6%).

8.2.	Explain the socio-economic value/contribution of the proposed development.

Increase in Production and GDP in economies of various scales

The capital expenditure of the proposed development would equate to a direct, indirect, and induced impact on production and new business sales within the local area. The localised expenditure on the project will stimulate the local and national economies during the construction phase, which is anticipated to be sustained in the operational phase of the proposed development.

Diverse Employment Opportunities

The employment profile data suggests that the proposed development could potentially benefit the local economy, particularly in Stikland, where 5.8% of the population is unemployed. By creating diverse job opportunities through residential, commercial, and service spaces, the development can potentially address the unemployment rate and the 37.3% of individuals classified as "not economically active." Overall, this proposed development has the potential to stimulate local economic growth and improve the socio-economic conditions of the community.

Given the prevalence of semi-skilled and skilled workers in both areas, this proposed development requires a workforce with specific skills during construction. This could involve trades, technical expertise, and specialised knowledge. Additionally, construction activity presents opportunities for unskilled labour participation. With a significant proportion of semi-skilled and skilled individuals in the labour force, there will be potential for ongoing employment opportunities during the operation phase of this development. This is particularly relevant for roles in maintenance, service, and management.

Affordable Housing

A high portion of Stikland's population falls within the middle-income category, indicating a strong need for affordable and social housing options. Addressing this gap will meet local housing demand

across various income levels, improving living conditions and stability. Additionally, the presence of high-income earners in areas like Stikland Industrial and Stikland North suggests potential for economic growth and investment. By integrating affordable housing into the development, a more inclusive community can emerge, attracting diverse demographics and promoting community unity.

8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

The proposed development framework includes social and affordable housing, as well as a school and a community clinic. These facilities will contribute to meeting the needs of housing, educational and health-care needs of the community.

8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

Both negative and positive impacts on people's health and wellbeing are anticipated for the proposed development framework. Negative impacts are largely temporary in nature as these a mostly associated with the construction phase of the proposed development. Positive impacts are long-term, as these are associated with the operational phase of the proposed development:

Construction Phase Negative Effects

- Temporary increase in dust, noise and visual disturbance.
- Temporary increase in social conflict due to an influx of external job seekers.

Construction Phase Positive Effects

- Temporary increase in job opportunities.

Operational Phase Negative Effects

- Long-term increase in traffic congestion.
- Permanent visual disruption and change in sense of place.

Operational Phase Positive Effects

- Long-term increase in the availability of social and affordable housing.
- Long-term increase in employment opportunities.

Mitigation measures for negative impacts and enhancement measures for positive impacts have been proposed in the EMPr.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred property and site alternative.	
Stikland South is located on erf 6300 in Stikland, Bellville. It is situated along the Provincial Main Road R101 (Old Paarl Road) to the north, De La Hay Avenue to the west, Midmar Road to the east and railway line to the South. The Property extent is approximately 114 hectares of which +60 hectares are vacant, and the remaining hectares include the Stikland Psychiatric Hospital, Stikland Hospital Pharmacy, and Western Cape College of Nursing Metro East Campus.	
Provide a description of any other property and site alternatives investigated.	
No other property or site alternatives are relevant to the proposed development framework. The identified property is considered underutilised, and thus, the development framework is proposed to ensure the best use of state-owned land. The chosen property is inherent to the proposed development. No other properties or sites are relevant to the proposed development framework.	
Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.	
See above response	
Provide a full description of the process followed to reach the preferred alternative within the site.	
See above response	
Provide a detailed motivation if no property and site alternatives were considered.	
Erf 6300 is a brownfield site that has a history of institutional and community developments, with the Stikland Psychiatric Hospital on Stikland South. The infrastructure and large areas of land in Stikland South are vacant and underutilised. Subsequently, the Stikland South precinct has been identified as an area that provides an opportunity for mixed-use development. The proposed development aligns with various spatial planning tools, as discussed in detail in Section E.4. Thus, after careful consideration, the development proposal was created with the specific intent of developing the Stikland South precinct. The property is inherent to the proposal; therefore, no other property or site alternatives were investigated.	
List the positive and negative impacts that the property and site alternatives will have on the environment.	
The proposed development will have the following impacts: » Visual impacts during construction » Traffic congestion caused by construction traffic » Dust and noise pollution generated due to construction activities » Noise generated during operational phase of the site » Employment creation and economic benefits due to construction activities » Transport impacts during the operational phase	

»	Employment creation and economic benefits due to operation of commercial and related uses on the site

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The preferred activity alternative is the development of the Stikland South precinct. Stikland South will be developed to make optimal use of the available vacant land. Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital.

The remaining edge of Old Paarl Road will be developed with 4 storey mixed-use buildings. Provision is being made for affordable and Social Housing, as well as open market housing, supported by a school and community facilities. The western edge of the site alongside De La Haye Street is being considered for a possible Community Clinic and new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas, the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Provide a description of any other activity alternatives investigated.

The activity alternative presented for assessment is the outcome of an extensive, iterative, constraints-led and consultative design process and represents an optimisation of the many competing and sometimes conflicting needs on this strategic site. It is the culmination of the investigation of many, iteratively-developed alternatives – it would not add value to present these alternatives for comparative assessment, but their consideration has been the subject of both technical and consultative inputs.
e involved the following key activities, each of which informed and refined the preferred alternative presented in this BAR:

- An Open House was held on 31 July 2024, and invitations to attend were sent to identified potential interested and affected parties. The list of I&APs included representatives of community organisations, on-site stakeholders and adjacent property owners.
- Technical inputs and design indicators arising from the following professional studies and assessments:
    - Urban design (ARG Design)
    - Cultural and architectural heritage (Cindy Postlethwayt)
    - Transport engineering (hho)
    - Wetland Delineation Study (GEOSS)

- Botanical study (Nick Helme Botanical Surveys)
- Freshwater ecology and aquatic biodiversity assessment (EnviroSwift)
- Socio-economic impact assessment (Urban Econ Development Economists)
- A non-statutory public participation process from Wednesday 17 July 2024 to Monday 19 August 2024, incorporating widespread advertising, a 30-day comment period, and an open day held on the site.

The proposed and preferred activity alternative aligns with the planning frameworks relevant to the site (see Section E) and takes account of the site's social significance as an institution.

Previous designs developed for the site were not considered as part of this assessment due to road capacity constraints, as well as the wetland and botanical constraints.

Provide a motivation for the preferred activity alternative.

The development and drafting of the proposal followed an iterative process, which ultimately resulted in the formulation of a draft development framework for the site early in 2024. This proposal accommodated the series of wetlands and their respective buffers identified in the freshwater specialist study (Enviroswift, 2024). The draft development framework was published as part of the non-statutory public participation process (PPP) to allow for comments from stakeholders and the public, from Wednesday, 17 July 2024, to Monday, 19 August 2024.

Since the non-statutory PPP undertaken in 2024, the development framework has been revised from the initial framework published for comment. The revisions were primarily driven by key environmental factors highlighted in the botanical study conducted by Nick Helme (Nick Helme Botanical Surveys, 2024 – refer to **Appendix G1**), which found that certain areas previously earmarked for development contained Medium to Very High sensitivity vegetation and were therefore unsuitable for development. These sensitive areas have since been excluded from the development footprint and are now included within the proposed boundary for the Stikland Hospital grounds.

Additionally, a Transport Impact Assessment (TIA) has also been conducted for this application. Prior to the detailed TIA being undertaken, the views of the City's Urban Mobility Directorate (TIA & Development Control Branch) regarding trip generation assumptions for the envisaged land uses were obtained. Based on this input, a further revision to the development framework was made resulting in reduced development density. All proposed development along the eastern section of the site being removed, and the maximum building height was reduced to from eight storeys to four.

Given the development constraints, the Eucalyptus Forest was investigated as an alternative for development to help offset, where possible, the loss of areas previously earmarked for development. It was confirmed that approximately 20 071m^2 of the Eucalyptus Forest along the western boundary of the site will be retained, while the remaining portion is proposed for residential development.

Provide a detailed motivation if no activity alternatives exist.

No other activity alternative would suit the purpose and the need of the proposed development at this location. As previously mentioned, in 2010, the Western Cape Government approved the mandate for the Regeneration Programme, which included the Stikland Hospital estate. This project

is currently managed by the Special Projects Directorate within the Department of Infrastructure, with the aim of maximizing the social value of publicly owned land.

Furthermore, planning frameworks, as outlined in Section E of this report, note that development guidelines indicated for the Stikland area include:

- *Mixed-use development in the form of commercial/office/residential development along portions abutting Old Paarl Road.*
- *Medium- to high-density residential development on portions of the precinct that are available for development. Portions of land fronting onto De La Haye Avenue should be considered for residential development, thereby creating a development link from Old Paarl Road to Stikland Station."(p. 95)*

The proposed development aligns with the development guidelines outlined for Stikland, in that it proposes mixed-use, medium-density land uses, including social and affordable housing.

List the positive and negative impacts that the activity alternatives will have on the environment.

No activity alternatives are considered for the proposed project; thus, the positive and negative impacts are the same as the positive and negative impacts identified in the impact assessment section of this report. Please refer to section J.1.3. for a summary of the impacts identified.

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure.
Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.
The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised, indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas, the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital.

A Landscape Master (LF) prepared for the Stikland South development by Viridian Consulting (Pty) Ltd. This framework will guide the development process and includes comprehensive landscape guidelines. Key considerations of the LFP include preserving the botanical freshwater value of the environmentally sensitive areas, integrating with the surrounding environment and the retention of large mature trees as far as possible, also see Section A 4.4 of this BAR.

Provide a description of any other design or layout alternatives investigated.

Iterative Design Process

The development and drafting of the proposal followed an iterative process, which ultimately resulted in the formulation of a draft development framework for the site early in 2024. This proposal accommodated the series of wetlands and their respective buffers identified in the freshwater specialist study (Enviroswift, 2024). The draft development framework was published as part of the non-statutory public participation process (PPP) to allow for comments from stakeholders and the public, from Wednesday, 17 July 2024, to Monday, 19 August 2024.

Since the non-statutory PPP undertaken in 2024, the development framework has been revised from the initial framework published for comment. The revisions were primarily driven by key environmental factors highlighted in the botanical study conducted by Nick Helme (Nick Helme Botanical Surveys, 2024 – refer to **Appendix G1**), which found that certain areas previously earmarked for development contained Medium to Very High sensitivity vegetation and were therefore unsuitable for development. These sensitive areas have since been excluded from the development footprint and are now included within the proposed boundary for the Stikland Hospital grounds.

Additionally, a Transport Impact Assessment (TIA) has also been conducted for this application. Prior to the detailed TIA being undertaken, the views of the City's Urban Mobility Directorate (TIA & Development Control Branch) regarding trip generation assumptions for the envisaged land uses were obtained. Based on this input, a further revision to the development framework was made resulting in reduced development density. All proposed development along the eastern section of the site being removed, and the maximum building height was reduced to from eight storeys to four.

Thus, the current proposed layout is the only layout alternative assessed, as the previous versions are not deemed feasible.

Provide a motivation for the preferred design or layout alternative.

No design and layout alternative significantly different from that proposed would suit the purpose and the need of the proposed redevelopment at this location, while responding to the constraints, indicators, and consultation outcomes described above.

Provide a detailed motivation if no design or layout alternatives exist.
The activity alternative presented for assessment is the outcome of an extensive, iterative, constraints-led and consultative design process and represents an optimisation of the many competing and sometimes conflicting needs on this strategic site. It is the culmination of the investigation of many, iteratively-developed alternatives – it would not add value to present these alternatives for comparative assessment, but their consideration has been the subject of both technical and consultative inputs.
List the positive and negative impacts that the design alternatives will have on the environment.
The proposed development will have the following impacts: » Visual impacts during construction » Traffic congestion caused by construction traffic » Dust and noise pollution generated due to construction activities » Noise generated during operational phase of the site » Employment creation and economic benefits due to construction activities » Transport impacts during the operational phase » Employment creation and economic benefits due to operation of commercial and related uses on the site

1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:
The proposed development is still at the conceptual phase. No specific technology has been identified as a preferred alternative at this stage.
Provide a description of any other technology alternatives investigated.
Various technologies exist that can help developments reduce their impact on the environment. The following technology alternatives/measures are proposed to be considered at the detailed design phase of the development: 1. **Renewable energy sources**, such as solar panels and/or wind turbines, should be considered to reduce the development's energy consumption, and subsequently reduce their carbon footprint. 2. **Water conservation technologies,** such as low-flow taps and greywater recycling systems, can reduce the freshwater demand of the development in a water-stressed area. 3. **Green building materials**, such as bricks made from recycled materials, sustainably sourced materials, or materials that do not contain toxic/hazardous chemicals, should be investigated. 4. **Green roofs** should be considered as an alternative to traditional roofs, as a means of reducing stormwater runoff and reducing the carbon footprint of the development. 5. **Insulation** measures can reduce the demand for cooling and heating mechanisms that require energy, thereby reducing the development's carbon footprint. 6. **Energy-saving lighting** can increase the development's energy-efficiency, thereby reducing its carbon footprint. 7. **Footpath Materials:** Using permeable, non-invasive materials that blend seamlessly with the natural environment (e.g., crushed gravel, boardwalks, or stabilized sand) can help reduce surface runoff and prevent erosion.
Provide a motivation for the preferred technology alternative.

This is not applicable to the proposed development framework.
Provide a detailed motivation if no alternatives exist.
Technology alternatives will be investigated at the detailed design phase.
List the positive and negative impacts that the technology alternatives will have on the environment.
This is not applicable to the proposed development framework.

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred operational alternative.
The proposed activities do not have an operational component in terms of the NEMA EIA requirements, and operational alternatives are not applicable to the proposed development framework. Operational alternatives are suggested for consideration at the detailed design phase; however it is not anticipated that these would have significant environmental impacts. These are not assessed in this report.
Provide a description of any other operational alternatives investigated.
Various operational alternatives exist that can reduce the development's impact on the environment. The following operational alternatives/measures are proposed to be considered at the detailed design phase of the development: 1. **Recycling facilities** that allow the separation of waste on site should be considered to reduce the amount of waste that goes to landfill. 2. **Irrigation systems** that utilise **non-potable/grey water** should be investigated, to reduce the demand on freshwater resources. 3. **Indigenous vegetation** should be utilised for landscaping throughout the site.
Provide a motivation for the preferred operational alternative.
Operational alternatives are not applicable to the proposed development framework.
Provide a detailed motivation if no alternatives exist.
Operational alternatives are not applicable to the proposed development framework.
List the positive and negative impacts that the operational alternatives will have on the environment.
The positive and negative impacts of different operation alternatives will be assessed at the detailed design phase of the development.

1.6.	The option of not implementing the activity (the 'No-Go' Option).

Provide an explanation as to why the 'No-Go' Option is not preferred.
The No-Go alternative is the option of not implementing the proposed development and is the benchmark against which the impacts of the proposed development can be evaluated. In this alternative, the site would stay as it currently is, and the development would not take place (i.e., the status quo remains). Given the policy context outlined in Section E, as well as the socio-economic context of the area, the No-Go option is not preferred, as this would not meet the goal of maximising the social value of state-owned land.

1.7.	Provide an explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

The only alternative other than the preferred alternative is the No-go option, which refers to not proceeding with the proposed development of the site. This option would result in opportunity costs in both the short and long term. Any other proposed use of the site would not align with the planning policy context as described in Section E.

1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.

The proposed Stikland South development is envisaged to create medium-density, mixed-use, urban development opportunities that optimise the inherent potential of the site and portions thereof, while integrating respectfully within the surrounding urban fabric and on-site psychiatric functions, to provide maximum inclusivity, economic benefit and spatial transformation within the overall Cape Town socio-economic context. The development and drafting of the development proposal followed an iterative process, which ultimately resulted in the formulation of a draft development framework of the site. This draft development framework was published for comment by stakeholders and the public from Wednesday 17 July 2024 to Monday 19 August 2024.

Stikland South Development Framework

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure. Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.

The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, commercial spaces and supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas, the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Conservation Areas

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development

framework within the proposed new boundary for the Stikland Hospital. A portion of the Eucalyptus Forest is proposed to be conserved due to the place-making significance associated with the trees in the southwestern portion of the site.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

As discussed in detail in Section G.2.3, all of the five identified and delineated wetlands on the site will be retained within the development. Three of the site's wetlands (wetlands 2, 3 and 4) will be managed as part of the proposed new Stikland Hospital boundary and wetland 1 will be accommodated on the western edge, alongside De La Haye Road (Figure 5). Wetland 5 will also be maintained in the southwestern corner of the site as part of the site's stormwater management plan, which may require partial infilling to accommodate the recommended stormwater swale and a Non-Motorised Transport route along the southern edge of the site. Furthermore, all identified botanical spaces with a sensitivity of "Very high", as well as a portion of the Eucalyptus Forest due to its visual significance, have been designated as No-Go areas. The coordinates of the No-Go areas are provided in **Table 15** below and mapped in **Figure 12**.

The No-Go areas have been designated as "no-go" for development. Conservation-compatible land uses have been considered, such as stormwater management, open spaces, and an eco-trail. An ecological management plan will be compiled to ensure the open spaces both within the development framework and the new Hospital boundary are maintained. Design informants regarding the edge treatment of the open spaces and specifications of footpaths will all be compiled to inform the detailed design stage of the proposed development.

Table 15. No-Go Area Co-ordinates

No-Go Area	Co-ordinates					
	Latitude (S)			Longitude (E)		
	DEG	MIN	SEC	DEG	MIN	SEC
Wetland 1 (W1)	33°	53'	50.86"	18°	39'	16.89"
Wetland 2 (W2)	33°	53'	36.05"	18°	39'	31.06"
Wetland 3 (W3)	33°	53'	32.76"	18°	39'	36.56"
Wetland 4 (W4)	33°	53'	28.64"	18°	39'	42.78"
Very High sensitivity botanical area 1 (VH1)	33°	53'	35.95"	18°	39'	34.82"
Very High sensitivity botanical area 2 (VH2)	33°	53'	28.19"	18°	39'	52.12"
Very High sensitivity botanical area 3 (VH3)	33°	53'	35.50"	18°	39'	54.58"
Very High sensitivity botanical area 4 (VH4)	33°	54'	11.29"	18°	39'	31.24"
Medium-to-high sensitivity botanical area 1 (M-H1)	33°S	53'	37.29"	18°	39'	26.37"
Medium-to-high sensitivity botanical area 2 (M-H2)	33°53'	53'	31.04"	18°	39'	53.06"
Medium sensitivity botanical area 1 (M1)	33°	53'	42.47"	18°	39'	53.27"
Medium sensitivity botanical area 2 (M2)	33°	53'	48.73"	18°	39'	52.05"
Medium sensitivity botanical area 3 (M3)	33°	53'	56.34"	18°	39'	49.39"
Retained Eucalyptus Forest (EF)	33°	54'	01.09"	18°	39'	24.69"

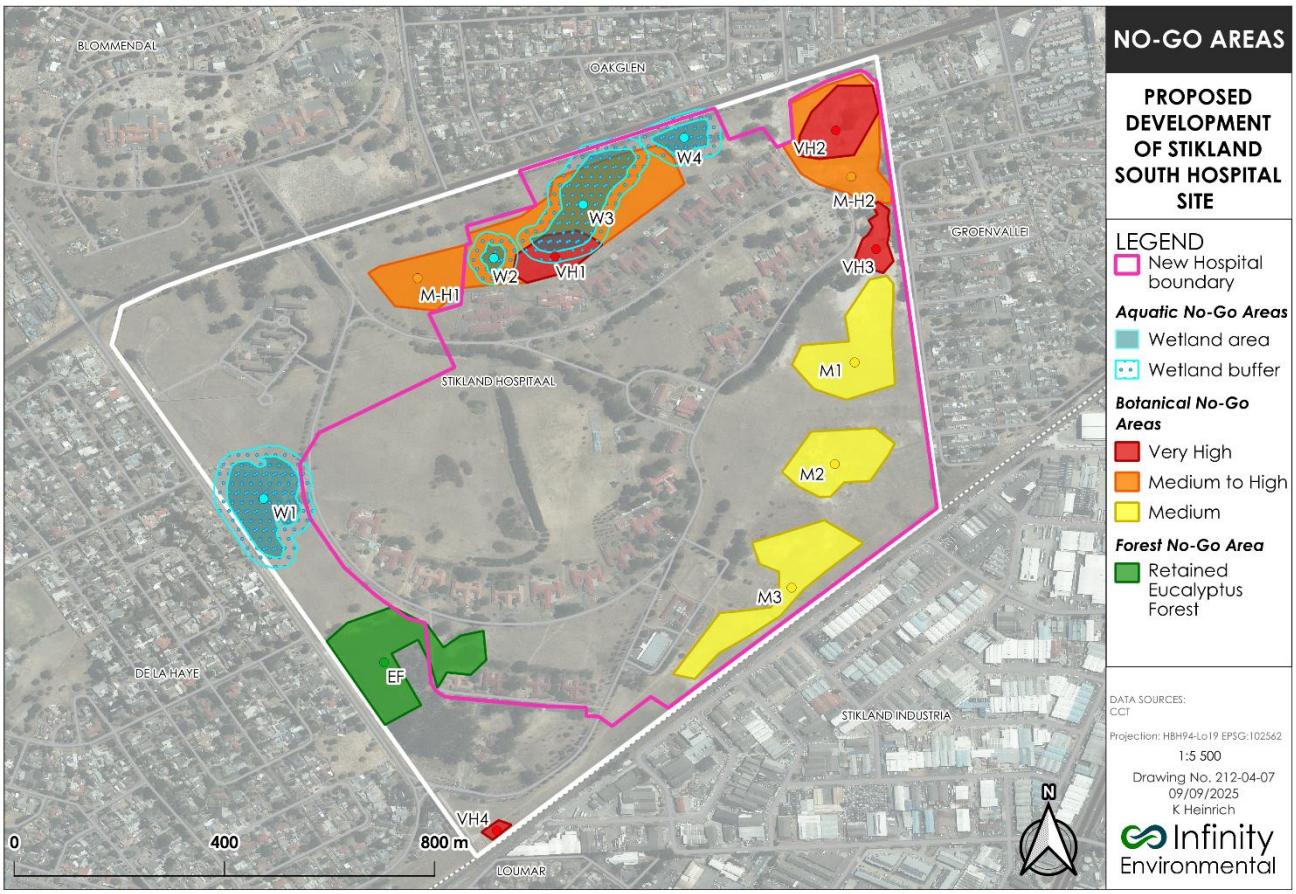


Figure 12. Map showing aquatic, terrestrial and forest No-Go areas.

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

This section outlines the impact assessment methodology, based on the DEAT 2006 Guideline on Assessment of Alternatives and Impacts. Impacts are defined as the changes in an environmental parameter that result from undertaking an activity. The change is the difference between the effect on the environmental parameter where the activity is undertaken compared to that where the activity is not undertaken. Impacts occur over a specific period and within a defined area.

Impacts may occur during the construction, operational and decommissioning phases of the development, and may be direct, indirect and/or cumulative in nature.

- Direct impacts are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.
- Indirect impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.
- Cumulative impacts, in relation to an activity, means the past, current and reasonably foreseeable future impact of an activity, considered together with the impact of activities associated with that activity, that in itself may not be significant, but may become significant when added to the existing and reasonably foreseeable impacts eventuating from similar or diverse activities.

In order to identify potential impacts (both positive and negative) the nature of the proposed projects is interrogated so that the impacts associated with the projects can be assessed. The process of identification and assessment of impacts included:

1. Determining the current environmental conditions in sufficient detail so that there is a baseline against which impacts can be identified and measured, including by:
    - Determination of site conditions via a visual inspection;
    - Review of recent and historical aerial imagery; and
    - Specialist assessments as required.
2. Determining future changes to the environment that will occur if the activity does not proceed, based on knowledge of local conditions, trends, and processes and on specialist assessment;
3. Developing an understanding of the activity in sufficient detail to understand its consequences; and
4. The determination of significant impacts which are likely to occur if the activity is undertaken.

As per the DEAT Guideline the following criteria have been applied to the prediction and assessment of impacts. Potential impacts are rated in terms of their:

- **Spatial extent** – The size of the area that will be affected by the impact:
    - Immediate (site only);
    - Local (<2 km from site);
    - Regional (within 30 km of site);

- National; or
- International.

- **Intensity** – The anticipated severity of the impact:
  - High (severe alteration of natural systems, patterns or processes);
  - Medium (notable alteration of natural systems, patterns or processes); or
  - Low (negligible alteration of natural systems, patterns or processes).
- **Duration** – The timeframe during which the impact will be experienced:
  - Temporary (less than 1 year);
  - Short term (1 to 6 years);
  - Medium term (6 to 15 years);
  - Long term (the impact will cease after the operational life of the activity); or
  - Permanent (reversal will not occur in such a way or in such a time span that the impact can be considered transient)
- **Reversibility** – The extent to which the impacts will be reversible when the project has reached the end of its life cycle (decommissioning phase, if applicable):
  - High reversibility of impacts (impact is highly reversible at end of project life);
  - Moderate reversibility of impacts;
  - Low reversibility of impacts; or
  - Impacts are non-reversible (impact is permanent).
- **Irreplaceability of resources lost** – the degree to which the impact causes irreplaceable loss of resources:
  - High irreplaceability of resources (project will destroy unique resources that cannot be replaced);
  - Moderate irreplaceability of resources;
  - Low irreplaceability of resources; or
  - Resources are replaceable (the affected resource is easy to replace/rehabilitate)

Using the criteria above, the impacts are further assessed in terms of the following:

Probability – The probability of the impact occurring:

- Improbable;
- Unlikely;
- Probable; or
- Very likely

Significance – Will the impact cause a notable alteration of the environment?

- Low to very low (the impact may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making);
- Medium (the impact will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated); or
- High (the impacts will result in major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision-making).

Status - Whether the impact on the overall environment will be:

- Positive - environment will benefit from the impact;
- Negative - environment will be adversely affected by the impact; or
- Neutral - environment will not be affected.

Confidence – The degree of confidence in predictions based on available information and specialist knowledge:

- Low;
- Medium; or
- High

Impact mitigation measures have been incorporated into the EMPr, which includes where appropriate:

- Standards for measuring and monitoring mitigatory measures and enhancements, and a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness; and
- Mitigation and management measures to avoid or reduce negative impacts.

Other aspects taken into consideration in the assessment of impact significance are:

- Impacts are evaluated for the construction and operation phases of the development.
- Impacts are evaluated with and without mitigation, stating the effectiveness of mitigation measures to reduce the significance of a particular impact;
- The impact evaluation takes into consideration the cumulative effects associated with this and other projects which are either developed or in the process of being developed in the local area; and

The impact assessment attempts to quantify the magnitude of potential impacts (direct and cumulative) and outline the rationale used. Where appropriate, national standards are used as a measure of the level of impact.

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

Please refer to Appendix J of this BAR for an assessment of impacts in the prescribed tabular format. Impact assessments and mitigation measures are described in the following section.

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

AQUATIC ECOSYSTEMS IMPACT ASSESSMENT

The Aquatic Ecosystems Impact Assessment was undertaken by Nick Stytler of EnviroSwift, 2024.

The study area lies in the Southwestern Coastal Belt ecoregion and is furthermore within the Berg Water Management Area, the Greater Cape Town sub-Water Management Area (sub-WMA) and the G22C and G22E quaternary catchments (NFEPA, 2011 and Kleynhans *et al*, 2005).

According to Mucina and Rutherford (2006, updated 2012 & 2018), the proposed site is located within Cape Flats Sand Fynbos which is listed as Critically Endangered in Government Gazette No. 47526 of November 2022. The NFEPA wetland vegetation database (2011) identifies the applicable wetland vegetation type to be Southwest Sand Fynbos within which all vegetation types are Critically Endangered with the exception of depressions and seeps which are listed as Vulnerable.

According to the NGI Rivers database (Cape Farm Mapper, 2023) and the National Wetlands Map Version 5 (CSIR, 2018) there are no rivers, drainage lines or wetlands within the site. The proposed site does however fall within the regulated zone (500m) of a hillslope seep which is located approximately 20m north of the north-western boundary of the site. The City of Cape Town Wetlands Layer (BioNet, updated 2018) however indicates that the proposed site lies within the regulated zone of a second wetland, an endorheic depression, located approximately 420m north of the north-western property boundary. Both wetlands occur upslope of the proposed site and on the far side of Old Paarl Road and as such are not at any risk of being impacted by the future development on the site.

A groundtruthing site visit was conducted by the aquatic specialist to verify the presence of watercourses on site. According to Steytler (2024), identifying wetlands on the site was challenging due to regular mowing, which reduced the effectiveness of using vegetation as a key determinant in wetland identification. Therefore, a geotechnical survey was recommended to confirm whether an impermeable subsurface layer was causing perched conditions. This survey would also assist in identifying hydromorphic soils and ultimately confirm the delineations. A hydropedological study was undertaken by GEOSS, DSA and FCG, the study confirmed that perching of the water table was a key hydrological driver of the wetlands on the site and consequently 5 wetlands were confirmed to be present. The findings are presented in the table below.

Wetland Number	Classification	Key Ecological Services	Present Ecological State (PES)	Ecological Importance and Sensitivity (EIS)	Recommended Ecological Condition (REC)
1	Depression	Maintenance of biodiversity Flood attenuation	D	Low/Marginal	D

		Nutrient and toxicant assimilation Erosion control Carbon Storage			
2&3	Hillslope Seep	Maintenance of biodiversity Flood attenuation Nutrient and toxicant assimilation Erosion control	C	Low/Marginal	C
4	Depression	Maintenance of biodiversity Flood attenuation Nutrient and toxicant assimilation Erosion control	E	Low/Marginal	D
5	Depression	Maintenance of biodiversity Flood attenuation Nutrient and toxicant assimilation Erosion control	E	Low/Marginal	D

Four of the five delineated wetlands on the property will be retained with 20m wide buffer established along as mitigation measure. Wetland 5, located in the southwestern corner, will be partially infilled to accommodate the stormwater swale and NMT route. Although the complete loss of Wetland 5 was initially deemed acceptable from a freshwater ecology perspective due to its limited size and ecological isolation, this approach has since been revised. The loss would be mitigated through ecological enhancement measures, including the cessation of mowing and the introduction of appropriate wetland plant species, which are expected to result in a net gain in biotic value. However, complete infilling is no longer viable due to the presence of a very high sensitive botanical patch within the wetland. As a result, only partial infilling may be undertaken, ensuring that the delineated vegetation patch remains undisturbed.

The latest iteration of the development framework excludes Wetland 2,3 and 4 from the proposed development site and will remain within the Stikland Hospital boundary.

Construction phase impacts include:

- Loss of habitat
- Alteration of natural flow regime
- Increased erosion and sedimentation
- Water quality impairment

- Biota loss

Operational phase impacts include:

- Wetland habitat disturbance
- Alteration of natural flow regime
- Water quality impairment
- Gains in biota

The specialist recommended planting of suitable wetland plants and establishment of a 20m wide buffer for each wetland along with mitigation measures detailed in the impact assessment. These mitigation measures will be incorporated into the EMPr for implementation during construction and operational phase of the development. Given the set of mitigation measures, a risk assessment matrix was used to determine the quantum of risk posed by the proposed development on wetlands and all the activities potentially generating negative impacts were found to be associated with a low risk class. Based on this assessment, the specialist supports the proposed development on condition that the recommended mitigation measures are implemented.

Should the No-go Alternative be authorised, the ongoing degradation of the site's wetlands would continue due to the regular mowing which has a significant impact on the species composition and reproductive success of the naturally occurring indigenous vegetation. Also, given that the proposed development presents an opportunity to improve the condition of the site's retained wetlands there would also be a lost opportunity cost. The No-Go alternative was rated to comprise a negative impact of low significance.

BOTANICAL ASSESSMENT

The Botanical Impact Assessment was undertaken by Nick Helm Botanical Surveys, 2024-2025

The study area is part of the Southwest Fynbos bioregion (Mucina & Rutherford 2006), and is part of the Fynbos biome, located within known as the Core Region of the Greater Cape Floristic Region (GCFR; Manning & Goldblatt 2012). The GCFR is one of only six Floristic Regions in the world, and is the only one largely confined to a single country. It is also by far the smallest floristic region, occupying only 0.2% of the world's land surface, and supporting about 11500 plant species, over half of all the plant species in South Africa. According to the SA Vegetation Map the original natural vegetation in the study area is mostly Cape Flats Sand Fynbos, with a tongue of Swartland Shale Renosterveld in the northern area. The specialist based on his ground truthing concurs with this mapping.

The Cape Flats Sand Fynbos is gazetted as Critically Endangered on a national basis (Government of South Africa 2022), with only 19% of its total original extent remaining intact, less than 1% conserved, and a national conservation target is 30% (Rouget *et al* 2004). Swartland Shale Renosterveld is also gazetted as Critically Endangered on a national basis (Government of South Africa 2022), with less than 9% of its total original extent remaining intact, less than 1% conserved, and a national conservation target of 26% (Rouget *et al,* 2004).

According to Helm (2024), the site supports notable remnants of two Critically Endangered vegetation types i.e. Cape Flats Sand Fynbos and Swartland Shale Renosterveld, with at least five plant Species of Conservation Concern. At least 8ha of mostly indigenous vegetation remains in the area. The majority of the study area is of Low botanical sensitivity, and do not support any of the recorded Species of Conservation Concern (SoCC). There are four patches of Very High sensitivity one of which is a seasonal wetland, and the other three all support the five recorded plant Species of Conservation Concern.

Surrounding and linking these are two patches of Medium to High sensitivity. In the southeast are three patches of Medium sensitivity that support none of the SoCC except the annual *Phyllopodium capillare*.

The development of the entire site would lead to a significant loss of vegetation, resulting in very high negative botanical impacts. According to the recommendations of the specialist (Helm, 2024), the mitigation hierarchy should be applied. This means that patches of very high sensitivity and medium to high sensitivity should be preserved and managed for long-term conservation. Medium sensitivity areas should ideally also be considered and managed as conservation areas due to their good rehabilitation potential and their loss would result in a medium negative botanical impact. Low sensitivity areas could be developed with minimal botanical impact. However, a large-scale search and rescue program would be necessary as mitigation during appropriate seasons, as they still support notable biodiversity that could be used to rehabilitate other areas.

The Botanical Impacts Assessment was undertaken for the original development framework, and the botanical specialist submitted an updated impact statement corresponding to the latest development framework. The current layout excludes a significant extent of the sensitive botanical areas from the proposed development footprint, which is intended to be conserved as part of the proposed new Stikland Hospital boundary, except for a portion of Medium-High sensitivity vegetation along the northern edge of the site. This area will form part of the open spaces within the development.

During the construction phase, impacts of loss and degradation of natural vegetation in the proposed development footprints on the site are expected. No loss of very-high sensitive areas will occur, but loss of approximately 0.40 ha of Medium-High sensitivity areas is expected to accommodate access roads along Old Paarl Road, while the larger extent will be conserved. All the ecologically connected medium-sensitive areas will also be retained.

The layout is assessed to be low-negative at a regional scale for the construction phase, and low positive (after mitigation) for the operational phase.

No go Alternative

The No Go alternative on site would have lower construction phase botanical impacts (Neutral) than the proposed development and would probably be the slightly preferred alternative from an ecological perspective at this stage. However, the positive ecological impacts that could be realised at the operational phase will not come about in the absence of better ecological management, and thus the No Go on balance may have a less positive outcome at the operational phase than the proposed development.

Cumulative impacts

The overall cumulative ecological impacts of the proposed development at the local scale are likely to be very low negative, given the small area of Medium-high sensitivity vegetation to be impacted.

Mitigation measures

- The conservation areas (all Very High, Medium to High and Medium sensitivity areas, plus associated buffers and linkages) will need to be intensively managed in perpetuity, due to their relatively small size, large edge effects, and partly degraded state. The City of Cape Town Biodiversity Management Branch is unable to manage the site, it is suggested that a

conservation partner with suitable expertise be appointed (e.g Nature Connect). The applicant must thus enter into a partnership to manage the area in the ecologically appropriate manner.
- The partnership must be signed and implemented within six months of any authorisation.
- The applicant must ensure that adequate funding is made available to the chosen conservation partner for all ongoing ecological management requirements on this site, including any Search and Rescue prior to development.
- Search and Rescue of all translocatable indigenous seeds, bulbs and whole plants in the development areas must be undertaken over a full year prior to any site development, to allow for the seasonal requirements of this type of project. The work should be undertaken by appointed conservation partner. The rescued material should ideally be used within the conservation areas on site.
- Within 6 months of taking over management of the site, the conservation partner must draw up an ecological management plan for the conservation areas.
- Key ongoing tasks to address in the conservation areas will be alien invasive plant management (including herbs and grasses) and selective reintroduction of suitable nursery grown or rescued plant species that are both locally indigenous (found within 10km of the site) and which should do well in the available habitats, and these rehabilitate areas should be designed to link the priority habitat remnants with rehabilitated ecological corridors.

SOCIO-ECONOMIC IMPACT ASSESSMENT

The Socio-Economic Impact Assessment was undertaken by Urban-Econ Development Economists, 2025

The proposed Stikland South development, through its construction and operation, is expected to result in both positive and negative impacts (Urban Econ, 2025) . The net positive impacts associated with the construction and operation of the proposed development outweigh the net negative effects. The proposed development is also anticipated to have a positive impact on the local economy and employment creation, leading to the diversification of the economy and a reduction in the unemployment rate.

The proposed development is aligned with national, provincial and local policies that support urban regeneration , social inclusion, and economic growth. Nationally, initiatives like the NDP 2030, National Social Housing Policy, and the Integrated Urban Development Framework aim to reduce poverty, address inequality, and promote urban integration through mixed-use developments that boost economic opportunities and improve accessibility. At the provincial level, the Western Cape's Spatial Development Framework and Strategic Plan focus on spatial integration, job creation, and sustainable development, aligning with the proposed development's goals of affordable housing and urban revitalisation. Locally, the Tygerberg District Plan supports these objectives by promoting land use intensification and the development of integrated communities with access to public transport and job opportunities. Collectively, these policies endorse the proposed development's vision of creating a sustainable, inclusive, and economically vibrant urban area.

The socio-economic profile of Stikland, Bellville, and the Tygerberg Planning District reveals key demographic and economic characteristics. Stikland faces challenges with low employment and a high rate of economically inactive individuals, while Bellville has a stronger workforce and higher education levels. The proposed mixed-use development aims to address these issues by providing residential, commercial, and employment opportunities, particularly benefiting Stikland by stimulating

economic activity and creating jobs. This development aligns with the area's increasing demand for infrastructure and services and has the potential to improve local socio-economic conditions, contributing to sustainable and inclusive growth in the region.

The proposed development will result in the following impacts during construction phase

- Temporary increase in production and GDP in national and local economy
- Temporary impact on employment
- Temporary Increase in household income
- Temporary Increase in Social Conflicts due to an Influx of People during Construction
- Temporary Impact on traffic during the construction phase
- Temporary impact on noise, dust, and pollution during construction

The proposed development will result in the following impacts during operational phase

- Sustainable increase in production and GDP in national and local economy
- Sustainable employment
- Sustainable increase in household income
- Impact on traffic congestion during operation
- Sustainable impact on Urban Regeneration
- Sustainable impact on the provision of Affordable and Social Housing
- Impact on sense of place

These impacts have been detailed and assessed in the Impact Assessment in Appendix J.

Cumulative impacts

The development will result both positive and negative cumulative impacts may result from the proposed development alongside other projects within the City of Cape Town. Positive cumulative impacts are expected in terms of employment creation, household income, business turnover, and housing provision. Negative cumulative impacts, such as additional traffic pressures and potential short-term social conflicts, have also been identified. However, these are anticipated to be of low significance and are manageable through the mitigation measures proposed. The mitigation strategies outlined for the proposed development have the capacity not only to enhance the positive outcomes but also to ensure that the identified negative cumulative impacts remain within acceptable thresholds avoiding unacceptable risks, losses, or long-term adverse changes to the environment. Overall, the positive socio-economic benefits are expected to outweigh the limited negative cumulative effects.

No-Go Alternative

The 'no-go' alternative is the option of not constructing the proposed development, where the status quo and/or activities on the project sites would prevail. This alternative would result in no additional impact on the receiving environment. Should the 'no-go' alternative be considered, there would be no impact on the existing environmental baseline and no benefits to the local economy and affected communities. The alternative also bears the opportunity cost of missed socio-economic benefits to the local and regional community. Although the 'no-go' alternative will result in the avoidance of negative impacts from a socio-economic perspective, this would also result in the positive impacts not being realised. Since positive impacts would outweigh the negative effects, the construction and operation of the proposed development is preferred over the 'no-go' alternative.

The conclusion of the SEIA (Urban Econ, 2025), the proposed development is considered acceptable with no major issues. Although avoiding the development would prevent negative impacts, it would also miss out on positive benefits. The positive impacts outweigh the negatives, making the development preferable, subject to recommended mitigation measures.

HERITAGE IMPACT ASSESSMENT

A heritage impact assessment was undertaken by Cindy Postlethwayt, 2025 based on the response to the notification of intent to develop by the heritage authority. Heritage Western Cape indicated that the development is believed to impact on heritage resources in terms of Section 38 of the National Heritage Resources Act. The HIA will be published together with this Basic Assessment Report for the public participation process. Comments related to Heritage will be incorporated to the final HIA submission that will be reviewed by HWC Impact Assessment Committee Meeting (IACOM). A final comment from HWC will be submitted with the Final BAR for decision.

The HIA reveals that the primary significance of the original Stikland Hospital site lies in its social significance as an institution serving a particularly marginalised sector of society, the failures of which can impact society as a whole. Although this is important, it does not fit the definition of intangible cultural heritage and should not be a matter for the heritage sector to regulate. For this reason, the institution and linked uses are considered ungradable in the absence of other attributes of heritage significance.

Heritage Resources Identified

The SAHRIS paleo-sensitivity map records the palaeontological sensitivity as being low. This is likely due to the history of agricultural activity and total clearing for earthworks and redevelopment of the site, the likelihood of significant archaeological finds is considered to be low.

In terms of medical significance, the hospital is significant in terms of the medical and architectural history of psychiatric institutions in South Africa, being the first purpose-built psychiatric hospital built during the period known as de-institutionalisation. It contributed significantly to research and training for the newly emerging mental health professions along with other institutions such as Groote Schuur and Valkenberg. Its historical significance is considered to be low.

In terms of architectural/historical significance, the design of Stikland hospital was a key medical response to the prevailing attitudes of the time based on international models of design - notably the villa model. Although the dictates of apartheid also imposed strict segregation according to the race of the patient and the race of the staff member, like all other institutions of the time, racial differentiations were built into the design and management of the institution. These have however been integrated since the 1990s. The buildings older than 60 years and layout remain substantially intact. There is little that is notable in the architecture itself, which is unpretentious, utilitarian and functional design, featureless, and borrows its aesthetic from the mid-century development in the area. However, the site has no aesthetic or visual significance. There's no aesthetic or visual significance.

Sociality, the people with mental problems are arguably amongst the most marginalised in all societies and South Africa is no exception especially those without financial resources. The appropriate care for people with such disabilities is inadequate and is critical for those affected either directly or by association. The social aspect has been graded Not Conservation Worthy.

In terms of landscape, the significant trees and tree groupings, including the Eucalyptus woodlot on Stikland South are in some part historic, and more generally provide important place-making opportunities. It is thus proposed a grading of 3C.

Stikland South supports notable remnants of two Critically Endangered vegetation types, with at least five plant Species of Conservation Concern. At least 8ha of mostly indigenous vegetation remains in the area. There are four patches of Very High sensitivity and the other three all support the five recorded plant Species of Conservation Concern. Surrounding and linking these are two patches of Medium to High sensitivity. In the southeast are three patches of Medium sensitivity that support none of the SoCC except the annual *Phyllopodium capillare*. Grade 3A is proposed for the very high to medium sensitivity areas.

No Go Alternative

This assumes the status quo prevails. This would result in no change and thus no impacts upon any identified heritage resources, limited as they are. However, the site is vastly underutilised, which incurs considerable maintenance costs by the Department of Health, and under circumstances where adequate budget provision in general terms and specifically for healthcare for those requiring psychiatric care is increasingly under pressure. This alternative thus would bear the opportunity cost of financial benefits to the Department of Health and Wellness, more pragmatic relationships between Stikland Hospital and the NGO community that support it and no benefits to the local and regional economy or the provision of affordable housing. The proposed development is thus preferred over the 'no-go' alternative.

Preferred Alternative

The proposed development could ultimately entail the demolition of buildings older than 60 years. All have been assessed as Not Conservation Worthy and impacts are assessed as Low.

There are identified conservation worthy heritage/environmental resources relating to the areas of botanical sensitivity and some of the tree groups or clumps on site. The areas of very high and high botanical sensitivity and the wetlands have been excluded from the development areas. In respect of the impacts upon the existing trees on site, whilst the plans are currently prepared at a conceptual level and details are not available, it appears that a relatively high percentage of the trees can be retained. Impacts with mitigation are expected to be Low.

Cumulative Impacts

Whist there will be a complete change to the existing South Stikland environment as a consequence of the proposed development, given the extent of low to positive heritage related impacts expects of the development, negative cumulative impacts are unlikely and positive cumulative impacts could be envisaged.

It is recommended that Heritage Western Cape:

- Endorses this report as having met the requirements of Section 38(3) of the NHRA;
- In terms of Section 38(8) of the NHRA, supports the proposed development as having limited and acceptable heritage-related impacts.

Subject to the following mitigations:

- A more detailed Tree Management Plan is required as part of the planning approval process for implementation.
- A qualified and experienced Arborist must be involved in the implementation /execution of the Tree Management Plan.
- Implementation of the Landscape design guidelines and requirements per Landscape Framework Plans and mitigations as per Forest Assessment.

Landscape Framework Plan

A Landscape Framework was prepared for the Stikland South development by Viridian Consulting (Pty) Ltd. This framework will guide the development process and includes comprehensive landscape guidelines. Key considerations of the LFP include preserving the botanical freshwater value of the environmental sensitive areas, integrating with the surrounding environment and the retention large mature trees as far as possible.

The framework proposes measures to manage development impacts, such as enhancing biodiversity through planting with indigenous species, maintaining a green connection. The framework proposes the following design guidelines and requirements for the various sections of the development and is summarised as follows:

Typology A : Botanical Conservation Areas within Hospital Grounds

- Retain existing trees as per the Tree Survey Plan.
- The timing of the mowing must be managed in consultation with a botanical specialist.
- conservation management plan for areas of high botanical sensitivity must be developed in consultation with a suitably experienced botanical specialist and conservation management expert.

Typology B : Mixed-use 4 Storey

- Retain existing trees as per the Tree Survey Plan and show them on the Site Development Plans (SDPs).
- Screen utility areas adjacent to public open spaces.
- Use permeable fencing where the development borders public spaces.
- For solid walls, incorporate overlooking features from second and third floors.
- Provide a landscape buffer around the outer perimeter of buildings.
- Locate parking areas centrally within the development parcel.
- Plant trees in parking areas as per CoCT requirements (1 tree per 4 parking bays).

Typology C : Four-Story Walkups Landscape

- Retain existing trees per the Tree Survey Plan and show them on the SDPs.
- Screen utility areas next to public open spaces.
- Use permeable fencing where the development interfaces public spaces.
- Implement overlooking features on solid walls between the development and public spaces.
- Provide a landscape buffer around the perimeter of buildings.
- Position parking areas centrally within the development.
- Plant trees in parking areas as per CoCT requirements (1 tree per 4 parking bays).
- Develop small private recreation spaces within walkup clusters for residents' gardens and relaxation.
- Use high-quality, durable, and low-maintenance paving

Typology D : School Grounds / Sports Recreation

- Retain existing trees as per the Tree Survey Plan and show them on the SDPs.
- Sports fields and recreational surfaces must be water-wise, durable, and able to withstand intensive use (consider artificial turf).
- The green belt with a continuous cycle/jogging track must pass through school grounds, with appropriate fencing and access control for public use during daylight hours.
- Sports fields should be available for community use outside school hours.
- Follow tree planting guidelines, ensuring proper root zone preparation, irrigation, and protection.
- Irrigation should use a well-point water tank with secure housing and a booster pump.
- Use durable materials (steel, polywood, timber) for playground equipment.
- Install safe fall surfacing for play equipment according to SANS 51176.
- Benches, tables, and litter bins should be made from vandal-resistant materials.
- Select durable, low-maintenance high-quality paving and hard surfaces.

Typology E : Green Belt with Cycle / Jogging Track

- The green belt will be a continuous public right of way across public and private land for extended recreational use in the Stikland South Development Framework.
- Extensive tree planting in the green belt will provide shade, wind shelter, and visual screening for the psychiatric hospital.
- Development interfaces with the green belt may or may not include fencing, but all fencing should be visually permeable for surveillance.
- Access control may be implemented at night for security of private land along the green belt.
- Encourage building interfaces with the green belt to include overlooking features, entrances, and active edges.
- The Green Belt to have continuous pathways that provides for cyclist and pedestrians in a manner that prevents conflict between cyclists and pedestrians.
- Provision of directional signages indicating entrances, exits and escape routes for the Green Belt users.

Typology F: Southern Stormwater Management Swale

- The stormwater swale should be integrated into the green belt right of way with the cycle/jogging track, reconnecting to the green belt around the Stikland psychiatric hospital.
- Tree planting is restricted due to overhead power lines.
- An NMT (Non-Motorized Transport) route must be provided along the edge of the swale
- Vegetation in the stormwater swale must follow the CoCT SUDS planting list.

Typology G : Adventure Park in Eucalyptus Forest

- The existing Eucalyptus forest requires a tree management plan, including pruning, canopy thinning, and root zone management, with tree removal guided by a qualified arborist.
- Infrastructure development in the forest must respect tree protection zones (TPZ) and critical root zones (CRZ), under arborist guidance.
- The green belt with a cycle/jogging track must be continuous along the park's eastern boundary and connect to the stormwater swale along Stikland South's southeastern boundary.
- Adventure park activities may include Acrobranch, outdoor climbing walls, and cross-fit.
- Provide a management and service node with ablution facilities, management offices, an events pavilion, and parking.
- Use visually permeable fencing along the De La Haye Rd boundary and at the interface with Stikland Hospital.

Typology H : De La Haye Park

- Retain existing trees as per the Tree Survey Plan, showing them on the Landscape Framework.
- Ensure the green belt with a continuous cycle/jogging track along the eastern boundary of the park.
- Adhere to wetland buffers and setbacks in the Landscape Master Plan.
- Develop passive recreational spaces within the wetland buffer, including walking paths, boardwalks, bird hides, signage, and seating.
- Provide at least one vehicular entrance for maintenance and emergency access.
- Use visually permeable fencing along the Del La Haye Rd boundary and interface with Stikland Hospital.
- Ensure interfaces with adjacent parcels allow visual surveillance of the park, encouraging overlooking features.
- Entrances on De La Haye Rd must be legible with defined gateways and signage. Green belt entrances should allow controlled access to adjacent developments at certain times.

Typology I : Botanical Conservation Areas

- Follow design and management guidelines for Sensitive Botanical and Conservation Areas, as outlined by botanist N Helme (2024). Very High and Medium to High sensitivity areas should not be disturbed or developed, and must be managed for long-term conservation, including no mowing during the flowering period (June–mid October) and proper removal of invasive alien plants (per Martens *et al.* 2021). Medium sensitivity areas should also be managed as conservation areas due to their rehabilitation potential. Their loss could trigger the need for a biodiversity offset.
- Focus on minimizing ecological disturbance and enhancing biodiversity.
- Minimal Impact Footpath Design including:
- **Footpath Materials:** We recommend using permeable, non-invasive materials that blend seamlessly with the natural environment (e.g., crushed gravel, boardwalks, or stabilized sand). These materials will help reduce surface runoff and prevent erosion.
- **Footpath Alignment:** Paths should be carefully located to avoid sensitive plant populations. Meandering paths or raised walkways can minimize soil compaction and preserve habitats.
- **Width and Frequency:** Footpath width should be kept to a minimum to reduce disturbances. A width of 1-1.5 meters for pedestrian paths is ideal. Low-impact, narrow paths that encourage infrequent use should be prioritized.
- **Separation from Sensitive Areas:** Footpaths should be designed to avoid critical habitats or sensitive botanical zones, ensuring that plant communities are not disturbed or trampled by foot traffic.
- Edge Treatments and Buffer Zones: The edges of conservation and botanical areas should be managed to reduce fragmentation, protect vegetation, and support ecological functions. For example, incorporating soft edges, buffer zones, and indigenous planting can create a smooth transition between residential areas and conservation zones, preserving both ecological integrity and visual appeal.
- Management of Conservation and Sensitive Botanical Areas: Conservation Maintenance Plan: A clear, long-term maintenance plan will be required to manage the conservation areas effectively. This will ensure the sustainability of the plant communities and ongoing protection of biodiversity.

TRANSPORT IMPACT ASSESSMENT

A transport impact assessment was undertaken for the proposed development by HHO Consulting Engineers to assess the potential impact of the development on traffic operations and surrounding road network. A high-level assessment was completed and was subjected to review by the City of Cape Town's Urban Mobility Directorate regarding trip generation for the envisaged land uses. Based on the review, iteration to the development framework was made with reduced land uses. This transport impact assessment is for the reduced iteration of the framework.

For the purposes of the TIA, reference has been made to Precincts 1, 2 (in the northern section of the site), 4 and 5 (western section of the site) as indicated in the development framework. Precinct 3 was originally part of the initial proposal, but this has since been eliminated through the iterative design process as described previously.

Site Access Proposals

Access to the site will be gained at a number of points along Old Paarl Road and De la Haye Avenue. The following accesses for the identified precincts are proposed

- P1B Access: Links with Old Paarl Road opposite Stikland North Access
- P1C Access: Links with Old Paarl Road opposite St Harrod Drive
- P2 Access: Links with Old Paarl Road opposite Meerlust Street
- P4 Access: Links with De la Haye Avenue to the north of existing Stikland Hospital Access (to be closed)
- P5 Access: Links with De la Haye Avenue opposite Frans Hals Street, also new hospital access
- P1A Access: Links with De la Haye Avenue at existing Nurses' College Access.

Existing Traffic Operations

An analysis of traffic flows along Old Paarl Road over an 11-year period between 2014 and 2025 shows that in the peak direction of travel, traffic demand has declined by an average of 1.5% pa (AM) and 2.5% (PM) per annum (240 – 400 veh/hr less). Traffic during both the morning (AM) and afternoon (PM) peak periods along Old Paarl Road and De la Haye Road is heavily concentrated within their respective peak hours, with approximately 60% of the flow occurring between 07h00–08h00 in the morning and 16h30–17h30 in the afternoon. In the AM peak hour, traffic builds steadily, remains consistent during the peak, and then drops sharply in the last half hour. In contrast, the PM peak hour shows more variability in flow and lower volumes during the shoulder periods. Overall, PM traffic volumes are about 23% lower than AM volumes, largely due to the site's peripheral location.

Existing Transport Network

- The site is in close proximity to major arterial and movement routes in Cape Town, such as the N1 Freeway, R300 Kuils River Freeway, and the Voortrekker Road Corridor. Old Paarl Road (R101), and Old Oak Road provide convenient access to these major roads.
- The Stikland rail station is located adjacent to the access to the hospital and provides a significant potential benefit for public transport access.

Future Road Proposals

A significant number of new road links have been planned for the area as part of the Bellville Transport Master Plan where the Stikland South site was included in the modelling as a new development node. These Belrail Road extension through Stikland to Old Paarl Road, and the extension of Cilmore Road across the railway line into the site. According to Public Right-of-Way plan, Tienie Meyer Bypass is proposed to be extended eastward to link with Voortrekker Road, and for Robert Sobukwe Drive to be

extended northward to link with Durban Road. However, none of the proposals of the Master Plan are included in the City's updated right of way plan for new or upgraded roads.

Upgrading of Old Paarl Road

The eastern section of Old Paarl Road has been upgraded to a dual carriageway with exclusive turn lanes at major intersections. To the west of Old Oak Road, it still functions as a four-lane undivided road, without right turn lanes at signalised intersections. The upgrading of the road, especially at the Old Paarl Road intersection with De la Haye Avenue, will facilitate the effective realisation of the link capacity of the road, which is currently constrained due to the restricted geometry at this intersection. The design of the road has been completed, and in the vicinity of Stikland, the proposed layout does not make provision for a full access to Stikland North, nor provides a point of access to Stikland South. Provision has only been made for a marginal intersection (left in; left out). The access proposals serving Stikland South from Old Paarl Road would require amendments to the above plan.

Future Upgrading Proposals to Accommodate Proposed Stikland South Development

From the capacity assessment of the impact of the development in this report, none of the proposals contained in the Bellville Transport Masterplan Framework are considered required to accommodate the proposed Stikland development. The assessment is in line with the proposals in the City's Right-of-Way plan, but with the inclusion of the extension of De la Haye Avenue to link with Bill Bezuidenhout Avenue, which will substantially improve the connectivity of the local area and the traffic modelling undertaken by the City in the greater Bellville area, which took into account development on the Stikland South site. Additionally, the assessment anticipates the upgrading of Old Paarl Road with some amendments.

Trip generation

Trip generation parameters as contained in the SA Trip Data Manual for the various land uses were applied. The trip distribution assumptions were derived from traffic counts in the vicinity of the site, adjusted to take into account improvements to the local road network, which are likely to result in a minor redistribution of trips. Some adjustments were made to the trip rates to account for reductions based on mixed use, level of car ownership, and proximity to core public transport corridors. The development is projected to generate 2 672 veh/hr in the AM peak hour, and 3 688 veh/hr in the PM peak hour. The trips will be balanced, with two of the major land uses, i.e. residential and office, having opposite peak directional flows. The majority of trips will be generated in Precinct 1 (P1), given the concentration of land uses across all categories in this precinct.

The future traffic scenario superimposes projected trips generated by the development on the upgraded road network assessed for this development, on background traffic increased at a rate of 1% per annum over a 10 year period. This will be a reversal of the declining trend in peak directional flows over the past 11 years.

Transport Impact Assessment

This section analyses the performance of the intersections on Old Paarl Road and De la Haye Avenue adjoining the Stikland South site, which will be directly affected by trips generated by the site.

- Old Paarl Road/ De la Haye Avenue

The analysis of the future scenario was based on the upgrading of this intersection as per the planned future scheme, but with the addition of a northbound right turn lane to accommodate the significant demand in the PM peak hour. The geometry of the intersection will have to be upgraded to accommodate the increase in demand. The existing road reserve along De la Haye Avenue has

sufficient space available to accommodate the proposed geometric upgrade. The analysis indicates that this intersection will perform at reasonable to acceptable levels of service (LOS C/D)in the AM and PM peak hours respectively.

- Old Paarl Road/ Stikland North Access/ P1B Access

The analysis of this intersection was based on an adaptation of the upgrading scheme, to accommodate a fourth leg to the intersection, introduce a median break with exclusive right turn lanes, and change its control to traffic signals. The analysis indicates that this intersection can be expected to operate at acceptable to high levels of service (LOS D/B) during the AM and PM peak hours.

- Old Paarl Road/ St Harrod Drive/ P1C Access

The analysis of this intersection was similarly based on an adaptation of the upgrading scheme, by introducing a fourth leg into the Stikland South site. It currently already has traffic signals, and exclusive right turn lanes to both side roads should be introduced. The analysis indicates that this intersection can be expected to operate at acceptable to high levels of service (LOS D/B) during the AM and PM peak hours.

- Old Paarl Road/ Meerlust Street/ P2 Access

The analysis of this intersection was also based on an adaptation of the upgrading scheme, by adding a fourth leg into the Stikland South site. It currently already has traffic signals, and exclusive right turn lanes to both side roads should be introduced. The analysis indicates that this intersection can be expected to operate at high levels of service (LOS B) during both the AM and PM peak hours.

- De la Haye Avenue/ Paratus Avenue

This intersection has been analysed as a priority-controlled intersection, as per the current operation. The increase in flows as a result of the Stikland development will result in the Paratus Avenue approach operating at a very low level of service (LOS F) in the AM peak hour, and at a low level of service (LOS E) in the PM peak hour. The major movements from Paratus Avenue are turning right (AM) and left in the PM peak hour. Given that the extension of De la Haye Avenue to Bill Bezuidenhout Drive will facilitate easier access onto the external higher order road network, the majority of vehicles can be expected to then turn left. Together with a possible widening of the approach to create separate left and right turn lanes, the resultant delays could be limited.

- De la Haye Avenue/ Clinic/ P1A Access

This intersection is projected to accommodate high flows, as a major access into the P1 precinct, which is to accommodate the bulk of the trips generated by the development. It can only function satisfactorily as a signalised intersection within the constraints of its road reserve (24m), which otherwise could have operated well with a roundabout in place. The analysis indicates that it should operate at acceptable levels of service (LOS D) during both peak hours. To the north of Constable Street, the road should be widened to accommodate an exclusive right turn lane at the intersection.

In the southbound direction along De la Haye Avenue, two approach lanes should be provided, with a through-and-left, and through configuration, to allow the large left turn movement from Old Paarl Road to remain in the left-hand lane to minimise weaving. This requires the southbound exit to be widened to two lanes, which can then be tapered back to single lane approaching Constable Street.

- De la Haye Avenue/ Frans Hals Street/ P5 Access

The side street flows at this intersection are considerably lower than at the P1A access, which despite the high flows along De la Haye Avenue, allows the intersection to operate at high levels of service during both the AM and PM peak hours (LOS A), with a mini-circle replacing the existing priority control.

- De la Haye Avenue/ P4 Access

This new intersection is also proposed to have a mini-circle in place, with similarly lower flows on the side street. The intersection is also expected to operate at high levels of service during both AM and PM peak hours.

PARKING PROVISION

The provision of on-site parking provision at the ratios stipulated for a standard zone would not be feasible (95% of the site), as the development model does not allow for extensive structured parking to be provided. It is proposed that the following parking ratios be adopted to achieve a feasible supply of parking on site for the residential uses:

- Social housing: 0.6 bays/unit
- First Home Finance units: 0.8 bays/unit
- Open market housing units: 1.0 bay/unit

A departure application would need be submitted for these ratios to be approved.

ELECTRICAL INFRASTRUCTURE REPORT

A baseline report was conducted for the electrical infrastructure of the proposed redevelopment of Stikland South. It was determined that the City has limited capacity (11kV) and will not be able to supply the additional capacity required for the proposed development (estimated to be 20.75MVA based on the City's Design Load Parameters, which is 4.04kVA ADMD) without infrastructure upgrades (see Table 1 below). Therefore, the City has recommended the following for infrastructure upgrades:

- Appropriate switching station sites are required to internally distribute the electrical supply for the proposed development
- The five switching station sites, 20m x 14m each, must be included on the plan for the subdivision and must be rezoned, registered, and transferred free of charge to the City.
- The City requires the switching station sites to be placed within the proposed development, on the erf boundary and adjacent to public roads. The position of the switching station sites will be determined by the electrical load concentration in the area and served by each switching station.
- The switching station sites shall have direct 24-hour unrestricted vehicular access.
  A lead time of up to 24 months, from the date of a formal supply application up until such time that the necessary supply is available, will be applicable. This lead time is required for any upgrading of the bulk electrical supply at the existing Oakdale Main Substation and must be confirmed at the time of application.
  The property owner will be required to submit an electricity reticulation design report to the Director: Electricity Generation and Distribution for approval.

The proposed site has an existing 22m servitude, a 66kV overhead line which will be upgraded to a 132kV line in the future by the City of Cape Town.

Table 16: Load estimate (Triocon Consulting, 2025)

DESCRIPTION	QUANTITY	UNIT LOADING (kVA)	TOTAL LOAD (kVA)
Estimated residential units	2682	4.04	10835.37
Allowance for existing infrastructure, offices and retail	1	8930.89	8930.89
Allowance for auxiliary services (streetlights etc)	1	988.31	988.31
Sub-total			20754.57
Discount existing NMD			1000.00
TOTAL ADDITIONAL LOAD			**19754.57**

CIVIL ENGINEERING BULK SERVICES ASSESSMENT REPORT

Civil Engineering Bulk Services Assessment was conducted by HHO Engineers for the potable water, Foul sewer and stormwater infrastructure around the site and the capacity available for the proposed development of Stikland South.

Potable water

It was determined that the site is well serviced with water infrastructure. The anticipated that the annual average daily demand of potable water is 919.18 kl/day (Table 17 below) however, the City of Cape Town still needs to determine availability for this development.

Table 17. Stikland South estimated potable water demand

LAND USE	UNIT	QUANTITY	WATER USAGE PER UNIT (kℓ/day)	WATER AADD (kℓ/day)	WATER PEAK FLOW (ℓ/s)	MINIMUM FIRE FLOW PER HYDRANT (ℓ/s)
Micro Business (Retail)	ha	2.9	21.00	59.90	2.50	25
Trip Attracting business (Office)	ha	4.1	21.00	86.04	3.59	25
Educational – School	ha	5.1	20.00	102.74	4.28	25
Roads	m^2	101925.0	0.00	0.00	0.00	-
Residential (4-8 storey; 50m^2 units)	No.	2682.0	0.25	670.50	27.94	25
TOTAL				**919.18**	**38.30**	

Stormwater

The proposed development at Stikland will have a notable impact on stormwater management, primarily due to the increase in impervious surfaces and the associated runoff. The development will need to incorporate comprehensive stormwater management systems to mitigate flood risks, improve water quality, and enhance groundwater recharge opportunities. It will require the design of upgraded infrastructure and the integration of sustainable water management practices to align with environmental goals and regulatory standards.

Recommendations:

- Implement detention ponds with a total storage volume of approximately 15000m³ to meet quality and quantity objectives.
- Implement swales with a total area of approximately 17200m² to complement the management and treatment of runoff by the detention pond.
- Upgrade the existing stormwater infrastructure, including pipes and culverts, to accommodate increased runoff.
- Consider the use of Water-Sensitive Urban Design (WSUD) techniques such as permeable pavements and rain gardens to promote infiltration and reduce runoff volumes.
- Regular maintenance of the stormwater system, including trash racks and sediment traps, to ensure long-term functionality.

Foul sewer

It was determined that Stikland South is serviced by infrastructure in immediate vicinity and discharges into the Belville Waste Waer Treatment Works, which has a maximum capacity of 15Ml per day, with about 15Ml available for treatment. It is anticipated that the foul sewer annual average daily demand will be 840.62 kl/day (Table 18 below), thus the there are no capacity constraints with regards to foul sewer discharge demand and infrastructure. However, capacity must still be confirmed with the City. Recommendations for foul sewer of Stikland South Development are:

- To confirm the capacity and condition of the existing sewer lines bordering the site, particularly the DN150 pipelines.
- Ensure alignment with City of Cape Town's sewer master plan.
- Consider incorporating sustainable wastewater practices, such as greywater recycling, to reduce pressure on the municipal system.

Table 18. Stikland South estimated foul sewer demand

LAND USE	UNIT	QUANTITY	FS USAGE PER UNIT (kℓ/day)	FS AADD (kℓ/day)	FS DWP FLOW (ℓ/s)	FS WWP FLOW (ℓ/s)
Micro Business (Retail)	ha	2.9	16.80	47.92	1.11	1.28
Trip Attracting business (Office)	ha	4.1	16.80	68.83	1.59	1.83
Educational – School	ha	5.1	13.00	66.78	1.55	1.78
Roads	m²	101925.0	0.00	0.00	0.00	0.00
Residential (4-8 storey; 50m² units)	No.	2682.0	0.25	657.09	15.21	17.49
TOTAL				**840.62**	**19.46**	**22.38**

Solid Waste Management

Waste produced from the development is expected to consist of domestic and household waste, business and commercial waste and construction waste during the construction phase of the development. Refuse collection services are currently provided to the area. In terms of cleansing services, the City currently provides services including cleaning of illegal dumping, litter picking, servicing of street litter bins, and street sweeping. The additional demand that will be created by the proposed development, the existing municipal waste collection and disposal system, including the Bellville South Landfill located 8 km away, is expected to accommodate this additional volume.

Recommendations:

- Implement an Integrated Waste Management Plan (IWMP) to address waste collection, storage, and recycling requirements.
- Provide on-site storage options, including mobile refuse bins and bulk containers, to ensure proper waste segregation and collection.
- Consider incorporating some of the City's initiatives to promote waste reduction and recycling.
- Ensure that roads and infrastructure are designed to accommodate waste collection vehicles.
- Allocate resources for street cleaning and litter management to prevent blockages in stormwater and sewer systems.

2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr

See Appendix J and section above for the mitigation measures provided by the specialists.

3.	List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.

All recommended impact management measures will be implemented.

4.	Explain how the proposed development will impact the surrounding communities.

The proposed development will have some negative impacts on its surroundings – residential, institutional and industrial land uses - during the construction phase. These impacts, which include noise, vibration, dust, traffic and visual nuisance, are typical of construction and can be mitigated and managed as set out in the construction environmental management programme. Temporary employment is anticipated to be created during the construction phase of the development.

Positive socioeconomic impacts are anticipated to accrue to the future homeowners of the proposed housing development, who will benefit from affordable housing opportunities in proximity to the Bellville CBD and Stikland Industrial which are active economic areas. The proposed development is also anticipated to have a positive impact on the local economy and employment creation, leading to the diversification of the economy and a reduction in the unemployment rate.

During the operational phase, the proposed development is expected to have a visual impact and alter the existing sense of place, primarily due to the contrast between the planned 4 storey buildings and the surrounding single-storey residential context. This will result in a permanent change to the visual landscape and character of the area. However, it is important to note that the development height has been significantly reduced from the originally proposed 4–8 storeys, this reduction is anticipated to mitigate the extent of the visual impact. Conversely, the development is in keeping with spatial planning imperatives to maximise the use of land in strategic areas within the urban inner core, particularly where it is in public ownership, and with a need to improve access to affordable housing stock close to employment.

The proposed development demonstrates a commitment towards achieving a sustainable development by the protection of environmentally sensitive areas with minimal impact. The landscaping of the development and conservation plans will enhance the ecological value of both the wetlands and the botanical sensitive areas while providing attractive open spaces and recreational opportunities for residents and visitors to enjoy.

5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

The site features four wetlands that will be retained and protected from development activities. One of the key functions of these wetlands is flood attenuation, which significantly reduces the risk of flooding by naturally storing water. These wetlands help mitigate the impact of heavy rainfall and storm surges, providing a crucial buffer against extreme weather events.

6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

The EAP identified a conflict between specialist findings regarding Wetland 5. The aquatic specialist assessed Wetland 5 as having low to marginal importance for biodiversity, deeming it unlikely to support endangered or rare species despite being within the historical range of a Critically Endangered (CR) terrestrial vegetation type. Its loss was considered acceptable subject to the improvement of other wetlands as a result of the cessation of the mowing of the vegetation within and surrounding the wetlands and the introduction of suitable indigenous plants within the wetlands and their associated buffer zones.

Conversely, the same wetland was mapped as a highly sensitive botanical area supporting Plant Species of Conservation. Clearing vegetation for development in this area would result in very high negative botanical impacts. Therefore, it was recommended that the vegetation will be preserved and managed for long-term conservation.

This conflict may have arisen due to differences in the timing of site visits and the fact that the vegetation is regularly mowed. The Development Framework was iterated to respond to the botanical informants.

7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

The findings and recommendations of the aquatic specialist study and botanical study have been incorporated into the Environmental Management Programme for implementation during the construction and operational phase (See Appendix H). During the construction phase, the implementation of these recommendations will be monitored by suitably qualified Environmental Control Officer and externally audited in accordance with Regulation 34 of the EIA Regulations (2014). The Ecological Management Plan proposed by the botanist, aimed at conserving sensitive areas during the operational phase, is recommended to be included as a condition of authorisation.

8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

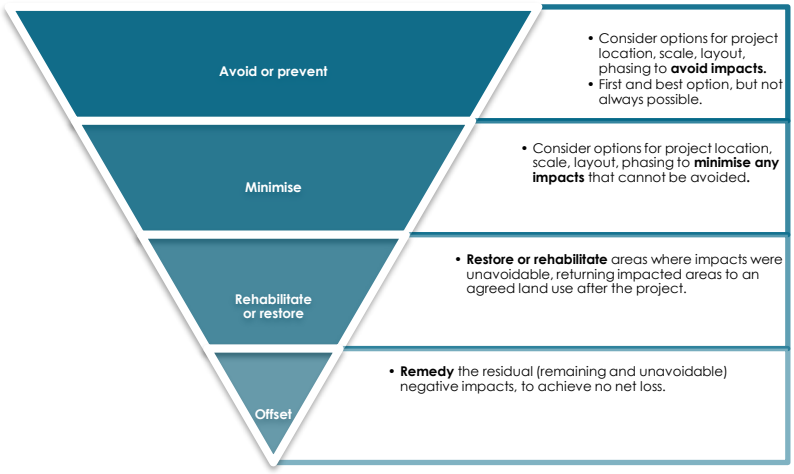
The development proposal, and the alternatives considered, must be consistent with the principles of environmental management as codified in the National Environmental Management Act. These principles include the following:

- Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
- Development must be socially, environmentally and economically sustainable.
- Sustainable development requires the consideration of all relevant factors including […] that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

Environmental impact assessment addresses the latter principle of the management of environmental impacts through the **mitigation hierarchy**. Simply put, impacts must be 'avoided, or, where they cannot be altogether avoided, are minimised and remedied.'

The DEA 2013 guideline on Need and Desirability formalises this hierarchy as follows:

- Firstly, alternatives must be investigated to avoid negative impacts altogether
- Secondly, after it has been found that the negative impacts cannot be avoided, alternatives must be investigated to reduce (mitigate and manage) unavoidable negative impact.
- Thirdly, alternatives must be investigated to remediate (rehabilitate and restore)
- Fourthly, unavoidable impact that remain after mitigation and remediation must be compensated for through investigating options to offset the negative impacts.
- While throughout, alternatives must be investigated optimise positive impact.



Mitigation Hierarchy (based on DEA 2013 guideline on Need and Desirability

The negative impacts associated with the proposed activity cannot be entirely avoided, since they include construction-related impacts such as noise, dust and vibration, as well as impacts on the watercourse and vegetation during the construction phase. These impacts can however be effectively minimised through the mitigation measures set out in this report and in the EMPr. Once construction activity has been completed, rehabilitation is proposed in the disturbed areas. No offsets are therefore required.

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.

The Western Cape Government: Department of Infrastructure proposed development of vacant land portion on erf 6300 in Stikland. The property is currently occupied by the Stikland Psychiatric hospital and a larger extent remains underutilised and maintained by mowing vegetation. The intention is to obtain development rights and release the land for feasible mixed-use development. The proposed development portions are largely vacant and maintained by regular mowing of vegetation, while the innermost portion of the property has been completely transformed to accommodate the hospital. Historically, the site was used for agriculture before the hospital was built, this is an indication of sequential transformations of land on this property. The site is surrounded to the North by a portion of the hospital estate (Stikland North) which accommodates mental health NGO's, residential areas to the west and east and industrial area and railway to the south.

The proposed development of Stikland South aims to optimise the use of available vacant land through a mixed-use, environmentally sensitive urban expansion. The development framework promotes sustainable land use while preserving ecological features and enhancing public health infrastructure. Key features of the development framework include the integration of botanical and wetland open spaces along Old Paarl Road (north of the site) and De La Haye Road (west of the site), with the eastern portion of the site along Midmar Road to remain undeveloped.
The development will include:

- Four-storey mixed-use buildings along Old Paarl Road, comprising affordable, social, and open market housing, commercial spaces, and supported by a school and community facilities.
- The western edge is being considered for a Community Clinic and a new Main Entrance to Stikland Hospital.

Three new accesses to the site will be provided along Old Paarl Road opposite existing intersections, i.e., opposite Stikland North (i.e., on the Remainder of Erf 6300, north of Old Paarl Road), St. Harrod Drive and Meerlust Street. The two new intersections opposite St. Harrod Drive and Meerlust Street will need to be signalised indicating access into the site along its northern boundary. An additional three access points will be provided to the site along its western boundary, i.e., along De la Haye Avenue. Again, access to the site will be established at or opposite existing intersections – with new access points created opposite Frans Hals Street and Wenning Park. The existing access to the Western Cape College of Nursing ('Nursing College') will be retained. Whereas the existing access to the Stikland Hospital will be closed and relocated to the shared access opposite Frans Hal Street.

Three areas important for biodiversity, both terrestrial and aquatic, have been avoided and will be conserved and enhanced within the proposed development framework. This includes two wetlands, one along De La Haye Road and one in the southernmost corner of the site, as well as a portion of Medium-High sensitivity terrestrial vegetation in the northern section of the site. All other terrestrial and aquatic biodiversity areas are proposed to be conserved separately from the development framework within the proposed new boundary for the Stikland Hospital. A portion of the Eucalyptus Forest is proposed to be conserved due to the place-making significance associated with the trees in the southwestern portion of the site.

The proposed development is aligned with Provincial, Local and District Spatial Development Frameworks and various planning instruments. The district plan supports the High-density mixed-use development on site along Old Paarl Road with a range of housing typologies including affordable housing. The District plan encourages development along transit corridors, specifically streets such as De La Haye and Old Paarl Road. The site is bounded by these streets and is proposed for mixed use development which will contribute towards provision of affordable housing.

The site was confirmed to have high sensitivity for Aquatic Biodiversity theme and Terrestrial Biodiversity theme. Specialist studies have been undertaken in compliance with Protocols for the Assessment and Minimum Report Content Requirements for Environmental Themes (GN 320 of 2020 and GN 1150 of 2020).

The site contains five wetlands delineated through geotechnical survey which confirmed that perching of the water table was a key hydrological driver of the wetlands on the site and delineation of wetlands was based on the hydropedological study. Three of the identified wetlands are depressional wetlands and two are Hillslope seep wetlands. The Hillslope seep wetlands are assigned Category C (moderately modified) in terms of their present ecological state which implies a moderate change in ecosystem processes and loss of natural habitats have taken place, but the natural habitat remains predominantly intact. Two of the Depression wetlands (4&5) are assigned Category E (severely modified) implying the change in ecosystem processes, loss of natural habitat and biota is great but some remaining natural habitat features are still recognisable. Wetland1 (depression) was assigned Category D (Largely modified) which indicates a large change in ecosystem processes, loss of natural habitat and biota has occurred. All the wetlands have low ecological importance and sensitivity. This is tabulated for ease of reference in Section I. Four of five wetlands will be retained with a mitigation of 20-metre buffer with the exception of Wetland 5 which may be partially infilled to accommodate development of stormwater swale and the NMT route along it. Impacts associated with both construction phase and operational phase are assessed to be low with the implementation of mitigation measures detailed in the Environmental Management Programme.

The site supports notable remnants of two Critically Endangered vegetation types i.e. Cape Flats Sand Fynbos and Swartland Shale Renosterveld, with at least five plant Species of Conservation Concern. At least 8ha of mostly indigenous vegetation remains in the area. The majority of the study area is of Low botanical sensitivity, and these areas do not support any of the recorded Species of Conservation Concern (SoCC). There are four patches of Very High sensitivity one of which is a seasonal wetland, and the other three all support the five recorded plant Species of Conservation Concern. Surrounding and linking these are two patches of Medium to High sensitivity. In the southeast are three patches of Medium sensitivity that support none of the SoCC except the annual *Phyllopodium capillare*.

The Botanical Impacts Assessment was undertaken for the original development framework which anticipated loss of 0.25ha of Medium sensitivity. The botanical impacts associated with the construction phase were assessed to be Low negative impact at a regional scale. While the overall the operational phase impacts would be Neutral to Low positive (after mitigation). The development framework was subsequently revised and the impact statement corresponding to the latest development framework was provided by the specialist. The revised layout excludes a significant extent of the sensitive areas from the proposed development footprint except for a portion Medium to High Sensitive patch situated to north of the site. This area will form part of the open spaces within the development. The conservation areas will now be within the hospital boundary.

During the construction phase, impacts of loss and degradation natural vegetation in the proposed development footprints on site is expected. No loss of very-high sensitive areas will occur but loss of approximately 0.40 ha Medium to High sensitivity areas is expected to accommodate access roads while the larger extent will be conserved. All the ecologically connected medium sensitive areas will also be retained. The proposed mitigation requires the applicant to form partnership with conservation partner and provide adequate funding. The conservation partner must have necessary expertise to manage the sensitive areas in an ecologically appropriate manner, develop an ecological management plan and undertake search and rescue of all translocatable indigenous seeds prior to the development of the site.

The socio-economic profile of Stikland, Bellville, and the Tygerberg Planning District reveals key demographic and economic characteristics. Stikland faces challenges with low employment and a high rate of economically inactive individuals. The proposed mixed-use development aims to address these issues by providing residential, commercial, and employment opportunities, particularly benefiting Stikland by stimulating economic activity and creating jobs. The proposed development is anticipated to have a positive impact on the local economy and employment creation, leading to the diversification of the economy and a reduction in the unemployment rate.

The site has limited conservation worthy heritage resources relating to the areas of botanical sensitivity and trees and tree groupings, including the Eucalyptus woodlot. The areas of medium and high botanical sensitivity and the wetlands will mostly be retained and are a subject of this basic assessment. In respect of the impacts upon the existing trees on site, based on the concept plan a relatively high percentage of the trees will be retained and the Landscape Framework Plans and the Forest Assessment contain mitigation measures which must be adhered to, to ensure the protection of these landscape elements. Impacts with mitigation are expected to be Low. The proposed development will have limited and acceptable heritage-related impacts.

Construction-phase nuisance impacts are also anticipated, but these will not exceed the norm and can be effectively managed through the implementation of the environmental management programme.

1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)

Refer to Appendix B2 for sensitivity map.

1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

The table overleaf summarises the assessment of all impacts identified in respect of the proposed activity.

Impact	Impact Significance		
	No-Go Alternative	Preferred Alternative	
		Without mitigation	With mitigation
Construction Phase Impacts			
Loss of wetland habitat	None	Low (negative)	Low (negative)
Alteration of flow regime	None	Low (negative)	Very Low (negative)
Increased erosion and sedimentation	None	Low (negative)	Very Low (Negative)
Water quality impairment	None	Low (negative)	Very Low (negative)
Loss of biota	Low (negative)	Medium (negative)	Low (negative)
Botanical impacts	Neutral	Medium (negative)	Low (negative)
Dust, noise, and vibration impacts	None	Medium (negative)	Very Low (negative)
Visual impacts	None	Low (negative)	Very low (negative)
Waste generation	None	Medium (negative)	Low (negative)
Contaminated stormwater	None	Medium (negative)	Low (negative)
Traffic congestion	None	Medium (negative)	Low(negative)
Temporary increase in production and gross domestic product	None	Medium (positive)	Medium (positive)
Creation of temporary employment	None	Medium (positive)	Medium to High (positive)
Temporary increase in household income	None	Medium (positive)	Medium to High (positive)
Temporary increase in social conflicts due to an influx of people during construction	None	Medium (negative)	Medium (negative)
Demolition of buildings older than 60 years	None	Low (negative)	Low (negative)
Negative impacts on trees to be retained in the development	None	Medium to High (negative)	Low (negative)
Operational Phase Impacts			
Biota gains	Low (negative)	Low (positive)	Medium (positive)
Disturbance of wetland habitat	None	Low (negative)	Very low (negative)
Alteration of flow regime	None	Medium (negative)	Very low (negative)
Botanical impacts	Neutral	Low (negative)	Low positive
Water quality impairment	None	Medium (negative)	Very low (negative)
Sustainable increase in production and GDP in national and local economy	None	Medium to High (positive)	Medium to High (positive)
Sustainable impact on employment	None	Medium (positive)	Medium to High (positive)
Sustainable increase in household income	None	Medium (positive)	High (positive)
Sustainable impact on urban regeneration	None	Medium (positive)	Medium to High (positive)
Provision of affordable and social housing	None	Medium to High (positive)	High (positive)

Impact	Impact Significance		
	No-Go Alternative	Preferred Alternative	
		Without mitigation	With mitigation
Sense of place	**None**	**Medium (negative)**	**Low (negative)**
Traffic impacts	**None**	**Medium (negative)**	**Low (negative)**
Negative impacts upon trees to be retained	**None**	**Medium to High (negative)**	**Low (negative)**

2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr

Impact management outcomes included in the EMPr are:

Pre-construction Phase

- Delineation of wetlands buffer areas
- Search and rescue of indigenous vegetation

Construction Phase

- Clearing of indigenous vegetation is limited to the development footprint
- Impact on the wetland to be avoided
- Ensure adequate waste and stormwater management
- Pollution of surface water, groundwater and soils due to general construction activities is avoided or minimised.
- Prevent environmental contamination because of inadequate waste management
- Prevent discharge of sediment-laden water into watercourses and conservation areas
- Comply with environmental legislation regarding the disposal of waste, including construction waste and spoil
- Visual disturbance is minimised.
- Noise disturbance is minimised or avoided.
- Prevent dust impacts on surrounding area.
- Comply with the City of Cape Town's Air Quality Management By-law's provisions related to dust emissions.
- Prevent damage to terrestrial vegetation.
- Prevent increased traffic congestion particularly along high-use roads

Operational Phase

- Rehabilitation of impacted sensitive areas
- Maintenance of conservation areas

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

- Delineation of a 20 m buffer to wetland 1,2,3 and 4 prior to commencement of construction.
- Search and Rescue programme approved by a botanical specialist prior to commencement of construction.
- Appointment of conservation partner that will be responsible for management of conservation areas.
- Commitment, in writing, for the provision of adequate funding for ongoing ecological management requirements on this site, including the Search and Rescue prior to development.
- Confirmation, in writing, by the relevant municipal authority of sufficient potable water, sewer reticulation, wastewater treatment, solid waste management and electrical capacity for the land uses proposed within that phase.
- Acceptance of the Transport Impact Assessment by the City of Cape Town.
- Adherence to the environmental management programme and environmental authorisation should be monitored by a suitably qualified and experienced environmental control officer.
- Should any archaeological remains be found during excavations, construction work is to cease, and the relevant authorities must be contacted.

2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.

Based on the findings of this Basic Assessment, it is the opinion of the EAP that there are no negative impacts that cannot be satisfactorily mitigated to acceptable levels. The assessed project benefits outweigh negative impacts, and the project is anticipated to address a socioeconomic need. It is consistent with municipal and provincial planning and will not result in environmental opportunity costs or unacceptable degradation of sensitive natural systems.

In order to ensure the effective implementation of the mitigation and management actions, an EMPr has been compiled (Appendix H). The mitigation measures necessary to ensure that the project is planned, constructed, and operated in an environmentally responsible manner are listed in the EMPr. The EMPr is a dynamic document that should be updated regularly and provide clear and implementable measures for the establishment and operation of the proposed development.

Provided that the specified mitigation measures are applied effectively, it is recommended that the project should receive Environmental Authorisation in terms of the 2014 EIA Regulations, as amended, subject to the following conditions:

- That the preferred alternative be authorised subject to submission of a final site development plan for approval by the competent authority prior to construction;
- The mitigation measures recommended in the aquatic ecosystems impact assessment and the botanical statement must be adhered to.
- Appointment of conservation partner that will be responsible for management of conservation areas.
- Commitment, in writing, for the provision of adequate funding for ongoing ecological management requirements on this site, including the Search and Rescue prior to development
- The mitigation measures recommended in the transport impact assessment, or any future revision thereof must be implemented.
- The Environmental Management Programme (EMPr) forming part of this Basic Assessment Report must be implemented during the design and construction phases of the development; and
- An independent Environmental Control Officer must be appointed for the duration of the construction phase and must carry out the responsibilities of that role as defined in the EMPr.

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

Gaps in knowledge relate primarily to the detailed design of the proposed development, since the development is currently in a framework stage. Future requirements for building plan approvals, together with proposals process to select a developer to develop the project, will consider the details of the design. The development framework will however provide guidance regarding environmental informants and ensure all the environmental sensitive areas are considered during detailed design phase.

Other gaps in knowledge regarding this development include transport impact assessment which is recommended for further discussions with the local authority and may be subjected to further scrutiny which may result to its amendment.

2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.

- Period for which EA is required:10 years
- Period within which the activity is to be conclude: A further twenty-year period.
- Post construction monitoring, to be finalised within a five-year period.

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.
During the construction phase non-potable water sources will be used as far as possible.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Construction-phase waste minimisation and recycling is a requirement of the EMPr. Establishing of a management authority (body corporate or homeowners association) is recommended to ensure adherence to the Environmental Management Programme during the operational phase as is continued management of open space areas to prevent waste impacts.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
Measures to ensure energy efficiency will be investigated, where feasible, during the detailed design stage.	

SECTION K:DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

I……., ID number ……in my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;

- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;

- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
  - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
  - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;

- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;

- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
  - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - Legitimate costs in respect of specialist(s) reviews; and
  - the provision of security to ensure compliance with applicable management and mitigation measures;

- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant: Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I ……, EAP Registration number …….. as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
    - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
    - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I ……, EAP Registration number …….. as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I ....., as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or

  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;

- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and

- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

I ……., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):