LORNAY
ENVIRONMENTAL CONSULTING

Final
Basic Assessment Report



Proposed Mixed Use Development on Erf 878 Riebeek Kasteel
Malmesbury RD

10 November 2026

DEA&DP Ref No.: 16/3/3/1/F5/20/2001/25 & 16/3/3/1/F5/20/2020/26

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

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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)

Project Overview and Site Context

The applicant, Silver Solutions 3371 CC, on behalf of the landowner, Huguemont Trust, proposes a mixed-use development on Erf 878, Riebeek Kasteel. The subject property is 12.1523 hectares (approximately 12 ha) in extent, of which the application area is 110,796 m², and is situated at a critical transition point between the historic village core and the surrounding agricultural landscape. The site is currently zoned Agricultural Zone 1, though it is located within the designated urban edge and has been identified for residential and business intensification in the Swartland Municipal Spatial Development Framework (SDF). While the site has a history of dryland cultivation, it is currently used for ad-hoc grazing and contains a historic Grade IIIA well structure ("the Fountain") and the non-perennial Krom River along its northern boundary.

Process to Date and Public Participation

The environmental process for Erf 878 has been intensive and iterative, spanning several years of engagement with the public and statutory bodies. Following three rounds of pre-application public participation (2020, 2021, and 2024) led by a previous practitioner, Lornay Environmental Consulting assumed responsibility for the project in January 2025 and conducted a fourth round of public participation from 12 March to 11 April 2025.

A critical turning point occurred in August 2025, when Heritage Western Cape (HWC) issued a negative Final Comment on earlier layouts (Alternatives 1-3), citing "fatal flaws" regarding topographical containment and the "introverted" nature of the proposed gated neighbourhoods. Simultaneously, the Riebeek Valley Ratepayers Association (RVRA) raised significant technical objections regarding bulk service capacity and visual sightlines. In response, the project was substantially revised to re-engineer the development framework in accordance with HWC's mandates and specialist recommendations.

The revised layout, Alternative 4 (Rev 71), was presented as the preferred layout during the fifth round of public participation (PPP 5) from 24 April to 26 May 2026. The RVRA confirmed its support for the revised development, subject to the resolution of engineering and infrastructure concerns, in its letter of 17 November 2025 (Appendix F2) and its PPP 5 comments (Appendix F1).

HWC IACom considered the Section 38(8) HIA at its meeting of 22 July 2026 and issued Further Requirements in August 2026. These required the uppermost erven on the visually exposed slopes to be repositioned, the view cone from Church Street towards the town and church steeple to be retained, and a consistent set of drawings to be submitted. The layout was refined accordingly into Alternative 5 (Subdivision and Rezoning Plan Rev 78, dated 24 August 2026), supported by updated specialist and design studies dated August and September 2026. In its Final Comment dated 30 September 2026, following the meeting of 16 September 2026, IACom endorsed the HIA and approved the Rev 78 drawing package.

This amended BAR forms part of the sixth and final round of public participation (PPP 6), presenting Alternative 5 as the final preferred layout. Following PPP 6, the Final BAR will be submitted to DEA&DP for decision making by 14 December 2026, in terms of the extension granted under Regulation 3(7) of the EIA Regulations, 2014.

Regulation 3(7) extension

Following the IACom meeting of 22 July 2026, HWC issued Further Requirements on 6 August 2026. These expanded the scope of work beyond what could have been anticipated. Lornay requested an extension of the timeframe for submitting the BAR in terms of Regulation 3(7) of the EIA Regulations, 2014 (as amended) on 20 August 2026. DEA&DP granted the extension on 11 September 2026 (Ref. 16/3/3/1/F5/20/2020/26). The Final BAR must be submitted by 17h00 on Monday, 14 December 2026

Specialist Input and Site Sensitivity

The development proposal has been informed by a comprehensive suite of specialist assessments, ensuring a technically defensible layout:

- → Aquatic Biodiversity: Verified a "Very High" sensitivity due to the Krom River and two groundwater-fed seep wetlands.
- → Heritage and Visual: Identified the townscape as a Grade IIIA resource and established mandatory "no-go" areas and view corridors to protect the Dutch Reformed Church (DRC) steeple. HWC IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026. The VIA (New World Associates, September 2026) rates the visual impact of the development as of medium significance after mitigation.
- → Agricultural: Verified "Medium" sensitivity, concluding that the site lacks viable arable potential due to urban edge constraints.
- → Botanical: Confirmed the site is entirely transformed, with a post-mitigation impact on the Critically Endangered Swartland Shale Renosterveld rated as "Very Low".
- → Engineering and Geotechnical: Mandated specific subsurface drainage to manage seasonal waterlogging and established a requirement for a 991 m3 on-site stormwater attenuation system.

- → **Traffic:** The Traffic Impact Study (Route2, version 005, 2 September 2026) estimates a worst-case 171 AM and 171 PM peak hour trips, with limited to no impact on adjacent roads. A 4-way stop is proposed at the R311 / Access 1 intersection.
- → **Electrical:** Eskom has confirmed that the estimated 642 kVA demand can be supplied from the Dagbreek Farmers 2 feeder (DSV Consulting Engineers, 31 August 2026).

Evolution of Layout Alternatives

The project layout has evolved through five primary iterations to satisfy the NEMA mitigation hierarchy:

- → Alternatives 1 and 2: Included a fuel station and a wedding venue on the hill crest. These were rejected for significant ecological encroachment and heritage sightline obstruction.
- → Alternative 3: Improved environmental siting but remained a detached gated enclave that intruded into the upper slopes.
- → Alternative 4 (Rev 71, preferred layout during PPP 5): This alternative represents a technical and spatial shift from a "precinct model" to a "pedestrian-oriented extension" of the townscape. It successfully integrates with the existing town grid and fulfils the following mandates:
    - Avoidance: Establishes a "no-go" zone for all building footprints above the 170m contour line.
    - Minimisation: Reduces the commercial footprint to a 172 m2 farmstall typology and restricts slope dwellings to single-storey forms.
    - Resource Protection: Avoids all functional portions of Seep Wetland 2 and the Krom River, with 15-20m buffers implemented for aquatic features.
- → **Alternative 5 (Final Preferred Layout, Rev 78):** Refines Alternative 4 in response to the HWC IACom Further Requirements (August 2026). Its drawing package was approved by IACom on 30 September 2026. It introduces the following refinements:
    - **Southern slope:** Moves the southern hill erven down slope to abut the southern boundary, with the ring road between these erven and the Hill Park. Erven 35 to 40 are limited to single storey with a 2.7 m wallplate.
    - **Hill Park:** Removes the erven on the northern edge of the hill, enlarging the publicly accessible Hill Park (Portion 80, 14,183 m²). The Hill Park (Erf 80) is zoned Private Open Space and will be owned and managed by the HOA, with controlled public access.
    - **View cone:** Reduces and relocates the events building, moves events parking to lower ground and removes screening trees along Church Street, keeping the view to the Dutch Reformed Church open.
    - **Architecture:** Removes the flat-roofed style. All buildings follow the Cape Vernacular idiom of the Architectural Guidelines (Rev 17).

Technical Conclusion and Recommendation

The preferred Alternative 5 resolves the identified service constraints through a significant rand value commitment to municipal reservoir and sewer upgrades. By prioritising the avoidance of the hill crest and minimising visual and aquatic impacts through strict architectural and landscape guidelines, the residual significance of the development is assessed as "Low" to "Moderate". Consequently, the preferred development framework is recommended for Environmental Authorisation as a sustainable extension of Riebeek Kasteel.

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, 1998 (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):

	○ Watercourses / Rivers / Wetlands ○ Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable); ○ Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): ○ Ridges; ○ Cultural and historical features/landscapes; ○ 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

DFFE:	Department of Forestry, Fisheries and the Environment
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 – B11:**	**Site development plan(s)** • **Alternative 1** • **Alternative 2** • **Alternative 3** • **Alternative 4 – Previously Preferred Layout (B5)** • **Alternative 5 – Final Preferred Layout (Rev 78): SDP, wetlands, 170 m contour, erven sizes, phasing plan and Subdivision and Rezoning Plan (B6 – B11)**	✓
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 (Final Comment of 30 September 2026 in Appendix G3d)**	✓
	Appendix E2:	**Copy of comment from Cape Nature**	✓
	Appendix E5	**Final Comment from the BOCMA / DWS**	✓
	Appendix E	**Comment from the DEA: Oceans and Coast**	N/A
	Appendix E	**Comment from the DFFE**	N/A
	Appendix E6:	**Comment from WCG: Department of Infrastructure (Road Planning), 28 October 2026**	√
	Appendix E3:	**Comment from WCG: DoA**	Attached – no objection

	Appendix E4:	**Comment from the local authority**	Attached letter of support
	Appendix E4:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	As above
	Appendix E:	**Comment from the District Municipality**	Requested, pending
Appendix F:	**Proof of PPP Report, including the Comments and Response Report (F1); RVRA support letter, November 2025 (F2)**		✓
Appendix G:	**Specialist Report(s)** **APP G1: Botanical Assessment (7 May 2021)** **APP G2: Report on Subgrade Conditions for Roads and Geotechnical Conditions for Services (28 July 2021)** **APP G3a: Heritage Impact Assessment, HWC Submission Report (31 August 2026)** **APP G3b: Heritage Western Cape Response to NID (20 January 2026)** **APP G3c: Heritage Western Cape IACom Working Document (19 August 2025)** **APP G3d: Heritage Western Cape IACom Final Comment (30 September 2026)** **APP G3e: Heritage Western Cape IACom Further Requirements (6 August 2026)** **APP G4: Urban Design Report (Rev 3.5, 20 August 2026)** **APP G5: Architectural Guidelines (Rev 17, September 2026)** **APP G6: Traffic Impact Study (version 005, 2 September 2026)** **APP G6b: Road Reserve 13m** **APP G6c: Road Reserve 10m** **APP G7: Site Sensitivity Verification and Agricultural Compliance Statement (7 March 2025)** **APP G8a: Aquatic Biodiversity Impact Assessment (5 December 2025)** **APP G8b: Risk Assessment Matrix (4 December 2025)** **APP G9: Landscape Site Development Plan (Rev 2, 26 August 2026)** **APP G10: Archaeological Impact Assessment (June 2024)** **APP G11: Visual Impact Assessment (9 September 2026)** **APP G12a: Civil Engineering Services Report (Rev F, September 2026)** **APP G12b: Electrical Engineering Services Report (31 August 2026)**		✓
Appendix H:	**EMPr (6 November 2026)**		✓
Appendix I:	**Screening Tool Report**		✓
Appendix J:	**Need and Desirability report**		✓
Appendix K	**LUPA Town Planning Report**		✓

SECTION A: ADMINISTRATIVE DETAILS

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:	Silver Solutions 3371 CC	
Name of contact person for Applicant/Proponent (if other):	Mr Allan Geldenhuys	
Company/ Trading name/State Department/Organ of State:	Silver Solutions 3371 CC	
Company Registration Number:	2011/049555/23	
Postal address:	21A Station Street, c/o Boomsticks	
	PAARL	Postal code:
Telephone:	021 020 0620	Cell: 0824496063
E-mail:	allan@boomsticks.co.za	Fax: ( )
Company of EAP:	Lornay Environmental Consulting	
EAP name:	Michelle Naylor	
Postal address:	Unit 5/ 1F , Hemel en Aarde Wine Village,	
	Hermanus	Postal code: 7200
Telephone:	-	Cell: 083 245 6556
E-mail:	michelle@lornay.co.za	Fax:
Qualifications:	Bachelor of Science (Hons); Master of Science (Rhodes University), EAPASA., SACNASP., IAIASA., cand. APHP	
EAP registration no:	EAPASA. 2019/698, SACNASP., IAIASA	
Duplicate this section where there is more than one landowner Name of landowner:	Huguemont Trust	
Name of contact person for landowner (if other):	Mr C N Louw	
Postal address:	Trichardt Street 31	
	Welgemoed	Postal code:
Telephone:	021 913 3030	Cell:
E-mail:	cnlouw@mweb.co.za	Fax: ( )
Name of Person in control of the land:	Silver Solutions 3371 CC	
Name of contact person for person in control of the land:	Mr Allan Geldenhuys	
Postal address:	21A Station Street, c/o Boomsticks	
	Paarl	Postal code:
Telephone:	021-0200620	Cell: 0824496063
E-mail:	allan@boomsticks.co.za	Fax:

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	Swartland Municipality
Contact person:	Mr Alwyn Zaayman

Postal address:	Private Bag X52	
	MALMESBURY	Postal code: 7299
Telephone	(022)-4879400	Cell:
E-mail:	AlwynZaayman@swartland.org.za	Fax: (022)-4879440

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

1.	Is the proposed development (please tick):	**New**	X	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
Brownfield - The site has experienced previous disturbance through historical agricultural activities, grazing and the construction of a brick structure around the "fountain" and a man-made drainage line.					
~~3.~~	~~**For Linear activities or developments**~~				
~~3.1.~~	~~Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:~~				
~~N/A~~					
~~3.2.~~	~~Development footprint of the proposed development for all alternatives.~~			~~m²~~	
~~N/A~~					
~~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)~~	~~º~~	~~'~~	~~"~~	
	~~Longitude (E)~~	~~º~~	~~'~~	~~"~~	
	~~**Middle point co-ordinates for all alternatives**~~				
	~~Latitude (S)~~	~~º~~	~~'~~	~~"~~	
	~~Longitude (E)~~	~~º~~	~~'~~	~~"~~	
	~~**End point co-ordinates for all alternatives**~~				
	~~Latitude (S)~~	~~º~~	~~'~~	~~"~~	
	~~Longitude (E)~~	~~º~~	~~'~~	~~"~~	
~~**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): Riebeek Kasteel				12.1523 ha (Erf 878); application area 110,796 m² (Rev 78)
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable): n/a				0m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				110,796 m² (Alternative 5). All alternatives are given in the table.

Alternative	Plan (Appendix B)	Total area	Erven	Open space
1	Rev 30, 19 June 2020 (B1)	110,961 m²	87	8,419 m² (8%)
2	(B2)	110,014 m²	137	14,328 m² (13%)
3	(B3)	110,087 m²	116	16,148 m² (15%)
4	Rev 71, 25 November 2025 (B5)	104,480 m²	94	26,396 m² (25.3%)
5 (preferred)	**Rev 78, 24 August 2026 (B11)**	**110,796 m²**	**90**	**29,323 m² (26.5%)**

Areas per the zoning table on each Subdivision and Rezoning Plan (Appendix B). The full breakdown per zoning for Alternative 5 is given in 4.4.

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).

This Application for Environmental Authorisation is for the following proposed development:

1. Rezoning from Agricultural Zone 1 to Subdivisional Area.
2. Subdivision of the subdivisional area into 90 portions and simultaneous **rezoning** of the subdivided portions from Agricultural Zone 1 to the following zonings:

- → 46 erven: Residential Zone 1: Low Density
- → 24 erven: General Residential Zone 2: Town-housing
- → 7 erven: General Residential Zone 3: Flats
- → 1 erf: Resort Zone: Resort
- → 1 erf: Business Zone 1: General Business
- → 8 erven: Open Space Zone 2: Private Open Space
- → 3 erven: Transport Zone 2: Roads

3. Departures as follows:

- → Coverage departure on Residential Zone 1: Low Density erven
- → Street and side building line departures on Residential Zone 1: Low Density erven
- → External building line departures on General Residential Zone 2: Town Housing erven
- → Parking departure on General Residential Zone 2: Town Housing erven
- → Departure to allow for the land use of a clubhouse on a General Residential Zone 2: Town Housing erf
- → Coverage departure on General Residential Zone 3: Flats erven
- → Street, side and rear building line departures on General Residential Zone 3: Flats erven
- → Parking departure on General Residential Zone 3: Flats erven
- → Departure to relax the common building line where a Business Zone 1: General Business erf abuts a residential property

4. Consent Uses: Tourist Facility on Portion 78; Shop and home occupation on Portions 47 to 53.

5. The **phasing** of the development in 4 phases.

6. The establishment of a **Master Homeowners' Association.**

A total of five (5) Public Participation Processes (PPPs) have been undertaken, each contributing to the refinement and evolution of the layout alternatives. Lornay Environmental Consulting assumed responsibility for the project from the previous EAP in January 2025. It initiated PPP 4, which introduced Alternative 3 as the previously preferred option, and PPP 5, which presented Alternative 4. Following PPP 5 and the HWC IACom Further Requirements of August 2026, the layout was refined into Alternative 5. This report is distributed as part of PPP 6, the final round of public participation, with the final preferred layout Alternative 5 presented.

The comments received during PPP 4 strongly emphasized the heritage significance of Riebeek Kasteel and raised concerns that the proposed development, as presented under Alternative 3, may negatively impact this culturally and historically important area. These concerns necessitated further reconsideration and refinement of the preferred layout to ensure adequate protection of the site's heritage resources. Alternative 4, the previously preferred layout presented during PPP 5, reflects a more sensitive approach to the existing cultural landscape and maintains the general layout and spatial character of the existing land, thereby ensuring improved alignment with heritage considerations. Following PPP 5, HWC IACom required further refinement of the uppermost erven on the visually exposed slopes and retention of the Church Street view cone. Alternative 5, the final preferred layout, incorporates these refinements and was approved by HWC IACom in its Final Comment of 30 September 2026.

Application is made for Environmental Authorization in terms of the National Environmental Management Act (NEMA) for the proposed mixed-use development on the subject erf, for the following land uses and as described in the preferred Alternative 5:

The proposal incorporates the establishment of various development erven that will cover the development footprint of approximately 11 ha. This development will be undertaken in 4 phases in terms of Chapter VI, Section 75(g)(vi) of the Swartland Municipal Land Use Planning By-Law, 2020, as illustrated in the plan below:

- **Single Residential Zone 1 (Low Density**):
  - 46 erven with extents of between ±388 m² to ±2,518 m² located along the slopes of Riebeek Hill,
  - Covering a total extent of **38,178 m².**

- **General Residential Zone 2 (Town Housing):**
  - 24 erven with extents between ± 237 m^2 to ± 582 m^2, accommodating medium-density residential opportunities.
  - Covering a total extent of **7031 m²**

- **General Residential Zone 3 (Flats):**
  - 7 Erven with extent between 986 m² to 2,082 m²
  - Covering a total extent of **8,789 m²**

- **Resort Zone: (Wedding Venue)**
  - 1 erf with an extent of **7,607 m²**
  - The layout reintroduces this component as a "werf-based complex" offset from Church Street. The venue is single storey and set back at least 30 m from Church Street.

- **Business Zone 1: (General Business)**
  - 1 erf with a total extent of **275 m²** will be utilized as a retail

- **Open Space Zone 2 (Private Open Space):**
  - 8 erven with total extent of **29,323 m², including the Hill Park (Portion 80, 14,183 m²)**
  - These erven encompass the natural seepage areas, landscaped open space, and stormwater discharge and ecological buffers.

- These areas are designated for the management of the Krom River corridor and confirmed seep wetlands, acting as ecological buffers and stormwater discharge points

- **Transport Zone 2 (Roads):**
  - 3 Erven with a total extent **19,592 m²**
  - This includes the internal road network that provides access throughout the development
  - This includes the internal road network, refined to limit through-access and prioritize pedestrian movement

Proposed bulk infrastructure:

The Swartland Municipality has confirmed that there is sufficient service capacity to service the development, see Letter in **Appendix E4,** as follows:

1. Water

→ **Connection:** The development will connect to the existing 200mm Ø watermain located within Fontein Street.
→ **Capacity:** The existing reticulation system has sufficient capacity to meet domestic and fire flow requirements.
→ **Upgrades:** The GLS analysis confirms that Riebeek Kasteel has insufficient reservoir storage capacity to accommodate the development. Implementation of master plan items (SRkW.B1, SRkW.B2, SRkW.B3, SRkW1.2, SRkW1.3, and SRwW2.1) is required to augment storage, with an estimated cost of R21,383,000.

2. Sewer

→ **Connection:** Multiple connections are proposed to the existing 150mm Ø outfall sewer within Fontein Street.
→ **Servitudes:** A new 3.0m wide services servitude across Erven 1304 and 203 is required to facilitate the connection to the municipal network.
→ **Capacity:** While the internal outfall sewer has sufficient capacity, the bulk sewers in Pieter Cruythoff Avenue are currently at capacity.
→ **Upgrades:** To accommodate the development, the implementation of master plan items SRkS1.2 and SRkS1.3 is required to augment bulk capacity at an estimated cost of R2,796,000.

3. Solid Waste

→ **Infrastructure:** The internal road network is specifically designed to accommodate heavy vehicles, including municipal refuse trucks.
→ **Management:** Refuse removal will be integrated into the standard municipal service delivery framework for the area.

4. Stormwater

→ **Strategy:** Due to a lack of capacity in the external municipal system, all post-development runoff must be attenuated on-site to pre-development flow rates.
→ **Design:** The system is designed to attenuate a 1:50-year peak post-development storm event, requiring a storage volume of 991 m³.
→ **Infrastructure:** The network comprises open swales, underground gravity pipes, and an attenuation facility.

Quality Control: Attenuation embankments and swales will be landscaped with indigenous vegetation to act as bio-filters, improving the quality of runoff before discharge

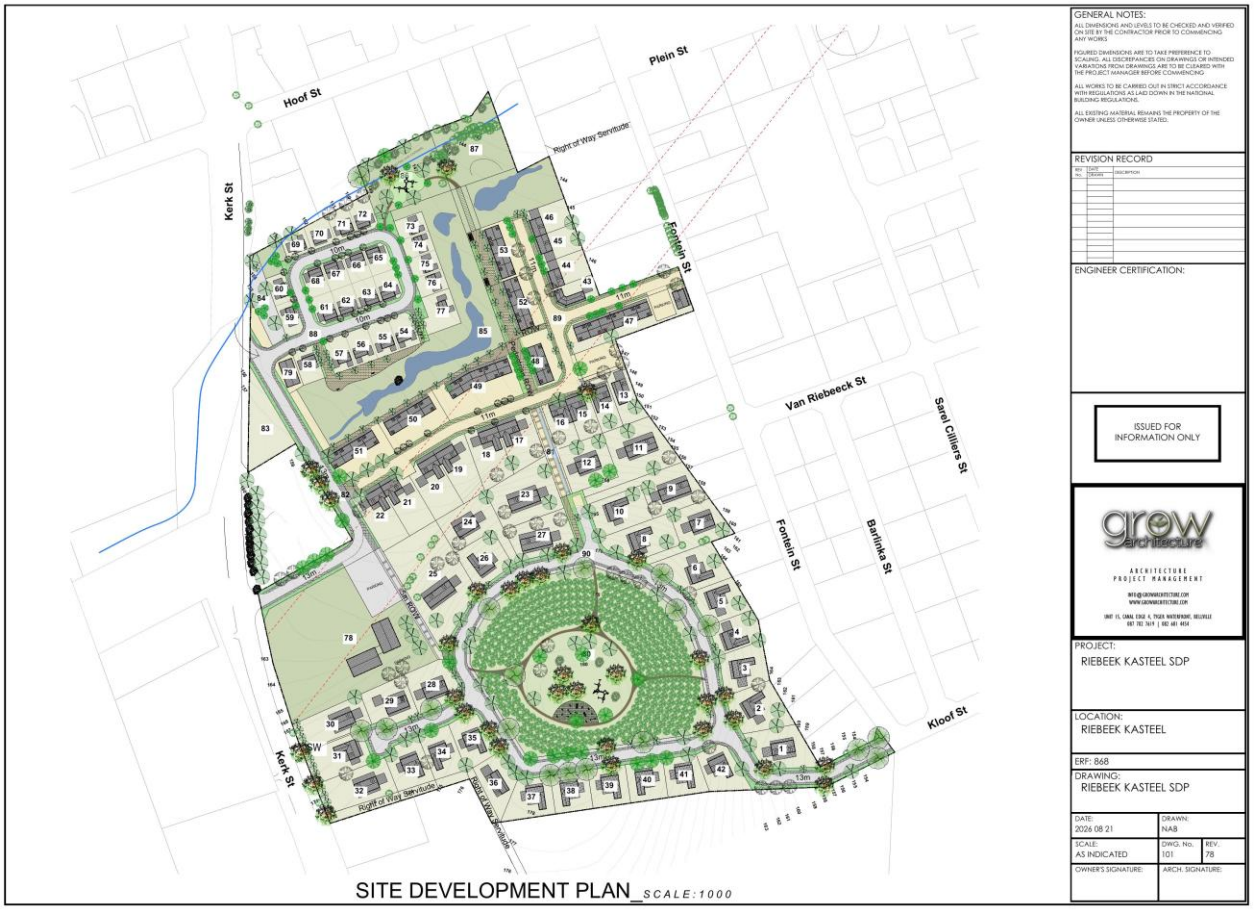


Figure 1: The site development plan.

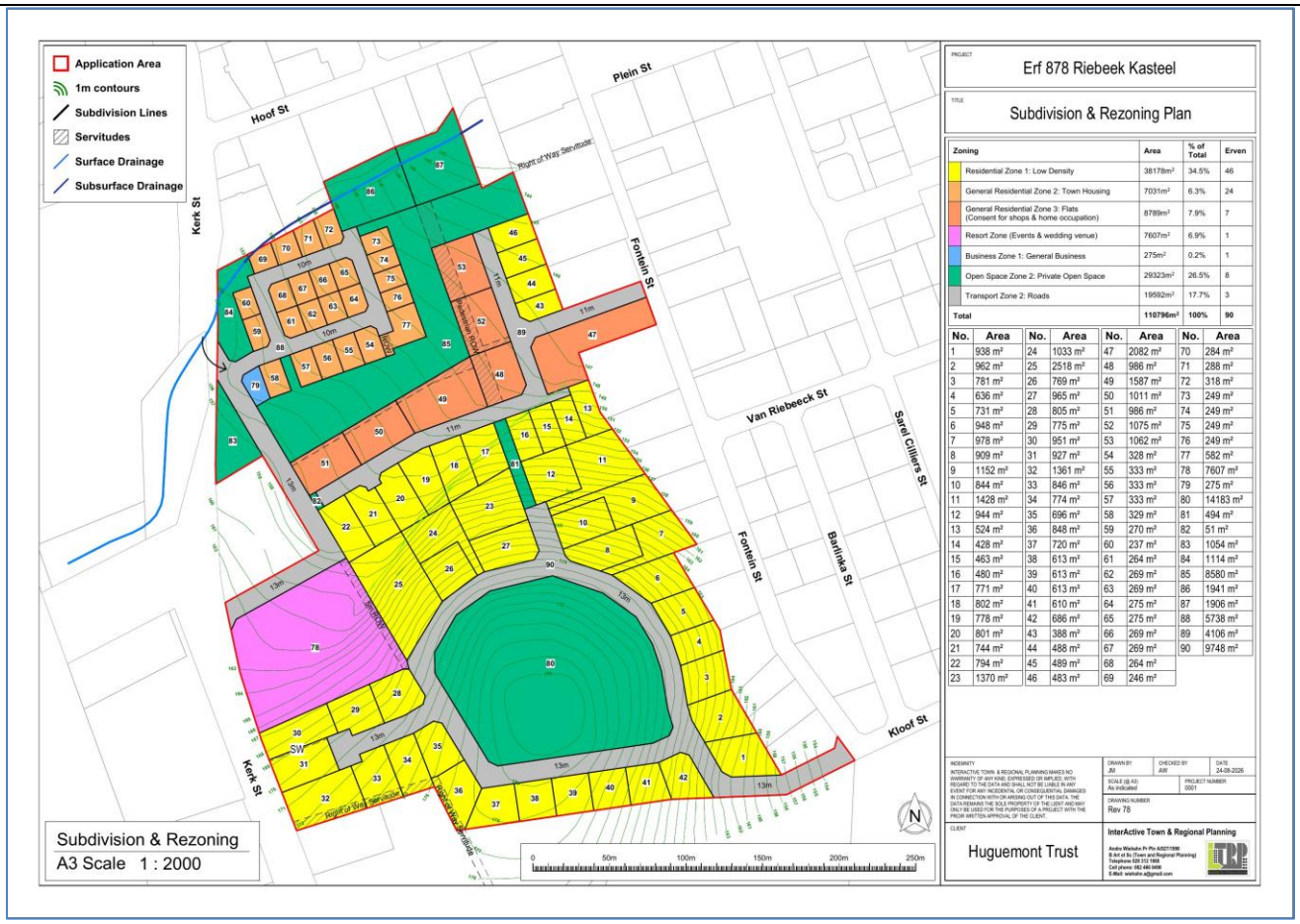


Figure 2: Preferred Zoning Plan.

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

Existing Access Points

There are no formal existing access points to the development site. The surrounding road network consists of existing public streets that currently serve the area: R311 (Church Road) on the western boundary, Main Street to the north, Fontein Street to the east, and Kloof Street to the south-east.

Proposed access points (Traffic Impact Study, version 005, 2 September 2026; Rev 78):

Access 1: off the R311 (Church Road), a full access intersection opposite the existing Farm Access Road, forming a staggered 4-way stop controlled intersection (Intersection 7). It serves the Resort and Retirement Village components.

Fontein Street access (Intersection 5): a new third leg, priority controlled, serving the Residential 1 and Residential 3 erven.

Fontein Street / Kloof Street access (Intersection 6): a new third leg, priority controlled, serving Residential 1 erven.

Left-in only access off the R311: secondary access for the Retirement Village and Resort components, described in the Town Planning Motivation as an additional slipway from Church Street north of Erf 1013. **The left-in only access off the R311 is retained. It serves only the small retail erf, the retirement village and the events and wedding venue, and no longer serves the fuel station and commercial hub on which the Department of Infrastructure's 2024 comment was based. Its use is therefore substantially lower than in earlier layouts. The access will be designed so that no right turn can be made into it from the R311 and no vehicle can exit onto the R311, by means of a median on the R311 and a narrowed, single one-way entry lane (Traffic**

Impact Study, Section 6.11). The final geometric design will be submitted to the Western Cape Department of Infrastructure for approval before construction of the access.

The internal road network is split into three independent components, so that no through traffic passes from the town to Church Street.

A Traffic Impact Assessment was undertaken by Route 2 Traffic Engineers and Transportation Planner and is attached under Appendix G.

The proposed access plan for the site is as follows:

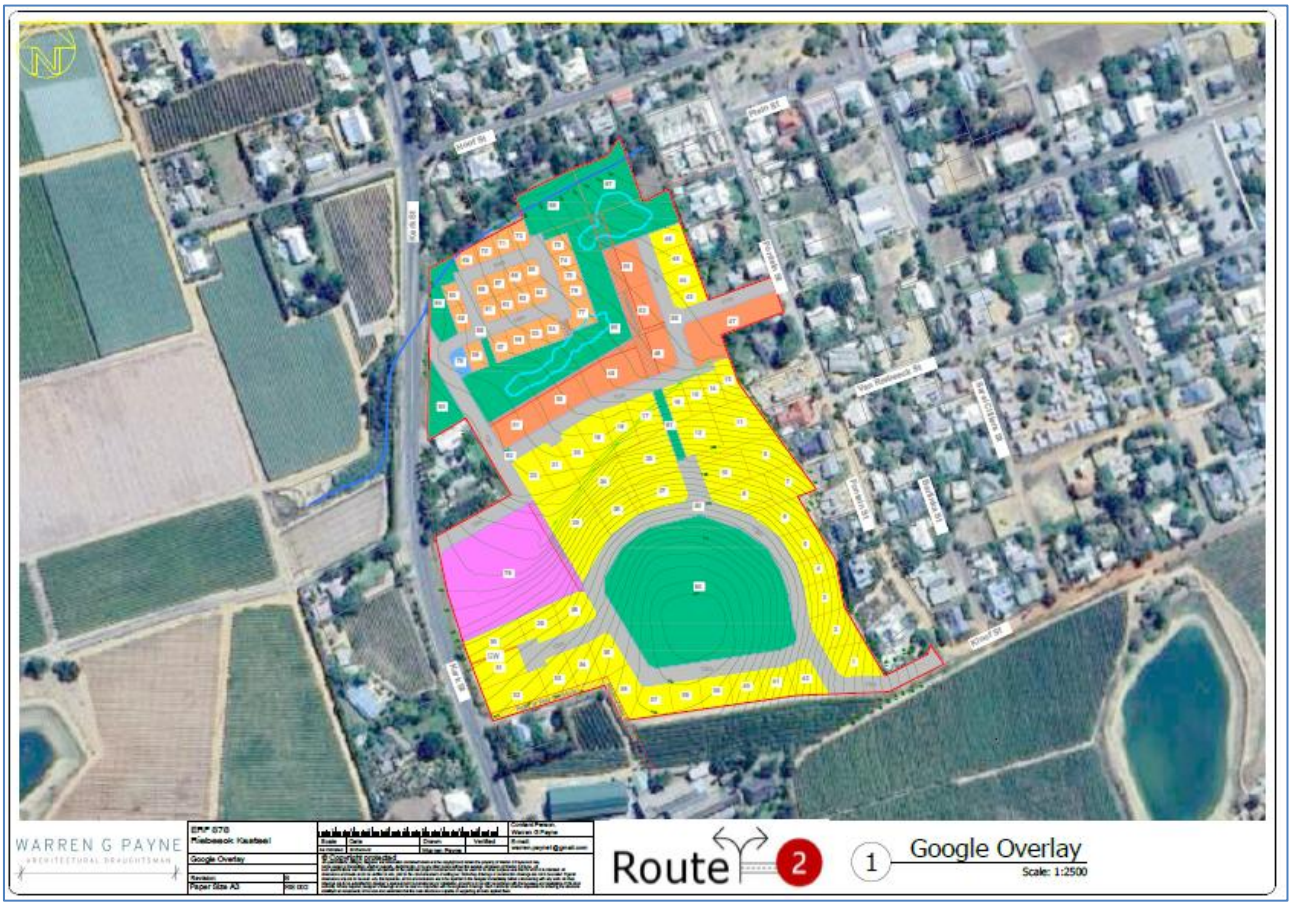


Figure 3. Proposed access plan

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	4	6	0	0	1	9	0	0	0	0	0	8	7	8	0	0	0	0	0

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	33°	23‘	12.68“
	Longitude (E)	18°	53‘	37.42“

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

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 x**

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 x**
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 x**	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. **A Section 21c and I application will be required for development located within the regulated area (500m) of watercourses and / wetlands. This will be undertaken as a condition of authorisation. Given the findings of the Freshwater Specialists Risk Matrix a General Authorisation is applicable**	**YES x**	**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 x**
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	**NO x**
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	**NO x**
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	**NO x**
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5. *(Agricultural zones within the urban edge not subjected to this legislation)*	YES	**NO x**

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
N/A

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
The following policies were considered and are administered by the entities indicated. **<u>Integrated Urban Development Framework, 2016 – 2019</u>** The Integrated Urban Development Framework (IUDF) sets out the policy framework for transforming and restructuring South Africa's urban spaces, guided by the vision of creating 'liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'. The predominant aims are as follows:

Integrated sustainable human settlements: Cities and towns that are liveable, integrated and multifunctional, in which all settlements are well connected to essential and social services, as well as to areas of work opportunities.

- Efficient land governance and management: Cities and towns that grow through investments in land and property, providing income for municipalities, which allows further investments in infrastructure and services, resulting in inclusive, multi-functional urban spaces.
- Inclusive economic development: Cities and towns that are dynamic and efficient, foster entrepreneurialism and innovation, sustain livelihoods, enable inclusive economic growth, and generate the tax base needed to sustain and expand public services and amenities.

West Coast District Municipality IDP 2022 – 2027

The vision of the West Coast District Municipality IDP is to guide development towards the "Weskus the caring centre for innovation & excellence" and the mission is to "Promote drivers of change, by leading well-coordinated and innovative initiatives to achieve sustainable and integrated development of West Coast". The West Coast District Municipality IDP objectives are the following:

- Care for the social wellbeing, safety and health of all our communities.
- Promote regional economic growth and tourism
- Co-ordinate and Promote the development of bulk and essential services and transport infrastructure
- Foster sound relationships with all stakeholders, especially local Municipalities
- Maintain Financial Viability and Good Governance.

Swartland Municipality IDP 2023

The purpose of the Swartland Municipality IDP 2023 informs the municipality's budget and prioritizes projects as per the needs of the communities. It is considered one of the important planning and management tools modern-day municipalities have. From this document the following extracts are valued to contribute towards this application:

LAND REQUIREMENTS

Land requirements for future settlement development are tabulated below:

WARDS	12
Land Required for:	**Riebeek Kasteel**
Subsidized housing	41ha
Affordable housing	30.6ha
Private housing	100ha
Total land required: 5 years	23.1ha
Total land required: 20 years	171.6ha
Land as per SDF	59.5ha
Shortfall	112.1ha

LAND SUPPLY AND SETTLEMENT FORM

To limit the extent of land required, settlement Form and Function should be enhanced through integration:

Wards	Ward 12
Towns	Riebeek Kasteel
Functional Integration	A commercial and social node in Riebeek Kasteel East. Promote formal pedestrian walkways between Riebeek Kasteel and Riebeek Kasteel East.
Social Integration	Development reinforced along connecting route between Riebeek Kasteel and Riebeek Kasteel East.
Offer a wider variety of housing types	**Different housing typologies densities in brown field developments. Infill higher density development along connecting route.**
Spatial Integration	Mixed use along link road between Riebeek Kasteel East and central part of Riebeek Kasteel.

DEVELOPMENT PROPOSALS PER SWARTLAND SETTLEMENT:

The themes and strategies translate into the following development proposals for Swartland settlement.

Riebeek West, Ongegund and Riebeek Kasteel: As small agricultural service centre, development proposals of the Valley include:

- Enhance tourism and agri-tourism, and protect heritage resources
- Provide residential land for Human Settlement housing schemes and private development that promote mix use and integration settlements.
- Maintain and strengthen agricultural service centre

Swartland Spatial Development Framework, 2023 – 2027

The purpose of the Swartland Spatial Development Framework (SDF) is to guide growth and development in the Swartland's Municipal area in a sustainable manner. Hence, future growth, development and land use planning will embrace the spatial vision and principles to protect and develop integrated, sustainable settlements and liveable environments and enable economic and social prosperity.

The following aspects from the SDF is relevant to the application site:

Land Demand

Additional land required in Swartland urban areas

WARDS	**12**
Land Required for:	**Riebeek Kasteel**
Private housing	100ha

Land Supply

- **Settlement Form and Function**

Settlement Form: Densification and Intensification Densification ensures optimal use of land and efficient use of infrastructure and services. Densification is strongly promoted in new housing developments and existing precincts in Malmesbury, Moorreesburg, Kalbaskraal, Riverlands and Chatsworth, whilst densification in the Riebeek Valley, Koringberg, Darling and Yzerfontein is cautiously promoted.

Proposed densification targets for Swartland settlements

Towns	2016	Average Density Targets du/ha		
		2017	2022	2027
Riebeek Kasteel	8.2 du/ha	8.5 du/ha	8.5 du/ha	8.5 du/ha

Settlement From: Restructuring and Integration

Integration					
Wards	**Towns**	**Functional Integration**	**Social Integration**	**Offer a wider variety of housing types**	**Spatial Integration**
Ward 12	Riebeek Kasteel	A commercial and social node in Esterhof. Promote formal pedestrian walkways between Esterhof and Riebeek Kasteel.	Development reinforced along connecting route between Esterhof and Riebeek Kasteel.	Different housing typologies & densities in brown field developments. Infill higher density development along connecting route.	Mixed use along link road between Esterhof and central part of Riebeek Kasteel.

Riebeek Kasteel

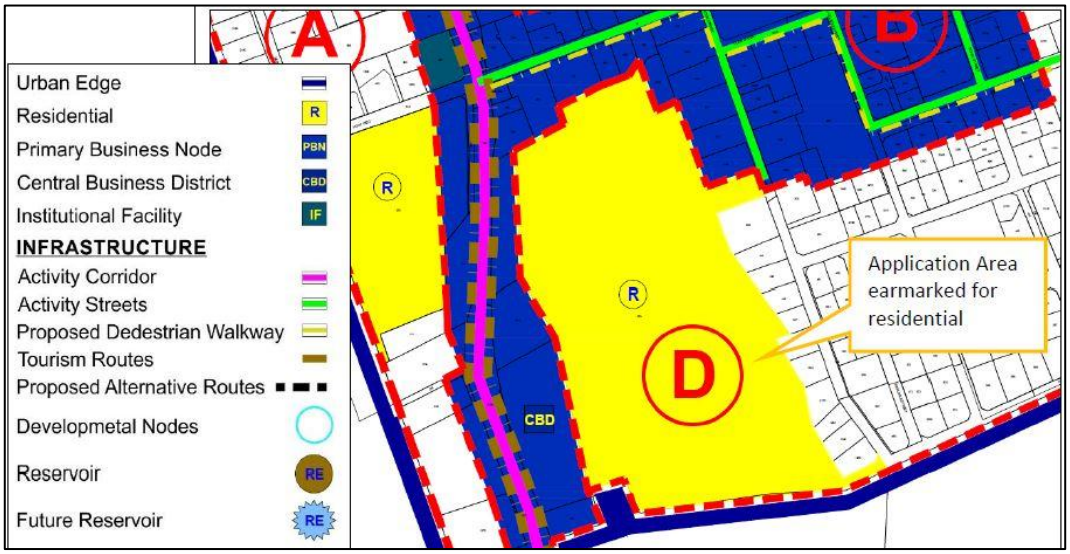
Riebeek Kasteel is situated approximately 20 kilometres northeast of Malmesbury and has access via the Paarl Road (Divisional Road 24/1) to the R45 that connects Malmesbury with Hermon. The R45 is connected to the N7 via the R311 (main route in the Riebeek Valley). The town is located along the slopes of Kasteelberg and is surrounded by some of the oldest vineyards in South Africa. The town's characteristic grid layout is encouraged by the surrounding vineyards along with intensive agricultural uses adjacent to the urban edge.

SPACE, BUILT			
	Elements	**No.**	**Proposals**
Change	Residential	55	Increase density by 2027 from the current 8.2 units per hectare to 8.5 units per hectare in Riebeek Kasteel.
		56	The low-density rate preserves the unique identity and character of Riebeek Kasteel. Higher residential developments and mixed uses should be encouraged along activity streets in the town.
	Commercial	63	Support development of CBD and secondary nodes and neighbourhood commercial facilities.
Develop	Residential	72	Provide 171.7ha in Riebeek Kasteel for future growth over next 20 years, of which 67.3ha is vacant land as identified per Vacant Land Audit.
		75	Provide adequate land for different housing topologies.
		76	Provide and support development of housing for retirees.
		82	Allow for minimum subdivision size of single residential erven of 500m² and rural living erven in identified zones of 1000m² and 2000m² respectively.

LAND USE ZONE PROPOSALS FOR RIEBEEK KASTEEL

The application area is located within Zone D which clearly supports the development proposal as reflected in the following extracts from the SDF:

ZONE	RIEBEEK KASTEEL LAND USE ZONES	Low Density Residential Uses	Medium Density Residential	High Density Residential Uses	Secondary Educational Uses	Place of Education	Professional Uses	Business Uses	Secondary Business Uses	Place of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
D	Zone D consists of a residential as well as institutional character with government functions (cemetery). There are mixed density residential uses with opportunities for infill development.	X	X	X Along activity streets/corridors & At proposed future residential development nodes	X	X	X	X Along activity streets/corridors & At proposed future residential development nodes	X Along activity streets/corridors & At proposed future residential development nodes	X	X	X	X	X	



In terms of the Swartland SDF the application area is not within the Riebeek Kasteel Heritage Protection Overlay Zone (HPOZ).

The application proposal is in accordance with all relevant land-use management policies and strategies for the area, however a lesser amount of business development is proposed in the application.

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.	
The following policies were considered and are administered by the entities indicated.	
Municipality SDF	The SDF indicates the area to be developed as residential area within the urban edge (adhered to fully).
National Environmental Management Act (Act 107 of 1998)	Relevant regulations govern content and process of EIA (adhered to fully)
Guidelines on Alternatives	Used to determine reasonable and feasible alternatives and also the mandatory assessment of the no – go alternative (adhered to fully)
Guideline for Environmental Management Plans	Definition of management actions to avoid, eliminating, offsetting, or reducing adverse environmental impacts during construction and operational phases and enhancing positive impacts (adhered to in high extent)
Guidelines on Need and Desirability	Used to answer whether this is the right time and is it the right place for locating the type of land-use/activity being proposed? In other words, is this development considered wise use of land – i.e. the question of whether the development could be considered as sustainable use of land, keeping in mind the triple bottom line of economic, social and environmental feasibility (fully adhered to)
Waste Minimisation Guidelines for Environmental Impact Assessment Review	Used to determine the limitation of generation of waste and the re-use thereof to limit negative environmental impacts and to maximize the re-use of waste resources (fully adhered to)
Guidelines on Public Participation	Guideline used to determine extent of public participation required and based on three variables of : o the scale of anticipated impacts of the proposed project; o the sensitivity and the degree of controversy of the project; and o the characteristics of the potentially affected parties. (adhered to fully).
Guideline on Exemption Applications	There were no exemption applications in this Basic Assessment process (adhered to fully).

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 following themes and their sensitivity ratings are identified in the Screening Tool Report:

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme	X			
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural	X			

Heritage Theme				
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Note the following information relating to these themes:

Agriculture Theme (Very high)

An Agricultural Compliance Statement completed.

JOHANN LANZ
Director & Principal Consultant
SOIL SCIENTIST (Pr.Sci.Nat)
Phone: +27 (0) 82 927 9018

Animal Species Theme (High)

The Screening Tool Report indicates that the Animal Species Theme is of High Sensitivity. The site, however, is located within the town of Riebeek Kasteel and has been transformed through previous agricultural activities. It is therefore assumed that this inclusion is based on the insect assemblages associated with the Swartland Shale Renosterveld, however, an Animal Species Assessment is not considered to be necessary. Detailed on-site investigation indicated the site to be inside the built-up urban area and the vegetation on site consists mainly of pioneer species as determined by a specialist Botanical Assessment. The site is completely surrounded by extensive residential and mainly mono-culture agricultural developments, with a tar road running immediately adjacent to the site. In terms of Avi-fauna, site investigations indicated that, due to the close proximity to the altered environment presented by the existing residential garden developments, the avian fauna that occurred were reminiscent of typical domestic garden species.

Communications between DEA&DP and previous NEMA processes taken place to date have confirmed that no further Animal Species assessment is required.

Aquatic Biodiversity Theme (Very high)

The Web-based Screening Tool indicates a Very High Sensitivity for this theme. The site is highly transformed with no Aquatic features mapped on site; however, there is a “fountain” on the northern end of the site. A Freshwater Impact Assessment has been undertaken.

Archaeological and Cultural Heritage Theme (Very high)

A Heritage Impact Assessment has been completed which includes A Visual Impact Assessment, Archaeological Impact Assessment as well as Urban Design, Landscape Plan and Architectural Guideline Document.

Civil Aviation Theme (High)

The Screening Tool indicates a High Sensitivity. The subject site is located within the town of Riebeek Kasteel, and proposed development is not significantly different from existing development. No further assessment is required.

Defence Theme (Low)

The Screening Tool indicates a Low Sensitivity. The subject site is located within the town of Riebeek Kasteel. No further assessment required.

Palaeontology Theme (Low)

According to the Web-Based Environmental Screening Tool, the Palaeontology Theme is considered of Low sensitivity. A Heritage Impact Assessment has been undertaken.

Plant Species Theme (Medium Sensitivity)

A Botanical Impact Assessment has been undertaken to cover the Plant Species and Terrestrial Biodiversity Themes. No further actions required.

Terrestrial Biodiversity Theme (Very high)

A Botanical Impact Assessment has been undertaken to cover the Plant Species and Terrestrial Biodiversity Themes. No further actions required.

Based on the site sensitivities above, the following specialist assessments are identified for the site:

No	Specialist assessment	Assessment Protocol
1	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
7	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
8	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

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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.
12	The development of (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs-(a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads, road reserves or railway line reserves; or the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.	Erf 878 is located within what the Swartland Municipality have demarcated as the urban edge and has a zoning of Agriculture 1. Stormwater drainage line runs along the northern extent of the property. The footprint of the proposed development will extend to closer than 32 metres from the drainage channel.
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 existing 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.	A stormwater drainage channel runs on the northern extent of Erf 878 and the development footprint may involve the movement of more than 10 cubic metres of soil.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	This agricultural zoned site has not been subjected to agriculture for the past 10 years and therefore is considered to be natural under NEMA 2014 (as amended)
28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming,	This agricultural zoned site was used for agriculture after 1 April 1998 and is located inside

	equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	the urban edge of Riebeek Kasteel and is ~11 hectares in size.
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.
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. In 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; (ii) Within critical biodiversity areas identified in bioregional plans; (iii) Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or (iv) On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or (v) on land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	The 2017 vegetation map indicates the natural vegetation on Erf 878 to be Swartland Shale Renosterveld that is listed as critically endangered under Section 52 of NEM: Biodiversity Act. But there is none of this vegetation left on 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, an 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.

Location of the site

Riebeek Kasteel is situated approximately 80 km north-east of Cape Town in The Riebeek Valley, approximately 22.5km northwest of Malmesbury and 5km south of Riebeek West.

The town consists of a central business district (CBD) with community, social, retail, tourist and educational facilities as well as residential areas mostly characterized by conventionally single title residential plots and include several tourist accommodation facilities. The town is also characterized by medium to higher density residential areas in and around the CBD with higher density residential areas in Esterhof along the eastern boundary of the town.

The preferred site alternative (Erf 878) is located on the south-western side of the Riebeek Kasteel town and access to the application site is presently obtained from Fontein Street. It is situated on a hill sloping to the north and western directions, ensuring scenic views of the valley down below.

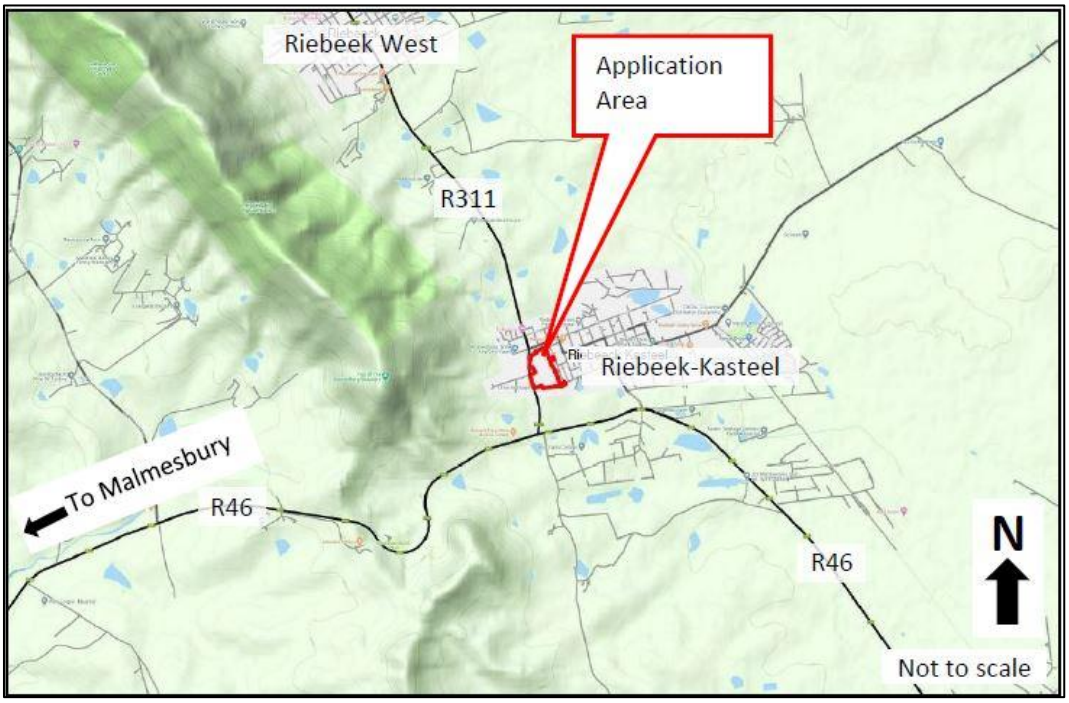


Figure 4: Locality Map.

Local Context

Within the local context, the application area is located on the south-western side of Riebeek Kasteel town and between Church Road (R311) and the existing single residential erven along Fontein Street and southwest of the CBD. The application area currently obtains access from Fontein Street to the east of the application area.



Figure 5: Locality Plan – Local Context

Description of vegetation and topography of the site

The vegetation map for South Africa indicates that the natural vegetation that originally occurred on site was Swartland Shale Renosterveld. This vegetation type is described to be critically endangered under Section 52(1)(a) of the NEM: Biodiversity Act (10 of 2004), the Revised National list of Ecosystems that are Threatened and In Need of Protection. The reason why this vegetation type is listed as critically endangered is because it existed on a soil type that was commonly converted to agriculture as a viable land use. As the whole erf had been repeatedly farmed with agricultural crops in the past for a number of years, but longer than 10 years ago, there is very little, if any, of this natural vegetation left on the property. The property is covered in pioneer vegetation such as renosterbos (*Erythropappus rhinocerostis*), kraalbos (*Galenia africana*), black wattle (*Acacia mearnsii*), kikuyu grass (*Pennisetum clandestinum*), *Cynodon* species and other pioneer grasses and vegetation (see Specialist Botanical Report in **Appendix G1**).

Erf 878 has an elevated small hillock on the southern lower third of the property at a maximum height of 180m.a.m.s.l. From this high point the topography slopes down for a height of 37 metres to the lowest point in the north-eastern corner of the property at 143m.a.m.s.l. There are two man-made stormwater furrows running across Erf 878 that both originate from the very extensive agricultural developments on the lower foothill slopes of the mountains to the west. Another drainage line terminates in a seasonal fountain that emerges above-ground more or less in the middle of the property during the wet winter runoff months but otherwise dries up during the dry summer months (see Photos in Appendix C).

The proposal incorporates the establishment of various use erven that will cover the development footprint of approximately 11 ha. This development will be undertaken in terms of Chapter VI, Section 75(g)(vi) of the Swartland Municipal Land Use Planning By-Law, 2020, as illustrated in the plan below:

- **Single Residential Zone 1 (Low Density**):
  - 46 erven with extents of between ±388 m² to ±2,518 m² located along the slopes of Riebeek Hill,
  - Covering a total extent of **38,178 m².**

- **General Residential Zone 2 (Town Housing):**
  - 24 erven with extents between ± 237 m^2 to ± 582 m^2, accommodating medium-density residential opportunities.
  - Covering a total extent of **7031 m²**

- **General Residential Zone 3 (Flats):**
  - 7 Erven with extent between 986 m² to 2,082 m²
  - Covering a total extent of **8,789 m²**

- **Resort Zone: (Events and Wedding Venue)**
  - 1 erf (Erf 78) with an extent of 7,607 m²

- **Business Zone 1: (General Business)**
  - 1 erf (Erf 79) with a total extent of 275 m² will be utilized as a retail

- **Open Space Zone 2 (Private Open Space):**
  - 8 erven with total extent of **29,323 m²**
  - These erven encompass the natural seepage areas, landscaped open space, and stormwater discharge and ecological buffers.

- **Transport Zone 2 (Roads):**
  - 3 Erven with a total extent **19,592 m²**
  - This includes the internal road network that provides access throughout the development

Proposed bulk infrastructure:

The Swartland Municipality has confirmed service availability (Appendix E4). The GLS Capacity Analysis (Civil Engineering Services Report Rev F, Appendix E) confirms sufficient capacity in the water reticulation and local sewer system, subject to bulk reservoir storage and main outfall sewer upgrades funded through Development Contributions. See below.

Water

The bulk water allocation from the Western Cape Water Supply Scheme for Swartland Municipality's Swartland System is 7900ML/a. The current abstraction is in the order of 6241.2ML/a. The calculated water demand of the proposed development (Alternative 5) is 87.2 kL/d, which is within the GLS master planning allowance of 98.0 kL/d (Civil Engineering Services Report, Rev F, September 2026). The availability of bulk water is confirmed.

The water master plan indicated that the proposed development should be accommodated in the existing Riebeek Kasteel reservoir zone. The proposed connection to the existing reticulation system should be made to the existing 200 mm Ø pipe in Fontein Street.

Sewer

Effluent from the proposed development will be treated at the Riebeek Valley WWTW. The WWTW has a hydrological capacity of 1.9 ML/day and an organic treatment capacity of 1500 kgCOD/day. The current flow received at the works

is 0.6 ML/day and the organic loading rate is 607kg COD/day. The calculated sewage yield of the proposed development (Alternative 5) is 46.8 kL/d, which is within the GLS master planning allowance of 68.6 kL/d (Civil Engineering Services Report, Rev F, September 2026). There is therefore sufficient treatment capacity.

The sewer master plan indicated that the proposed development should be accommodated in the existing Riebeek Valley PS sewer drainage area. The proposed connections to the existing sewer system are to the existing 150 mm Ø outfall sewer in Fontein Street.

Solid waste

Normal refuse of the proposed facility will be handled at the Highlands Landfill and sufficient capacity exists to service the proposed development.

The establishment of a Master Homeowners' Association for the application area in terms of Chapter IV, Section 39(1) of the Swartland Municipal Land Use Planning By-Law, 2020, is proposed. The constitution and design guidelines will be submitted at a later stage for approval.

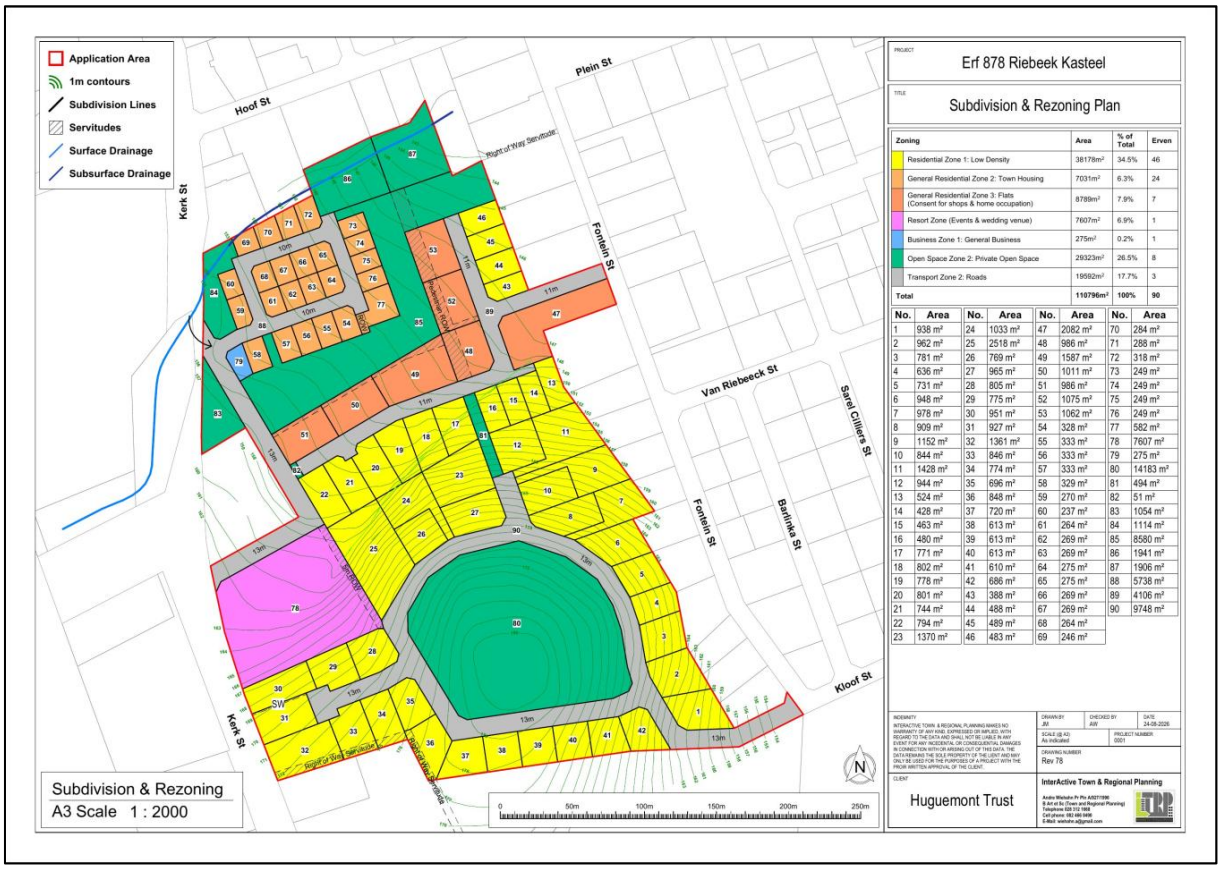


Figure 6: Subdivision and rezoning plan.

The development objective is to establish a sustainable residential development with a supporting business component, sensitively taking the topography of the application area into consideration and due respect and integration to and with the existing character of the town aligned with the relevant spatial policies.

The aim is to ensure that the proposal preserves the existing historic character and heritage of the town, while adapting to changing trends in housing and lifestyle needs, urban growth and town planning guidelines to ensure the long-term sustainability of Riebeek Kasteel.

The proposed residential township has the potential to provide for the following land-use components:

- → Low Density single residential dwellings
- → Town housing
- → Retail
- → Mixed-use residential
- → Events and Wedding Venue.
- → Private Open Space for stormwater servitude
- → Roads

The proposed Development Components

All proposed development will adhere to the proposed architectural guidelines as well as the Zoning Scheme regulations in accordance with Swartland Municipal Land Use Planning By-Law, 2020, as presented in paragraph 2b of this report.

Internal Road Network

The internal road network is split into 3 independent components, each with their own access points.

- One component gains access from Church Street (R311) south of Erf 1013 with an additional slipway from Church Street north of Erf 1013 and serves the retirement town housing development, a business property and the events and wedding venue.
- One component gains access from Fontein Street between Erven 202 and 449 and serves mixed use and single residential erven.
- One component gains access from Fontein Street, south of Erf 1286 and provides access to single residential erven.

The roads are laid out in a grid format as much as possible to conform to the grid layout of the rest of Riebeek Kasteel.

Retirement Village

A retirement village is proposed in the north-west section of the application area on subdivided Erven 54-77. The retirement village consists of an internal 10m road on Erf 88. The erven ranging between 237m2 and 582m2 with a total extent of 7031m². Erf 77 has an extent of 582m2 intended to be for a community erf. A right-of-way is proposed over Erf 77 to provide pedestrian access to the private open space. The applicable zoning for the retirement village is
General Residential Zone 2 for the single-title townhouses and Transport Zone 2 for the internal road.



Figure 7: Retirement Village component

Erf 79: Retail

Retail use is proposed on Erf 79 and is located at the entrance to the retirement village on a 275 m² erf.



Figure 8. Business component

Erven 80-87: Communal parks and integrated open space system

Parks are proposed for stormwater, a retention pond, the existing fountain, recreation and walkways. The top of the hill is proposed as a park with a walkway running down to the northern side of the hill to connect to a group of various open space erven around the retirement village. The open space on the hilltop is inter alia intended to link up with the proposed events and wedding venue. The existing fountain is located on Erf 85. Erven 84, 86 and 87 contain existing stormwater systems.



Figure 9: Communal parks and integrated open space system

Proposed Erven 1-46: Single residential dwellings

The single residential component is mostly proposed along the slopes of the hill providing views of the town and area. The top of the hill accommodates an open space for a park. Vehicular access to the single residential erven is from the southern side of Fontein Street. This component consists of 46 single residential erven with extents of between 388 m² and 2,518 m² with an average single residential erf size of 830 m² and covering a total extent of 38,178 m². Erf sizes are consistent with the existing surrounding single residential erf extents.



Figure 10: Single Residential Component and proposed architectural style typologies

Erven 47-53: Mixed-use residential. General Residential with small business uses is proposed on the ground floors of Erven 47-53, such as artist workshops, galleries, small craft retail, coffee shops or offices, with residential units above. These erven range from 986 m² to 2,082 m² in size, and provide a walkable link from the existing business node around Plein Street to Church Road along a landscaped wetland. Consent uses for shops and home occupation are included.



Figure 10a. Mixed-use general residential component

Erf 78: Events and wedding venue. An events and wedding venue is proposed on Erf 78, on Church Street. The venue will be designed to resemble a rural traditional farmstead, creating a transition from the agricultural surroundings into the village. All parking is to be accommodated on Erf 78.



Figure 10b. Events and wedding venue

Home-Owners' Association

A Master Home-Owners' Association will be established with a Constitution and Design Guidelines. The constitution and design guidelines are attached as part of the Architectural Design Parameters document.

Engineering Services:

- The design philosophy for the proposed internal road network will be similar to that of a typical urban road network and all internal roads within development clusters will be designed for low heavy vehicle traffic (construction vehicles, furniture removal and refuse trucks). Therefore, the design of the roads in terms of structure, material and layout will adhere to all relevant municipal regulations and criteria.

- There is no additional capacity within the existing external stormwater system and allowance should thus be made for on-site attenuation of the post development run-off which will be done.

- Water, sewer and solid waste services can be provided, subject to the bulk reservoir storage and outfall sewer upgrades identified by GLS, funded through Development Contributions calculated by the Municipality.

- The Traffic Impact Study (September 2026) concludes that the development will have limited to no impact on the adjacent road network.

Phasing of the development

The development is proposed to be developed in 4 phases as illustrated in the Phasing Plan below. The phases are foreseen as follows:

1. Phase 1 (Blue): The retirement village, including the town houses on Erven 54-77, business on Erf 79, private open space on Erven 83-87 and a road on part of Erf 88.

2. Phase 2 (Green): Single residential dwelling houses on Erven 13-22 and 43-46, mixed-use flats on Erven 47-53, private open space on a part of Erf 81 and Erf 82, and a road on Erf 89.

3. Phase 3 (Orange): Events and wedding venue on Erf 78 and a road on a part of Erf 88.

4. Phase 4 (Purple): Single residential dwelling houses on Erven 1-42, private open space on Erf 80 and a part of Erf 81, and a road on Erf 90.

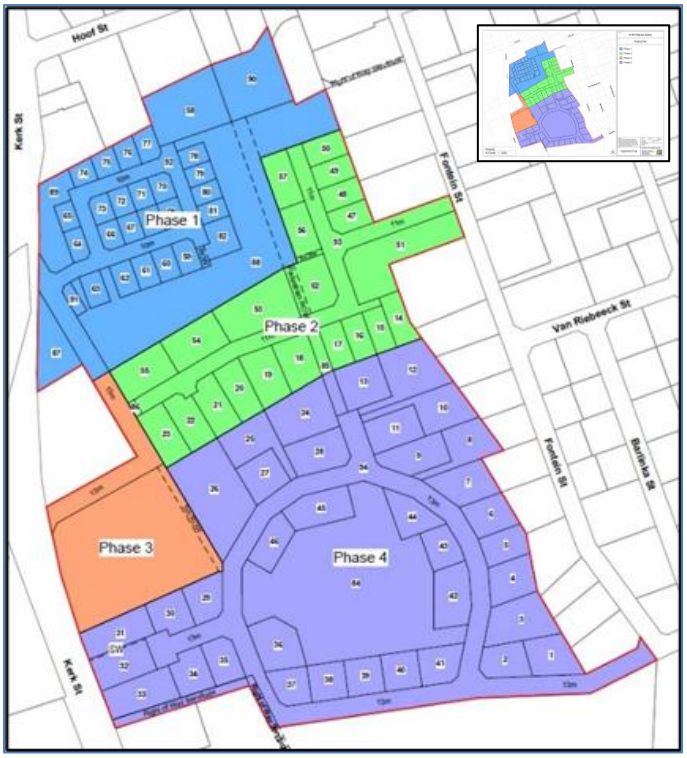


Figure 11. Phasing Plan

CONCEPT MASTERPLAN OF THE PROPOSED DEVELOPMENT – EXTRACT FROM THE URBAN DESIGN REPORT

PRECINCT APPROACH

Integrate the hill into the existing public open space system of the town

→ Connect the top of the hill to the network of pedestrian paths. This also provides access to the top of the hill for the new events and wedding venue next to The Barn and to all residence of the town.

Complete the fragmented town blocks:

→ Align new plots to the existing town grid. Adjust grid to accommodate transition to western edge. Situate houses on the street boundary with verandahs to contribute to intimate village streetscapes. Use a combination of hard (built-form) and soft (landscape) edges and extended thresholds.

Rethink the vehicular movement scheme:

→ The Church-Main street connection serve as the primary entry point into town when entering from the west (Malmesbury, Cape Town) and north (Riebeek West). Any through-access over the site detracts from that arrival experience. Vehicular access from Church street could be limited to users of The Barn, the new, small roadside retail, and the events and wedding venue. No vehicles other than emergency and services to cross line 6.

The masterplan is organized into distinct precincts, each designed to integrate seamlessly with the existing town fabric and landscape:

Church Street Threshold: Serves as the transition from agricultural to village landscape, featuring small roadside retail outlets and an event venue adjacent to The Barn.

Retirement Village: A fine-grained village of single-storey houses. The cottage-style homes feature verandas overlooking natural areas, fostering a sense of community and connection to the landscape.

Mixed-Use Village: Offers a direct pedestrian link to the town centre, with vehicular access from Main and Fontein streets. Small studio spaces with residential units above, and a public plaza that acts as a midpoint between the town centre and The Barn.

Single Residential: Houses are positioned on the street edge with verandas facing the street, creating soft and hard thresholds that reflect the local context. Architectural guidelines ensure a cohesive village character.

Southern Hill Edge Residential: single storey houses (Erven 35 to 40 with a 2.7 m wallplate and no habitable roof space) with strict architectural and landscaping restrictions, designed to minimize visual impact and blend with the natural topography.

TYPOLOGIES

Retirement Village

Single-storey retirement cottages feature verandas overlooking landscaped natural areas, blending indoor comfort with outdoor living. The design emphasizes accessibility, privacy, and community, with simple forms and pitched roofs inspired by local traditions. These homes are arranged to encourage social interaction and integrate harmoniously into the village environment.

Mixed-Use Residential

The mixed-use residential typology features buildings that combine living spaces with workshops or small retail outlets, often with residential units above. These structures are designed to encourage community interaction and flexibility, with simple forms and pitched roofs that reflect local architectural traditions. The arrangement supports walkability and integrates harmoniously into the village environment, fostering a vibrant and connected neighborhood.

Single Residential

Single residential homes are situated along the steeper slopes, leveraging topography to create layered views and subtle transitions between the public and private realm. Verandas face onto the street edge, while careful placement and landscaping mediate privacy. The architectural approach draws inspiration from local traditions yet allows for contemporary interpretation within the vernacular, ensuring new homes contribute to both the evolving character and the enduring identity of Riebeek Kasteel. Houses on the upper slopes must be designed within strict limits to minimize visual impact. Only single-storey, simple forms are permitted, constructed from natural materials that blend seamlessly with the landscape. Architectural guidelines should ensure that each dwelling remains visually unobtrusive, supporting the principle of sensitive integration with the site's topography and character.
These houses should also conform to a landscape masterplan to ensure integration with the landscaping on the hill.

Events & Wedding Venue

This transitional precinct draws inspiration from Cape farmland architecture, employing simple barn-shaped forms arranged within a traditional werf and cultivated landscape. This approach creates a meaningful transition from the agricultural surroundings into the village. The design reinforces the connection between agricultural landscape and the village townscape and provides a layered view towards town from Church Street.

Retail

Limited retail is proposed along Church Street in the form of farmstall typologies. These small-scale outlets are designed to reflect the rural character of the area.

Refer to Appendix G for the full Urban Design Report.

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 K**.

The Erf 878 is located within the urban edge of Riebeek Kasteel and is zoned Agricultural Zone 1. It is therefore not appropriately zoned for the proposed development. However, the appropriate application for subdivision and rezoning has been lodged with the Swartland Municipality.

The proposal will be located on vacant land within the urban edge, which is earmarked for residential and business development by the Municipal SDF, 2023-2027. All required legislative procedures are being followed to ensure the minimizing of any negative impacts and the maximizing of positive impacts on the environment. The proposed development has been designed to be sensitive to the existing character and heritage of the environment.

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.

There are no existing development approvals for the site. Erf 878 is the only large enough piece of vacant land located within the urban edge on the western side of Riebeek Kasteel to accommodate the proposed urban development. Erf 878 is indicated in the approved SDF for Riebeek Kasteel for residential and business development. Erf 878 is zoned Agriculture I and is not appropriately zoned for residential and business development. An application for the appropriate rezoning and consent use to allow the proposed residential and business development has been lodged

with the Swartland Municipality to run concurrently with the application for environmental authorisation submitted to the relevant authority under NEMA 2014 as amended.

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

The PSDF makes provision for the rezoning of land for development in urban areas.

The Western Cape Provincial Spatial Development Framework (PSDF) provides overarching guidance for spatial planning and land use management in the province, including the Swartland Municipality. It emphasizes sustainable development, economic growth, and the creation of integrated, resilient settlements. The PSDF supports mixed-use developments in urban areas to promote economic vitality and social cohesion.

In alignment with the PSDF, the Swartland Municipality has developed its own Spatial Development Framework (SDF) to guide local development initiatives. The Swartland SDF (2023-2027) aims to create sustainable settlements and liveable environments, facilitating economic and social prosperity. One of its key objectives is to enhance economic mobility and sustainable settlements by intensifying land uses within designated urban edges, thereby promoting mixed-use developments.

The Swartland SDF outlines specific strategies to achieve this, including:

- → Promoting rejuvenation of settlements while preserving precinct character, which encompasses infill development, increased floor factor, and opportunities for subdivisions or renewal projects.
- → Enhancing landscapes and utilizing assets as tourist destinations, supported by the provision of non-motorized transport (NMT) infrastructure and well-maintained pavements.

4.2	The Integrated Development Plan of the local municipality.

Since Erf 878 is located within the urban edge of Riebeek Kasteel and the proposed residential and business development is included in the 2023 Integrated Development Plan (IDP) of the Swartland Municipality, the following points are relevant:

1. Alignment with the IDP

The inclusion of Erf 878 in the 2023 IDP suggests that the proposed mixed-use development aligns with the municipality's strategic priorities for growth and infrastructure provision. The IDP emphasizes:

- → Sustainable urban expansion within designated urban edges.
- → Mixed-use developments that promote economic activities alongside residential growth.
- → Efficient use of existing infrastructure to minimize service delivery costs.

2. Urban Edge and Land Use

Being within the urban edge, Erf 878 is strategically positioned for development without contributing to urban sprawl. This supports:

- → Infill development and densification in line with the Western Cape PSDF.

→ Efficient land use for residential and business purposes, maximizing the development potential.

3. Rezoning and Compliance

Since the IDP includes this development:

→ Rezoning applications for mixed-use purposes are likely to be supported, provided they comply with the Swartland Municipality's Zoning Scheme By-Law.

→ Compliance with environmental and infrastructural requirements will be essential, especially regarding water, sewage, and traffic impacts.

4. Economic and Social Benefits

The proposed development could:

→ Boost local economy by creating jobs and attracting businesses.

→ Enhance service delivery and public amenities for the community.

→ Support housing needs identified in the IDP.

4.3.	The Spatial Development Framework of the local municipality.

The SDF indicates this Erf 878 as Agriculture Zone 1 that will have to be rezoned appropriately under SPLUMA to allow the proposed development. This application for rezoning and subdivision was submitted to Swartland Municipality for approval under different legislation. Please note that the Western Cape Provincial Department of Environmental Affairs and Development Planning allow the two applications to run together, but the planning approval may not be given before the Environmental Authorisation has not been approved.

4.4.	The Environmental Management Framework applicable to the area.

N/A

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

The definition of "Biodiversity" was expanded to include the "diversity" from a human perspective on issues such as heritage elements, urban planning, visual impression and sense of place. The alternatives were developed from an initial development proposal informed by initial site and surrounding conditions. This was presented as a pre application Basic Assessment Report wherein the initial layout alternative was informed by the site conditions, the issues, comments and impacts raised during previous rounds of the public participation process and the various specialist reports conducted. Due to the repeated long term agricultural practices on Erf 878 and the total destruction and removal of all-natural vegetation over a number of years, the biodiversity is limited to none and after lying fallow for 10 years, there are only pioneer plants associated with Renosterbos present. The immediately surrounding land use to Erf 878 is all severely transformed either to agriculture or urban development.

In addition to the above principles, aspects to rehabilitate and restore watercourse corridors and buffers have also been considered in the evolution of the layout alternatives.

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

The application for the proposed development has been in process since 2020, and as such, the 2017 Western Cape Biodiversity Spatial Plan (WCBSP) remains applicable. DEADP has confirmed that all biodiversity assessments, studies, and legal processes initiated prior to 13 December 2024 may continue to rely on the 2017 WCBSP. According to the 2017 mapping, small sections of the northern portion of the property are classified as Ecological Support Area 2 (ESA2), while the southern section, including the hill area, is mapped as Critical Biodiversity Area 1 (CBA1). A site-based botanical assessment confirmed, however, that the property has been cultivated for a prolonged period, and the areas mapped as CBA1 do not support intact natural vegetation.

Within the WCBSP (2017), the Krom River and the seep wetland area corridor are designated as ESA2 (Restore), with the objective of rehabilitating ecological processes and supporting soil, water, and faunal movement functions. This designation emphasises the need to maintain and, where possible, restore ecological functionality along the river corridor. The preferred development layout, Alternative 4, aligns with these guidelines by allocating consolidated open space along the identified ecological corridor and within the areas mapped as ESA2. This approach ensures that the degraded Krom River system and associated seep wetlands are retained as part of a continuous ecological open-space network.

The site is highly transformed, having historically been used for intensive agriculture. Aerial imagery from 2013 and 2015 illustrates large areas under cultivation. The botanical assessment confirmed that less than 12 ha of transformed or degraded veld will be further transformed through the proposed development, with only limited remaining natural features of botanical significance. These include the degraded Krom River corridor and a few *Olea europaea subsp*. *africana* (wild olive) trees intermixed with old fruit trees. The specialist concluded that, although the development overlaps areas mapped as CBA1 and ESA2, these mapped features no longer reflect intact or functional natural habitat. As a result, the botanical impact significance is rated Medium–Low without mitigation and can be reduced to Very Low through the application of feasible and effective mitigation measures.

From a freshwater perspective, the areas mapped as ESA2 correspond closely with the delineated Seep Wetlands 1 and 2 and with the degraded stretch of the Krom River along the northern boundary. These wetlands are groundwater-fed, dynamic in extent, and exhibit clear signs of historical disturbance, including canalisation, infilling, ploughing and irrigation. Both wetlands achieved a Present Ecological State (PES) Category E, indicating a seriously modified condition. Their Ecological Importance and Sensitivity (EIS) scores fall within the Moderate category, reflecting the general ecological value of seep wetlands for flow regulation and water quality functions, but reduced here due to anthropogenic disturbance. The Krom River is also seriously modified, with altered hydrology, channelisation, underground piped sections, and invasion by *Phragmites australis* and alien tree species.

The WCBSP guidelines for wetland and river management, as well as the Buffer Zone Guidelines for Rivers, Wetlands and Estuaries (Macfarlane & Bredin, 2016), informed the delineation of appropriate protective buffers. The freshwater specialist recommended a 20 m buffer around the remnant Seep Wetland 1 and a 15 m buffer for above-ground sections of the Krom River. Although full avoidance of these buffers is not feasible due to site constraints and historical disturbance, the development layout has been adjusted to minimise encroachment as far as practicable. All non-essential construction and operational activities will be prohibited within these buffers to reduce impacts on ecological processes.

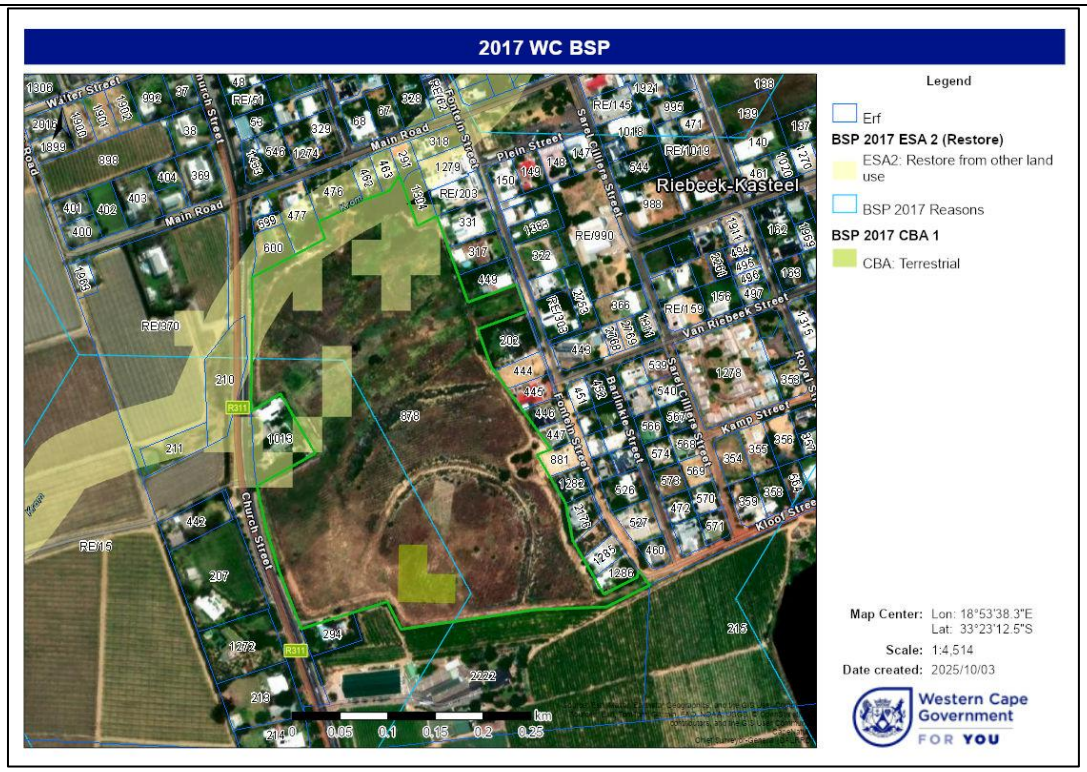


Figure 12. The Krom Rover corridor is highlighted as an Ecological Support Areas (Restore) (2017).



Figure 13: Overview of Erf 878, showing the property boundaries (red), previously cultivated areas (yellow) and potential remaining natural veld (green) as well as a small wet area (blue). ***Source;*** (Botes, 2021).



Figure 14. Watercourse Delineation Map.

The site has been highly transformed and has been used for intensive agriculture previously.



Figure 15: 2013 Aerial photograph showing the agricultural activities on the site.



Figure 16: 2015 Aerial photograph showing the agricultural activities on the site.

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

N/A

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.**

This is the Final BAR. The screening report submitted with the application form is the same as that included in **Appendix I**. It has been revised with the additional specialist input and evolution of the layout alternatives.

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

The proposed development is located on an Erf that is vacant and carries a zoning of Agriculture 1. The Swartland SDF indicates that Erf 878 is located within the urban edge proposed for residential development in Riebeek Kasteel. The site is strategically placed between main access roads within the built-up area , combined with its transformed nature, presents as the ideal place with infill development which addressed the need for both retail and residential needs.

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

Erf 878 is the only portion of developable land located at the western end within the urban edge of Riebeek Kasteel. The location of the erf is such that it can easily be serviced by the Swartland Municipality. There is also a very large

demand for residential opportunities in Riebeek Kasteel that far outstrips availability. This was confirmed during the feasibility study conducted by the applicant before embarking on the proposed development.	
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 E**).
The necessary existing services capacities are available. See municipal confirmation Letter attached under **Appendix E.**	
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.**

According to the Spatial Development Framework, 2019 as well as the draft 2023 Spatial Development Framework, Riebeek-Kasteel offers unique opportunities for the future expansion of the tourism sector and the residential component as a result of its unique sense of place and scenic natural landscape and resources.

OPPORTUNITIES

When taking into account all the relevant policy plans, which are also highlighted in the draft 2023 SDF, it is evident that the location and characteristics of the application area present excellent opportunities for the proposed development. The opportunities of the application area are as follows:

- It is located within the urban edge,
- borders on the CBD,
- offers beautiful views due to location and topography
- identified in the Spatial Development Framework, 2019, as well as the draft 2023 SDF as earmarked for residential development
- densification is proposed by the Spatial Development Framework, 2019 as well as the draft 2023 SDF
- business development, mixed use and higher residential densities are encouraged by the Spatial Development Framework, 2019 as well as 2023 SDF, along activity streets
- location adjacent to two activity streets namely Church Street (R311) and Main Street
- availability of infrastructure
- the adjacent Main and Church street crossing has recently been upgraded to ensure higher levels of safety on the roads
- the existing fountain and stream which is to be incorporated to provide a memorable historical focal point/landmark and to contribute to a unique sense of place.

The aim is to ensure that the proposal preserves the historic character and heritage of the town, while adapting to changing trends in housing and lifestyle needs, urban growth and town planning guidelines to ensure the long-term sustainability of Riebeek-Kasteel. The proposed residential township has the potential to provide for the following land-use components:

- Low Density single residential dwellings
- Town housing retirement units
- Apartment focused mixed use
- Events and wedding venue
- A shop
- Parks

- Private Open Space for stormwater servitude
- Roads

DESIRABILITY OF THE PROPOSAL

Growth Stimulus

The primary factor, stimulating growth in the Swartland, is most likely the area's favourable distance from the Cape Town metropole and the number of tourist attractions in the area. Similar to growth patterns of towns on the outskirts of other cities world-wide, the benefits include a lifestyle alternative to city life, lower cost structure and good municipal services whilst still having good access to markets in the metropole.

A further factor which has recently developed and which may contribute to future growth in the Swartland, is the global Covid-19 pandemic which may drive some people away from higher density city living to lower density rural living, where the infection rate may be lower. A further stimulus related to the global Covid-19 pandemic in South Africa was the expansion of effective communication links that made physical meeting sessions redundant. Nowadays a large number of the workforce can choose from where they want to work and this has made small rural towns very attractive as a base from which to operate.

As a result of the increasing popularity of Riebeek-Kasteel as a residential destination for retirees and various persons working in Cape Town and the surrounding towns, the need for residential developments in Riebeek-Kasteel, has increased.

Policy & Legislation

The proposal is consistent with the following land-use management policies and legislation:

- Integrated Urban Development Framework, 2016 of which the purpose is to achieve integrated sustainable human settlements
- Efficient land governance and management
- Inclusive economic development
- West Coast District Municipality IDP, 2017 of which the purpose is to pursue economic growth and the facilitation of job opportunities and to promote the social well–being of residents, communities and targeted social groups in the district, namely the elderly
- Swartland Municipality IDP revised 2018 of which the purpose is to ensure healthy lives and promote well-being for all at all ages.
- Swartland Municipality SDF revised 2019 of which the aim is to enhance sustainable, liveable urban environments.

Socio-economic impact

The proposal is foreseen to create new opportunities and to add vibrancy to the town by offering a wider variety of residential uses and providing access to housing opportunities for different segments of the market in terms of age, needs and financial capacity.

Furthermore, the proposal is foreseen to increase thresholds of existing businesses and tourist facilities and offer new employment and business opportunities to expand the town and surrounds further and to promote and ensure its long-term sustainability.

The proposal also offers businesses and residents the opportunity of a lower cost structure and good municipal services whilst still having good access to markets and employment opportunities in the metropole.

Compatibility

The proposal presents a mixed-use development, which integrates residential, business, social and community facilities within a single development. The business component is mostly along or close to the R311 Church Street activity corridor, which thus adheres to the SDF, 2019 and draft 2023 and applies the planning and financial principle of locating business facilities along activity streets and corridors to increase the accessibility thereto and visibility thereof, thus increasing the potential number of visitors.

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.

N/A

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in **Appendix F**.

The Public Participation Process has been conducted in terms of the Environmental Impact Assessment (EIA) regulations as promulgated in the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) (as amended) and the 2014 NEMA EIA Regulations promulgated in Government Gazette No. 38282 and Government Notice R983, R984 and R985 on 4 December 2014 (as amended) as outlined in Section 41(2) of these Regulations.

There have been three rounds of pre-application public participation conducted to date. These were undertaken by the previous Environmental Assessment Practitioner (EAP) on the project, Charel Bruwer of Enviro Africa, and are outlined in this report. Lornay Environmental Consulting took over the project during the In-Process Phase in January 2025. The pre-application and in-process public participation are summarised herein.

All registered interested and affected parties who were identified in the previous rounds of pre-application public participation remain registered I&APs and have been and will continue to be notified of all public participation and decisions going forward.

Three rounds of pre-application public participation were conducted by Charel Bruwer of Enviro Africa. Please note that the information below relating to the three rounds of out of process public participation, was supplied by the previous EAP.

The three rounds were conducted at the following times:

a. 2020 Public participation: 25 March 2020 to 26 May 2020 (60 days)

b. 2021 Public participation: 16 March 2021 to 22 April 2021 (30 days)
c. 2024 Public participation: 15 March 2024 to 16 April 2024 (30 days)

Lornay Environmental Consulting was then appointed to take over the application on behalf of the applicant. Lornay Environmental Consulting resubmitted the Application Form with the outstanding information which was requested by DEA&DP and conducted 1 round on In-process public participation from 12 March 2025 to 11 April 2025. All comments received have been recorded and responded to. However, it was apparent that there were still outstanding matters relating to the project and therefore in consultation with DEA&DP, it was decided to withdraw the applications whilst the additional information and concerns were attended to.

Following the resubmission of the application, a fifth round of public participation (PPP 5) was conducted from 24 April 2026 to 26 May 2026 on the In-Process BAR and the Draft HIA, presenting Alternative 4 (Rev 71). Notice was given by advertisement in the Swartland Joernaal on 24 April 2026, by two site notices, and by notification of all registered I&APs and organs of state. The documents were made available on the Lornay website.

Following PPP 5 and the HWC IACom process of July to September 2026, the layout was refined into Alternative 5 (Rev 78). This amended BAR forms part of the sixth and final round of public participation (PPP 6).
the final round of public participation will run from the 10th of November to the 9th of December 2026, after which the final report will be submitted to the Department of Environmental Affairs and Development Planning for consideration.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

- → Heritage Western Cape: Further Requirements issued August 2026 (IACom meeting of 22 July 2026); Final Comment on the Section 38(8) HIA issued 30 September 2026, endorsing the HIA and approving the Rev 78 drawing package (Appendix G3d).
- → Cape Nature
- → Department of Water and Sanitation (Warren Dreyer, Derril Daniels, Nelisa Ndobeni)
- → Dept of Agriculture (Elsenburg)
- → DEA&DP: Pollution Management
- → DEA&DP: Waste Management
- → DEA&DP: Biodiversity (comments no longer essential due to change in application scope and removal of fuel station)
- → DEA&DP: Development Management (Region 1)
- → Swartland Municipality
- → West Coast District Municipality
- → Western Cape Department of Infrastructure (Road Planning)

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

N/A

5. if any of the State Departments and Organs of State did not respond, indicate which.

N/A

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.

Public Participation Round 1, 2 And 3 – undertaken by previous EAP

Summary provided by Charel Bruwer of Enviro Africa (PPP 1 to 3):

An initial development layout was designed by the Town Planner and the (then) EAP. This initial Alternative A1 (now Alternative 1) was made available to potential Interested and Affected Parties (I&APs), relevant state departments, organs of state and community organisations that may have jurisdiction in the proposed development, meeting all the requirements as stipulated under NEMA 2014 as amended, for public comment. From the comments received it soon became evident that participants were, amongst other, concerned about the wedding venue on top of the hillock and the visual impact that it would have from the surrounding topography of Riebeek Kasteel. Concern was also expressed in the comments received about the perceived alteration of the character and sense of place of Riebeek Kasteel. Please note that due to the Covid-19 pandemic, the public participation process was modified as determined by DEA&DP at the time to provide access to information by all potential I&APs. Recognising the concerns raised by the participants in the first round of the public participation process, some specialist input studies were commissioned e.g. botanical and biodiversity study, archaeological study of the site, an architectural design study as well as statement on visual impact to further inform a modified design layout presented as Alternative A2 (now known as Alternative 2).

The major difference between Alternative A1 and A2 (Alternative 1 and 2) lies in the removal of the wedding venue that was originally included in Alternative A1 (Alternative 1) as a visual feature and replacing it with ~25 single storey residential erven on top of the hillock. Another modification was creating a visual corridor from the entrance along Church Street from the south across the middle of Erf878 to the old church located on the ridge to the north-west.

Taking cognisance of the Heritage Western Cape response, as a commenting authority on the submitted NID, that a heritage study, inclusive of a visual assessment must be submitted with the final BAR, extensive discussions and inputs were obtained from a heritage practitioner, a visual impact specialist, an architectural design specialist, urban planner, infrastructure design engineers, traffic and road design specialist and the proponent's economic specialists.

Public Participation Round 4 – Lornay Environmental Consulting

Based on the information emanating from the first three rounds of Public Participation, the layout was modified in consultation with the specialists and town planning team and previous preferred Alternative 3 was distributed during the fourth round of Public Participation conducted by Lornay Environmental Consulting.

Public participation process 4 ran from 12 March 2025 to 11 April 2025.

Below is a summary of comments received:

1. Heritage and Visual Character

- **Townscape Integration:** Objections were raised regarding the "introverted" nature of earlier layouts, which were perceived as gated enclaves detached from the historic open grid of the town.
- **Visual Focal Points:** Stakeholders expressed ongoing concern that the development would compete with or obstruct the historic Dutch Reformed Church steeple, which serves as a critical visual focal point.

- **Heritage Grading:** There is a fundamental discrepancy regarding the site's significance, with the developer's initial assessment at Grade IIIC while HWC asserts the site and its context warrant Grade IIIA protection.
- **Topographical Impact:** Concerns were noted regarding development on the hill crest, which serves as a topographical "green frame" and containment for the village.

2. Scale, Density, and Town Character

- **Density Levels:** The proposed gross density (over 10 du/ha) and nett density (approximately 20 du/ha) are considered by the RVRA to be inappropriate for a rural village.
- **Commercial Component:** The scale and location of the proposed retail component along Church Street (R311) were criticized as being unsympathetic to the existing tourist route and likely to detract from the established CBD.
- **Architectural Language:** Earlier designs were described as "unoriginal urban suburbia" that failed to respect the traditional 19th-century 'kerk dorp' identity of Riebeek Kasteel.

3. Stormwater and Hydrology

- **Technical Omissions:** Initial engineering reports were cited for a "complete absence" of stormwater calculations and for failing to specify the size or location of mandatory attenuation facilities.
- **Attenuation Requirements:** Technical projections suggest a required attenuation dam of 10,000 m² to 15,000 m², which could potentially displace the entire area earmarked for the retirement village.
- **Geohydrological Data:** Stakeholders highlighted the absence of a geohydrological study despite the site being a recognized active seepage zone with established springs and fountains.

4. Civil Services Infrastructure (Sewer and Water)

- **Sewer Capacity:** Bulk sewers in Pieter Cruythoff Avenue are confirmed to be at capacity. Furthermore, the RVRA reported existing illegal interconnections between stormwater and sewer systems causing raw sewage overflows during rainfall.
- **Potable Water:** The Riebeek Kasteel reservoir storage is insufficient for the development and requires upgrades, the value of which will be determined between the developer, the municipality and any future developers in the area.
- **Electricity:** The Basic Assessment Report (BAR) lacked formal confirmation of bulk electrical supply capacity from Eskom or the municipality.

5. Traffic and Access

- **Fontein Street Access:** There is strong community opposition to utilizing Fontein Street as a primary access route due to its limited capacity and existing traffic issues.
- **Road Safety:** Concerns were raised regarding the safety and rural road geometry of new access points off the R311 (Church Street).
- **Outdated Studies:** The RVRA rejected the initial Traffic Impact Assessment (TIA) on the basis that it was modeled on an outdated version of the site development plan.

6. Natural Environment and Economic Impact

- **Wetland Protection:** Objections were noted regarding the potential loss of functional portions of Seep Wetland 1 and 2.

- **Economic Viability:** Local business owners expressed concern that additional commercial footprints would draw customers away from a CBD that is already economically strained.
- **Pollution:** Potential noise and light pollution during both the construction and operational phases were identified as risks to the village atmosphere.

7. Procedural and Public Participation (PP) Concerns

- **Consultant Conduct:** The RVRA formally objected to the "dismissive and derogatory" tone used by the developer's previous consultants when responding to public submissions.
- **Stakeholder Engagement:** There was a perception that the PP process was being followed as a formality rather than in a spirit of meaningful engagement.
- **Public Sentiment:** An online petition submitted during this process included 211 signatures from residents supporting the objections raised by the RVRA

Public Participation Round 5 – Lornay Environmental Consulting

PPP 5 ran from 24 April 2026 to 26 May 2026 and presented Alternative 4 (Rev 71) and the Draft HIA as preferred. All comments received have been recorded and responded to in the Comments and Response Report (Appendix F1). Below is a summary of comments received:

1. Heritage and Process

- An objection referred to HWC's previous negative Final Comment and questioned whether the specialist reports modelled the same version of the layout. The heritage-related comments were incorporated into the HIA submitted to HWC. HWC IACom then issued Further Requirements (August 2026), leading to Alternative 5, and approved the Rev 78 drawing package in its Final Comment of 30 September 2026.

2. Civil Services

- Objections stated that the water and sewer upgrades are not shown to be secured, that the WCDM bulk water capacity analysis is not included, and that the Swartland Municipality services letter (7 December 2023) and the solid waste confirmation should be updated. Bulk upgrades are to be funded through Development Contributions calculated by the Municipality in accordance with Council policy (Civil Engineering Services Report, Rev F).

3. Traffic and Access

- Concerns were raised that the traffic study does not assess the events and wedding venue, that written Provincial Roads Authority approval is required for the R311 access, and that the parking departure is not reconciled with the traffic study. Neighbours objected to additional traffic on Fontein Street.

4. Freshwater and Stormwater

- One I&AP proposed that the lower wet portion of the site be developed as a botanical garden instead of housing. Another questioned the freshwater assessment's single site visit, the assessment of wetland condition, and the stormwater and floodline calculations. The layout follows the freshwater specialist's delineation and buffer recommendations.

5. Neighbouring Residents

- Adjoining residents raised boundary security, privacy, possible structural impacts during construction, density and building heights. A summary of permitted storeys and heights in metres was added to the Architectural Guidelines.

6. Neighbouring Agri-tourism Business

- The adjacent Het Vlock Casteel (Môrester farm) welcomed the retirement village and residential components. However, it objected to the events and wedding venue in an already saturated local market, to the farmstall's potential effect on established businesses, and to the new road from Fontein Street.

7. Organs of State

- Swartland Municipality registered as an I&AP and noted that its land use decision will follow the decision on the EIA application.
- The Department of Water and Sanitation / BOCMA confirmed that its comments of 9 April 2025 still apply.
- DEA&DP Waste Management required the waste management hierarchy to be incorporated into the EMPr.

8. RVRA

- The RVRA confirmed its support for the revised development, subject to the resolution of engineering and infrastructure concerns, in its letter of 17 November 2025 (Appendix F2) and its PPP 5 comments (Appendix F1).

Comments received after PPP 5

- **Western Cape Department of Infrastructure (Road Planning), 28 October 2026:** the Department indicated that it cannot support the application in its current form, with reference to its comment of 23 April 2024 refusing a left-turn slip off Main Road 227 (R311). This comment refers to an outdated version of the SDP. The left-in access is retained in Alternative 5, but it no longer serves the fuel station and commercial hub on which the Department's 2024 comment was based. It now gives access only to the small retail erf, the retirement village and the events and wedding venue, so its use and impact are substantially reduced (Traffic Impact Study, Section 6.11). The final geometric design of the access will be submitted to the Department for approval before construction of the access.
- **Sewer capacity comment (9 May 2026, updated 26 May 2026)** on the Civil Engineering Services Report (Ref. 20041, Rev E, December 2025): the comment refers to the GLS Capacity Analysis. That analysis confirms that the existing sewer reticulation from Erf 878 to the main outfall sewer in Pieter Cruythoff Avenue has sufficient capacity, but that the main outfall sewers in Pieter Cruythoff Avenue are at capacity and must be upgraded, with master plan items SRkS1.2 and SRkS1.3 as the minimum required. Sewer capacity is therefore available subject to these bulk upgrades. They are to be funded through the Development Contribution (BICL) calculated by Swartland Municipality in accordance with Council policy, estimated at ±R2.8m excluding VAT (Civil Engineering Services Report, Rev F, Appendix E).

Public Participation Round 6 – Lornay Environmental Consulting

Summary of PPP 6 comments, after the commenting period closes.

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 x**	NO
1.2.	Provide the name and or company who conducted the specialist study.		

R H Bradshaw & Associates CC Consulting Engineering Geologists – See Appendix G2 for the Geotechnical Assessment.

A Freshwater Impact Assessment was undertaken by Kim van Zyl of Delta Ecology (site assessment on 20 February 2025; report dated 5 December 2025) – See **Appendix G8.** The findings of the report are summarised as follows:

Identified Watercourses and Ecological Status
Field assessments confirmed three primary aquatic features on the subject property: the non-perennial Krom River intersecting the northern boundary, and two seep wetland systems (Seep 1 and Seep 2) sustained by groundwater discharge.

- **Present Ecological State (PES):** All identified features are classified as Category E (Seriously Modified) due to historical agricultural activities, excavation, and canalisation.
- **Ecological Importance and Sensitivity (EIS):** Seep wetlands are rated as "Moderate" primarily due to their functional role in local water provisioning, while the Krom River is rated as "Marginal/Low".

Evaluation of Development Alternatives
An iterative screening process was conducted to assess four development alternatives:

- **Alternatives 1 and 2:** These layouts posed the highest ecological risk, with significant encroachment into the ESA2 river corridor and wetland areas, resulting in substantial habitat loss and hydrological disruption.
- **Alternative 3:** This alternative provided improvements by shifting the footprint onto disturbed areas and respecting heritage corridors, yet it still involved moderate encroachment into freshwater buffer zones.
- **Alternative 4 (carried forward into preferred Alternative 5):** This layout is the most responsive to aquatic constraints. It successfully avoids all functional portions of Seep Wetland 2 and the above-ground sections of the Krom River. Encroachment is limited to approximately 100 m² of the already degraded lower section of Seep Wetland 1. The freshwater specialist assessed Alternative 4. Alternative 5 carries forward the freshwater layout of Alternative 4, so these findings apply equally to Alternative 5.
- **No-Go Alternative:** Maintaining the status quo would result in the continued degradation of these systems by invasive alien species without the benefit of the rehabilitation and management measures proposed in the development framework.

Impact Assessment for Alternatives 4 and 5 (Preferred Alternative 5)

While Alternative 4 involves limited habitat loss (0.01 ha), the associated impacts are rated as "Low" significance following the implementation of recommended mitigation measures. Key mitigations include the demarcation of functional wetland zones as "No-Go Areas" and the implementation of a 15–20 m buffer for seeps and a 10 m buffer for the Krom River where feasible.

The proposed development is considered permissible from an aquatic biodiversity perspective, provided all mitigation measures are strictly implemented. The following regulatory actions are required:

- → **National Water Act (NWA) Application:** A Water Use Authorisation (WUA) is required because the development falls within the 500 m regulated area of wetlands and the 100 m regulated area of the river.
- → **Authorisation Level:** Given that the post-mitigation risk is assessed as "Low," it is recommended that the project be authorized under a General Authorisation (GA).
- → **Specialist Studies:** The developer is required to conduct a groundwater impact assessment during the water use authorisation process.
- → **Operational Management:** Long-term management of the wetlands, including controlled community access and alien invasive plant control, must be overseen by the Homeowners Association (HOA)

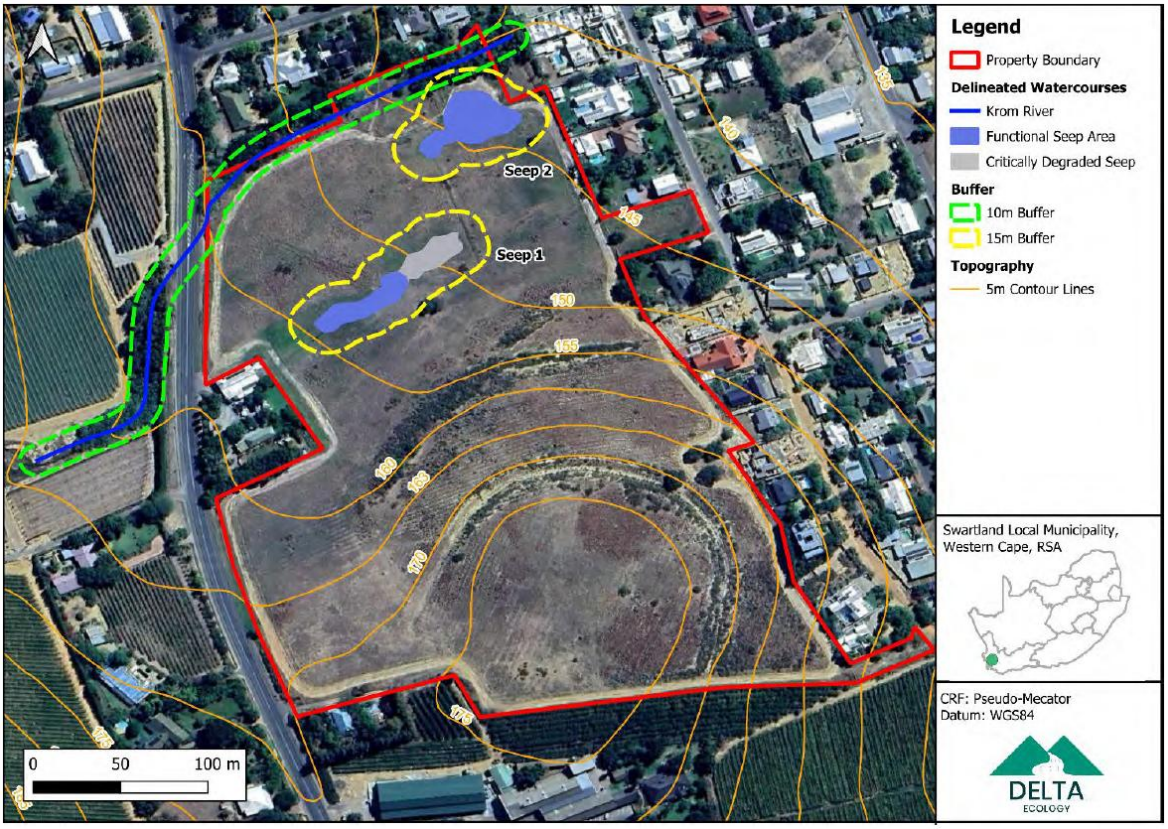


Figure 17a. Water course delineation map provided by Freshwater specialist

The recommended buffer for the identified seep wetlands on Erf 878 is 15 to 20 meters. In the preferred development framework (Alternative 4, carried forward into Alternative 5), these functional wetland zones and the majority of their associated buffers are incorporated into Open Space Zone 2 to ensure ecological protection and hydrological functioning.

Specific implementation within the Alternative 4 and 5 layouts utilizes a 20-meter buffer where feasible; however, buffer widths are reduced to approximately 5 meters in certain sections where space is limited by the required engineering and road network. It is a requirement that these functional wetland portions be strictly demarcated as no-go areas during construction to prevent any non-essential activities from occurring within the established buffers. Management of these areas, including controlled community access, will be the responsibility of the Homeowners Association (HOA) to prevent further degradation

The following mitigation measures are required by the aquatic specialist to ensure that the impacts of the preferred Alternative 5 are maintained at a "Low" significance level and to support the application for development rights:

General Preservation and Spatial Constraints

- → **Buffer Implementation:** A 10m to 20m buffer area must be maintained around all watercourses as far as possible. Specifically, 10m for the Krom River and 15–20m for the seep wetlands, although reduced buffers of approximately 5m are permitted where engineering constraints are unavoidable.
- → **No-Go Areas:** The functional portions of Seep Wetland 1, Seep Wetland 2, and the Krom River must be strictly demarcated as "No-Go" areas during both construction and operational phases.
- → **Hydrological Connectivity:** Throughflow from Seep Wetland 1 must be facilitated via indigenous vegetated earthen swales connecting to the Krom River to ensure habitat and hydrological connectivity.

Technical Infrastructure and Stormwater Management

- → **Stormwater Controls:** No untreated or direct stormwater runoff is permitted to enter the watercourses. All runoff must be directed through vegetated swales and detention ponds featuring flow dissipaters to ensure diffuse release.
- → **Erosion and Sedimentation:** Sediment traps and curb inlet grates must be incorporated into the stormwater design to capture debris and silt. Regular monitoring by the Environmental Control Officer (ECO) is required to address any erosion or sedimentation immediately following heavy rainfall.
- → **Groundwater Assessment:** A formal groundwater impact assessment must be conducted during the water use authorisation process.

Sewage and Waste Management

- → **Disposal Systems:** The development must tie into the municipal mainline sewage system or utilize fully contained conservancy tanks serviced by truck. No sewage treatment, irrigation, or soakaways are permitted on-site.
- → **Containment:** Sewage manholes located upslope of watercourses must include surcharge containment and emergency storage for two hours of peak flow.
- → **Maintenance:** Sewage infrastructure must be constructed to SANS/SABS specifications and inspected by a plumber every 10 years.

Construction Phase Controls

- → **Site Layout:** Construction camps, stockpiles, and refueling areas must be located on level ground outside of the designated No-Go areas and buffers.
- → **Chemical Management:** Hazardous substances must be stored in bunded, weatherproof containers. Drip trays are mandatory at all fuel dispensing areas and under stationary machinery.
- → **Concrete Handling:** Mixing must occur on impermeable surfaces outside of no-go areas, with temporary bunds constructed around areas where cement is cast in situ.
- → **Environmental Oversight:** A weekly ECO inspection is required to ensure compliance with the Environmental Management Programme (EMPr) and to address unforeseen disturbances.

Operational Management and Monitoring

- → **HOA Responsibility:** Long-term management of the Open Space Zone 2, including the control of Alien Invasive Plant Species (AIPS) and management of community access to water sources, must be enforced by the Homeowners Association (HOA).
- → **Landscaping:** Buffer areas must be landscaped with indigenous vegetation and monitored monthly for health and the presence of invasive species.
- → **Education:** Residents and tenants must be formally notified of the sensitivity of the onsite wetlands

1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.

See comment from Freshwater specialist above.

There was no aquifer that was identified on site, but 16 test pits were dug, spaced over Erf 878 to determine the impact of the subsurface conditions on proposed infrastructure and to plan the engineering techniques to tailor the underground development infrastructure to the site conditions. Analysis of the test pit results indicated that there were only three pits where a perched water table was encountered (see Report on Geotechnical Conditions for Services in **Appendix G2**).

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 test pits were dug to a depth of ~1.3 metres. The perched water tables in the three pits ranged between 0.5 to 0.8 metres from the surface. It must be noted that this test pit study was done during a very wet period in 2021 with surface water present on the northern portion of Erf 878. Engineering management techniques are well developed to deal with these sorts of subsurface conditions.

2. Surface water

2.1.	Was a specialist study conducted?	**YES x**	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
Delta Ecology – Kimberley van Zyl			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		

The previous EAP on the project, Charel Bruwer of Enviro Africa, provided the initial information relating to possible water resources on site. The then EAP, carries professional registration under the South African Council for Natural Scientific Professions as a Professional Environmental Scientist since 1983 and was employed, amongst other, as an applied limnologist for 22 years by Dept of Water Affairs and thereafter for 25 years as a private applied limnologist, conducted a water resources study of Erf 878 and immediate surrounds.

In addition to the above, Kim van Zyl from Delta Ecology, was appointed in February 2025, to delineate the wetlands and water resources on the site. Her findings included the following:

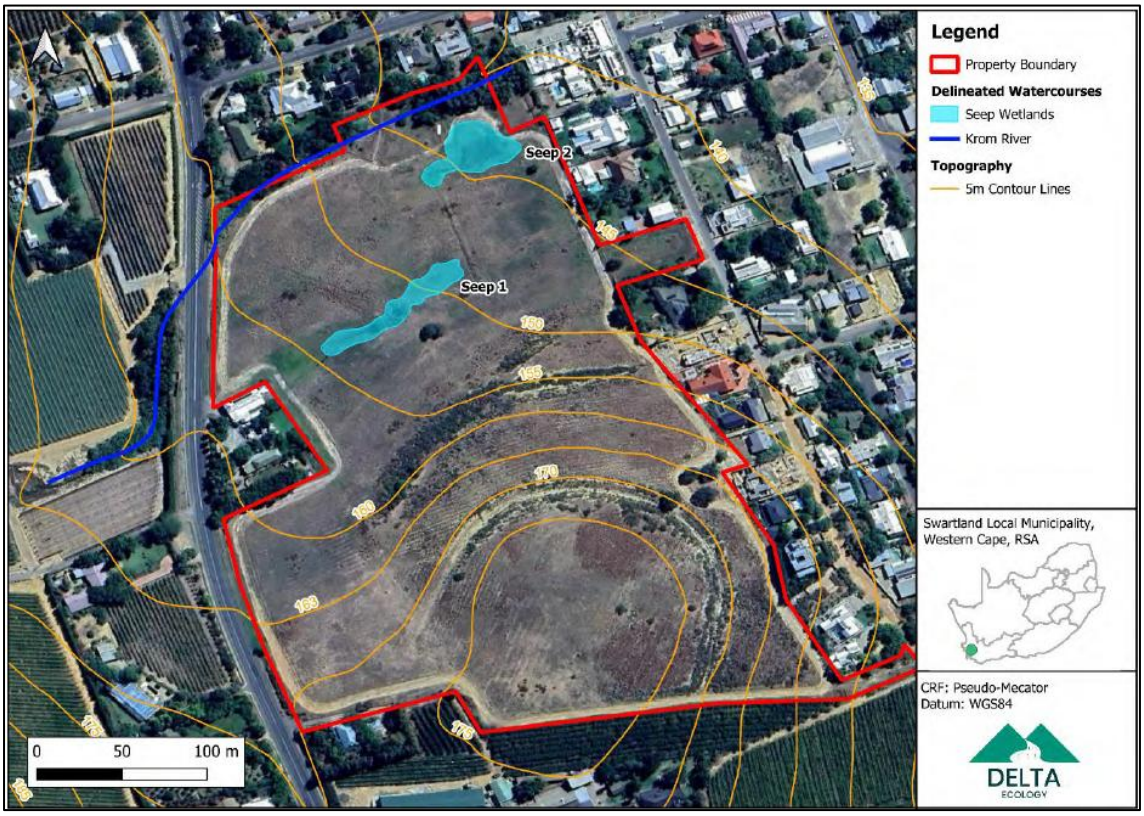


Figure 17b. Wetlands delineation for the site.

The presence of confirmed aquatic features on Erf 878 has fundamentally dictated the spatial configuration and management framework of the proposed development to ensure environmental compliance and the securing of development rights

1. Systematic Layout Optimization

The iterative design process was directly informed by the "Very High" aquatic sensitivity of the site. The development transitioned through five alternatives to mitigate risks to the non-perennial Krom River and the two identified groundwater-fed seep wetlands

- → Alternatives 1 & 2: These were rejected due to significant encroachment into the ESA2 river corridor and wetland areas, which posed high ecological risks
- → Alternative 3: While improved, it maintained a moderate impact due to buffer zone encroachments
- → Alternative 4 (carried forward into preferred Alternative 5): This layout was specifically engineered to avoid all functional portions of Seep Wetland 2 and the above-ground Krom River

→ The development footprint was shifted to utilize previously disturbed or transformed areas, successfully confining unavoidable encroachment to approximately 100 m² (0.01 ha) of the already degraded lower portion of Seep Wetland 1

2. Spatial and Buffer Zoning

To protect the hydrological and ecological integrity of the watercourses, the following spatial constraints were integrated into the site plan:

→ Open Space Zone 2: All functional freshwater features and their associated buffers have been incorporated into a dedicated Private Open Space zone to ensure long-term protection

→ Buffer Requirements: A standard 15–20m buffer is applied to seep wetlands and a 10m buffer to the Krom River. In restricted areas where engineering or road network requirements are unavoidable, reduced buffers of approximately 5m have been implemented for the degraded sections

→ No-Go Areas: Functional wetland and riparian zones are designated as "No-Go" areas, requiring strict demarcation during the construction phase to prevent non-essential activities and habitat disturbance

3. Infrastructural and Management Mitigation

The presence of these watercourses necessitates specific technical interventions to maintain a "Low" post-mitigation impact rating:

→ Stormwater Management: Treated runoff must be directed through vegetated swales and detention ponds featuring flow dissipaters to prevent erosion or direct discharge into the watercourses

→ Sanitation Infrastructure: To prevent contamination, the development must tie into the municipal mainline or utilize fully contained conservancy tanks; no soakaways are permitted

→ Operational Oversight: The Homeowners Association (HOA) will be legally responsible for the long-term management of these aquatic zones, including alien invasive plant control and managed community access to the water sources

4. Regulatory Requirements for Authorization

Due to the development falling within the 500m regulated area of wetlands and the 100m regulated area of the Krom River, a Water Use Authorisation (WUA) is required under the National Water Act. Because the preferred layout (Alternative 5, which carries forward the Alternative 4 freshwater layout) reduces all impacts to a "Low" significance level, it is recommended that the project be authorized under a General Authorisation (GA). Furthermore, a formal groundwater impact assessment must be conducted as part of the WUA process to ensure no disruption to the groundwater emergence sustaining the seeps.



Figure 17c: Area of artificial seepage dominated by *P. clandestinum* adjacent to the neighbouring restaurant. This area has likely developed as a result of artificial stormwater enhancement and irrigation runoff from the restaurant garden. Source; (Van Zyl and Brunings, 2025).



Figure 17d: A well has been developed within Seep Wetland 1. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 18a: A channel has been excavated from the central well in Seep Wetland 1 leading westwards. This has revealed additional points of perched groundwater as indicated by the presence of *T. Capensis*. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 18b: Dark, low-chroma, organic soil sampled from within the central portion of Seep Wetland. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 18c: Permanent wetland zone within Seep Wetland 1 dominated by *T. Capensis*. A single *S. guineense* can be seen in the background. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 19a: A SW canal dominated by *T.Capensis* located to the east of the proposed development site boundary. ***Source***; (Van Zyl and Brunings, 2025).



Figure 19b: Preferential flow path crossing the perimeter road along the eastern boundary. This flow path extends from the portion of Seep Wetland 1 located west of the road**.** ***Source;*** (Van Zyl and Brunings, 2025).



Figure 20: Seep Wetland 2 is situated in the northeastern corner of the site. The foreground is dominated by *C. dactylon* grasses, followed by T. capensis and a Sesbania spp. (small trees). In the background, *P. alba* trees are visible on the left, while P. australis is present on the right. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 21: Point at which the Krom River enters the proposed development site by means of a degraded stormwater channel. Bank stabilisation measures have collapsed and are currently blocking the stormwater pipeline. ***Source;*** (Van Zyl and Brunings, 2025).



Figure 22: Point at which the Krom River emerges from the underground pipeline in the northern portion of the site. Rubble has been used for infill and bank stabilisation. ***Source;*** (Van Zyl and Brunings, 2025).

Buffer determination onsite

The freshwater specialist applied the methodology outlined in the Buffer Zone Guidelines for Rivers, Wetlands and Estuaries (Macfarlane & Bredin, 2016) to determine appropriate buffer requirements for the onsite watercourses. Based on this assessment, a 15–20 m buffer is recommended around the Seep Wetlands, while a 10 m buffer is proposed for the sections of the Krom River that are aboveground.

The specialist notes that full avoidance of these buffer areas is not feasible, as portions of the proposed development will encroach into the recommended buffer zones and will affect part of the degraded Seep Wetland 1. To minimise impacts, it is recommended that the functional areas of both Seep Wetland 1 and Seep Wetland 2 be designated and demarcated as "No-Go" areas during construction. All non-essential construction and operational activities must be excluded from these buffers, including construction camps, laydown areas, stockpiles, cement mixing, ablution facilities, and similar activities.

While wetland systems commonly benefit from controlled access or fencing to ensure long-term ecological protection, the specialist acknowledges that these seep wetlands also function as an important water source for the surrounding community. Continued public access will therefore need to be accommodated. The specialist recommends that such access be formally managed by the Homeowners' Association (HOA) to prevent littering, dumping, and other forms of degradation that could compromise the ecological integrity of the wetlands.

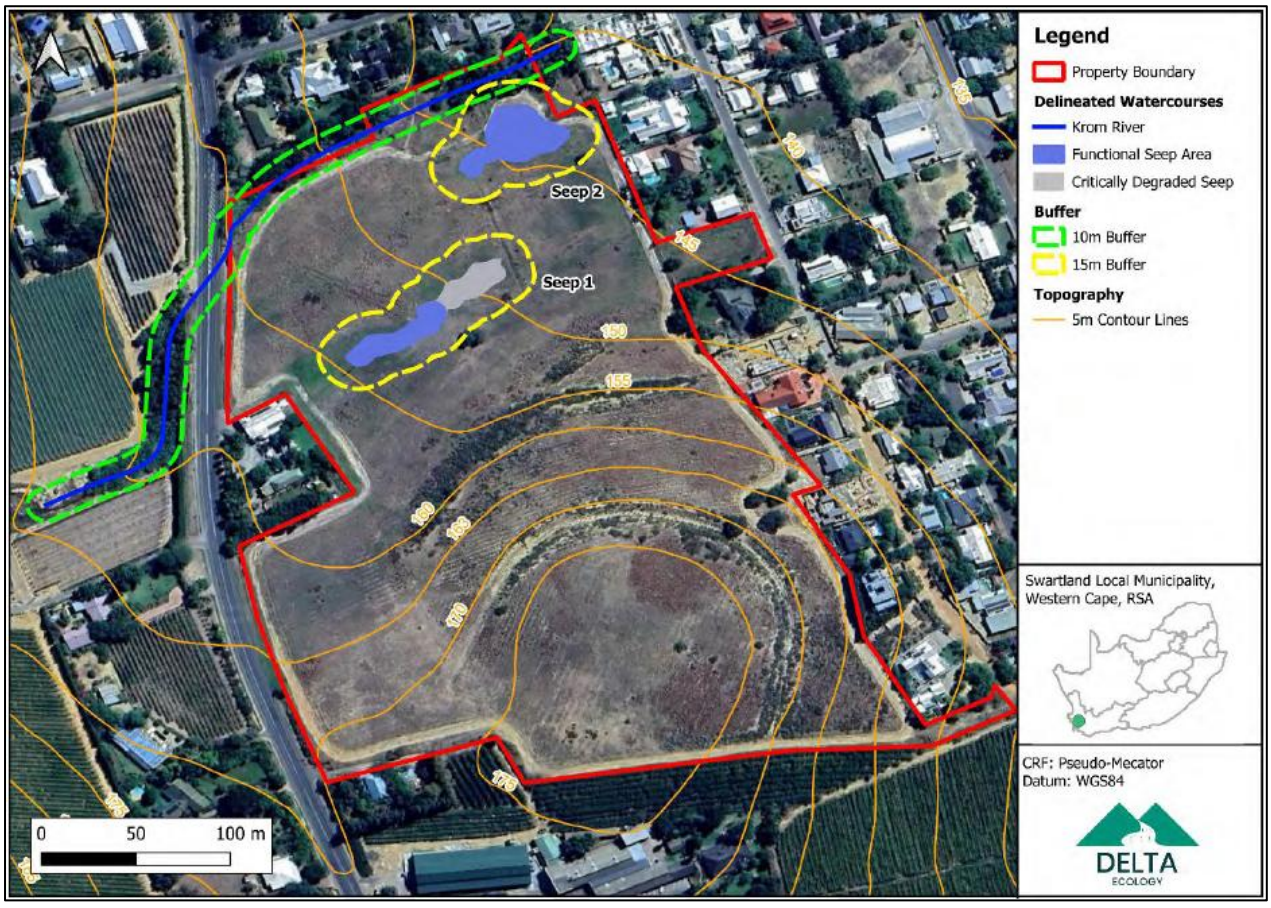


Figure 23 Delineated watercourses with respective buffer areas.

The potential impacts to the seeps as a result of the proposed development are listed below:

Five alternatives were proposed as detailed below:

Alternatives 1 and 2

Alternatives 1 and 2 present the highest negative impacts across ecological, freshwater, and heritage themes. Both layouts extend the development footprint too close to sensitive ecological features, including seep wetlands and sections of the Krom River located within an Ecological Support Area (ESA2). This placement results in habitat loss, the potential alteration of hydrological pathways, and significant encroachment into recommended freshwater buffer zones. From a visual and heritage perspective, Alternatives 1 and 2 also threaten the iconic sightline from Church Street (R311) toward the historic church. In Alternative 1, the placement of a wedding venue on Riebeek Hill introduces a competing visual focal point that disrupts the town's historic visual character and sense of place. Specialist assessments confirmed that this visual obstruction would undermine the cultural landscape and diminish the legibility of the church as the primary visual anchor at the entrance to Riebeek Kasteel. Alternative 2, although slightly refined, still fails to adequately address these concerns. Both alternatives produce excessive visual intrusion, increased fragmentation of ecological areas, and higher construction-phase impacts due to their larger, less sensitive footprint.

While these alternatives offer some positive contributions such as opportunities for housing provision and basic stormwater management these benefits are limited and outweighed by the scale of environmental and heritage disturbance. Consequently, Alternatives 1 and 2 are not considered environmentally or culturally sustainable options.

Alternative 3 – Previously Preferred

Alternative 3 offers several notable improvements over Alternatives 1 and 2. From a heritage and urban design perspective, it makes a significant contribution to maintaining the visual and cultural integrity of Riebeek Kasteel. Key improvements include the preservation of the historic view from Church Street toward the elevated church approximately 500 m northeast of the site. The revised layout deliberately avoids obstructing this heritage view corridor and instead creates a framed sight path that visually reinforces the church's prominence. Specialist heritage and visual impact studies confirm that this adjustment substantially reduces adverse visual effects.

Alternative 3 also introduces meaningful ecological and environmental enhancements. The layout shifts much of the footprint to previously disturbed areas, reduces the number of residential erven on Riebeek Hill, increases plot sizes, and restricts development to single-storey height. These changes reduce visual intrusion, minimise landscape alteration, and align more closely with the existing low-rise character of Riebeek Kasteel. Ecologically, Alternative 3 offers partial protection to the river corridor and seep features by incorporating open space along the Krom River and avoiding some sensitive areas identified in the freshwater assessment.

However, several negative impacts remain. Although reduced, portions of the development still extend close to freshwater features and their required 15–20 m buffer zones. Some intrusion into degraded wetland areas persists, along with moderate vegetation loss and displacement of fauna. Hydrological disturbance and construction-phase impacts (dust, erosion, noise) remain relevant. From a socio-economic standpoint, the reduction in erven may reduce development yield, which specialists note could affect project viability. Despite these limitations, Alternative 3 is substantially more balanced than the earlier alternatives and significantly more environmentally sensitive.

Alternatives 4 and 5 – Preferred Alternative 5

Alternative 4, carried forward into preferred Alternative 5, is the most environmentally and heritage-responsive option. It was developed directly in response to the findings of the freshwater, heritage, visual, urban design, botanical, and engineering specialist studies, as well as extensive public participation input.

The most significant freshwater-related benefit of Alternative 4 is its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 4 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 4 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 4 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

From a freshwater perspective, Alternative 4 represents a substantial improvement over all earlier alternatives. While approximately 100 m^2 of degraded Seep Wetland 1 will be unavoidably lost, the entire functional portion of Seep Wetland 1 and Seep Wetland 2 is fully set aside as private open space along with a 20 m buffer where space allows, and reduced buffers of approximately 5 m elsewhere.

The freshwater specialist assessed Alternative 4. Alternative 5 carries forward the freshwater layout of Alternative 4, so these findings apply equally to Alternative 5.

Potential impacts of Preferred Alternative 5 (as assessed for Alternative 4) (Construction and Post-construction)

The potential impacts to the watercourses because of the proposed development are listed below:

Loss and Disturbance of Wetland and Riparian Habitat: Approximately 100 m^2 (0.01 ha) of the degraded portion of Seep Wetland 1 will be permanently lost due to the placement of infrastructure. In addition, construction activities may cause temporary habitat disturbance to the remaining portions of Seep Wetland 1, Seep Wetland 2, and the Krom River corridor, including trampling, edge disturbance, vegetation damage, and soil compaction within and adjacent to these features. Routine operational activities - including landscaping, pedestrian movement, maintenance of services, and informal access - may result in ongoing edge disturbance to wetland and riparian habitats within Seep Wetland 1, Seep Wetland 2, and the Krom River corridor.

Alteration of Flow Regimes: Construction activities may temporarily alter the flow regime of remnant wetland and seep features, including short-term disruption of shallow subsurface flows and surface-water drainage patterns. The completed Eco-Lifestyle Estate may modify stormwater volumes and runoff pathways, potentially leading to localised erosion, sedimentation, or minor flow diversion within remnant watercourses.

Water Quality Impairment from Sedimentation: Earthworks and soil disturbance may increase erosion and sediment mobilisation, resulting in sediment-laden runoff entering remnant watercourses if not adequately controlled.

Water Quality Impairment from Pollutants: Accidental spills of hydrocarbons, cement wash water, or other construction-related contaminants, as well as contaminated stormwater runoff, may impair water quality in adjacent freshwater features. Stormwater discharged from developed areas may contain hydrocarbons or other pollutants. Without adequate stormwater management, this may impact the remaining seep systems and downstream drainage features.

Risk Assessment

The freshwater specialist notes that, in terms of the National Water Act (Act 36 of 1998) and its associated regulations, a Water Use Authorisation (WUA) will be required for any development situated within 500 m of a wetland or within 100 m of a non-perennial river, where such development may impede or divert flow or alter the bed, banks, course, or characteristics of a watercourse.

Following the application of the prescribed risk assessment methodology, and with the implementation of the recommended mitigation measures, the residual risks posed by the proposed development to the affected watercourses were assessed to be of Low significance. Based on these findings, the specialist concludes that the development can be authorised under a General Authorisation (GA) as part of the WUA process.

Summary

Construction and operational phase impacts without mitigation measures fell within "Moderate" impact categories. The potential impacts all had post-mitigation scores which fell within "Low" impact categories.

The potential impacts associated with Preferred Alternative 5 (as assessed for Alternative 4) include (1) limited loss and disturbance of degraded wetland habitat, (2) temporary and long-term alterations to local flow regimes, (3) increased sedimentation during construction, and (4) water quality impairment from construction pollutants and operational stormwater. Without mitigation, these impacts are rated Moderate, but with the recommended buffer protection, stormwater management, rehabilitation measures, and HOA-managed access to wetland areas, all impacts reduce to Low significance. No impacts on irreplaceable freshwater resources are expected, and cumulative impacts are assessed as Low.

It is therefore the opinion of the specialist that the proposed development can be approved subject to implementation of the mitigation measures listed in this report.

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	**NO x**
3.2.	Provide the name and/or company who conducted the specialist study.		
The site is located ~59 kilometres from the nearest coast.			
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.		
N/A			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
N/A			
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.		

N/A

4. Biodiversity

4.1.	Were specialist studies conducted?	**YES x**	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
PB Consult Environmental Management Services.			
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.		

Several national and provincial biodiversity informants were consulted to understand the ecological context of the site and to guide the design and placement of the proposed development. These included the 2018 Vegetation Map of South Africa, the National Biodiversity Assessment (NBA, 2018), the National List of Threatened Terrestrial Ecosystems (GN 1002 of 2011), the Western Cape Biodiversity Spatial Plan (WCBSP, 2017), and the National Land Cover Dataset (2018). These systematic conservation planning tools provided the baseline ecological information required for the botanical specialist to evaluate the site and for the EAP to determine how biodiversity sensitivities should influence the proposed layout.

According to the 2018 Vegetation Map and the National Biodiversity Assessment, the property historically supported Swartland Shale Renosterveld which is listed as a Critically Endangered ecosystem at both national and provincial levels. This vegetation type has a conservation target of 26%, yet more than 90% has already been lost to ploughing and agricultural activities, making it difficult to attain its national target. However, although the regional mapping indicates high conservation concern, the specialist's site assessment confirmed that the entire property has been severely degraded as a result of long-term dryland cultivation, with clear plough lines and extensive disturbance still visible (refer to **Photos** below). Renosterveld, once ploughed, is widely recognised as effectively irrecoverable, and the specialist confirmed that no intact natural Renosterveld habitat remains on the site. Only hardy, disturbance-tolerant shrubs such *as Dicerothamnus rhinocerotis, Stoebe plumosa*, and *Dodonaea viscosa* have re-established along old fence lines and road embankments where ploughing did not reach.



Figure 24: Vegetation map of South Africa (2018), showing the expected vegetation types.

The Western Cape Biodiversity Spatial Plan (WCBSP, 2017) provided another key informant by identifying spatial biodiversity priorities in the landscape, including Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs). According to the WCBSP (2017), the upper portion of the hilltop is mapped as a CBA, while the Krom River along the northern boundary is mapped as an ESA2 due to its role in ecological functioning and connectivity. However, the field survey confirmed that the area mapped as a CBA is fully degraded and does not contain any remnant natural vegetation, special habitats such as *heuweltjies,* or species of conservation concern. The ESA associated with the Krom River is also degraded and dominated by Phragmites australis, with ornamental species such as Oak and Bougainvillea present, indicating long-term alteration of the riparian zone. Despite this degradation, the ESA is described as the only remaining features of significance on the site, although it consists of degraded Krom River corridor (which can benefit from some protection) and the presence of a few *Olea europaea* (wild olive) trees in between the old fruit trees. Otherwise, the site is enclosed by urban development to the north and east and agricultural land to the south and west.

The National Land Cover (2018) dataset verified the specialist's findings by classifying almost the entire property as cultivated commercial annual crops, reflecting its long history of agricultural use. Areas appearing as "dense forest" or "low shrubland" in remote sensing imagery were verified during the site visit. The botanical specialist's site visit confirmed that the property is severely degraded from a botanical perspective, with no remaining areas of intact natural vegetation. Only hardy indigenous species have re-established in locations where past disturbance took place. These include small patches of regrowth on excavated soils along the circle road constructed near the top of the small hill, as well as along an old fence line at the foot of the hill, where the slope and fence structure provided limited protection from historical ploughing activities. Within this area, several ageing fruit trees were also recorded, indicating previous agricultural use.

The upper slopes of the hill support a number of alien invasive species, most notably mature *Acacia mearnsii* (Black Wattle) trees, which have become established over time. Among these alien stands, the specialist recorded two individuals of *Searsia lancea* (Wit Karee), likely planted in the past as ornamental or shade trees rather than representing

naturally occurring vegetation. The Krom River, forming the northern boundary of the property, was also found to be in a degraded ecological condition. The riparian zone is dominated by dense stands of *Phragmites australis*, indicative of disturbance and altered hydrological conditions. In addition, Oak trees planted along the riverbank further reflect historical anthropogenic modification of the riparian corridor. Overall, the specialist concluded that the site's vegetation and riparian features have been extensively transformed, with only limited and fragmented regrowth of disturbance-tolerant indigenous species.

Additional biodiversity informants, including SANBI BGIS datasets, historical aerial imagery, expected species lists, and red-listed plant screening datasets, were consulted during the desktop phase. These datasets helped identify species of potential concern, which were then actively searched for during the field survey. The specialist confirmed that no Species of Conservation Concern, no NEM:BA-listed species, no National Forest Act protected trees, and no provincially protected flora occur on the property, despite the general conservation importance of Renosterveld in the region. Alien species were present at low levels but included potentially problematic invaders such as *Acacia mearnsii*, *Melia azedarach*, and most significantly *Populus alba*, which requires active management due to its ability to spread aggressively along watercourses.

Collectively, these systematic conservation planning tools informed the conclusion that the property, although mapped as sensitive at a regional scale, is in reality highly degraded, with limited ecological functioning remaining outside of the Krom River corridor. The botanical specialist further highlights that, the renosterveld vegetation type, once ploughed especially over a long period of time it is notoriously difficult to rehabilitate.

As a result, it is evident that the proposed development has been designed to be situated almost entirely within areas already transformed by historical agriculture. The preferred layout (Alternative 4, carried forward into Alternative 5) incorporates open space erven within the portion mapped as ESA2, specifically along the Krom River portion falling within the property. This ensures the protection of the ecological significant habitats onsite, although they have been found to be in a severely degraded state.

The development will result in the transformation of less than 12 hectares of land, all of which the specialist confirms is already transformed natural veld. While the proposal does overlap with a portion mapped as a Critical Biodiversity Area (CBA) and a section of the Ecological Support Area (ESA) associated with the Krom River, field verification demonstrated that the CBA-mapped area is already entirely degraded and no longer supports the vegetation community for which it was originally classified. The ESA, although also disturbed, still retains ecological value as the only functional ecological corridor on or adjacent to the property.

From a biodiversity and botanical perspective, the specialist identifies only two features of any remaining ecological significance on the site: the degraded Krom River corridor, which could benefit from protection, rehabilitation, and alien plant control, and the presence of several Olea europaea subsp. africana (wild olive) trees scattered among the old fruit trees on the lower slopes. These features have informed both the layout and the recommended mitigation measures.

According to the specialist's impact assessment, the overall biodiversity impact of the development, without mitigation, is rated as **Medium-Low**, largely due to the potential effects on the degraded CBA-mapped area and the Krom River ESA. However, the specialist concludes that the impact significance can be reduced to **Very Low** through the implementation of straightforward and highly feasible mitigation measures, including the protection of the riparian corridor, alien invasive plant removal, and the incorporation of appropriate indigenous landscaping.

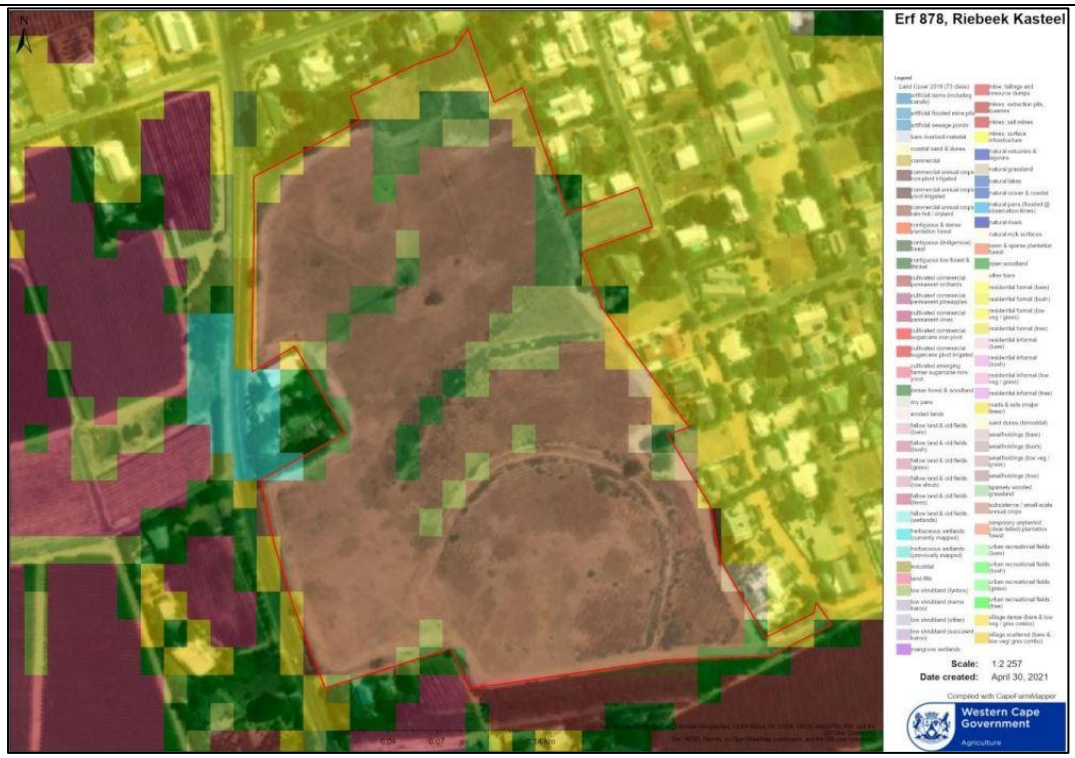


Figure 25. The 2018 DEA Land Cover map (73-class) showing the property in red.



Photo 1: Looking from north to south over the site, with old agricultural land in the foreground and the small hill in the background. Note the transformed status of the bottom part of the site.



Photo 2: A view of the southwestern corner of the property, looking from northeast (the foot of the small hill) to south-west. The old agricultural land with its grassy cover remains apparent.

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 objectives and management guidelines of the 2017 Western Cape Biodiversity Spatial Plan (WCBSP) were carefully considered in the assessment of Erf 878 and have directly informed the design, positioning, and footprint of the proposed development. The potential to achieve these objectives was assessed based on the site's ecological features and constraints, and the proposed development was designed to minimise impacts on biodiversity and maintain ecological functioning where possible.

The site contains no significant biodiversity corridors or linkages, except for a narrow stormwater drainage channel along the northern boundary, approximately 5 metres wide. This channel conveys surface runoff from the higher-lying agricultural areas and from the Riebeek Kasteel urban area into a stormwater retention dam. Historical riparian vegetation along this drainage channel has been heavily altered and compromised due to its location within the urban edge. Field observations noted that the channel is largely overgrown with Phragmites australis, which has replaced the expected natural riparian vegetation. Only occasional *Searsia* shrubs were observed, alongside scattered ornamental plantings, including oak trees (*Quercus spp.)* and *Bougainvillea*. Sequential farm storage water bodies along this drainage channel are utilised by surrounding landowners for irrigation and the discharge of agricultural runoff. These features illustrate that the drainage channel functions primarily as a modified water management conduit rather than a natural ecological corridor.

The WCBSP mapping indicates that the northern portion of the property falls within Ecological Support Area 2 (ESA2), while the southern hill area is mapped as Critical Biodiversity Area 1 (CBA1). Field assessments and the botanical specialist confirmed that the property has been extensively cultivated over a long period, and remaining natural features are largely degraded. The only ecological features of significance remaining on the site are the Krom River corridor, identified as an ESA (Restore), and the two groundwater-fed seep wetlands in the northern section of the property, which were delineated by the freshwater specialist.

The aquatic biodiversity impact assessment confirmed that the proposed development (under Alternatives 4 and 5) will result in permanent loss of approximately 0.01 ha of seriously degraded seep wetland 1 due to placement of

infrastructure. degraded portion of Seep Wetland 1 will be permanently lost due to the placement of infrastructure. In addition, construction activities may cause temporary habitat disturbance to the remaining portions of Seep Wetland 1, Seep Wetland 2, and the Krom River corridor, including trampling, edge disturbance, vegetation damage, and soil compaction within and adjacent to these features. Routine operational activities - including landscaping, pedestrian movement, maintenance of services, and informal access - may result in ongoing edge disturbance to wetland and riparian habitats within Seep Wetland 1, Seep Wetland 2, and the Krom River corridor.

It is important to note that, as highlighted by the freshwater specialist that most significant freshwater-related benefit of Alternative 4 is its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 4 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 4 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 4 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

The freshwater specialist assessed Alternative 4. Alternative 5 carries forward the freshwater layout of Alternative 4, so these findings apply equally to Alternative 5.



Figure 26: Critical Biodiversity Areas Map (2017) associated with the property (CapeFarmMapper).



Photo 3: The Krom River riparian vegetation to the right of picture. Note the dense stands of *Phragmites australis*.

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.

Terrestrial Biodiversity

According to the Western Cape Biodiversity Spatial Plan (WCBSP), the property includes areas mapped as a Critical Biodiversity Area (CBA) on the upper hill and a portion of Ecological Support Area (ESA2) associated with the Krom River as well as the 2 seep wetlands delineated along the northern boundary of the property. The specialist's site visit confirmed, however, that the mapped CBA has been entirely transformed through historic agricultural cultivation and

no longer contains any natural vegetation, ecological processes, or habitat features representative of the ecosystem for which it was originally classified. As a result, the CBA no longer fulfils the biodiversity function designated in the spatial plan. The proposed development therefore does not result in the loss of any intact CBA features because these features have already been lost prior to the application.

The ESA2 along the Krom River was also found to be severely degraded, with the riparian zone dominated *by Phragmites australis* and lined with ornamental alien trees such as Oak, reflecting long-term hydrological and ecological disturbance. Although degraded, this area still represents the only remaining ecological corridor on or adjacent to the property and therefore retains functional importance within the landscape. For this reason, the development layout deliberately avoids placing built structures within the ESA and instead designates this section as open space in Alternative 4. This approach maintains the corridor's role in ecological functioning and enables opportunities for ecological rehabilitation, alien-clearing, and improved riparian management.

The proposed development will transform less than 12 ha of land, all of which is already entirely transformed and therefore no longer contributes to the biodiversity objectives underlying its CBA designation. The only site-specific features of any remaining ecological value the degraded Krom River corridor and a few scattered Olea europaea subsp. africana (wild olive) trees have been retained within open space areas and will not be directly impacted by built infrastructure. In this way, the design responds directly to the BSP categories by avoiding remaining ecological features and situating the development strictly within transformed areas.

Aquatic Biodiversity

The freshwater assessment confirmed that the northern portion of the site contains several aquatic features of relevance to the Western Cape Biodiversity Spatial Plan (WCBSP), including two seep wetlands fed by persistent groundwater emergence and the non-perennial Krom River along the property's northern boundary. Although these aquatic features are mapped within an Ecological Support Area (ESA2) in the WCBSP, the site visit and WET-Health assessments demonstrated that all of these systems are in a seriously modified ecological condition (PES Category E) due to long-term agricultural transformation, canalisation, excavation, infilling, altered drainage, and the installation of an underground stormwater pipeline. Despite their degraded state, these watercourses continue to perform limited hydrological and provisioning functions and therefore retain residual ecological value within the ESA categorisation.

The delineation of Seep Wetland 1 confirmed a dynamic, groundwater-fed seep system that historically extended beyond the current boundary road but has been significantly altered by a formalised abstraction well, excavated channels, and past clearing for agriculture. The wetland's moderate Ecological Importance and Sensitivity (EIS) score reflects its remaining functional role, particularly because the well within the seep is still used as a water source for local communities, giving the system moderately high provisioning value despite severe structural degradation. Seep Wetland 2, similarly groundwater-fed, has also been heavily infilled and modified by road construction and canalisation but continues to re-establish due to persistent hydrological influence. The presence of these features within the mapped ESA underscores the importance of maintaining ecological processes associated with groundwater emergence and downstream connectivity to the Krom River.

The Krom River, also forming part of the ESA2, was found to be severely degraded due to channelisation, stormwater channelling, erosion, historical infilling, and the replacement of natural riparian vegetation with stands of Phragmites australis, Populus alba, and ornamental species such as oak. Although the river has limited remaining ecological integrity, it retains hydrological connectivity and contributes to sediment transport and local flood attenuation. As a result, the ESA designation remains valid from a functional perspective, and the river corridor represents the most important aquatic ecological feature on or adjacent to the property.

The most significant freshwater-related benefit of Alternative 4 is its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most

of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 4 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 4 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 4 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

From a freshwater perspective, Alternative 4 represents a substantial improvement over all earlier alternatives. While approximately 100 m^2 of degraded Seep Wetland 1 will be unavoidably lost, the entire functional portion of Seep Wetland 1 and Seep Wetland 2 is fully set aside as private open space along with a 20 m buffer where space allows, and reduced buffers of approximately 5 m elsewhere.

The freshwater specialist assessed Alternative 4. Alternative 5 carries forward the freshwater layout of Alternative 4, so these findings apply equally to Alternative 5.

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 in a protected area.

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

There were initially 25 introduced springboks on Erf 878. These numbers have dwindled since 2019 to ~11. The areas immediately surrounding Erf 878 is devoid of any wild fauna, but domesticated pets are present. Lynx and other wild animals occurring naturally in the undeveloped mountain slopes to the immediate west of the site, as well as the drainage channels and may occasionally visit Erf 878, although this would be limited due to the nature of the site and presence of humans, domesticated pets and traffic.

5. Geographical Aspects

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

An important geographical aspect is the hillock located on the southern side of Erf 878. This hillock is not visible when one enters Riebeek Kasteel from the south along Kerkstraat due to the fact that it is screened by The Barn restaurant complex located on the western border of the site. Driving along Kerkstraat in a southerly direction the hillock becomes visible. The initial development design proposal made use of this elevated hillock to present a visual feature on top of

the hill in the form of a small prominent wedding venue with a small steeple, surrounded by tall upright cypress trees. Comments received from Interested and Affected Parties (I&APs) indicated that this design would compete with the old church steeple located on the ridge ~600 metres to the northeast (see Photograph in **Appendix C**).

Topography/ Landscape

In response to these concerns, the development layout was revised to include an open space at the top of the hillock and to reduce the number of single residential erven in this area. This revised layout, referred to as Alternative 4 and refined further in Alternative 5, incorporates the open space to minimise visual impacts associated with development intrusion, preserving the prominence of the surrounding cultural and historical features. Additionally, the revised layout respects the natural topography of the hillock, ensuring that the development integrates more harmoniously with the local landscape while maintaining unobstructed sightlines to the historic church steeple.

The inclusion of the open space at the top of the hill also allows the remaining residential erven, which are proposed around the hill on lower levels, to be positioned in a way that reduces visual intrusion and preserves the prominence of the hillock as a natural feature. This layout ensures that the development steps down the slope, integrating with the existing topography, and provides residents with unobstructed views while maintaining a sense of openness and visual relief at the hill's summit.

Hydrology

The freshwater specialist identified and delineated two seep wetlands and the Krom River onsite. These aquatic features represent key geographical aspects of the site, influencing both the design and positioning of proposed development infrastructure in order to avoid and/or minimise encroachment of the development on these features. The presence of these wetlands and the river have necessitated the inclusion of buffer zones, which have been identified by the freshwater specialist, to protect ecological integrity, guide site layout, and minimise potential impacts from construction and operational activities.

The preferred site development plan (Alternative 5, which carries forward the Alternative 4 freshwater layout) represents the most significant water-related benefit due to its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 4 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 4 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 4 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

From a freshwater perspective, Alternative 4 represents a substantial improvement over all earlier alternatives. While approximately 100 m^2 of degraded Seep Wetland 1 will be unavoidably lost, the entire functional portion of Seep Wetland 1 and Seep Wetland 2 is fully set aside as private open space along with a 20 m buffer where space allows, and reduced buffers of approximately 5 m elsewhere.

The freshwater specialist assessed Alternative 4. Alternative 5 carries forward the freshwater layout of Alternative 4, so these findings apply equally to Alternative 5.

6. Heritage Resources

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

The specialist Heritage Resources Report was compiled by Ms Bridget O'Donoghue (Heritage specialist), Mr Bruce Eitzen (Visual specialist) and Mr Jonathan Kaplan (Archaeologist).

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

HERITAGE IMPACT ASSESSMENT (31 AUGUST 2026)

Background & Process

This is the Section 38(8) HIA HWC Submission Report (31 August 2026), prepared by Bridget O'Donoghue (Heritage Specialist), Bruce Eitzen of New World Associates (Visual Impact Assessment), and Jonathan Kaplan of ACRM (Archaeological Impact Assessment), on behalf of the **Huguemont Trust** (owner).

The application has a lengthy history. A Notification of Intent to Develop (NID) was first submitted in May 2020 and considered by Heritage Western Cape's (HWC) Impact Assessment Committee (IACom) in May 2021. An initial HIA was submitted in March 2025, but HWC's **Final Comment dated 19 August 2025** rejected it, finding that the HIA failed to adequately address the heritage significance of the site, and that the proposed development in its then-current form would have a major negative impact on the townscape and landscape qualities of Riebeek Kasteel. A new NID application was therefore submitted in 2026, and HWC required a Section 38(8) HIA in its response of 20 January 2026. IACom considered the HIA at its meeting of 22 July 2026 and issued Further Requirements on 6 August 2026 (Appendix G3e). The HIA HWC Submission Report of 31 August 2026 responds to these requirements. HWC IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026 (Appendix G3d).

The Site

Erf 878 is a **12.15 ha property** located at the south-western edge of Riebeek Kasteel, between Church Street (the R311) to the west and Fontein Street to the east. It is currently zoned Agriculture 1 and used for Springbok grazing. The only structure on site is a historic brick-lined well ("the Fountain"), which a title deed condition requires to be preserved and made publicly accessible. The site rises from a flat northern portion to a **prominent hill** on the southern section, which is a visually significant feature in the wider townscape.

Heritage Significance

The HIA (31 August 2026) recommends that the site be graded Grade IIIA, as it lies within the proposed Riebeek Kasteel heritage area, which is recommended for Grade IIIA significance. This revises the earlier HIA's Grade IIIC assessment of the site, in response to HWC's 2025 comment. HWC endorsed the HIA in its Final Comment of 30 September 2026. The town is recognised as a well-preserved example of a **19th-century 'kerk dorpie'** (church town) of significant historical, aesthetic, and architectural value, situated at the foot of the Kasteelberg and surrounded by agricultural landscape. Key heritage attributes include the distinctive rectangular street grid, the visually prominent Dutch Reformed Church on Main Street, the agricultural green frame, the R311 scenic route (designated a Secondary Scenic Route under the Provincial Spatial Development Framework), and the Kasteelberg Cultural Landscape.

The site itself lies within the **proposed Riebeek Kasteel Heritage Area** and contributes to the scenic gateway experience along the R311, as well as to the sense of topographical containment provided by the hill.

The Revised Development Proposal

The Concept Masterplan, revised by Urban Designer Etienne Britz (20 August 2026), proposes a **mixed-use neighbourhood** comprising:

- → A retirement village with a visitor and care centre
- → Retail use buildings (small-scale, along Church Street)
- → Mixed-use residential (artist workshops, galleries, small craft retail with residential above)
- → Detached and attached residences and apartments
- → An events/wedding venue
- → Public parks and pedestrian walkways
- → Public vehicular parking

A key change from the 2025 proposal is that the development is now designed to **integrate with the existing town grid**, with open public access (no gated enclaves), street connections to the historic grid, and a public park at the crest of the hill (rather than housing). The hilltop is retained undeveloped, with one row of single storey residences on the southern edge of the hilltop and site boundary, protecting the ridgeline (180 m MSL). The Rev 78 application area is 110,796 m², with approximately 34.5% zoned for low density residential, 6.3% for town housing, 7.9% for flats, 6.9% for resort/events use, 0.2% for business, 26.5% for open space and 17.7% for roads.

Heritage & Urban Design Indicators

The HIA sets out overarching Heritage Design Indicators covering:

- → **Connectivity** to the historic town through roads, urban blocks, and street interfaces
- → **Uses** compatible with the character of Riebeek Kasteel
- → **Layout** respecting the historic grid and topography
- → **Architectural guidelines** referencing the scale, roofscapes, and materials of the existing town
- → **Hard and soft landscaping** to reinforce the green character

The Urban Design assessment concludes that future development must balance growth with preservation, respecting the historic grid and maintaining a strong connection to the natural landscape.

Visual Impact Assessment (VIA)

The VIA by New World Associates (9 September 2026) finds that the development will have a moderate-high impact on the landscape, causing a noticeable change to the visual environment. The impact has district extent, long-term duration, medium intensity and medium significance. High visual impact is limited to the local environment (primarily the immediate neighbours at New Orleans). Mitigation recommendations include:

- → Landscape guidelines to control hillside vegetation in private backyards (natural renosterveld to be enhanced)
- → Mapping and conservation of existing trees (oaks, gums, poplars, Wild Olive)
- → Natural colouring (sage, light grey, sandy hues); avoidance of brilliant whites, intense blacks, or vivid colours
- → Subtle, traditional fencing
- → Careful control of lighting
- → A Landscape Maintenance plan integrated into the scheme

Archaeological Impact Assessment (AIA)

The AIA by Jonathan Kaplan concludes that there is **no significant impact to Stone Age or historical archaeological resources** requiring mitigation prior to construction. No further archaeological mitigation or construction monitoring is required, with the sole exception that any buried human remains uncovered during excavation must be immediately reported to the archaeologist.

Conclusion & Recommendations

The 2026 HIA assesses the revised proposal **positively**, concluding that a mixed-use neighbourhood on Erf 878 (publicly accessible, connected to the town grid, with appropriate scale, architectural guidelines, and a public hilltop park) can be developed in a manner consistent with the heritage significance of Riebeek Kasteel. The HIA recommended that HWC:

1. **Endorse the HIA as meeting the requirements of the Response to the NID (20 January 2026) and the HWC Further Requirements (6 August 2026)**
2. Accept the statement of significance (Grade IIIA for the site) and the heritage design indicators
3. **Approve the Concept Masterplan (20 August 2026), the Urban Design Report (Rev 3.5), the Architectural Guidelines (Rev 17), the Landscape Site Development Plan (26 August 2026) and plant list, the AIA and the VIA**

HWC IACom endorsed the HIA as meeting the requirements of Section 38(3) of the NHRA, and approved these drawings and the Rev 78 Subdivision and Rezoning Plan, in its Final Comment of 30 September 2026 (Appendix G3d). It requires the VIA construction and operational phase mitigations, and the landscape maintenance of the public spaces, to be included in the EMPr.

ARCHAEOLOGICAL IMPACT ASSESSMENT

A small number of Early Stone Age and Middle Stone Age flakes and chunks were recorded during site survey. The remains were found in a severely transformed isolated and disturbed context and have been graded as Not Conservation Worthy. No graves were encountered during the field assessment. The site has been transformed by historical agriculture, and the anticipated impact on tangible archaeological heritage resources is expected to be **very low.**

The specialist study has identified no significant impact to local Stone Age and historical archaeological resources that will need to be, mitigated prior to construction activities commencing.

Mitigation measures

→ No further archaeological mitigation is required.
→ No archaeological monitoring is required during construction phase excavations
→ If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.

VISUAL IMPACT ASSESSMENT

1. Evolution of the Development Scheme
The proposed development has undergone an iterative design process, evolving significantly from earlier concepts to address critical heritage concerns and commentary received during public participation.

→ **Initial Concepts (Alternatives 1-3):** Earlier versions were described as "precinct-based" and were found to compete visually with the historic town fabric or obstruct significant sightlines.
→ **Alternatives 4 and 5:** This layout represents a "pedestrian-oriented extension" of the Riebeek Kasteel townscape rather than an isolated development. It incorporates a fully revised set of site informants, including landscape heritage and urban design principles tailored to the town's unique character.

2. Key Visual Findings for Alternative 5
The specialist confirms that the scheme is a "sophisticated scheme" that successfully integrates urban development while remaining sensitive to landscape character. Key design responses include:

→ **Town Fabric Integration:** The layout aligns new residential plots with the existing town grid to complete fragmented town blocks.
→ **Spatial Transitioning:** The western edge along Church Street is reimagined as a transitional zone using agricultural building typologies (farm barns and "werf" walls) and olive groves to soften the entry into the village.
→ **Topographical Sensitivity:** The scheme is fully modelled to the site's contours. Building heights are curtailed on the slopes and crest of Riebeek Hill to prevent the silhouette of rooflines on the skyline from principal viewing angles.
→ **Visual Corridors and Open Space:** Approximately 26.5% of the application area (29,323 m²) is dedicated to Private Open Space. This includes the preservation of the hilltop as an outlook point and the creation of a "wetland park" that follows natural drainage patterns and serves as a privacy threshold for the retirement village.
→ **Aesthetic Improvement:** The specialist notes that Alternative 4 is a "substantial aesthetic improvement" over previous schemes, providing a better fit for both the urban and rural contexts of the area.

3. Assessment of Visual Significance
The development will result in a **Moderate-High** impact on the landscape, causing a noticeable change to the visual environment.

→ **Exposure and Visibility:** The site has mixed visual exposure; it is clearly visible from the R311 (Church Street) but largely hidden from the interior of the town due to existing vegetation and street orientations.
→ **Absorption Capacity:** The visual absorption capacity is rated as moderate-high, aided by the proposed extensive use of indigenous landscaping and the "werf" wall typology.
→ **Nature of Impact:** The impact has district extent, long-term duration, medium intensity, definite probability and medium significance. The post-mitigation significance is acceptable provided that the prescribed management plans are enforced.

4. Mitigation and Management Requirements

To maintain the visual integrity of the preferred layout, the specialist mandates the following:

- → **Architectural Guidelines:** Building designs must use a traditional Cape vernacular idiom. The VIA (September 2026) finds that the design and layout of buildings is now well integrated with the historic townscape, requiring no further changes.
- → **Coloration and Fencing:** Unnatural, high-contrast colors (e.g., brilliant whites or intense blacks) must be avoided in favor of sage, light grey, and sandy tones. Fencing must follow traditional, subtle patterns to manage edge conditions.
- → **Lighting:** Lighting must be minimized and carefully controlled to preserve the rural landscape character at night.
- → **Monitoring:** A formal Visual Management and Monitoring Plan must be implemented throughout the life of the project, including routine inspections by the Environmental Control Officer (ECO) during the construction and operational phases.

In conclusion, Alternative 5 is recognised as a visually responsible proposal that effectively balances the need for urban densification with the requirement to protect the unique cultural and scenic landscape of Riebeek Kasteel.

URBAN DESIGN

The Urban Design analysis and Indicators report provides an evaluation of the Riebeek Kasteel's structure, landscape and built environment with the primary goal of guiding the proposed development in a way that creates a development that is an extension of the town, that fits within the context and contributes positively to the character of Riebeek Kasteel. Through this analysis, several key informants and recommendations have been identified to ensure the new neighbourhood is fits for its context.

Key informants

1. Town Structure: The historical layout of Riebeek Kasteel developed around key landmarks like the Churches and Royal Hotel that remain foundation elements. The town structure integrates its scenic landscape. With vineyards and olive groves, emphasizing both cultural heritage and natural beauty. This integration is critical to maintaining Riebeek Kasteel appeal as both a residential and tourist hub.
2. Urban Grid and Layout: The town's grid pattern, which runs east-west with intersecting streets, is a primary ordering device. This grid informs the layout of new developments, despite topographic challenges. The grid must be respected and extended into new neighbourhoods through the use of trees and building arrangements where road networks may not be feasible.
3. Streetscape and Public Realm: The intimate streetscape, particularly in the town's historic centre, must be maintained. Building placement, verandas, and pedestrian-friendly environments contribute to the vibrant atmosphere of Riebeek Kasteel. The continuation of these design principles is vital in preserving the charm of the town while enhancing functionality for residents and visitors.
4. Sustainability and Natural Integration: The built environment is strategically nested within banks of trees, ensuring that buildings blend seamlessly into the landscape. This design not only reduces the visual impact of new structures but also contributes to a layered townscape that respects the natural environment. The town's green buffer along Church Street serves as both a visual and functional asset, and its expansion through additional landscaping is recommended.

The future development of Riebeek Kasteel must balance growth with preservation. By adhering to the identified layout informants, respecting the historical town grid, and maintaining a strong connection to the natural landscape, the town can evolve sustainably. The recommendations outlined in this report ensure that any new developments will not only complement the existing town but also enhance its charm, liveability, and appeal as both a creative and cultural hub.

EVOLUTION OF ALTERNATIVES IN RESPONSE TO CULTURAL / HERITAGE ASPECTS

The development of Erf 878, Riebeek Kasteel, has undergone an iterative design process to mitigate impacts on heritage resources and visual character, culminating in the preferred Alternative 5 (Rev 78).

Phase 1: Alternatives 1, 2, and 3 (Baseline Concepts)
The initial development iterations were categorized as "precinct-based" models that were largely detached from the historic town centre.

- → **Heritage Concerns:** Heritage Western Cape (HWC) and the Impact Assessment Committee (IACom) issued a negative comment on these alternatives in August 2025. The committee found the designs constituted "introverted gated residential neighbourhoods" that were foreign to the town's open grid pattern.
- → **Visual Intrusion:** Previous layouts included development on the prominent hill crest, which was found to interrupt the town's topographical "green frame" and compete with the landmark Dutch Reformed Church (DRC) steeple.
- → **Scenic Route Impact:** These alternatives were deemed to have a major negative impact on the R311 (Church Street) scenic route due to inappropriate retail scales and a lack of spatial integration.

Phase 2: Evolution to Preferred Alternative 4
Alternative 4 represents a fundamental shift in urban design philosophy to address the "major disjuncture" identified in previous schemes.

1. Urban Design and Townscape Integration

- → **Extension of Town Fabric:** The model shifted from a "gated precinct" to a "pedestrian-oriented extension" of Riebeek Kasteel. The new layout aligns residential plots with the historic town grid to "complete" fragmented blocks.
- → **Connectivity:** The scheme establishes a continuous pedestrian network linking the town centre to key site assets like "The Barn" and the hilltop. Vehicular through-access is restricted to emergency and service vehicles to preserve the arrival experience from the west.

2. Visual and Landscape Mitigation

- → **Topographical Preservation:** Responding to HWC's 2025 recommendation of a 170 m cut-off line, development was pulled back from the crest of Riebeek Hill. The crest is preserved as a public "Hill Park" featuring Renosterveld species and public trails.
- → **Protection of Sightlines:** A primary view corridor or "view cone" from the R311 across the site to the DRC steeple has been established and protected through the use of parkland and wetland areas.
- → **Transitional Edges:** The western boundary along Church Street was reimagined as a transitional zone. This area utilizes simple barn-shaped forms, "werf" walls, and olive groves to mirror the town's agricultural surroundings.

3. Architectural and Cultural Response

- → **Vernacular Idiom:** Strict architectural guidelines mandate a contemporary interpretation of Cape Vernacular. This includes simple rectangular forms, double-pitched roofs, and neutral earth tones to ensure buildings act as an "unobtrusive background".
- → **Density Distribution:** Building intensity is concentrated on the northern portion near the CBD, with lower-density, single-story structures on the more visible southern slopes to minimize their silhouette on the skyline.

→ **Heritage Assets:** The historic fountain (well) is integrated into the public realm as a celebrated multipurpose area.

Phase 3: Evolution to Preferred Alternative 5

IACom considered the HIA on 22 July 2026 and issued Further Requirements on 6 August 2026. It acknowledged the improvements of Alternative 4, but required the uppermost erven on the visually exposed slopes to be repositioned and the view cone from Church Street to be retained. Alternative 5 (Rev 78) responds as follows:

→ **Southern Hill Edge:** The erven on the southern edge of the hill were moved down slope to abut the southern boundary, with the ring road between these erven and the Hill Park. The Hill Park was enlarged by removing the erven on its northern edge.
→ **Building Height:** Erven 35 to 40 are limited to single storey with a 2.7 m wallplate and no habitable roof space, and the flat-roofed architectural style was removed.
→ **View Cone:** The events building was reduced in size and moved southwards, events parking was placed on lower ground, and the perimeter trees along Church Street were removed from the design.
→ **Approval:** HWC IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026 (Appendix G3d).

Specialist Conclusion on Alternative 5

The revised Heritage Impact Assessment (HIA) and Visual Impact Assessment (VIA) confirm that Alternative 5 successfully responds to statutory requirements. The scheme is recognized as a "substantial aesthetic improvement" that balances urban densification with the preservation of Riebeek Kasteel's unique 19th-century "kerk dorp" (church town) identity. HWC IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026 (Appendix G3d).

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.

Definitions as per Section 2 of the NHRA define these items as follows:

1. Heritage resource: any place or object of cultural significance

2. Cultural significance: aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value

Based on the above the preferred Alternative 5 layout, building on Alternative 4, represents a fundamental redesign of the project in direct response to the negative Final Comment issued by Heritage Western Cape's (HWC) IACom in August 2025 as well as concerns raised from various I&APs and the Riebeek Valley Ratepayers Association (RVRA). **The previous heritage concerns have been addressed through the following systematic revisions: Alternative 5 also responds to the HWC IACom Further Requirements of 6 August 2026.**

1. Integration with Townscape and Urban Fabric

- → **Concern:** The 2025 proposal was criticized for being an "introverted gated residential neighbourhood" that was detached from the historic core and at variance with the town's open grid pattern.
- → **Response:** Alternative 4 shifts from a precinct-based model to a "pedestrian-oriented extension" of the Riebeek Kasteel townscape. The layout now aligns with the historic town grid to "complete" fragmented town blocks and establishes a continuous pedestrian network linking the site to the heart of the town.

2. Topographical Preservation and Hill Crest Protection

- → **Concern:** Previous iterations were found to be visually intrusive, with development extending across the prominent hill crest and interrupting the town's topographical "green frame".
- → **Response:** The hill crest is preserved as a public "Hill Park" featuring Renosterveld species and public trails, maintaining the topographical containment of the town. In Alternative 5, a single row of single storey erven lies on the southern edge of the hill, below the ring road, as accepted by the HIA and HWC IACom.

3. Mitigation of Impact on the R311 Scenic Route

- → **Concern:** Earlier layouts were deemed to turn their back on the R311 (Church Street) with rear residential boundaries and inappropriate retail scales that impacted the rural arrival experience.
- → **Response:** The western edge along the R311 was reimagined as a "transitional zone". This precinct utilizes a "werf-based" agricultural building typology, including barn-shaped structures and werf walls, to layer views and provide an appropriate foreground for the village extension.

4. Protection of Cultural Sightlines

- → **Concern:** Previous designs intruded into the "view cone" or vista from the R311 across the site toward the landmark Dutch Reformed Church (DRC) steeple.
- → **Response:** A dedicated view corridor was established and protected through the strategic placement of parkland and wetland areas. Site sections CC, DD, and EE demonstrate that the clear view lines from Church Street toward the church are now maintained. In Alternative 5, the events building was reduced and moved southwards, events parking was placed on lower ground, and the perimeter trees along Church Street were removed to keep this view open.

5. Architectural and Landscape Guidelines

- → **Concern:** The IACom found previous urban design indicators were ignored and that there was an over-reliance on tree planting to mitigate contextually alien layouts.
- → **Response:** The Architectural Guidelines (Rev 17, September 2026) enforce a contemporary Cape Vernacular idiom. They limit hillside dwellings to single storey with a 4.5 m wallplate and an 8.0 m roof apex, and Erven 35 to 40 to single storey with a 2.7 m wallplate, and ensure that buildings on street boundaries feature verandahs to support an intimate village streetscape.

In conclusion, the HIA dated 31 August 2026 confirms that Alternative 5 addresses the "major disjuncture" identified in 2025 and complements the high heritage significance of the Riebeek Kasteel townscape. HWC IACom endorsed the HIA in its Final Comment of 30 September 2026.

8. Socio/Economic Aspects

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

The site is surrounded by intensively developed agricultural fields on the western and southern side of the town of Riebeek Kasteel. There is a narrow strip of residential development on the northern side of the Erf 878 and a wide section of residential development on the eastern boundary of Erf 878. Riebeek Kasteel thus appears as a residential "Island" amidst very extensive agricultural development surrounding Riebeek Kasteel (see Locality Map in **Appendix A1**. The agricultural community appears to be economically sustainable and provide jobs and housing for farmworkers. The town of Riebeek Kasteel consists of a mixture of old historical buildings (buildings older than 60 years by definition), as well as new modern buildings much younger than 60 years. This is pronounced along the southern end of Fontein Street that borders Erf 878 to the east.

The residential buildings belong to a mix of permanent and absentee residents, the latter who are financially robust and have invested in these rural escapes of temporary occupied houses as a getaway from the city hustle and bustle, in these quaint small towns in the Western Cape. A similar trend may be found in many small towns e.g. Greyton, Stanford, Pringle Bay, Onrus River, etc. This provides a clear trend in the need and desirability for such offerings.

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

The proposed mixed-use development on Erf 878 provides socio-economic benefits that support the application for development rights and align with the Swartland Municipal and provincial planning objectives:

- → **Job Creation:** The project will generate substantial employment during the construction phase, followed by long-term operational positions associated with the wedding venue, retail components, retirement village management, and the ongoing maintenance of private open spaces.
- → **Economic Stimulation and Municipal Revenue:** The development increases the municipal rate base, enhancing the financial sustainability of local services. Furthermore, the developer is liable for Development Contributions toward bulk water and sewer infrastructure, which facilitates broader civil service upgrades within the town.
- → **Housing Diversity and Affordability:** The proposal addresses regional demand by offering a wide variety of housing typologies, including low-density single residential units, medium-density townhouses, and retirement cottages. The inclusion of group housing provides more affordable options suitable for young families and working professionals, supporting social inclusivity.
- → **Support for Local Entrepreneurs:** The dedicated Business Zone 1 (retail component) is designed to support local entrepreneurs and enhance economic vibrancy along the R311 activity corridor.
- → **Tourism and Agri-tourism Enhancement:** As a recognized wedding and arts destination, the reintroduction of a resort-zoned wedding venue and artisanal village node supports year-round tourism and strengthens Riebeek Kasteel's economic identity.
- → **Urban Integration and CBD Support:** The development is engineered to function as a pedestrian-oriented extension of the town rather than an isolated precinct. By establishing direct pedestrian links to the CBD, the project will increase foot traffic and consumer thresholds for existing businesses.
- → **Response to Demographic Trends:** The development proactively addresses the "reverse trend of rural depopulation" and the rising demand for secure, age-appropriate retirement accommodation within established rural centers.
- → **Public Transport and Access:** The site is well-served by existing minibus-taxi services within the CBD, and the development includes new sidewalks that link directly to existing town infrastructure to support non-motorized transport

(See also Need and Desirability Report in **Appendix K** and Section E in this report above).

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 of the vacant Erf 878, located within the urban edge, will provide a viable residential and business addition to the economy of Riebeek Kasteel. The preferred Alternative 5 development proposal, with the wedding venue moved from the hill top to the lower south-western slope along Church Street, a single row of single storey residential erven on the southern edge of the hillock and maintenance of sight lines and heritage character across the Erf 878 to the old church located to the northeast upon the ridge, as indicated by the participatory design process, development motivation, specialist reports relating to heritage, visual, urban design and architectural design parameters (see Urban Design and Architectural Reports in **Appendix G**) will be a welcome upliftment to the area, meeting the triple bottom line requirements of social, economic and environmental sustainability (see Town Planning Application in **Appendix K**).

The inclusion of a retirement component addresses the need for such offerings for the elderly, particularly in towns such as Riebeek Kasteel where the aging population does not have easy access to medical facilities.

The new opportunities which will come with the development and investment aspect of the proposal will support social and economic growth while protecting place identity and cultural integrity of the town.

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.

In the determination of the impact of the proposed development on people's health and well-being it was found that there will be temporary noise impacts during the construction period with the installation of services on Erf 878. Noise during the scattered construction period of residential and other dwellings over a long period of time will not be discernible from the ambient noise generated from surrounding roads and residential areas. The visual character of the Erf 878 will be altered extensively as it will change from a non-developed piece of open land to resemble the residential developments of the rest of Riebeek Kasteel. With the alterations in design layout and maintenance of sight lines from Kerkstraat to the historical church along a greenbelt established over Erf 878, the urban and architectural design criteria specified and the reversion to a much reduced number of single storey residential buildings from the initially proposed wedding venue on the hillock on Erf 878, both the visual character and sense of place of Riebeek Kasteel will be maintained (see Heritage Report in **Appendix G**).

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.

The preferred property, Erf 878, is located within Riebeek Kasteel in the Swartland Municipality and currently falls within the Agricultural Zone 1 zoning category. The erf is presently vacant and will require rezoning to a mixed-use development, incorporating Residential Zone 1, General Residential Zones 2 and 3, Resort Zone (Wedding Venue), Business Zone 1, Open Space Zone 2, and Transport Zone 2. Erf 878 is regarded as the last remaining large undeveloped erf situated within the designated urban edge of Riebeek Kasteel. Its position on an elevated hill that slopes toward the north and west provides expansive scenic views over the valley, contributing to its suitability for residential and tourism-oriented uses.

According to the Swartland Spatial Development Framework (SDF) 2023–2027, the application area falls within a precinct earmarked for business and residential development, with specific encouragement for mixed-use typologies and higher residential densities along identified activity routes. Historically, a subdivision application for the property was approved by the former Cape Provincial Administration in 1985 but later lapsed due to the rights not being exercised. In 1995, the erf was formally established following the subdivision of the original parent property into five portions and a remainder, with access afforded via the 13-metre-wide Fontein Street. The five Single Residential erven were subsequently consolidated and developed, while the southernmost portion was merged with the last remaining erf to form the current application area measuring approximately 110 796 m² (Rev 78).

Erf 878 is the sole property under consideration for the proposed mixed-use development. The preferred site alternative aligns with existing municipal planning frameworks and capitalises on the property's location, existing road access, and transformed condition resulting from historic agricultural activities. The development proposal comprises a range of land uses structured to optimise land efficiency, ensure compatibility with surrounding urban fabric, and protect areas of environmental sensitivity.

The preferred alternative is strengthened by several locational and contextual attributes:

- → The site contains no significant biophysical features of intact natural habitat and has been extensively transformed through historic agricultural use.
- → Multiple existing access points and proximity to the historical CBD support efficient integration with surrounding land uses.

- → The site offers exceptional scenic views, enhancing its suitability for residential and tourism-oriented development.
- → The SDF (2019 and 2023) specifically identifies this area for residential densification, mixed-use development, and business expansion along activity routes.
- → The property is situated adjacent to two activity streets: Church Street (R311) and Main Street, both recently upgraded to improve road safety and accommodate increased movement.
- → The existing fountain and historical stream on the site will be incorporated into the layout to serve as a landmark feature and contribute to a distinctive sense of place.
- → The proposal aligns fully with applicable municipal and provincial spatial planning legislation, including the Municipal Spatial Development Framework and the Western Cape Provincial SDF.

The proposed mixed-use development under the current preferred site development plan (Alternative 5, Rev 78) consists of the following components:

- → Residential Zone 1: Low Density for Erven 1-46 with a total extent of 38,178 m².
- → General Residential Zone 2: Town-housing for Erven 54-77 with a total extent of 7,031 m².
- → General Residential Zone 3: Flats on Erven 47-53 with a total extent of 8,789 m².
- → Resort Zone: Resort on Erf 78 with a total extent of 7,607 m².
- → Business Zone 1: General Business: for Retail on Erf 79 with a total extent of 275 m².
- → Open Space Zone 2: Private Open Space: for parks, stormwater and a spring on Erven 80-87 with an extent of 29,323 m².
- → Transport Zone 2: Roads on Erven 88-90 with a total extent of 19,592 m².

1. Water

- → **Connection:** The development will connect to the existing 200mm Ø watermain located within Fontein Street.
- → **Capacity:** The existing reticulation system has sufficient capacity to meet domestic and fire flow requirements.
- → **Upgrades:** The GLS analysis confirms that Riebeek Kasteel has insufficient reservoir storage capacity to accommodate the development. Implementation of master plan items (SRkW.B1, SRkW.B2, SRkW.B3, SRkW1.2, SRkW1.3, and SRwW2.1) is required to augment storage, with an estimated cost of R21,383,000.

2. Sewer

- → **Connection:** Multiple connections are proposed to the existing 150mm Ø outfall sewer within Fontein Street.
- → **Servitudes:** A new 3.0m wide services servitude across Erven 1304 and 203 is required to facilitate the connection to the municipal network.
- → **Capacity:** While the internal outfall sewer has sufficient capacity, the bulk sewers in Pieter Cruythoff Avenue are currently at capacity.
- → **Upgrades:** To accommodate the development, the implementation of master plan items SRkS1.2 and SRkS1.3 is required to augment bulk capacity at an estimated cost of R2,796,000.

3. Solid Waste

- → **Infrastructure:** The internal road network is specifically designed to accommodate heavy vehicles, including municipal refuse trucks.
- → **Management:** Refuse removal will be integrated into the standard municipal service delivery framework for the area.

4. Stormwater

- → **Strategy:** Due to a lack of capacity in the external municipal system, all post-development runoff must be attenuated on-site to pre-development flow rates.
- → **Design:** The system is designed to attenuate a 1:50-year peak post-development storm event, requiring a storage volume of 991 m³.
- → **Infrastructure:** The network comprises open swales, underground gravity pipes, and an attenuation facility.
- → **Quality Control:** Attenuation embankments and swales will be landscaped with indigenous vegetation to act as bio-filters, improving the quality of runoff before discharge

Provide a description of any other property and site alternatives investigated.

There were no other properties available in Riebeek Kasteel of an appropriate size that met the requirements offered by Erf 878 with regard to economy of scale that offered the development potential and economic feasibility that could be investigated.

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.

A site selection matrix approach was not possible in this instance as the Erf 878 was the only property available that could meet the selection criteria imposed by the developer that were the following:

- → The site is located within the urban edge.
- → The site borders on the historical CBD;
- → Offers picturesque views due to location and topography;
- → Identified in the Spatial Development Framework, 2019 and 2023 as earmarked for residential development;
- → Densification is proposed by the Spatial Development Framework, 2019 and 2023;
- → Business development, mixed use and higher residential densities are encouraged by the Spatial Development Framework, 2019 and 2023 along activity streets;
- → Location adjacent to two activity streets namely Church Street(R311) and Main Street;
- → The adjacent Main and Church street crossing has already been upgraded to ensure higher levels of safety on the roads;
- → The existing fountain and stream which is to be incorporated to provide a memorable historical focal point/ landmark and to contribute to a unique sense of place;
- → The development proposal is aligned with all relevant planning and spatial development legislation.

Provide a full description of the process followed to reach the preferred alternative within the site.

The application process for the project has been running for more than six years, with the first round of public participation on the Pre-Application Basic Assessment Report, commencing in 2020, just before the Covid lock down. There have been 2 Environmental Assessment Practitioners (EAPs) appointed on the project. The entire Pre-Application phase, which included 3 rounds of out of process public participation, were undertaken by the previous EAP, Charel Bruwer of Enviro Africa. Lornay Environmental Consulting was appointed in January 2025 to complete the application and take over the "In-Process" application requirements. This includes the completion of the "In-Process" Basic Assessment Report and final rounds of public participation.

An initial development layout was designed by the Town Planner in conjunction with the proponent and the initial EAP. This initial alternative was made available to potential Interested and Affected Parties (I&APs), relevant state departments, organs of state and community organisations that may have jurisdiction in the proposed development, meeting all the requirements as stipulated under NEMA EIA Regulations, 2014, as amended, for public comment. From the comments

received it was evident that participants were, amongst other, concerned about the wedding venue on top of Riebeek Hill and the visual and cultural heritage impact that it would have from the surrounding topography of Riebeek Kasteel. Concern was also expressed in the comments received about the perceived alteration of the character and sense of place of Riebeek Kasteel. Recognising the concerns raised by the participants in the first round of the public participation process, some specialist input studies were commissioned e.g. botanical and biodiversity study, archaeological study of the site, an architectural design study as well as statement on visual impact to further inform a modified design layout presented as Alternative 2.

The major difference between Alternative 1 and 2 lies in the removal of the wedding venue that was originally included in Alternative 1 as a visual feature and replacing it with ~25 single storey residential erven on top of the Riebeek Hill. Another modification was creating a visual corridor from the entrance along Church Street from the south across the middle of Erf 878 to the old church located on the ridge to the northeast. As a result, Alternative 3 – the previously preferred alternative incorporated single residential erven on the hilltop.

Taking cognisance of the Heritage Western Cape response, as a commenting authority on the submitted NID, the full Heritage Impact Assessment, with a Visual Impact Assessment, Urban Design Report and Archaeological Impact Assessment, were undertaken and informed the evolution of the layout Alternative. During Public Participation Process four (4) Alternative 3 was the preferred layout, which was informed by the above-mentioned specialist's assessment and the Urban Design Report, and was therefore submitted as a preferred layout Alternative during PPP 4. However, following comments and concerns received from I&APs and the Organs of State during PPP 4, a new layout alternative (Alternative 4) was introduced. Following PPP 5 (24 April to 26 May 2026) and the HWC IACom Further Requirements of August 2026, Alternative 4 was refined into Alternative 5, the final preferred layout. HWC IACom approved the Rev 78 drawing package in its Final Comment of 30 September 2026.

The impacts associated with the installation of the civil engineering aspects are common to all five alternatives: Geographical impact, Ecological impact, Traffic impact and Noise impact. The only impacts where there were differences between the alternatives A1 to A5 were those relating to Heritage, Visual and Socio-economic**.** The essential differences between the five alternatives were the following:

Alternative 1

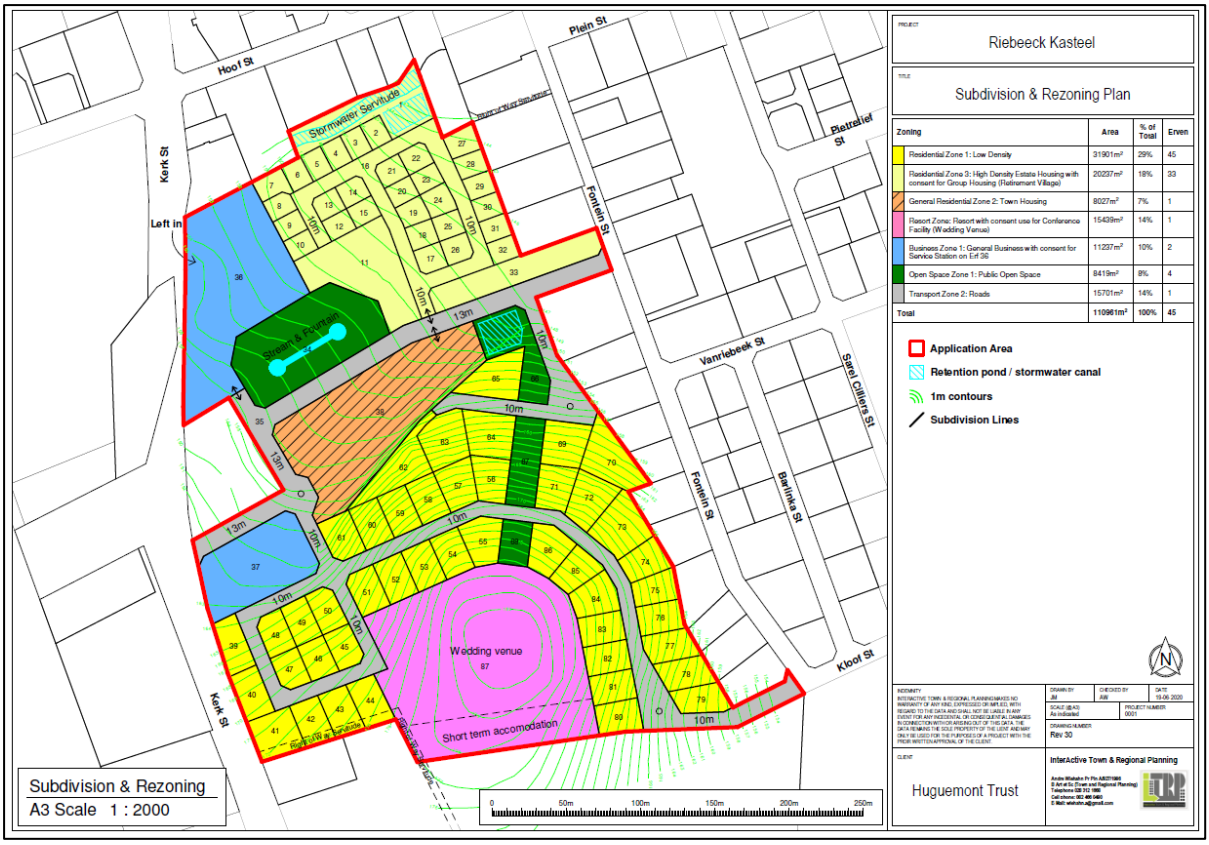
This alternative was designed as an initial development layout submitted in the form of a pre-BAR to initiate the process of public participation and solicit input on issues, comments and impacts from initially identified I&APs, ratepayers and environmental groups, as well as organs of state. This proposal included service station on Business Zone 1 as well as a wedding venue on top of the hillock on Erf 878 as a visual feature and underestimated the importance of the sight line across the property from Church Street as one enters Riebeek Kasteel. This alternative also failed to recognise and / or acknowledge the history of the town and the importance of the town church as a focal point. By including a second church steeple on the Riebeek Hill presented a threat to the existing point of focus in Riebeek Kasteel.

In a number of on-site tests that were run during these initial phases of the development concept, showed that when entering the town from Church street, the motorists foreign to the town focussed mainly on the roadway of Church Street as it is a steep downhill and that the church on the far hill was screened by The Barn before the vista suddenly opened up when passing Erf 878.

Driving from the north to the south down Church Street one is also confronted with a downhill slope that tends to maintain focus on the road ahead and there is no awareness of the church on the hill behind.

When on foot as a pedestrian entering the town on foot from the south, all became aware of the church on the far hill. This awareness was ascribed to the slow speed of approach and the ample time to take in the detail of the surrounding vistas.

With the above in mind, and the input from visual and heritage specialists, regarding the inappropriateness of the wedding venue and church steeple on Riebeek Hill resulted in the removal of this feature in the future layout alternatives. The venue was replaced with single residential erven in Alternative 2.



Zoning		Area	% of Total	Erven
	Residential Zone 1: Low Density	31901m²	29%	45
	Residential Zone 3: High Density Estate Housing with consent for Group Housing (Retirement Village)	20237m²	18%	33
	General Residential Zone 2: Town Housing	8027m²	7%	1
	Resort Zone: Resort with consent use for Conference Facility (Wedding Venue)	15439m²	14%	1
	Business Zone 1: General Business with consent for Service Station on Erf 36	11237m²	10%	2
	Open Space Zone 1: Public Open Space	8419m²	8%	4
	Transport Zone 2: Roads	15701m²	14%	1
Total		**110961m²**	**100%**	**45**

Figure 27. Alternative 1 layout.

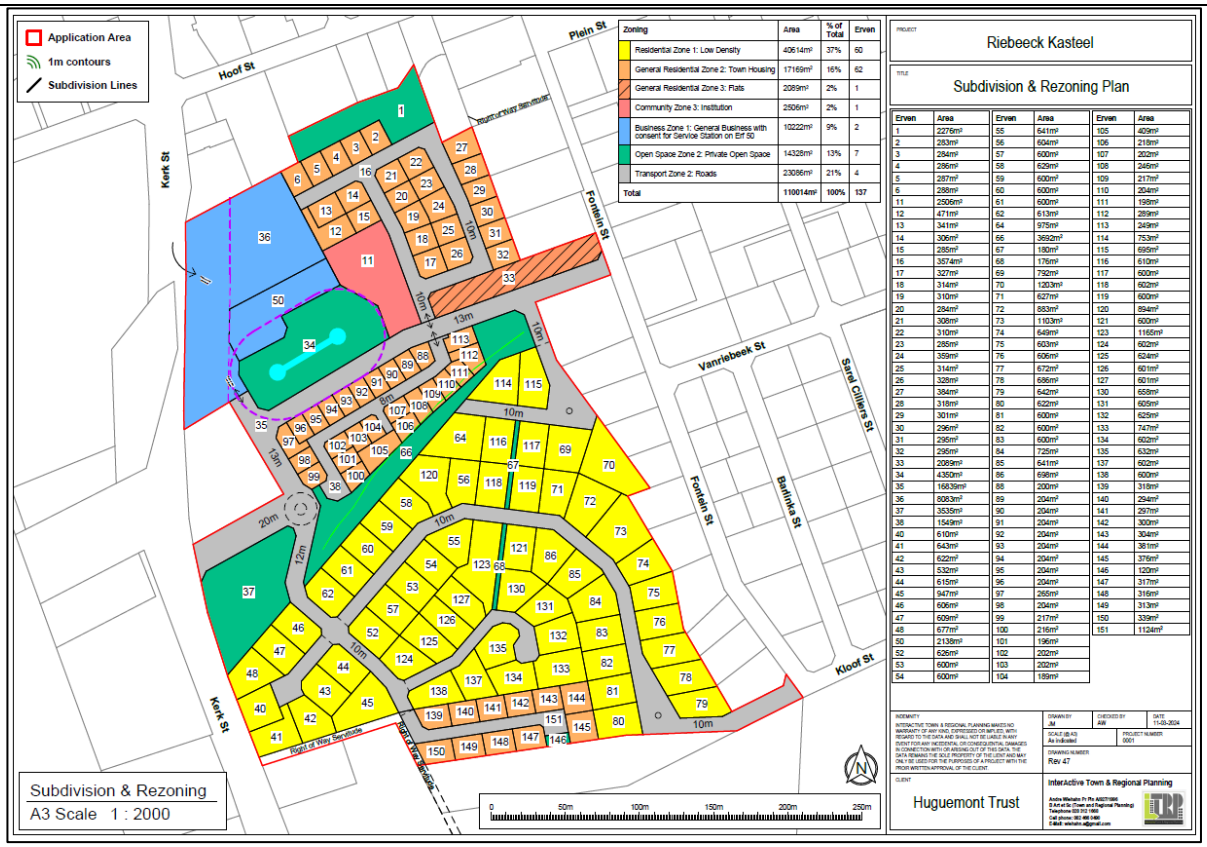
Alternative 2

Alternative 2 evolved in response to the first round of public participation, as well as early input from the heritage, visual and design team. Specialist input to meet the Heritage Western Cape requirement, with specific reference to townscape analysis, visual impact assessment and heritage design indicators as well as an overall assessment of the impact on heritage resources, were not yet fully implemented in this alternative.

The removal of the proposed wedding venue and small church steeple was implemented in this alternative. The short term accommodation offering under resort zone, which was proposed adjacent to the venue has also been removed and replaced with General Residential Zone 3 (apartments). This was replaced with approximately 25 single storey residential dwellings on top of Riebeek Hill, but still no consideration yet for the density of residential dwellings on top of Riebeek Hill and the grid-block type layout of the old residential areas of Riebeek Kasteel. The visual sight corridor from Church Street across the middle of Erf 878 to the old church steeple on the distant ridge to the northeast was opened, as per previous concerns. The economic impact with the increased number of residential dwellings were also more positive according to the proponent perspective. This was because the economic benefit would be realised over a shorter period of time with the sale of the erven, than with the economic benefit of a wedding venue that would accrue over a longer period of time with rentals.

This alternative also saw changes in the layout of the business zone, specifically relating to the fuel station, where a right of way servitude was included alongside Kerk Street and the Business Zone was reduced in size.

However, in the meantime, discussions were held with people knowledgeable in the field of HIA and specialist studies were embarked upon as inputs to the heritage impact assessment as stipulated by Heritage Western Cape in their letter of 4 June 2021. The outcome of these discussions and specialist studies was that the design layout was once again changed to culminate in Alternative A3. In addition, erf 37 which was previously marked in Alternative 1 as a Business Zone is removed in Alternative 2 and marked as Open Space – this opened up the line-of-sight corridor required. in addition, for this line of sight, an open space erf (Erf 66) was added between the town houses and single residential dwellings on the hill.



Zoning	Area	% of Total	Erven
Residential Zone 1: Low Density	40614m²	37%	60
General Residential Zone 2: Town Housing	17169m²	16%	62
General Residential Zone 3: Flats	2089m²	2%	1
Community Zone 3: Institution	2506m²	2%	1
Business Zone 1: General Business with consent for Service Station on Erf 50	10222m²	9%	2
Open Space Zone 2: Private Open Space	14328m²	13%	7
Transport Zone 2: Roads	23086m²	21%	4
Total	**110014m²**	**100%**	**137**

Figure 28. Alternative 2

Alternative 3

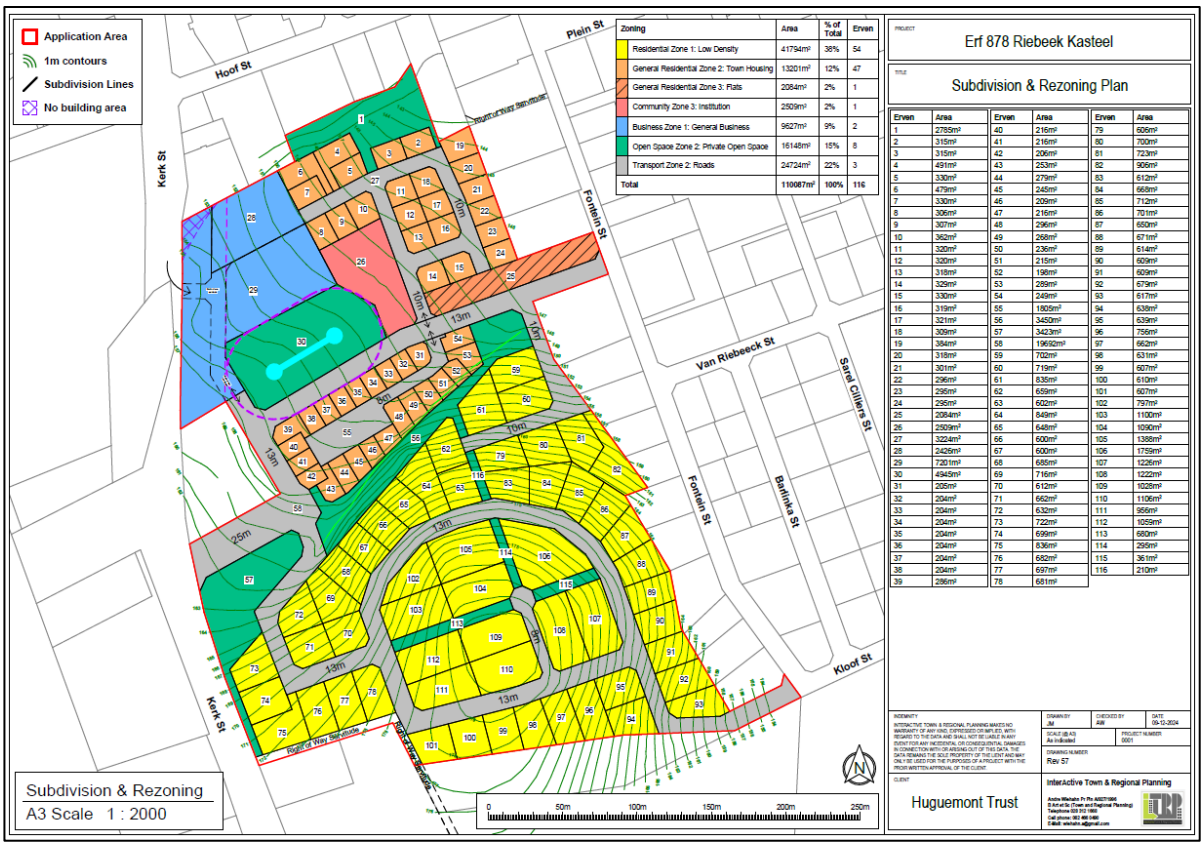
This layout was developed after additional specialist input, particularly as requested by Heritage Western Cape and as presented in the Heritage Impact Assessment, Visual Impact Assessment, Archaeological Impact Assessment and Urban Design Guideline. This was the preferred layout alternative at that stage. Other additional specialist input which informed this layout included the Freshwater Impact Assessment.

Alternative 3 sees an inclusion of a grid-block layout as seen in the older part of the Riebeek Kasteel, being replicated as far as possible on Erf 878. Riebeek Hill topography did present practical limitations to this, due to the configuration of the landform and requirement that the stormwater and other underground services had to be placed in the road reserves.

In addition, Alternative 3 sees a significant reduction of the number of erven on top of Riebeek Hill from approximately 25 to approximately 11. The erven sizes have been increased from 600 - 750 m^2 to approximately 1000 - 1400 m^2 over the same area. This change aims to allows for a less dense alternative and encourages green spaces between homes.

Although this reduction in the number of erven and the increased difficulty in selling the larger erven at higher cost, the developer was in agreement to incorporate the outcomes of the specialist studies of visual, urban design and heritage into Alternative 3.

Another important change in Alternative 3 was the removal of the fuel station as well as the apartments that were proposed for the south end of the property, where these were replaced with low density single residential erven.



Zoning	Area	% of Total	Erven
Residential Zone 1: Low Density	41794m²	38%	54
General Residential Zone 2: Town Housing	13201m²	12%	47
General Residential Zone 3: Flats	2084m²	2%	1
Community Zone 3: Institution	2509m²	2%	1
Business Zone 1: General Business	9627m²	9%	2
Open Space Zone 2: Private Open Space	16148m²	15%	8
Transport Zone 2: Roads	24724m²	22%	3
Total	**110087m²**	**100%**	**116**

Figure 29. Alternative 3

Alternative 4 – Previously Preferred (PPP 5)

April 2026

Alternative 4 was a technical response to the negative feedback received on earlier iterations and the specific mandates provided by environmental and heritage specialists. The following modifications were integrated into this layout:

- → **Shift in Urban Design Philosophy:** The development model transitioned from "introverted gated residential neighbourhoods" to a "pedestrian-oriented extension" of the Riebeek Kasteel townscape, aligning residential plots with the historic grid to complete fragmented town blocks.
    - **Requester:** Heritage Western Cape (HWC) IACom and the Riebeek Valley Ratepayers Association (RVRA).
- → **Topographical Preservation and "No-Go" Areas:** Development is now restricted below the 170m contour line, preserving the prominent hill crest as a publicly accessible "Hill Park" featuring restored Renosterveld.
    - **Requester:** HWC IACom (who recommended a 170m cut-off line) and RVRA.
- → **Protection of Cultural Sightlines:** The layout was reconfigured to establish and protect a dedicated "view cone" or corridor from the R311 across the site toward the landmark Dutch Reformed Church (DRC) steeple.
    - **Requester:** RVRA and HWC IACom.
- → **Reduction of Commercial Scale:** Earlier large-scale retail concepts and a previously proposed fuel station were replaced with a limited "Business Zone 1" (172 m^2) utilizing a low-impact farmstall typology along Church Street.
    - **Requester:** RVRA and HWC IACom.
- → **Aquatic Resource Avoidance:** The layout successfully avoids all functional portions of Seep Wetland 2 and the above-ground Krom River corridor, incorporating these features into Open Space Zone 2.
    - **Requester:** Aquatic Biodiversity Specialist (Delta Ecology) and RVRA.
- → **Formal Stormwater Attenuation:** A technically sized system was designed to attenuate a 1:50-year peak storm event (991 m^3 volume), integrated into a "wetland park" using bio-filters to manage runoff quality and quantity.
    - **Requester:** Civil Engineering Specialists (KLS) and RVRA (who cited the absence of calculations in earlier reports as a "major flaw").
- → **Traffic Management and Intersection Safety:** The implementation of a 4-way stop at the R311/Access 1 intersection was mandated to mitigate a 75m sight distance constraint and act as a speed deterrent.
    - **Requester:** Traffic Engineering Specialist (Route 2) and RVRA.
- → **Architectural Design Parameters:** The adoption of strict guidelines enforcing a contemporary Cape Vernacular idiom (simple rectangular forms, pitched roofs, and verandas) to ensure the development complements the historic 19th-century church town character.
    - **Requester:** Heritage Western Cape and Urban Design Specialist.
- → **Bulk Service Capacity Upgrades:** The developer committed to Development Contributions for mandated municipal upgrades, including for reservoir storage and for bulk sewer capacity in Pieter Cruythoff Avenue. Rand values will be determined in conjunction with the developer, any future developers in the area and the Municpality.
    - **Requester:** Swartland Municipality, GLS Consulting, and RVRA.
- → **Transitional Landscape Edges:** The western boundary along the R311 was reimagined as a "transitional zone" using agricultural typologies, "werf" walls, and olive groves to soften the entry experience into the village.
    - **Requester:** Visual Impact Specialist (New World Associates) and HWC IACom

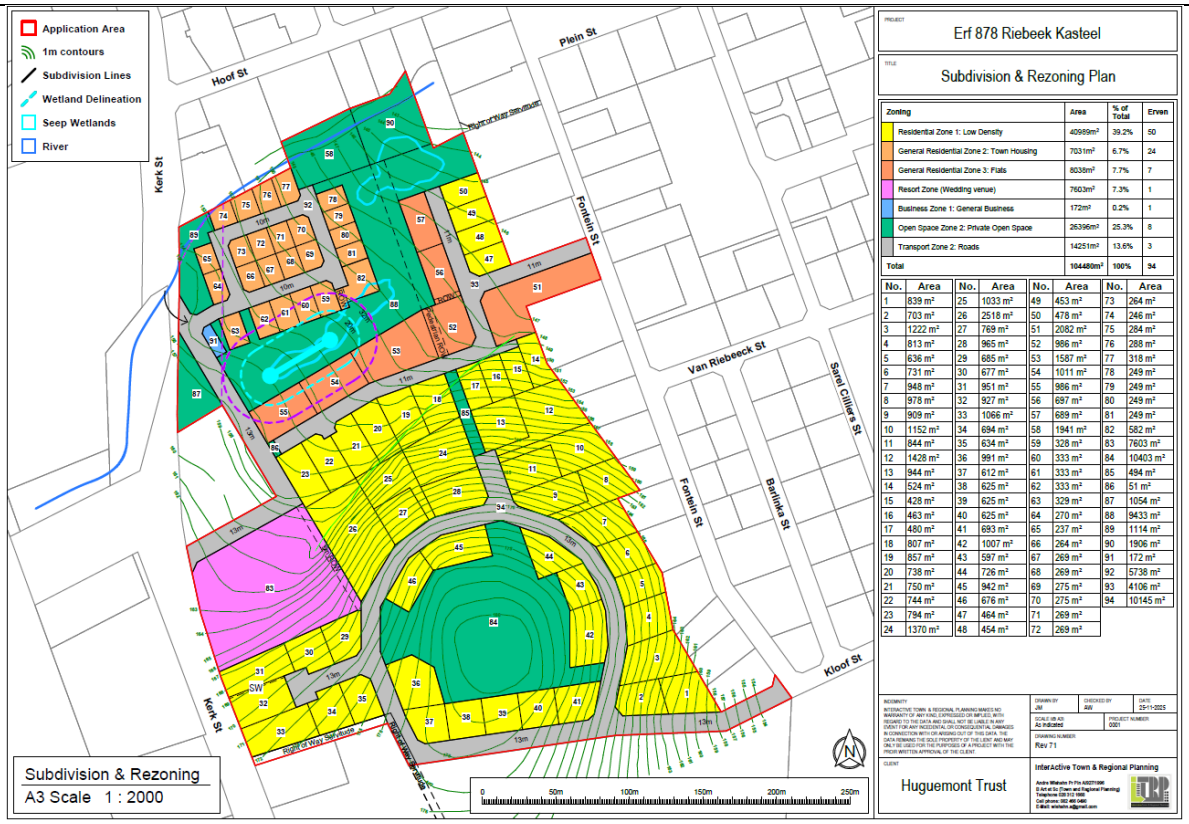


Figure 30: Alternative 4 – Previously Preferred (PPP 5)



Figure 31: Alternative 4 Urban Design Study.

Important notes regarding the Urban design and Evolution of Layout Alternative 4:

- → Shift from a precinct development model to a pedestrian-oriented extension of the Riebeek Kasteel townscape, reinforcing integration with the existing town centre and linking the site assets to the existing village.
- → Strengthen connection to the heart of town by establishing a continuous pedestrian network linking the site, the town centre, and key destinations such as The Barn and the top of the hill.
- → Limit vehicular movement across the site: restrict through-access to emergency and service vehicles only, preserving the arrival experience into Riebeek Kasteel from Church/Main Street.
- → Introduce a gradual transition in intensity of built form, responding to the agrarian-to-village sequence along Church Street. Reimagine the western edge as a transitional zone between agriculture and village:
  - Use farm/werf typologies, werf walls, and landscape structuring
  - Frame views toward the town with an agricultural foreground
  - Reinforce the spatial experience of entering the village along Church Street
  - Replace the north-western commercial zone and parking area with landscaping and single-storey residential typologies, supporting this transition
- → Remove the standalone business zone and reposition development to support the town structure:
  - Locate the retirement village along Church Street
  - Retain a small-scale farm stall / roadside retail erf at its entrance

- → Reconfigure the core of the development:
  - Shift from a central retail node overlooking a park to a series of village spaces along a primary pedestrian route
  - Create a linear public realm structure and pedestrian spine connecting the town centre to the hilltop
- → Replace the inward-facing village model with an outward-facing mixed-use typology:
  - Double-storey buildings forming one edge of the main pedestrian street
  - Active ground-floor uses (e.g. studios, workshops, small-scale commercial)
  - Residential units above
  - Establish a vibrant, active edge along the public realm
- → Refine the green open space system into a continuous ecological and stormwater network:
  - Align with existing flow paths and ponding conditions
  - Establish a wetland park for stormwater retention and biodiversity
  - Provide a privacy and security threshold for the retirement village
  - Provide a green edge to the pedestrian spine
- → Integrate the hill into the town's public open space system:
  - Convert from private erven to a publicly accessible park
  - Connect to the wider pedestrian network through the new development
- → Complete and reinforce the town structure:
  - Align new plots with the existing town grid along the eastern edge of the site
  - Position buildings on the street boundary with verandahs to support intimate village streetscapes
  - Use a combination of hard (built form) and soft (landscape) edges to define streets and thresholds

Alternative 5 – Final Preferred

September 2026

Alternative 5 (Subdivision and Rezoning Plan Rev 78, dated 24 August 2026) is the final preferred layout. It retains the spatial structure of Alternative 4 and refines it in response to the HWC IACom Further Requirements (August 2026) and the comments received during PPP 5. IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026. The following modifications were integrated into this layout:

- → **Repositioning of the Southern Slope Erven:** The erven on the southern edge of the hill were moved down slope to abut the southern site boundary, and the ring road was relocated between these erven and the hilltop. This reduces the visual prominence of the uppermost units on the koppie.
  - Requester: HWC IACom (Further Requirements, item 1).
- → **Enlargement of the Hill Park:** The erven on the northern edge of the hill were removed, enlarging the publicly accessible, vegetated Hill Park (Portion 80, 14,183 m²).
  - Requester: HWC IACom.
- → **Height Controls on the Upper Slopes:** Erven 35 to 40 are limited to single storey with no habitable roof space and a 2.7 m wallplate. All other hillside dwellings are limited to single storey with habitable roof space, a 4.5 m wallplate and an 8.0 m roof apex. A summary of building heights in metres was added to the Architectural Guidelines (Rev 17).
  - Requester: HWC IACom and RVRA.
- → **Retention of the Church Street View Cone:** The events building was reduced in size and moved southwards, the events parking was placed on lower ground, and the perimeter trees along Church Street were removed from the design, so that views from Church Street to the Dutch Reformed Church remain open.
  - Requester: HWC IACom (Further Requirements, item 2) and RVRA.
- → **Events and Wedding Venue (Resort Zone):** The venue remains on Portion 78 (7,607 m²) on the lower western slope off Church Street, away from the hilltop. Buildings are limited to single storey, with a floor plate of 300 m²

per building and 700 m² for the combined complex, set back at least 30 m from Church Street and screened with trees.
    - Requester: HWC IACom and RVRA.
- → **Architectural Language:** The flat-roofed architectural style was removed. All buildings are to be designed in the contemporary Cape Vernacular idiom.
    - Requester: HWC IACom and Visual Impact Specialist (New World Associates).
- → **Removal of the Care Centre:** The care centre and all buildings in the northern corner of the site were removed.
    - Requester: HWC IACom.
- → **Expanded Wetland Servitude:** The servitude for the wetland precinct was expanded.
    - Requester: Freshwater Specialist.
- → **Consistent Drawing Set:** The Concept Masterplan (20 August 2026), Urban Design Report Rev 3.5, Architectural Guidelines Rev 17, Landscape Site Development Plan (26 August 2026) and Subdivision and Rezoning Plan Rev 78 were aligned and approved together by HWC IACom.
    - Requester: HWC IACom (Further Requirements, item 4).

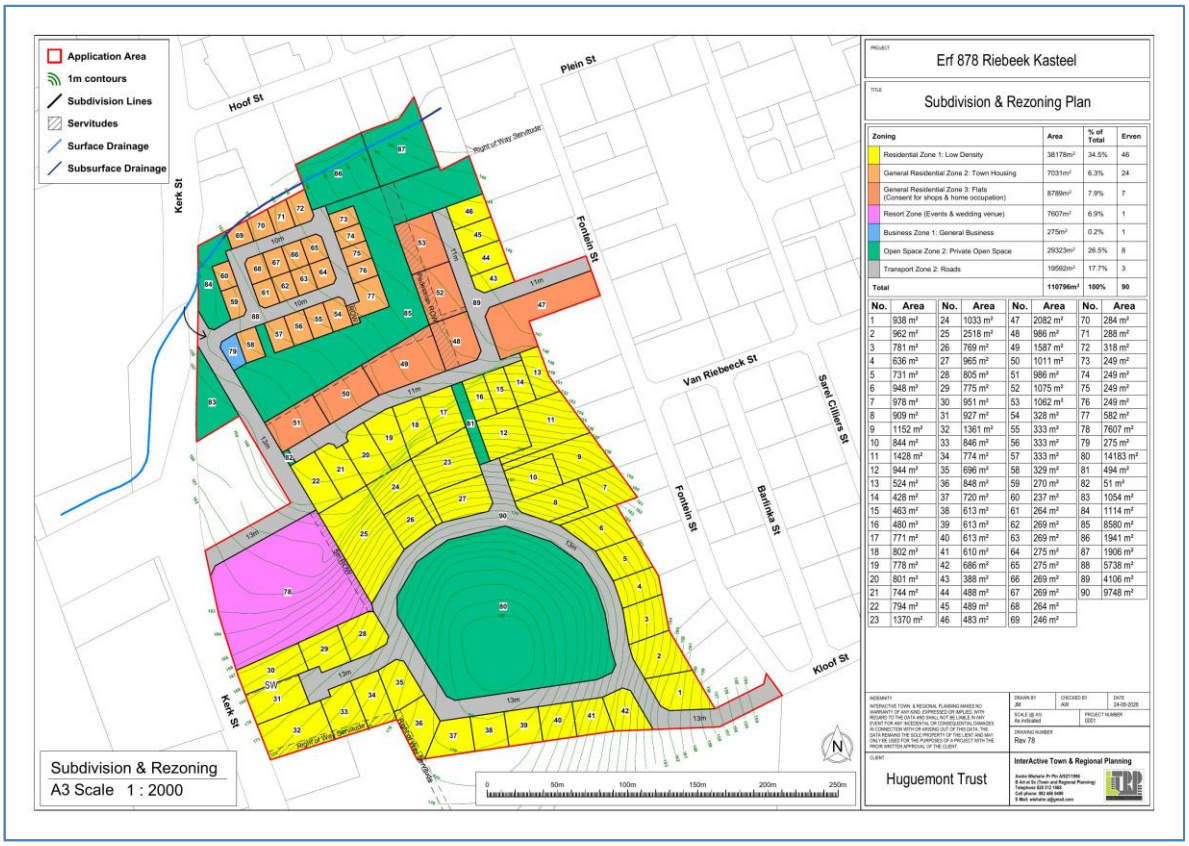


Figure 31a: Alternative 5 (Subdivision and Rezoning Plan Rev 78), final preferred layout.

Provide a detailed motivation if no property and site alternatives were considered.

The developer investigated all the undeveloped properties available in Riebeek Kasteel that could meet the required size, cost, location and economic feasibility in the property investment that he wished to embark upon. Erf 878 was the only one that met the size criterium that was required for the proposed development. All the others were too small to present economic feasibility as determined by the economists and financiers that he approached (see Vacant Land in Locality Map in **Appendix A**).

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

There were no appropriate property and site alternatives identified that could meet the proposed development requirements.

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

Provide a description of the preferred activity alternative.

Only layout alternatives are investigated with minor internal activity alternatives, as described above.

Provide a description of any other activity alternatives investigated.

N/A

Provide a motivation for the preferred activity alternative.

N/A

Provide a detailed motivation if no activity alternatives exist.

There were no activity alternatives identified as this an application for a residential housing and associated business and infrastructure development, designed to conform with the applicable national, provincial, local regulations and Swartland municipal by-laws.

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

N/A

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.

Five (5) layout alternatives and the No Development option (No Go) have been assessed. Alternative 5 is the preferred layout.

ALTERNATIVE 5: PREFERRED

The preferred Alternative 5 (Subdivision and Rezoning Plan Rev 78, dated 24 August 2026) is the final refinement of the proposed mixed-use development on Erf 878, Riebeek Kasteel. It retains the pedestrian-oriented extension of the town established in Alternative 4, and incorporates the HWC IACom Further Requirements of August 2026. IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026.

1. Land Use and Zoning Summary

According to the Rev 78 Subdivision and Rezoning Plan, the application area of **110,796 m²** is subdivided into **90 portions**:

- → **Residential Zone 1 (Low Density):** 46 erven (Portions 1 to 46, 38,178 m²) for single residential dwellings on the slopes of Riebeek Hill. Portions 13 to 22 and 43 to 46 are semi-detached.
- → **General Residential Zone 2 (Town Housing):** 24 erven (Portions 54 to 77, 7,031 m²) forming a single storey retirement village, with Portion 77 as a community erf.
- → **General Residential Zone 3 (Flats):** 7 erven (Portions 47 to 53, 8,789 m²) forming a mixed-use village, with consent for shops and home occupation on the ground floor and residential units above.

- → **Resort Zone:** 1 erf (Portion 78, 7,607 m²) for the events and wedding venue, with consent for a tourist facility, designed as a single storey Cape werf complex on the lower western slope.
- → **Business Zone 1:** 1 erf (Portion 79, 275 m²) for small-scale roadside retail at the entrance to the retirement village.
- → **Open Space Zone 2 (Private Open Space):** 8 erven (Portions 80 to 87, 29,323 m²), representing 26.5% of the application area. These include the Hill Park (Portion 80, 14,183 m²), the historic fountain, the wetland park and the stormwater systems.
- → **Transport Zone 2 (Roads):** 3 erven (Portions 88 to 90, 19,592 m²) laid out on a grid to integrate with the existing town fabric.

2. Urban Design and Heritage Integration

Alternative 5 retains the urban design principles of Alternative 4, as set out in the Urban Design Report (Rev 3.5, 20 August 2026). New plots align with the existing town grid, and a continuous pedestrian network links the town centre to The Barn and the hilltop. The western edge along the R311 is treated as a transitional zone between agriculture and village. The internal road network is split into three independent components, so that no through traffic passes from the town to Church Street.

3. Topographical and Visual Mitigation

The crest of Riebeek Hill is retained undeveloped as the Hill Park, which was enlarged by removing the erven on the northern edge of the hill. A single row of low density erven on the southern edge of the hill was moved down slope to abut the southern boundary, with the ring road between these erven and the park. The Rev 78 170 m contour plan shows that 12 erven on this southern edge lie predominantly above the 170 m contour. HWC IACom accepted this arrangement subject to strict height controls: Erven 35 to 40 are limited to single storey with a 2.7 m wallplate, and all other hillside dwellings to a 4.5 m wallplate and an 8.0 m roof apex. The view cone from Church Street to the Dutch Reformed Church is kept free of buildings and trees.

4. Environmental and Freshwater Preservation

The freshwater layout of Alternative 4 is carried forward, with an expanded wetland servitude. Seep Wetland 2 and the above-ground Krom River corridor are avoided and placed within Open Space Zone 2. Encroachment remains limited to approximately 100 m² of the degraded lower portion of Seep Wetland 1. The site baseline has not changed, so the freshwater, botanical and agricultural findings apply equally to Alternative 5.

5. Civil, Electrical and Traffic Engineering

- → **Stormwater:** An on-site attenuation facility of 991 m³ attenuates the 1:50 year post-development flood to the 1:2 year pre-development outflow rate (Civil Engineering Services Report, Rev F, September 2026).
- → **Water and Sewer:** The calculated water demand (87.2 kL/d) and sewage yield (46.8 kL/d) fall within the GLS master planning allowances. Bulk reservoir storage and outfall sewer upgrades are required. These are to be funded through Development Contributions calculated by Swartland Municipality in accordance with Council policy, estimated at ±R21.4m (water) and ±R2.8m (sewer), excluding VAT at 2024/25 Rand values (Civil Engineering Services Report, Rev F).
- → **Traffic:** The Traffic Impact Study (Route2, version 005, 2 September 2026) estimates a worst-case 171 AM and 171 PM peak hour trips, with limited to no impact on adjacent roads. Access 1 off the R311 is a full access intersection with a 4-way stop, to address the restricted sight distance and deter speeding. A second access off the R311 is proposed as left-in only. The TIS motivates in response to the DOI comment, that the left in slip is no longer used for major commercial purposes and therefore its impact is reduced significantly.

→ **Electrical:** Eskom has confirmed that the estimated 642 kVA demand can be supplied from the Dagbreek Farmers 2 feeder (DSV Consulting Engineers, 31 August 2026).

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

Five layout alternatives (Alternatives 1 to 5) and the no go option have been assessed in the NEMA process.

ALTERNATIVE 1

A mixed-use development is proposed, consisting of the following components with the following approximate extent values:

→ 45 Residential Zone1: Low Density - 31901m^2
→ 33 Residential Zone 3: High Density Estate Housing with Consent Use for Group Housing (Retirement Village) - 20237m^2
→ General Residential Zone 2: Town - 8027m^2
→ Resort ZoneL Resort Zone with Consent Use for Conference Facility (Wedding Venue)
→ Business Zone 1: General Business with Consent for Service Station on Erf 36 – 11237 m^2
→ Open Space Zone 1: Public Open Space – 8419 m^2
→ Transport Zone 2: Road's - 15701m^2

This alternative was developed as an initial proposal to kick off the impact assessment process for the proposed urban development of Erf 878. This proposal included a wedding venue with parking area on top of Riebeek Hill. The wedding venue consisted of a church with steeple and tall cypress trees to act as a visual emphasised feature on top of the hillock (Riebeek Hill) on Erf 878. This alternative also includes a fuel service station and was guided by limited public or specialist input.

ALTERNATIVE 2

Alternative 2 evolved in response to the first round of public participation, as well as early input from the heritage, visual and design team. Specialist input to meet the Heritage Western Cape requirement, with specific reference to townscape analysis, visual impact assessment and heritage design indicators as well as an overall assessment of the impact on heritage resources, were not yet fully implemented in this alternative.

Key changes in the layout include:

→ The removal of the proposed wedding venue and small church steeple on Riebeek Hill
→ The removal of the short-term accommodation offering under resort zone, which was proposed adjacent to the venue has also been removed and replaced with General Residential Zone 3 (apartments).
→ Addition of approximately 25 single storey residential dwellings on top of Riebeek Hill in place of the venue.
→ Inclusion of the visual sight corridor as an open space. from Church Street across the middle of Erf 878 to the old church steeple on the distant ridge to the northeast.
→ Changes in the layout of the business zone, specifically relating to the fuel station, where a right of way servitude was included alongside Kerk Street and the Business Zone was reduced in size.
→ Change of erf 37, previously a Business Zone, is removed in Alternative 2 and marked as Open Space – this opened up the line-of-sight corridor required.
→ An open space erf (Erf 66) was added between the town houses and single residential dwellings on the hill to further add to the line of site corridor

Specifically, Alternative 2 is broken down into the following specific offerings

- → Residential Zone 1: Low Density - 60 erven of approximately 40614m^2.
- → General Residential Zone 2: Town housing covering a total extent of 17169m^2
- → General Residential Zone 3: Flats of approximately 2089 m^2
- → Community Zone 3: Institution of 2506 m^2
- → Business Zone 1: 2 General Business with consent for service station, covering a total extent of 10222m^2.
- → Open space zone 2: 7 Private Open Spaces covering a total extent of 14328m^2.
- → Transport Zone 2, 4 erven with an extent of 23086m^2.

ALTERNATIVE 3

This layout has been refined based on inputs from various specialists, including archaeological, visual, heritage, freshwater and botanical assessments, as well as site-specific considerations such as topography, environmental sensitivities, and integration with the surrounding context. Input from Interested and Affected Parties (I&APs) and Organs of State during the various preceding rounds of public participation have also shaped this layout.

This layout includes the following broad land uses:

- → Retirement village
- → Single residential dwellings
- → Town housing
- → Retail (no fuel station)
- → Open spaces located at specific areas to incorporate water resources as well as line of site requirements
- → Internal roads

Alternative 3 has evolved as follows in response to specialist and I&AP input, as follows

- → Including a grid-block type layout as seen in the older parts of Riebeek Kasteel
- → No wedding venue
- → No fuel station
- → Removal of apartments on the southern border
- → Reduction of the business zone and increase in open space offerings
- → Open spaces located to include line of site as per heritage requirements
- → Development on Riebeek Hill reduced in density with larger erven to allow for a more open and green

ALTERNATIVE 4 (REVISION 71): PREVIOUSLY PREFERRED (PPP 5)

Alternative 4 was presented as the preferred layout during PPP 5 (24 April to 26 May 2026). It was superseded by Alternative 5 after HWC IACom required the uppermost erven on the visually exposed slopes to be repositioned and the Church Street view cone to be retained (Further Requirements, August 2026).
Alternative 4 (Revision 71) was a technical and spatial refinement of the proposed mixed-use development on Erf 878, Riebeek Kasteel, designed to function as a pedestrian-oriented extension of the town rather than an isolated gated precinct. This alternative incorporates a comprehensive set of specialist mandates to balance urban densification with heritage, visual, and ecological preservation.

1. Land Use and Zoning Summary

According to the Rev 71 site plan and planning reports, the development comprises **94 erven** within a total footprint of **104,480 m²**:

- → **Residential Zone 1 (Low Density):** 50 erven (40,989 m²) consisting of single residential houses situated on the lower slopes of Riebeek Hill.
- → **General Residential Zone 2 (Town Housing):** 24 erven (7,031 m²) dedicated to a retirement village component including a clubhouse.
- → **General Residential Zone 3 (Mixed-Use Village):** 7 erven (8,038 m²) conceptualized as an artisanal village node with active ground-floor workshops and residential units above.
- → **Resort Zone:** 1 erf (7,603 m²) for a wedding and events venue designed as a traditional Cape "werf" complex.
- → **Business Zone 1:** 1 erf (172 m²) for limited roadside retail along Church Street (R311), utilizing a low-impact farmstall typology.
- → **Open Space Zone 2 (Private Open Space):** 8 erven (26,396 m²) representing 25.3% of the site, encompassing the "Hill Park," wetland systems, and stormwater attenuation infrastructure.
- → **Transport Zone 2 (Roads):** 3 erven (14,251 m²) following a grid-based layout to integrate with the existing town fabric.

2. Urban Design and Heritage Integration

Alternative 4 responds to Heritage Western Cape (HWC) requirements by aligning new plots with the existing town grid to complete fragmented town blocks. A continuous pedestrian network links the town center to site landmarks, such as "The Barn" and the hilltop. The western edge along the R311 is reimaged as a "transitional zone" between agricultural land and the village, using "werf" walls, barn-shaped structures, and olive groves to soften the arrival experience and protect the scenic route.

3. Topographical and Visual Mitigation

To preserve the town's topographical "green frame," a "no-go" area is established above the 170m contour line, keeping the crest of Riebeek Hill free of development as a public park. The layout also protects a critical "view cone" or vista from the R311 toward the landmark Dutch Reformed Church steeple. Strict architectural guidelines mandate a contemporary Cape Vernacular idiom with low building heights to minimize visibility on the skyline.

4. Environmental and Freshwater Preservation

The layout successfully avoids all functional portions of Seep Wetland 2 and the above-ground Krom River corridor, placing them within protected open space. Encroachment is limited to approximately 100 m² of the already degraded lower portion of Seep Wetland 1. Buffers of 10m for the Krom River and 15–20m for the seeps are maintained where possible to ensure hydrological and ecological connectivity.

5. Civil and Traffic Engineering

- → **Stormwater:** A technically sized attenuation system is integrated into a "wetland park" to manage a 1:50-year peak storm event (991 m³ storage), utilizing bio-filters to improve runoff quality.
- → **Traffic:** Four primary access points are established. To mitigate sight distance constraints and deter speed on the R311, a 4-way stop is mandated at the R311/Access 1 intersection.

→ **Bulk Services:** The developer is committed to contributions for bulk upgrades, including municipal reservoir storage (±R21.4m) and bulk sewer capacity in Pieter Cruythoff Avenue (±R2.8m)

NO-GO

This alternative retains the status quo with no development considered for the site. The existing environmental conditions, remain as is.

Provide a motivation for the preferred design or layout alternative.

The preferred Alternative 5 has evolved through the EIA process to address the technical and heritage-related "fatal flaws" identified in previous iterations by organs of state and the public.

1. Evolution in Response to Heritage and Cultural Informants
The preferred layout responds directly to the negative Final Comment issued by Heritage Western Cape's (HWC) IACom in August 2025. It also responds to the HWC IACom Further Requirements of August 2026, which led to the refinements in Alternative 5. IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026.

→ **Townscape Integration:** The development has transitioned from a series of "introverted gated residential neighbourhoods" to a "pedestrian-oriented extension" of the Riebeek Kasteel townscape. The layout aligns new residential plots with the historic town grid to complete fragmented blocks.
→ **Topographical Preservation:** To protect the town's "green frame," the crest of Riebeek Hill is a "no-go" area for development, with only a single row of single storey erven on its southern edge, as accepted by HWC IACom. The crest is preserved as a publicly accessible "Hill Park" featuring restored Renosterveld.
→ **Protection of Cultural Sightlines:** The layout establishes and protects a formal "view cone" or corridor from the R311 (Church Street) across the site toward the landmark Dutch Reformed Church steeple, ensuring the church remains a dominant visual reference.
→ **Architectural Language:** Strict Architectural Design Parameters mandate a contemporary interpretation of Cape Vernacular, emphasizing low building heights and neutral earth tones to ensure structures remain visually recessive.
→ **Southern Slope and Hill Park Refinements (Alternative 5):** The erven on the southern edge of the hill were moved down slope to abut the southern boundary, and the ring road now separates these erven from the hilltop. The Hill Park was enlarged by removing the erven on its northern edge. Erven 35 to 40 are limited to single storey with a 2.7 m wallplate.
→ **View Cone Refinements (Alternative 5):** The events building was reduced in size and moved southwards, events parking was placed on lower ground, and the perimeter trees along Church Street were removed from the design to keep the view to the Dutch Reformed Church open.

2. Response to Public Participation and Stakeholder Concerns
The scheme incorporates critical technical feedback provided by the Riebeek Valley Ratepayers Association (RVRA) and other Interested and Affected Parties (I&APs). The RVRA confirmed its support for the revised development, subject to the resolution of engineering and infrastructure concerns, in its letter of 17 November 2025 (Appendix F2) and its PPP 5 comments (Appendix F1).

→ **Commercial Re-scaling:** In response to objections regarding the scale of retail development, the proposal replaces earlier large-scale concepts with a limited "Business Zone 1" (275 m² in Alternative 5) roadside retail node.

- → **Stormwater Sizing:** Addressing earlier technical omissions, a system has been designed to attenuate a 1:50-year peak storm event (991 m³ volume). This infrastructure is integrated into a "wetland park" to manage both runoff quality and quantity.
- → **Infrastructure Sustainability:** The developer is committed to Development Contributions for municipal upgrades as identified in the Services Report.
- → **Building Heights in Metres:** In response to the RVRA's PPP 5 comment, a summary of building heights in metres was added to the Architectural Guidelines (Rev 17). It is proposed that the height restrictions be included in the conditions of approval, the guidelines and the title deed conditions.

3. Environmental and Ecological Mitigation

The "Very High" aquatic sensitivity of the site was a primary spatial informant for Alternatives 4 and 5.

- → **Resource Avoidance:** The layout successfully avoids all functional portions of Seep Wetland 2 and the above-ground Krom River corridor. Unavoidable encroachment is limited to ~100 m² of the already degraded lower portion of Seep Wetland 1.
- → **Buffer Management:** 10m to 20m buffers are maintained around functional features, which are incorporated into Private Open Space Zone 2 for long-term protection.
- → **Botanical Integrity:** As the site is largely transformed, focus is placed on establishing a suitable rehabilitation corridor along the Krom River and preserving significant indigenous trees.

4. Engineering and Traffic Safety

Technical assessments confirm that the development will have a manageable impact on municipal services and transport networks.

- → **Road Safety:** To mitigate a 75m sight distance constraint and act as a speed deterrent on the R311, a 4-way stop control is mandated at the R311/Access 1 intersection.
- → **Non-Motorized Transport:** The layout prioritizes pedestrian connectivity by establishing a network of sidewalks and paths that link the site directly to the Riebeek Kasteel CBD.
- → **Traffic Generation:** The updated Traffic Impact Study (Route2, version 005, 2 September 2026) estimates a worst-case 171 AM and 171 PM peak hour trips, with limited to no impact on the adjacent road network.
- → **Electricity Supply:** Eskom has confirmed that the estimated 642 kVA demand can be supplied from the Dagbreek Farmers 2 feeder.

5. Socio-Economic Desirability

The development aligns with provincial and municipal planning objectives by providing:

- → **Housing Diversity:** Offers a range of housing types, including low-density single residential, medium-density townhousing, and age-appropriate retirement accommodation.
- → **Economic Stimulation:** Generates construction-phase and long-term operational employment while increasing the municipal rate base and supporting local retail thresholds.

Provide a detailed motivation if no design or layout alternatives exist.

N/A

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

A comparative assessment of the five design/layout alternatives and the No-Go option show varying levels of environmental, heritage, visual, ecological, and socio-economic impacts. While each alternative offers certain benefits,

the balance of impacts clearly supports Alternative 5 as the preferred and most environmentally responsible option. The discussion below summarises the key positive and negative impacts associated with each alternative, integrating the findings of the heritage, freshwater, visual, urban design, botanical, and engineering specialist studies.

Alternatives 1 and 2

Alternatives 1 and 2 present the highest negative impacts across ecological, freshwater, and heritage themes. Both layouts extend the development footprint too close to sensitive ecological features, including seep wetlands and sections of the Krom River located within an Ecological Support Area (ESA2). This placement results in habitat loss, the potential alteration of hydrological pathways, and significant encroachment into recommended freshwater buffer zones. From a visual and heritage perspective, Alternatives 1 and 2 also threaten the iconic sightline from Church Street (R311) toward the historic church. In Alternative 1, the placement of a wedding venue on Riebeek Hill introduces a competing visual focal point that disrupts the town's historic visual character and sense of place. Specialist assessments confirmed that this visual obstruction would undermine the cultural landscape and diminish the legibility of the church as the primary visual anchor at the entrance to Riebeek Kasteel. Alternative 2, although slightly refined, still fails to adequately address these concerns. Both alternatives produce excessive visual intrusion, increased fragmentation of ecological areas, and higher construction-phase impacts due to their larger, less sensitive footprint.

While these alternatives offer some positive contributions such as opportunities for housing provision and basic stormwater management these benefits are limited and outweighed by the scale of environmental and heritage disturbance. Consequently, Alternatives 1 and 2 are not considered environmentally or culturally sustainable options**.**

Alternative 3 – Previously Preferred

Alternative 3 offers several notable improvements over Alternatives 1 and 2. From a heritage and urban design perspective, it makes a significant contribution to maintaining the visual and cultural integrity of Riebeek Kasteel. Key improvements include the preservation of the historic view from Church Street toward the elevated church approximately 500 m northeast of the site. The revised layout deliberately avoids obstructing this heritage view corridor and instead creates a framed sight path that visually reinforces the church's prominence. Specialist heritage and visual impact studies confirm that this adjustment substantially reduces adverse visual effects.

Alternative 3 also introduces meaningful ecological and environmental enhancements. The layout shifts much of the footprint to previously disturbed areas, reduces the number of residential erven on Riebeek Hill, increases plot sizes, and restricts development to single-storey height. These changes reduce visual intrusion, minimise landscape alteration, and align more closely with the existing low-rise character of Riebeek Kasteel. Ecologically, Alternative 3 offers partial protection to the river corridor and seep features by incorporating open space along the Krom River and avoiding some sensitive areas identified in the freshwater assessment.

However, several negative impacts remain. Although reduced, portions of the development still extend close to freshwater features and their required 15–20 m buffer zones. Some intrusion into degraded wetland areas persists, along with moderate vegetation loss and displacement of fauna. Hydrological disturbance and construction-phase impacts (dust, erosion, noise) remain relevant. From a socio-economic standpoint, the reduction in erven may reduce development yield, which specialists note could affect project viability. Despite these limitations, Alternative 3 is substantially more balanced than the earlier alternatives and significantly more environmentally sensitive

Alternative 4 – Previously Preferred (PPP 5)

Alternative 4 established the environmental and heritage responses that are carried forward into Alternative 5. It was developed directly in response to the findings of the freshwater, heritage, visual, urban design, botanical, and engineering specialist studies, as well as extensive public participation input.

The most significant freshwater-related benefit of Alternative 4 is its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 4 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 4 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 4 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

From a freshwater perspective, Alternative 4 represents a substantial improvement over all earlier alternatives. While approximately 100 m2 of degraded Seep Wetland 1 will be unavoidably lost, the entire functional portion of Seep Wetland 1 and Seep Wetland 2 is fully set aside as private open space along with a 20 m buffer where space allows, and reduced buffers of approximately 5 m elsewhere.

Heritage and visual considerations were equally central to the selection of Alternative 4. The site forms part of a visually sensitive landscape, with Riebeek Hill creating an important backdrop to the historic core of Riebeek Kasteel. Specialist studies repeatedly emphasised the importance of protecting the skyline and maintaining the historic view corridor from Church Street toward the distant church steeple. Earlier proposals, particularly Alternatives 1 and 2, placed visually intrusive structures and higher-density development on the hilltop, compromising this heritage setting. Alternative 4 responds directly to these concerns through a substantial reduction in hilltop erf numbers, the creation of a hilltop open space, and the application of strict height and architectural controls. These measures ensure that the visual relationship between the town and the hill remains intact and that the development complements, rather than dominates, the surrounding cultural landscape.

Alternative 4 also demonstrates a strong improvement in urban design quality and integration with the existing town. Alternative 4 incorporates a grid-like layout in the lower, more developable areas of the site, reflecting the historic morphology of Riebeek Kasteel. On the steeper upper slopes where a grid is not feasible, a contour-responsive layout minimises earthworks, reduces engineering interventions, and allows the built form to follow the natural topography. This not only lowers the environmental footprint of the development but also ensures visual coherence with the existing townscape. The reduced density on the hilltop further enhances this contextual fit and softens the interface between built and natural areas.

Reduction of the retail component represents another key advantage of Alternative 4. Earlier alternatives included a fuel station and a larger commercial area. Alternative 4 limits commercial use to a single Business Zone 1 erf (172 m²) at the north-western entrance off Church Street (R311), next to the retirement village. This low-impact farmstall typology keeps

the commercial footprint at a scale appropriate to the town and limits bulk and visual intrusion. Pedestrian connections through the development link the site to the existing retail environment in the town centre.

In addition, Alternative 4 incorporates a more coherent and functional open space network that delivers both ecological and visual benefits to the site and its surroundings. The revised layout introduces open-space buffers along Church Street (including the redesigned wedding venue precinct positioned on the south-western portion of the site along Church Street), which together help to maintain a green visual edge and protect the entrance character of the town. In the earlier layout alternatives, the wedding venue had been located on the hilltop area, an arrangement that resulted in unacceptable impacts from both a heritage and visual perspective due to its exposure and the sensitivity of the ridgeline. Under the Alternative 4 configuration, however, the venue is repositioned to the lower south-western slope along Church Street, where it can be effectively screened through structured landscaping and existing vegetation, thereby minimising its visual prominence. Furthermore, the integration of seep wetlands, seep systems, hilltop open space, and visual buffers into the broader open-space system ensures that the most sensitive areas of the site remain undeveloped. This structure not only safeguards key ecological processes but also preserves the landscape's visual integrity over the long term.

Alternative 5 – Final Preferred Alternative

Alternative 5 is the preferred and most heritage-responsive option. It retains the freshwater, ecological and urban design benefits of Alternative 4 described above, as the development footprint, wetland avoidance and open space network are unchanged in principle. The site baseline has not changed, so the freshwater, botanical and agricultural findings apply equally to Alternative 5.

The difference between Alternative 4 and Alternative 5 is primarily heritage and visual. HWC IACom acknowledged the improvements of the revised proposal, but remained concerned about the location of the uppermost units on the visually exposed slopes and the need to retain the view cone from Church Street. Alternative 5 moves the southern hill erven down slope to the southern boundary, places the ring road between these erven and the Hill Park, and enlarges the Hill Park. It also reduces and relocates the events building and its parking, and removes screening trees from the view cone. Erven 35 to 40 are restricted to single storey with a 2.7 m wallplate, and the flat-roofed architectural style was removed.

The HIA (31 August 2026) supports the Rev 78 subdivision and zoning diagram, the SDP, the Architectural Guidelines and the Landscape Masterplan. HWC IACom endorsed the HIA and approved these drawings in its Final Comment of 30 September 2026. The VIA (New World Associates, September 2026) concludes that the development will have a visual impact of medium significance after mitigation, with the key views from Church Street to the Dutch Reformed Church retained. No further archaeological mitigation or monitoring is required.

Negative impacts remain similar to Alternative 4. A single row of erven on the southern edge of the hill lies above the 170 m contour, as accepted in the HIA and approved by HWC, the visual change seen from the R311 remains noticeable, and the loss of approximately 100 m² of degraded Seep Wetland 1 is unchanged. These impacts are mitigated through the height controls, landscaping and maintenance requirements. HWC requires the VIA mitigation measures and the landscape maintenance of public spaces to be included in the EMPr.

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:

There were no technology alternatives that could be considered as this is an application for an urban development on the last vacant piece of land of the required size in private ownership located within the urban edge of Riebeek Kasteel.

Provide a description of any other technology alternatives investigated.

N/A	
Provide a motivation for the preferred technology alternative.	
N/A	
Provide a detailed motivation if no alternatives exist.	
N/A	
List the positive and negative impacts that the technology alternatives will have on the environment.	
N/A	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
There were no operational alternatives that could be considered as this is an application for an urban development on the last appropriate sizeable vacant piece of land located within the urban edge on the western side of Riebeek Kasteel. The proposed development will be subject to the building regulations and to the municipal by-laws of the Swartland Municipality.	
Provide a description of any other operational alternatives investigated.	
N/A	
Provide a motivation for the preferred operational alternative.	
N/A	
Provide a detailed motivation if no alternatives exist.	
N/A	
List the positive and negative impacts that the operational alternatives will have on the environment.	
N/A	
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' Option is not preferred for the following reasons found in the land use planning application (see **Appendix K**) → There is a great demand for properties in Riebeek Kasteel as well as business opportunities → There is very limited vacant land within the urban edge of Riebeek Kasteel of which Erf 878 is the only large piece of vacant land within the urban edge. → Erf 878 is earmarked for residential and business development according to the Swartland municipal SDF. → According to a specialist botanical study there is virtually no natural vegetation left on Erf 878 due to long term repeated impact by agricultural practices over the whole extent of Erf 878. → No biodiversity issues would be impacted with the development of Erf 878 as the property is completely surrounded by extensive agricultural and urban development.	

- → Swartland Municipality supports the development of Erf 878 as it will contribute financially to the municipal coffers and infrastructure.
- → The heritage and visual aspects of Erf 878 is important in the context of Riebeek Kasteel and it was found by the appropriate visual, heritage and architectural studies that the development would not compromise the sense of place of Riebeek Kasteel, provided the architectural guidelines are applied.

The proposed development on Erf 878 will formalise the maintenance of the visual and sense of place as well as maintain the possible biodiversity corridor from Erf 878 ultimately to the Berg River.

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.

Beyond the five development layout alternatives (Alternatives 1 to 5) and the No-Go option, no additional reasonable or feasible alternatives exist for this project. Erf 878 is the only property under application, and no off-site or property alternatives were available for consideration. As a result, the alternatives assessment focused on refining the internal site layout to avoid negative impacts, minimise unavoidable impacts, and enhance positive environmental and socio-economic outcomes.

Alternatives 1 to 4 were progressively redesigned based on specialist findings (Heritage, Visual, Freshwater, Botanical, Archaeological, Traffic, and Urban Design) and the issues raised during several rounds of public participation. These alternatives were essential in testing different spatial configurations and identifying opportunities for avoidance and minimisation.

Alternative 5 emerged as the only viable and balanced option. It refines Alternative 4 in response to the HWC IACom Further Requirements and integrates all specialist recommendations, achieves the lowest environmental and heritage impacts, and maximises socio-economic benefits. All impacts associated with Alternative 5 can be mitigated to acceptable levels, with ecological impacts rated as Very Low after mitigation.

Moreover, the most significant freshwater-related benefit of Alternative 5 (unchanged from Alternative 4) is its avoidance of all confirmed functioning freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, along with most of their recommended 15–20 m buffers, are incorporated into Open Space Zone 2 to ensure long-term ecological protection, hydrological functioning, and rehabilitation opportunities.

However, to accommodate the required engineering layout and road network, Alternative 5 does encroach into the degraded lower portion of Seep Wetland 1, where hydric indicators are absent and the vegetation is dominated by agricultural grasses associated with fallow land. This encroachment is confined to the highly disturbed zone influenced by overflow from the well point. Although most of the delineated permanent and functional zones of Seep Wetland 1 are avoided, buffer widths are reduced to approximately 5 m in certain sections, where space limitations prevent achieving the recommended 15–20 m buffer. The intact, functioning portion of Seep Wetland 1, dominated by a dense and diverse assemblage of wetland species, is fully avoided and incorporated into private open space, together with a 20 m buffer where feasible.

Ecologically, Alternative 5 remains the option with the lowest habitat loss, preserves ecological connectivity, and largely confines development to previously disturbed or transformed areas. While some wetland loss and reduced buffers occur, these impacts are limited to already-degraded portions of the system and can be effectively mitigated through rehabilitation and stormwater controls.

Although Alternative 5 still presents minor unavoidable freshwater impacts, including reduced buffers and loss of degraded seep area, these are manageable and significantly less severe than those associated with Alternatives 1–3. Importantly, the functional wetland zones and their core ecological processes are retained.

From a freshwater perspective, Alternative 5 represents a substantial improvement over all earlier alternatives. While approximately 100m^2 of degraded Seep Wetland 1 will be unavoidably lost, the entire functional portion of Seep Wetland 1 and Seep Wetland 2 is fully set aside as private open space along with a 20 m buffer where space allows, and reduced buffers of approximately 5 m elsewhere.

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

The proposed mixed-use development has identified Erf 878 as the preferred and sole viable location, as it uniquely fulfils all necessary requirements for the project. Situated within the urban edge of Riebeek-Kasteel and designated for residential development in the Swartland Municipality Spatial Development Framework (SDF), Erf 878 aligns with municipal planning objectives and can be serviced from existing municipal infrastructure, with bulk reservoir and sewer upgrades funded through Development Contributions. The site's environmental context, as assessed by the botanical specialist, reveals that virtually no original natural vegetation remains aside from one or two isolated specimens, due to extensive agricultural activity over a decade ago, minimizing ecological constraints and supporting its suitability for development. Five layout alternatives were evaluated, with Alternative 5 emerging as the preferred design following an iterative process informed by local community feedback and specialist studies in heritage, visual impact, aquatic and urban design. This preferred alternative (Alternative 5) ensures the development integrates harmoniously with the ambiance and sense of place of Riebeek-Kasteel, preserving key visual sight lines, reducing environmental impact, and enhancing the town's cultural and scenic character. Consequently, Erf 878, paired with Alternative 5, stands as the optimal choice for the proposed activity, balancing developmental goals with contextual sensitivity.

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).

T

he following areas are designated as No-Go areas for all development, construction activities, equipment storage, and stockpiling in terms of the preferred Alternative 5 layout:

1. Riebeek Hill crest (Hill Park, Portion 80) No building footprints or permanent infrastructure are permitted within the Hill Park (Portion 80, 14,183 m²) on the crest of Riebeek Hill. This area is to be established and maintained as a publicly accessible Hill Park featuring restored Renosterveld species and pedestrian pathways, protecting the topographical green frame of the town. In its Final Comment of August 2025, HWC IACom recommended a cut-off line for development, noting that the 170 m contour would be reasonable to avoid breaking the 180 m ridgeline. The HIA heritage indicators require no, or as little as possible, development above the 170 m contour. The Rev 78 170 m contour plan shows a single row of 12 erven on the southern edge of the hill lying predominantly above the 170 m contour. The HIA assessed these erven as acceptable, given the design of the erven, the Architectural Guidelines (Rev 17) and the Hill Park. HWC IACom approved the Rev 78 drawing package in its Final Comment of 30 September 2026.

2. Seep Wetland 2 and its buffer The functional portions of Seep Wetland 2 are entirely avoided and designated as a No-Go area. A buffer of 15–20m must be maintained around the wetland and incorporated into Open Space Zone 2 for long-term ecological protection. No encroachment into Seep Wetland 2 is permitted under any phase of the development.

3. Functional portions of Seep Wetland 1 and its buffer The intact, functioning portion of Seep Wetland 1, characterised by a dense assemblage of wetland species including Typha capensis, is designated as a No-Go area and incorporated into Open Space Zone 2 with a 20m buffer where space permits. The only permitted encroachment on Seep Wetland 1 is approximately 100m² of the already degraded lower portion, required to accommodate essential road infrastructure.

4. The Krom River corridor and its buffer The above-ground sections of the Krom River along the northern boundary of the site are designated as a No-Go area. A 10m buffer must be maintained on either side of the above-ground river sections. Both the river and its buffer are incorporated into Open Space Zone 2.

5. The Dutch Reformed Church view corridor A formal, unobstructed view cone from the R311 (Church Street) across the site toward the Dutch Reformed Church steeple must be maintained at all times. No permanent structures, temporary construction facilities, signage, or stockpiles may obstruct this corridor. The view corridor is protected through the strategic placement of parkland and wetland open space areas. In Alternative 5 the events building was reduced and moved southwards, events parking was placed on lower ground, and the perimeter trees along Church Street were removed to keep this view open.

6. The Grade IIIA historic fountain (well) The historic fountain on the site is designated as a No-Go area for all construction activities. It must be preserved in situ and incorporated into the landscaped open space as a publicly accessible feature in accordance with the title deed condition and the Heritage Impact Assessment requirements.

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

An impact is any change to a resource or receptor brought about by a project component or through the execution of a project related activity. The evaluation of baseline data provides information for the process of evaluating and describing how the project could affect the biophysical and socio-economic environment.

Impacts are described according to their nature or type, as follows:

Nature / type of impact

Nature / Type of impact	Definition
Positive	An impact that is considered to represent an improvement on the baseline or introduces a positive change
Negative	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor
Direct	Impacts that result from a direct interaction between a planned project activity and the receiving environment/receptors (e.g. between occupation of a site and the pre-existing habitats or between an effluent discharge and receiving water quality).
Indirect	Impacts that result from other activities that are encouraged to happen as a consequence of the Project (e.g. in-migration for employment placing a demand on resources).
Cumulative	Impacts that act together with other impacts (including those from concurrent or planned future third-party activities) to affect the same resources and/or receptors as the Project.

Significance

Impacts are described in terms of 'significance.' Significance is a function of the magnitude of the impact and the likelihood of the impact occurring:

Impact Magnitude	
Extent	**On site** – impacts that are limited to the boundaries of the development site.
	Local – impacts that affect an area in a radius of 20 km around the Development site.
	Regional – impacts that affect regionally important environmental resources or are experienced at a regional scale as determined by administrative boundaries, habitat type/ecosystem.
	National – impacts that affect nationally important environmental resources or affect an area that is nationally important/ or have macro-economic consequences
Duration	**Temporary** – impacts are predicted to be of short duration and intermittent/occasional.
	Short-term – impacts that are predicted to last only for the duration of the construction period.
	Long-term – impacts that will continue for the life of the Project but ceases when the project stops operating.
	Permanent – impacts that cause a permanent change in the affected receptor or resource (e.g. removal or destruction of ecological habitat) that endures substantially beyond the project lifetime.
Intensity	**BIOPHYSICAL ENVIRONMENT**
	Negligible – the impact on the environment is not detectable.
	Low – the impact affects the environment in such a way that natural functions and processes are not affected
	Medium – where the affected environment is altered but natural functions and processes continue, albeit in a modified way.
	High – where natural functions or processes are altered to the extent that they will temporarily or permanently cease.
	SOCIO-ECONOMIC
	Negligible – there is no perceptible change to people's livelihood.
	Low - people/communities are able to adapt with relative ease and maintain pre-impact livelihoods.
	Medium – people/communities are able to adapt with some difficulty and maintain pre-impact livelihoods but only with a degree of support.
	High - affected people/communities will not be able to adapt to changes or continue to maintain pre-impact livelihoods.

Likelihood – the likelihood that an impact will occur

Likelihood	
Unlikely	The impact is unlikely to occur.
Likely	The impact is likely to occur under most conditions.
Definite	The impact will occur.

Once an assessment is made of the magnitude and likelihood, the impact significance is rated through a matrix process:

Significance				
Magnitude		Unlikely	Likely	Definite
	Negligible	Negligible	Negligible	Minor
	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
	High	Moderate	Major	Major

Definitions of significance:

Negligible	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be 'negligible'
Minor	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is small (with and without mitigation) and within accepted standards, and/or the receptor is of low sensitivity/value
Moderate	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable. This does not necessarily mean that 'moderate' impacts have to be reduced to 'minor' impacts, but that moderate impacts are managed effectively and efficiently.
Major	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued / sensitive resource / receptors. A goal of the EIA process is to get to a position where the Project does not have any major residual impacts.

Significance of an impact is then qualified through a statement of the degree of ***confidence***. Degree of confidence is expressed as low, medium or high.

Significance colour scale (if applicable):

Negative	Positive
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Impact rating colour scale:

Negative	Positive
Negligible	Negligible
Low	Low
Medium	Medium
High	High

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.

ALTERNATIVE 1

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** Increased employment opportunities and economic activity vs. potential disruption to local community cohesion.
Nature of impact:	**Positive** (job creation) and **negative** (social disruption due to construction and perceived change in town character).
Extent and duration of impact:	Local (Riebeek Kasteel and immediate neighbours); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary boost to local economy; potential strain on community relations due to wedding venue controversy.
Probability of occurrence:	High (construction jobs certain; community concerns evident from public feedback).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no significant resource loss; social cohesion recoverable with time).
Degree to which the impact can be reversed:	High (economic benefits temporary; social impacts reversible post-construction with engagement).
Indirect impacts:	Increased demand for local services (e.g., suppliers); potential for resident dissatisfaction to affect future projects.
Cumulative impact prior to mitigation:	Moderate (economic gain offset by social tension from wedding venue placement).

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (balancing economic benefits against community opposition).
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High (through community consultation and construction management).
Degree to which the impact can be mitigated:	High (via local hiring, communication, and design adjustments).
Proposed mitigation:	- Employ local labour; - Engage community through regular updates; - Adjust wedding venue design to reduce visual prominence.
Residual impacts:	Minor lingering community dissatisfaction if wedding venue remains contentious.
Cumulative impact post mitigation	Low (mitigation reduces social tension while retaining economic benefits)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts** Disturbance to residents and wildlife from construction activities, e.g., machinery, traffic.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Temporary disruption to quality of life, potential annoyance to people in the surroundings

Probability of occurrence:	High (noise inherent to construction activities like earthmoving and building).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; temporary disturbance only).
Degree to which the impact can be reversed:	High (noise ceases upon construction completion; no lasting effects).
Indirect impacts:	Potential reduced appeal for tourism during construction; minor stress on community relations.
Cumulative impact prior to mitigation:	Moderate (combined with dust and traffic, affects liveability during construction).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (noticeable but temporary disruption in a small-town setting).
Degree to which the impact can be avoided:	Low (construction noise unavoidable, though intensity can be reduced).
Degree to which the impact can be managed:	High (through scheduling and equipment controls).
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noisy activities to daytime hours (e.g., 7 AM-5 PM); - Use low-noise equipment; - Install temporary sound barriers near sensitive areas (e.g., New Orleans neighbours); - Inform residents of schedule.
Residual impacts:	Minor residual noise during permitted hours; minimal disturbance with compliance.
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust** Air quality degradation from earthworks, vehicle movement, and material handling.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Temporary health risks (e.g., respiratory irritation), reduced visibility, and nuisance to residents.
Probability of occurrence:	High (dust generation inevitable during dry conditions and earthmoving).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; air quality recovers post-construction).
Degree to which the impact can be reversed:	High (dust settles after construction; no lasting environmental damage).
Indirect impacts:	High (dust settles after construction; no lasting environmental damage).
Cumulative impact prior to mitigation:	Moderate (combined with noise and traffic, impacts air quality and liveability).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium to low
Degree to which the impact can be avoided:	Moderate (some dust generation unavoidable, but extent can be minimised).
Degree to which the impact can be managed:	High (through dust suppression techniques).
Degree to which the impact can be mitigated:	High (standard measures effectively reduce dust spread).

Proposed mitigation:	- Regular water spraying on exposed surfaces; - Cover stockpiles; limit vehicle speeds on-site; - Revegetate disturbed areas promptly; - Monitor dust levels near sensitive receptors.
Residual impacts:	Minor dust during dry, windy conditions despite mitigation; quickly dissipates.
Cumulative impact post mitigation	Low (mitigation reduces interaction with other impacts like noise).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Watercourse Habitat Disturbance** At present the proposed development area (as a whole) coincides with approximately 0.6 Ha of seriously degraded hillslope seep wetland. The permanent zone of Seep Wetland 1 (an area of 0.13 Ha) will be set aside, along with a 20 m buffer, as private open space.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent
Consequence of impact or risk:	Loss of a seriously modified (PES Category E) seep wetland, reduction of marginal ecological functions (water purification, flow regulation), and loss of degraded wetland vegetation. Ecological consequences are limited due to the already substantially altered hydrology and vegetation.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low to Moderate

Indirect impacts:	Possible short-term sedimentation and turbidity increases downstream if construction is not well managed. Altered upstream/downstream micro-flow paths during construction.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	→ All watercourses along with their 10 m - 20 m buffer areas should be avoided by the proposed development as far as possible. → Throughflow of water from the Remnant Seep Wetland 1 downslope must be achieved, ideally in the form of earthen swales vegetated with indigenous wetland vegetation, connecting to the Krom River downstream to ensure habitat connectivity. → Avoid encroachment into the functional portion of Seep Wetland 1, Seep Wetland 2 and the Krom River during construction and operational phases. These two areas should be set aside as a No Go for construction and operational phases by suitable means such as fencing or hazard tape. → The buffer areas surrounding the remnant watercourses (10 -15 m for the Seep wetland 1 & 2 and 10 m for the Krom River) should be landscaped and consist of indigenous vegetation. → The buffer areas should be regularly monitored (once a month) to ensure that the vegetation is healthy; and that no Alien Invasive Plant Species colonize this area as well as within the watercourses.

	→ The Krom River section that occurs within the site should be rehabilitated, as per a River Maintenance and Management Plan. → It is recommended that a groundwater impact assessment is conducted during the water use authorisation process. → Effective stormwater management should be implemented, which ensures that sediment laden stormwater flow from the construction area, particularly during storm events, does not enter downslope remnant watercourses. A regular monitoring system should be set up by the Environmental Control Officer (ECO) which ensures that if sedimentation does occur downslope, remediation measures are implemented. → No stormwater runoff should flow directly into the downslope aquatic environment. Flow dissipaters should be constructed to reduce the velocity of flow which should be released as diffuse as opposed to channelled flow. → No untreated stormwater should enter the watercourses. Allowance must be made for stormwater to be treated in a vegetated detention pond and/or a substantial vegetated swale before release into the Krom River. → Stormwater/erosion/sediment control measures are to remain in place until construction has been completed, and operational storm water management infrastructure is in place and operating correctly. → Sheet runoff from hardened surfaces must be intercepted and the treatment and infiltration of runoff must be promoted. → Sediment traps should be incorporated into stormwater drains / swales upstream of discharge points. → Monitor the proposed development and adjacent remnant watercourses for erosion and sedimentation after heavy rainfall events. Any erosion noted must be immediately addressed. Rehabilitation measures may include the removal of accumulated sediment by hand, filling of erosion gullies and rills, the stabilisation of gullies with silt fences, riprap, and the revegetation of stabilised areas. → Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems. → Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately. → Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.

	→ Stormwater generated from areas with a higher risk of contamination such as parking areas and roads must receive basic filtering and treatment prior to its release into surrounding areas. Treatment methods may include sand filter traps and oil-water separators which will require maintenance. → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles. → Tie into mainline sewage if possible or use fully contained conservancy tanks serviced by truck. No sewage treatment, irrigation or soak-aways should be contemplated. → Repair all sewage leaks as soon as reasonably possible after detection. Inspection of all sewage pipes should be conducted by a plumber once every 10 years (or as per Engineering guidelines / specifications). → Construct sewage pipelines in accordance with the relevant SANS / SABS specifications. → Design the pipelines to accommodate the operating and surge pressures. → Provide surge protection e.g air valves. → Allow for scour valves along pipelines in order to ensure sewage pipelines can be emptied in a controlled manner if required. → Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the remnant watercourses. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter. → The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles. → Undertake initial clearing in the early dry season (November to January) if possible. → Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go areas (remnant watercourses and buffers). These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the ECO. Cut and fill must be avoided where possible during the set-up of the construction site camp.

	→ Any dumping / littering within the No Go areas is strictly prohibited. Spoil material must be appropriately disposed of at a registered waste disposal facility. → Topsoils and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation. → Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible. → Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities. → An ECO must inspect the construction footprint on a weekly basis and must take immediate measures to address unforeseen disturbances to the remnant watercourses and buffers. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor. → Erosion should be monitored for and addressed immediately, especially after rainfall events. Implement erosion control measures if / where required. Examples of erosion control measures may include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags → Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the farm manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand. → Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go areas. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage. → All construction machinery and vehicles used within the site should be regularly serviced. → Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly

	prohibit the use of any vehicles or machinery from which leakage has been detected. → Mixing and transferring of chemicals or hazardous substances must take place outside of the remnant watercourses and its associated buffer area, and must take place on drip trays, shutter boards or other impermeable surfaces. → Drip trays must be utilised at all fuel dispensing areas. → Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of remnant watercourses and its associated buffer areas and should only occur on bunded areas with a water/oil/grease separator. → Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site. → Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction in order to reduce the risk of leachate from imported materials contaminating the remnant watercourses. → Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it. → Construct temporary bunds around areas where cement is to be cast in situ. → Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. → Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the stormwater system or the remnant watercourses is strictly prohibited. → Washout must not be discharged into the no-go area or the stormwater system. A washout area should be designated, and wash water should be treated on-site. → Provide portable toilets where work is being undertaken (1 toilet per 10 construction workers). These toilets must be located within an area designated by the ECO outside of the no-go areas, should preferably be located on level ground, and must be regularly serviced and maintained. → Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly. → Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.

	→ In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent. An AIPS control plan must therefore be compiled which includes measures to control and prevent the proliferation of AIPS during the construction phase. → Should any pollution events occur, such as petrol spills, etc. the spread to watercourses should be prevented, by applying / covering with absorbent materials. In no circumstance should pollutants enter the SW system or the watercourses on site. → Residents, or tenants, should be made aware of the wetlands within the site Open Space Zone 2, and this area should be managed according to a landscape and maintenance / management plan enforced by a Homeowners Association (HOA). → Although wetlands typically require controlled access or fencing for long-term protection, these seep wetlands provide an important water source for the surrounding community. As such, continued access will need to be accommodated. This access should, however, be managed by the HOA to prevent littering, dumping, and other activities that could further degrade the wetlands.
Residual impacts:	Medium
Cumulative impact post mitigation	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Altered flow regime** Site clearance, infilling and compaction in the catchment area of the watercourses may result in alteration of the flow regime.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent

Consequence of impact or risk:	Changes in surface and shallow subsurface flow may affect hydrological inputs to the seep wetlands, potentially increasing peak flows, reducing infiltration, or altering downstream erosion and sedimentation patterns. Given the current seriously modified (PES E) condition, consequences are limited but still ecologically relevant.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate cost / Moderate likelihood of success
Indirect impacts:	Increased downstream erosion and sedimentation in the Krom River. Reduced water retention in downstream ecosystems or increased runoff velocity. Potential waterlogging or drying of certain wetland zones.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low Medium
Cumulative impact post mitigation	Low – Medium

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Erosion and Sedimentation** The removal of vegetation and stripping of soils from the construction footprint will result in the exposure of soils to erosive elements. An increase in stormwater runoff and velocities from exposed and compacted areas, particularly during peak rainfall periods, may result in the formation of erosion gullies and rills in the downslope watercourses. In addition, destabilisation of soils during the removal of vegetation and excavation activities, as well as the stockpiling of soils may result in an increase in the runoff of sediment laden stormwater into the downslope watercourses from the construction footprint, particularly during the rainy season.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Potential soil loss, watercourse sedimentation, slope destabilisation, and aquatic habitat degradation
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	Increased turbidity, smothering of aquatic biota, alteration of wetland hydrology, reduced infiltration, and long-term decline in water quality
Cumulative impact prior to mitigation:	Medium High

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Nature of impact:	**Water quality impairment** The movement of construction vehicles and the use of machinery during construction increases the possibility of the contamination of the watercourses by hydrocarbons, oils and grease which may leak from the vehicles / machinery or spill during poor dispensing practices and enter the watercourses directly, or indirectly with stormwater runoff. There is also a possibility that the watercourses will be contaminated by the runoff/spillage of cement and other construction related materials from the construction footprint. Contamination of the watercourses by sewage may occur as a result of leakages from portable chemical toilet facilities, or the informal use of surrounding areas by workers. Additional impacts to the watercourses as a result of the disposal of solid waste (including litter and building material) may also occur.
Extent and duration of impact:	Local; short-term

Consequence of impact or risk:	Moderate; may result in reduced water quality, toxicity to aquatic organisms, altered pH from cement contamination, nutrient loading from sewage, and overall degradation of aquatic ecosystem health.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	Potential harm to aquatic biota, reduced ecosystem functioning, nutrient enrichment, algal growth, and downstream impairment of wetland or riparian habitat.
Cumulative impact prior to mitigation:	Medium, especially if combined with other catchment disturbances or existing pollution pressures.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**1. Vegetation loss** Overall loss of ecological connectivity and degradation of the Krom River corridor due to construction; transformation of 11.1 ha of vegetation previously classified as critically endangered vegetation**.** Note the findings of the botanical assessment and that the site has been significantly transformed by active agricultural activities, ploughing and ripping in the past and therefore does not represent the natural vegetation type and is characterised by grass.
Nature of impact:	Negative (vegetation clearing, soil disturbance) and indirect (altered hydrology, invasive species spread)
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Loss of degraded ESA functionality, potential further degradation of Krom River ecosystem.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low (site already transformed, no significant protected species observed)
Degree to which the impact can be reversed:	Medium-High
Indirect impacts:	Spread of invasive alien plants (e.g., Populus alba) into Krom River; socio-economic benefits from development offset by potential ecological decline.
Cumulative impact prior to mitigation:	Medium (wedding venue exacerbate ecological impact)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Moderate

Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High (through specific measures targeting the Krom River and invasive species)
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Minor degradation of transformed veld, but moderate degradation of the Krom river corridor.
Cumulative impact post mitigation:	Moderate impact on CBA/ESA and river corridor.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**2. Visual impacts** Visual intrusion and disruption of scenic sight lines due to the wedding venue on the hilltop crest.
Nature of impact:	Negative – The wedding venue competes with the iconic church steeple as a landmark, eroding the historic townscape's character and scenic gateway experience, particularly along the R311 southern approach.
Extent and duration of impact:	Local (site and immediate surrounds, e.g., R311, Hermon Road, R46 within 1.2 km); Long-term (duration of construction and permanent structures).
Consequence of impact or risk:	Alteration of the town's sense of place, loss of scenic quality, and diminished landmark visibility, especially from the highly sensitive R311 southern "Gateway" view.
Probability of occurrence:	High – The wedding venue's prominent hilltop position ensures visibility from multiple sensitive viewpoints (e.g., R311, Bothmanskloof Pass, R46).
Degree to which the impact may cause irreplaceable loss of resources:	Medium – While not a physical resource loss, the irreversible change to the cultural landscape's visual integrity is significant.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Potential community dissatisfaction and reduced tourism appeal due to altered scenic character.
Cumulative impact prior to mitigation:	High – Adds to existing visual clutter (e.g., Het Vlok Kasteel warehouse) and competes with historic landmarks.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High – Due to sensitivity of the R311 gateway and low visual absorption capacity (VAC) of the hilltop crest.

Degree to which the impact can be avoided:	High – Removing the venue from the crest avoids the impact entirely.
Degree to which the impact can be managed:	Medium – Layout design adjustments
Degree to which the impact can be mitigated:	Medium – Mitigation can soften but not fully negate the impact of a hilltop structure.
Proposed mitigation:	- The alternatives should be further explored to better fit the town grid and the site contours. The retention of Riebeek Hill as significant Open Space should be considered. - Architecture: The design of buildings needs to incorporate traditional typologies and details that will make a better fit with this historic town and prevent a modernist intrusion on a heritage landscape. - Landscape Plan: A Landscape Plan has already been prepared and a reference to traditional tree and shrub species is desirable e.g. Oak and Gum trees. - Tree Plan: Trees both on-site and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars, and indigenous/endemic species like Wild Olive. - Planting: There is no need to rigidly adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. - Fencing: Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional fencing options and colours are preferred. ClearVu fencing is not desirable especially along the R311. - Colouration: Colouration is a key tool to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourations today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. - Maintenance: Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme.

	- Damage Control: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. - Pollution: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. - Monitoring: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted.
Residual impacts:	High – Very High visual impact that cannot be significantly mitigated.
Cumulative impact post mitigation:	High – due to noticeable change in the landscape character
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Archaeological impacts** Disturbance or destruction of archaeological remains (ESA and MSA flakes, chunks, and a historical tile).
Nature of impact:	Negative: physical disturbance due to earthworks, construction, and infrastructure installation.
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Minor loss of degraded archaeological material graded as Not Conservation Worthy (NCW).

Probability of occurrence:	High (construction will likely disturb surface and subsurface remains).
Degree to which the impact may cause irreplaceable loss of resources:	Low (remains are degraded, isolated, and not significant; no graves or settlements identified).
Degree to which the impact can be reversed:	Low (once disturbed, physical remains cannot be restored to original context).
Indirect impacts:	Potential minor disruption to historical narrative of site, though negligible due to low significance.
Cumulative impact prior to mitigation:	Low (site already transformed by agriculture; additional impact is minimal).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (due to Non-Conservation Worthy grading and degraded context).
Degree to which the impact can be avoided:	Low (development footprint covers areas where remains were found).
Degree to which the impact can be managed:	High (monitoring and recording can manage any finds).
Degree to which the impact can be mitigated:	High (simple measures can address low significance remains).
Proposed mitigation:	→ No further archaeological mitigation is required. → No archaeological monitoring is required during construction phase excavations. → If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
Residual impacts:	Negligible (loss of already disturbed, low value remains).
Cumulative impact post mitigation:	Very Low (mitigation ensures minimal additional impact).

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic congestion and safety risks during construction due to delivery vehicles and equipment movement.
Nature of impact:	Negative; Temporary disruption to local traffic flow and potential safety hazards on Church Rd and Fontein St.
Extent and duration of impact:	Local (intersections along Church Rd and Fontein St); Short-term (construction period, likely 1-2 years).
Consequence of impact or risk:	Minor delays and increased risk of accidents at access points; moderate due to wedding venue-related traffic.
Probability of occurrence:	High – Construction activities are inevitable, with additional trips from wedding venue setup.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No loss of physical resources; temporary disruption only.
Degree to which the impact can be reversed:	High – Impacts cease post-construction; roads return to normal operation.
Indirect impacts:	Noise and dust affecting nearby residents; potential delays for public transport users.
Cumulative impact prior to mitigation:	Moderate – Combined effect of construction and background traffic growth by 2028.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Manageable but noticeable disruption during peak construction.

Degree to which the impact can be avoided:	Low – Construction traffic is unavoidable, though wedding venue removal in A3 reduces intensity.
Degree to which the impact can be managed:	High – Through scheduling and traffic control measures.
Degree to which the impact can be mitigated:	High – With proper planning and design adherence.
Proposed mitigation:	→ The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road; → The proposed access on Fontein Street should be designed according to local guidelines; → The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m); → Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document; → It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development and up to the filling station premises.
Residual impacts:	Minor delays during peak construction periods.
Cumulative impact post mitigation:	Low – Mitigated to background levels with minimal additional effect.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socioeconomic impacts** Tourism and economic growth from wedding venue vs. long-term change to town character and local lifestyle.

Nature of impact:	Positive (revenue, jobs)
Extent and duration of impact:	Local to regional (visitors from beyond Riebeek-Kasteel); long-term (duration of venue operation).
Consequence of impact or risk:	Economic upliftment for businesses; potential overburdening of infrastructure and resident discontent.
Probability of occurrence:	High (wedding venue likely to attract visitors; public concerns already noted).
Degree to which the impact may cause irreplaceable loss of resources:	Medium (loss of town's tranquil character difficult to quantify or replace).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Growth in hospitality sector; potential property value changes;
Cumulative impact prior to mitigation:	High (economic benefits vs. significant community and infrastructure strain).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (economic benefits vs. significant community and infrastructure strain).
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	Moderate
Proposed mitigation:	- Employ local individuals during the operational phase as far as possible - Use local service providers as far as possible
Residual impacts:	Reduced community resistance due to job creation; manageable infrastructure load if mitigations are implemented effectively.

Cumulative impact post mitigation:	Medium-High (economic benefits remain, but community and infrastructure strain are reduced).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Ecological impacts** Ongoing degradation of the Krom River corridor and increased invasive alien plant infestation.
Nature of impact:	Negative
Extent and duration of impact:	Local (Krom River corridor and 11.1 ha site); Permanent unless actively managed.
Consequence of impact or risk:	Reduced ecological connectivity and potential further degradation of the CBA/ESA along the Krom River.
Probability of occurrence:	Probable (depends on maintenance practices; high if no alien control is implemented).
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Spread of invasive species downstream, affecting broader river ecology; increased veld fire risk.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium

Degree to which the impact can be avoided:	Medium – Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. o Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Visual impacts** Ongoing visual prominence of the wedding venue, competing with the church steeple and altering the town's scenic identity.
Nature of impact:	Negative – Permanent alteration of key sight lines (e.g., R311 southern approach, R46, Bothmanskloof Pass) and introduction of a new, dominant landmark.
Extent and duration of impact:	Local to regional (visible from R311, R46, and elevated points up to 1.8 km away); Permanent (for the lifespan of the development).
Consequence of impact or risk:	Erosion of the historic townscape's landmark qualities, reduced scenic appeal, and potential conflict with the town's cultural identity.
Probability of occurrence:	Definite - The venue's hilltop location ensures visibility from sensitive viewpoints as noted in the VIA.
Degree to which the impact may cause irreplaceable loss of resources:	High – Loss of visual heritage value, though not a tangible resource, is significant and difficult to restore.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Possible decline in visitor experience and local property values due to diminished scenic quality.
Cumulative impact prior to mitigation:	High – Reinforces existing visual intrusions and competes with established landmarks over time
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very High – High sensitivity of views (e.g., R311 gateway) and low VAC of the crest amplify the impact.
Degree to which the impact can be avoided:	Low

Degree to which the impact can be managed:	Medium – Lighting control and landscaping can reduce prominence, but not the venue's inherent visibility.
Degree to which the impact can be mitigated:	Medium – Screening with vegetation and subtle design can lessen, but not eliminate, the impact.
Proposed mitigation:	Review development design to reduce impacts
Residual impacts:	Persistent alteration of the ridge line and partial competition with the church steeple.
Cumulative impact post mitigation:	Medium-High – Mitigation reduces severity, but cumulative scenic degradation remains.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic volumes and potential congestion at intersections due to wedding venue and mixed-use components.
Nature of impact:	Negative – Added trips with higher peaks from wedding events.
Extent and duration of impact:	Local (Church Rd, Fontein St intersections); Long-term (duration of development operation).
Consequence of impact or risk:	Moderate delays (e.g., 3-7.6s per TIA Table 5) with worse peak delays from wedding venue events; safety risks at access points.
Probability of occurrence:	High – Wedding venue and mixed-use elements ensure consistent trip generation.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No physical resource loss; impacts are operational.

Degree to which the impact can be reversed:	High – Traffic impacts reversible if wedding venue use is ceased
Indirect impacts:	Increased demand for public transport; pedestrian safety risks without sidewalks; noise from wedding events.
Cumulative impact prior to mitigation:	Moderate – Background 2028 traffic plus development trips, exacerbated by wedding venue peak events.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High – Noticeable impact on service levels, especially during wedding events.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	- The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road - The proposed access on Fontein Street should be designed according to local guidelines - The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m) - Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document - It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development and up to the filling station premises.
Residual impacts:	Slight delays during peak wedding events; minor pedestrian inconvenience if sidewalk use is low.

Cumulative impact post mitigation:	Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**Low (-)**
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Altered flow regime and erosion** An increase in stormwater runoff volumes and velocities from the bare / hardened surfaces associated with the proposed development, or from areas left bare as a result of construction related activities may result in channel and headcut erosion as well as sedimentation of the remnant watercourses.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; long term	
Consequence of impact or risk:	Moderate–High; potential morphological changes to watercourses, long-term reduction in ecological functioning, sedimentation of wetlands, and persistent hydrological disruption.	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Medium; while some hydrological functions can be rehabilitated, wetland structure and ecological integrity may be permanently affected if erosion is left unmanaged.	
Degree to which the impact can be reversed:	Low	
Indirect impacts:	Degradation of wetland ecological functioning, reduced water quality, increased sediment loads to the Krom River, loss of habitat for wetland-dependent species, and downstream cumulative impacts.	

Cumulative impact prior to mitigation:	High; compounded by historic and ongoing disturbance in the local catchment.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures provided by the freshwater specialist.
Residual impacts:	N/A
Cumulative impact post mitigation:	Continued wetland loss regardless of level of degradation
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low -ve**
POST CONSTRUCTION PHASE	
Potential impact and risk:	**Water quality impairment** The water quality of the remnant watercourses may be impacted as a result of the runoff of contaminated stormwater from the proposed fuel station. Additionally, the water quality of the remnant watercourses may be impacted as a result of the runoff of contaminated stormwater from the urban surface of the proposed development. Contaminants may include hydrocarbons, detergents, fertilizers and heavy minerals. However, with the inclusion of stormwater

	design measures which allow for the infiltration and treatment of stormwater this impact can be greatly reduced. With a housing/commercial development there is also a long-term risk that the remnant watercourses may be impacted on as a result of sewage surcharge or as a result of the leakage of sewage from poorly maintained pipes, manholes or sewage pumps.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Moderate–High; potential deterioration of water quality, toxicity to aquatic organisms, eutrophication, and long-term ecological degradation if not managed.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate cost / Moderate likelihood of success
Indirect impacts:	Decline in aquatic biodiversity, downstream impacts to the Krom River, nutrient enrichment, algal blooms, unpleasant odours, reduced recreational/tourism appeal, and potential human health risks where water is accessible
Cumulative impact prior to mitigation:	Medium–High, given contributions from existing urban and agricultural inputs in the catchment.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Moderate; careful design and operational controls can largely avoid contamination.
Degree to which the impact can be managed:	High

Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures provided by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 2

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Watercourse Habitat Disturbance** At present the proposed development area (as a whole) coincides with approximately 0.6 Ha of seriously degraded hillslope seep wetland. The permanent zone of Seep Wetland 1 (an area of 0.13 Ha) will be set aside, along with a 20 m buffer, as private open space.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent
Consequence of impact or risk:	Loss of a seriously modified (PES Category E) seep wetland, reduction of marginal ecological functions (water purification, flow regulation), and loss of degraded wetland vegetation. Ecological consequences are limited due to the already substantially altered hydrology and vegetation.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low to Moderate
Indirect impacts:	Possible short-term sedimentation and turbidity increases downstream if construction is not well managed. Altered upstream/downstream micro-flow paths during construction.
Cumulative impact prior to mitigation:	Medium

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	Refer to freshwater specialist mitigation measures.
Residual impacts:	Medium
Cumulative impact post mitigation	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Altered flow regime** Site clearance, infilling and compaction in the catchment area of the watercourses may result in alteration of the flow regime.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent
Consequence of impact or risk:	Changes in surface and shallow subsurface flow may affect hydrological inputs to the seep wetlands, potentially increasing peak flows, reducing infiltration, or altering downstream erosion and sedimentation patterns. Given the current seriously modified (PES E) condition, consequences are limited but still ecologically relevant.
Probability of occurrence:	Definite

Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate cost / Moderate likelihood of success
Indirect impacts:	Increased downstream erosion and sedimentation in the Krom River. Reduced water retention in downstream ecosystems or increased runoff velocity. Potential waterlogging or drying of certain wetland zones.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low Medium
Cumulative impact post mitigation	Low – Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Erosion and Sedimentation**

	The removal of vegetation and stripping of soils from the construction footprint will result in the exposure of soils to erosive elements. An increase in stormwater runoff and velocities from exposed and compacted areas, particularly during peak rainfall periods, may result in the formation of erosion gullies and rills in the downslope watercourses. In addition, destabilisation of soils during the removal of vegetation and excavation activities, as well as the stockpiling of soils may result in an increase in the runoff of sediment laden stormwater into the downslope watercourses from the construction footprint, particularly during the rainy season.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Potential soil loss, watercourse sedimentation, slope destabilisation, and aquatic habitat degradation
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	Increased turbidity, smothering of aquatic biota, alteration of wetland hydrology, reduced infiltration, and long-term decline in water quality
Cumulative impact prior to mitigation:	Medium High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium

Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Nature of impact:	**Water quality impairment** The movement of construction vehicles and the use of machinery during construction increases the possibility of the contamination of the watercourses by hydrocarbons, oils and grease which may leak from the vehicles / machinery or spill during poor dispensing practices and enter the watercourses directly, or indirectly with stormwater runoff. There is also a possibility that the watercourses will be contaminated by the runoff/spillage of cement and other construction related materials from the construction footprint. Contamination of the watercourses by sewage may occur as a result of leakages from portable chemical toilet facilities, or the informal use of surrounding areas by workers. Additional impacts to the watercourses as a result of the disposal of solid waste (including litter and building material) may also occur.
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Moderate; may result in reduced water quality, toxicity to aquatic organisms, altered pH from cement contamination, nutrient loading from sewage, and overall degradation of aquatic ecosystem health.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success

Indirect impacts:	Potential harm to aquatic biota, reduced ecosystem functioning, nutrient enrichment, algal growth, and downstream impairment of wetland or riparian habitat.
Cumulative impact prior to mitigation:	Medium, especially if combined with other catchment disturbances or existing pollution pressures.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** Increased employment opportunities and economic activity vs. potential disruption to local community cohesion.
Nature of impact:	**Positive** (job creation) and **negative** (social disruption due to construction and perceived change in town character).
Extent and duration of impact:	Local (Riebeek-Kasteel and immediate neighbours); short-term (construction phase, ~1-2 years).

Consequence of impact or risk:	Temporary boost to local economy; potential strain on community relations due to wedding venue controversy.
Probability of occurrence:	High (construction jobs certain; community concerns evident from public feedback).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no significant resource loss; social cohesion recoverable with time).
Degree to which the impact can be reversed:	High (economic benefits temporary; social impacts reversible post-construction with engagement).
Indirect impacts:	Increased demand for local services (e.g., suppliers); potential for resident dissatisfaction to affect future projects.
Cumulative impact prior to mitigation:	Moderate (economic gain offset by social tension from wedding venue placement).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (balancing economic benefits against community opposition).
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High (through community consultation and construction management).
Degree to which the impact can be mitigated:	High (via local hiring, communication, and design adjustments).
Proposed mitigation:	- Employ local labour; - Engage community through regular updates; - Adjust wedding venue design to reduce visual prominence.
Residual impacts:	Minor lingering community dissatisfaction if wedding venue remains contentious.
Cumulative impact post mitigation	Low (mitigation reduces social tension while retaining economic benefits)

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts** Disturbance to residents and wildlife from construction activities, e.g., machinery, traffic.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Temporary disruption to quality of life, potential annoyance to people in the surroundings
Probability of occurrence:	High (noise inherent to construction activities like earthmoving and building).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; temporary disturbance only).
Degree to which the impact can be reversed:	High (noise ceases upon construction completion; no lasting effects).
Indirect impacts:	Potential reduced appeal for tourism during construction; minor stress on community relations.
Cumulative impact prior to mitigation:	Moderate (combined with dust and traffic, affects liveability during construction).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (noticeable but temporary disruption in a small-town setting).
Degree to which the impact can be avoided:	Low (construction noise unavoidable, though intensity can be reduced).

Degree to which the impact can be managed:	High (through scheduling and equipment controls).
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noisy activities to daytime hours (e.g., 7 AM-5 PM); - Use low-noise equipment; - Install temporary sound barriers near sensitive areas (e.g., New Orleans neighbours); - Inform residents of schedule.
Residual impacts:	Minor residual noise during permitted hours; minimal disturbance with compliance.
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust** Air quality degradation from earthworks, vehicle movement, and material handling.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Temporary health risks (e.g., respiratory irritation), reduced visibility, and nuisance to residents.
Probability of occurrence:	High (dust generation inevitable during dry conditions and earthmoving).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; air quality recovers post-construction).

Degree to which the impact can be reversed:	High (dust settles after construction; no lasting environmental damage).
Indirect impacts:	High (dust settles after construction; no lasting environmental damage).
Cumulative impact prior to mitigation:	Moderate (combined with noise and traffic, impacts air quality and liveability).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High
Degree to which the impact can be avoided:	Moderate (some dust generation unavoidable, but extent can be minimised).
Degree to which the impact can be managed:	High (through dust suppression techniques).
Degree to which the impact can be mitigated:	High (standard measures effectively reduce dust spread).
Proposed mitigation:	- Regular water spraying on exposed surfaces; - Cover stockpiles; limit vehicle speeds on-site; - Revegetate disturbed areas promptly; - Monitor dust levels near sensitive receptors.
Residual impacts:	Minor dust during dry, windy conditions despite mitigation; quickly dissipates.
Cumulative impact post mitigation	Low (mitigation reduces interaction with other impacts like noise).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Vegetation loss**

	Overall loss of ecological connectivity and degradation of the Krom River corridor due to construction; transformation of 11.1 ha transformed vegetation**.**
Nature of impact:	Negative (vegetation clearing, soil disturbance) and indirect (altered hydrology, invasive species spread)
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Loss of degraded CBA/ESA functionality, potential further degradation of Krom River ecosystem.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low (site already transformed, no significant protected species observed).
Degree to which the impact can be reversed:	Medium-High
Indirect impacts:	Spread of invasive alien plants (e.g., Populus alba) into Krom River; socio-economic benefits from development offset by potential ecological decline.
Cumulative impact prior to mitigation:	Medium (wedding venue exacerbate ecological impact)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High (through specific measures targeting the Krom River and invasive species)
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental

	Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Minor degradation of transformed veld, but moderate degradation of the Krom river corridor.
Cumulative impact post mitigation:	Moderate impact on CBA/ESA and river corridor.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts** Visual intrusion and disruption of scenic sight lines due to the wedding venue on the hilltop crest.
Nature of impact:	Negative – The wedding venue competes with the iconic church steeple as a landmark, eroding the historic townscape's character

	and scenic gateway experience, particularly along the R311 southern approach.
Extent and duration of impact:	Local (site and immediate surrounds, e.g., R311, Hermon Road, R46 within 1.2 km); Long-term (duration of construction and permanent structures).
Consequence of impact or risk:	Alteration of the town's sense of place, loss of scenic quality, and diminished landmark visibility, especially from the highly sensitive R311 southern "Gateway" view.
Probability of occurrence:	High – The wedding venue's prominent hilltop position ensures visibility from multiple sensitive viewpoints (e.g., R311, Bothmanskloof Pass, R46).
Degree to which the impact may cause irreplaceable loss of resources:	Medium – While not a physical resource loss, the irreversible change to the cultural landscape's visual integrity is significant.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Potential community dissatisfaction and reduced tourism appeal due to altered scenic character.
Cumulative impact prior to mitigation:	High – Adds to existing visual clutter (e.g., Het Vlok Kasteel warehouse) and competes with historic landmarks.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High – Due to sensitivity of the R311 gateway and low visual absorption capacity (VAC) of the hilltop crest.
Degree to which the impact can be avoided:	High – Removing the venue from the crest avoids the impact entirely.
Degree to which the impact can be managed:	Medium – Layout design adjustments
Degree to which the impact can be mitigated:	Medium – Mitigation can soften but not fully negate the impact of a hilltop structure.
Proposed mitigation:	- The alternatives should be further explored to better fit the town grid and the site contours. The retention of

	Riebeek Hill as significant Open Space should be considered. - Architecture: The design of buildings needs to incorporate traditional typologies and details that will make a better fit with this historic town and prevent a modernist intrusion on a heritage landscape. - Landscape Plan: A Landscape Plan has already been prepared and a reference to traditional tree and shrub species is desirable e.g. Oak and Gum trees. - Tree Plan: Trees both on-site and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars, and indigenous/endemic species like Wild Olive. - Planting: There is no need to rigidly adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. - Fencing: Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional fencing options and colours are preferred. ClearVu fencing is not desirable especially along the R311. - Colouration: Colouration is a key tool to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourations today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. - Maintenance: Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. - Damage Control: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. - Pollution: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. - Monitoring: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too

	inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted.
Residual impacts:	High – Very High visual impact that cannot be significantly mitigated.
Cumulative impact post mitigation:	High – due to noticeable change in the landscape character
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Archaeological impacts** Disturbance or destruction of archaeological remains (ESA and MSA flakes, chunks, and a historical tile).
Nature of impact:	Negative: physical disturbance due to earthworks, construction, and infrastructure installation.
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Minor loss of degraded archaeological material graded as Not Conservation Worthy (NCW).
Probability of occurrence:	High (construction will likely disturb surface and subsurface remains).
Degree to which the impact may cause irreplaceable loss of resources:	Low (remains are degraded, isolated, and not significant; no graves or settlements identified).
Degree to which the impact can be reversed:	Low (once disturbed, physical remains cannot be restored to original context).
Indirect impacts:	Potential minor disruption to historical narrative of site, though negligible due to low significance.

Cumulative impact prior to mitigation:	Low (site already transformed by agriculture; additional impact is minimal).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (due to NCW grading and degraded context).
Degree to which the impact can be avoided:	Low (development footprint covers areas where remains were found).
Degree to which the impact can be managed:	High (monitoring and recording can manage any finds).
Degree to which the impact can be mitigated:	High (simple measures can address low significance remains).
Proposed mitigation:	- No further archaeological mitigation is required. - No archaeological monitoring is required during construction phase excavations - If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
Residual impacts:	Negligible (loss of already disturbed, low value remains).
Cumulative impact post mitigation:	Very Low (mitigation ensures minimal additional impact).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic congestion and safety risks during construction due to delivery vehicles and equipment movement.

Nature of impact:	Negative; Temporary disruption to local traffic flow and potential safety hazards on Church Rd and Fontein St.
Extent and duration of impact:	Local (intersections along Church Rd and Fontein St); Short-term (construction period, likely 1-2 years).
Consequence of impact or risk:	Minor delays and increased risk of accidents at access points; moderate due to wedding venue-related traffic.
Probability of occurrence:	High – Construction activities are inevitable, with additional trips from wedding venue setup.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No loss of physical resources; temporary disruption only.
Degree to which the impact can be reversed:	High – Impacts cease post-construction; roads return to normal operation.
Indirect impacts:	Noise and dust affecting nearby residents; potential delays for public transport users.
Cumulative impact prior to mitigation:	Moderate – Combined effect of construction and background traffic growth by 2028.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Manageable but noticeable disruption during peak construction.
Degree to which the impact can be avoided:	Low – Construction traffic is unavoidable, though wedding venue removal in A3 reduces intensity.
Degree to which the impact can be managed:	High – Through scheduling and traffic control measures.
Degree to which the impact can be mitigated:	High – With proper planning and design adherence.
Proposed mitigation:	- The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road;

	- The proposed access on Fontein Street should be designed according to local guidelines; - The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m); - Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document; - It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development and up to the filling station premises.
Residual impacts:	Minor delays during peak construction periods.
Cumulative impact post mitigation:	Low – Mitigated to background levels with minimal additional effect.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Altered flow regime and erosion** An increase in stormwater runoff volumes and velocities from the bare / hardened surfaces associated with the proposed development, or from areas left bare as a result of construction related activities may result in channel and headcut erosion as well as sedimentation of the remnant watercourses.
Nature of impact:	Negative
Extent and duration of impact:	Local; long term
Consequence of impact or risk:	Moderate–High; potential morphological changes to watercourses, long-term reduction in ecological functioning, sedimentation of wetlands, and persistent hydrological disruption.

Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium; while some hydrological functions can be rehabilitated, wetland structure and ecological integrity may be permanently affected if erosion is left unmanaged.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Degradation of wetland ecological functioning, reduced water quality, increased sediment loads to the Krom River, loss of habitat for wetland-dependent species, and downstream cumulative impacts.
Cumulative impact prior to mitigation:	High; compounded by historic and ongoing disturbance in the local catchment.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures provided by the freshwater specialist.
Residual impacts:	N/A
Cumulative impact post mitigation:	Continued wetland loss regardless of level of degradation
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low -ve**

POST CONSTRUCTION PHASE	
Potential impact and risk:	**Water quality impairment** The water quality of the remnant watercourses may be impacted as a result of the runoff of contaminated stormwater from the proposed fuel station. Additionally, the water quality of the remnant watercourses may be impacted as a result of the runoff of contaminated stormwater from the urban surface of the proposed development. Contaminants may include hydrocarbons, detergents, fertilizers and heavy minerals. However, with the inclusion of stormwater design measures which allow for the infiltration and treatment of stormwater this impact can be greatly reduced. With a housing/commercial development there is also a long-term risk that the remnant watercourses may be impacted on as a result of sewage surcharge or as a result of the leakage of sewage from poorly maintained pipes, manholes or sewage pumps.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Moderate–High; potential deterioration of water quality, toxicity to aquatic organisms, eutrophication, and long-term ecological degradation if not managed.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate cost / Moderate likelihood of success
Indirect impacts:	Decline in aquatic biodiversity, downstream impacts to the Krom River, nutrient enrichment, algal blooms, unpleasant odours,

	reduced recreational/tourism appeal, and potential human health risks where water is accessible
Cumulative impact prior to mitigation:	Medium–High, given contributions from existing urban and agricultural inputs in the catchment.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Moderate; careful design and operational controls can largely avoid contamination.
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures provided by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socioeconomic impacts** Tourism and economic growth from wedding venue vs. long-term change to town character and local lifestyle.
Nature of impact:	Positive (revenue, jobs)

Extent and duration of impact:	Local to regional (visitors from beyond Riebeek-Kasteel); long-term (duration of venue operation).
Consequence of impact or risk:	Economic upliftment for businesses; potential overburdening of infrastructure and resident discontent.
Probability of occurrence:	High (wedding venue likely to attract visitors; public concerns already noted).
Degree to which the impact may cause irreplaceable loss of resources:	Medium (loss of town's tranquil character difficult to quantify or replace).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Growth in hospitality sector; potential property value changes;
Cumulative impact prior to mitigation:	High (economic benefits vs. significant community and infrastructure strain).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	High (economic benefits vs. significant community and infrastructure strain).
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	Moderate
Proposed mitigation:	- Employ local individuals during the operation phase.
Residual impacts:	Reduced community resistance due to job creation; manageable infrastructure load if mitigations are implemented effectively.
Cumulative impact post mitigation:	Medium-High (economic benefits remain, but community and infrastructure strain are reduced).

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Ecological impacts** Ongoing degradation of the Krom River corridor and increased invasive alien plant infestation.
Nature of impact:	Negative
Extent and duration of impact:	Local (Krom River corridor and 11.1 ha site); Permanent unless actively managed.
Consequence of impact or risk:	Reduced ecological connectivity and potential further degradation of the CBA/ESA along the Krom River.
Probability of occurrence:	Probable (depends on maintenance practices; high if no alien control is implemented).
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Spread of invasive species downstream, affecting broader river ecology; increased veld fire risk.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium – Low

Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Visual impacts**

	Ongoing visual prominence of the wedding venue, competing with the church steeple and altering the town's scenic identity.
Nature of impact:	Negative – Permanent alteration of key sight lines (e.g., R311 southern approach, R46, Bothmanskloof Pass) and introduction of a new, dominant landmark.
Extent and duration of impact:	Local to regional (visible from R311, R46, and elevated points up to 1.8 km away); Permanent (for the lifespan of the development).
Consequence of impact or risk:	Erosion of the historic townscape's landmark qualities, reduced scenic appeal, and potential conflict with the town's cultural identity.
Probability of occurrence:	Definite - The venue's hilltop location ensures visibility from sensitive viewpoints as noted in the VIA.
Degree to which the impact may cause irreplaceable loss of resources:	High – Loss of visual heritage value, though not a tangible resource, is significant and difficult to restore.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Possible decline in visitor experience and local property values due to diminished scenic quality.
Cumulative impact prior to mitigation:	High – Reinforces existing visual intrusions and competes with established landmarks over time
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very High – High sensitivity of views (e.g., R311 gateway) and low VAC of the crest amplify the impact.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium – Lighting control and landscaping can reduce prominence, but not the venue's inherent visibility.

Degree to which the impact can be mitigated:	Medium – Screening with vegetation and subtle design can lessen, but not eliminate, the impact.
Proposed mitigation:	
Residual impacts:	Persistent alteration of the ridge line and partial competition with the church steeple.
Cumulative impact post mitigation:	Medium-High – Mitigation reduces severity, but cumulative scenic degradation remains.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	**High (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic volumes and potential congestion at intersections due to wedding venue and mixed-use components.
Nature of impact:	Negative
Extent and duration of impact:	Local (Church Rd, Fontein St intersections); Long-term (duration of development operation).
Consequence of impact or risk:	Moderate delays with worse peak delays from wedding venue events; safety risks at access points.
Probability of occurrence:	High – Wedding venue and mixed-use elements ensure consistent trip generation.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No physical resource loss; impacts are operational.

Degree to which the impact can be reversed:	High – Traffic impacts reversible if wedding venue use is ceased
Indirect impacts:	Increased demand for public transport; pedestrian safety risks without sidewalks; noise from wedding events.
Cumulative impact prior to mitigation:	Moderate – Background 2028 traffic plus development trips, exacerbated by wedding venue peak events.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	Medium-High – Noticeable impact on service levels, especially during wedding events.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	- The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road; - The proposed access on Fontein Street should be designed according to local guidelines; - The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m); - Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document; - It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development and up to the filling station premises.
Residual impacts:	Slight delays during peak wedding events; minor pedestrian inconvenience if sidewalk use is low.

Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 3

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Watercourse Habitat Disturbance** At present the proposed development area (as a whole) coincides with approximately 0.6 Ha of seriously degraded hillslope seep wetland. The permanent zone of Seep Wetland 1 (an area of 0.13 Ha) will be set aside, along with a 20 m buffer, as private open space.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent
Consequence of impact or risk:	Loss of a seriously modified (PES Category E) seep wetland, reduction of marginal ecological functions (water purification, flow regulation), and loss of degraded wetland vegetation. Ecological consequences are limited due to the already substantially altered hydrology and vegetation.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low to Moderate
Indirect impacts:	Possible short-term sedimentation and turbidity increases downstream if construction is not well managed. Altered upstream/downstream micro-flow paths during construction.
Cumulative impact prior to mitigation:	Medium

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	→ All watercourses along with their 10 m - 20 m buffer areas should be avoided by the proposed development as far as possible. → Throughflow of water from the Remnant Seep Wetland 1 downslope must be achieved, ideally in the form of earthen swales vegetated with indigenous wetland vegetation, connecting to the Krom River downstream to ensure habitat connectivity. → Avoid encroachment into the functional portion of Seep Wetland 1, Seep Wetland 2 and the Krom River during construction and operational phases. These two areas should be set aside as a No Go for construction and operational phases by suitable means such as fencing or hazard tape. → The buffer areas surrounding the remnant watercourses (10 -15 m for the Seep wetland 1 & 2 and 10 m for the Krom River) should be landscaped and consist of indigenous vegetation. → The buffer areas should be regularly monitored (once a month) to ensure that the vegetation is healthy; and that no Alien Invasive Plant Species colonize this area as well as within the watercourses. → The Krom River section that occurs within the site should be rehabilitated, as per a River Maintenance and Management Plan. → It is recommended that a groundwater impact assessment is conducted during the water use authorisation process. → Effective stormwater management should be implemented, which ensures that sediment laden stormwater flow from the construction area, particularly during storm events, does not enter downslope remnant watercourses. A regular monitoring system should be set up by the Environmental Control Officer (ECO) which ensures that if sedimentation does occur downslope, remediation measures are implemented.

	→ No stormwater runoff should flow directly into the downslope aquatic environment. Flow dissipaters should be constructed to reduce the velocity of flow which should be released as diffuse as opposed to channelled flow. → No untreated stormwater should enter the watercourses. Allowance must be made for stormwater to be treated in a vegetated detention pond and/or a substantial vegetated swale before release into the Krom River. → Stormwater/erosion/sediment control measures are to remain in place until construction has been completed, and operational storm water management infrastructure is in place and operating correctly. → Sheet runoff from hardened surfaces must be intercepted and the treatment and infiltration of runoff must be promoted. → Sediment traps should be incorporated into stormwater drains / swales upstream of discharge points. → Monitor the proposed development and adjacent remnant watercourses for erosion and sedimentation after heavy rainfall events. Any erosion noted must be immediately addressed. Rehabilitation measures may include the removal of accumulated sediment by hand, filling of erosion gullies and rills, the stabilisation of gullies with silt fences, riprap, and the revegetation of stabilised areas. → Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems. → Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately. → Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags. → Stormwater generated from areas with a higher risk of contamination such as parking areas and roads must receive basic filtering and treatment prior to its release into surrounding areas. Treatment methods may include sand filter traps and oil-water separators which will require maintenance. → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles. → Tie into mainline sewage if possible or use fully contained conservancy tanks serviced by truck. No sewage treatment, irrigation or soak-aways should be contemplated.

	→ Repair all sewage leaks as soon as reasonably possible after detection. Inspection of all sewage pipes should be conducted by a plumber once every 10 years (or as per Engineering guidelines / specifications). → Construct sewage pipelines in accordance with the relevant SANS / SABS specifications. → Design the pipelines to accommodate the operating and surge pressures. → Provide surge protection e.g air valves. → Allow for scour valves along pipelines in order to ensure sewage pipelines can be emptied in a controlled manner if required. → Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the remnant watercourses. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter. → The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles. → Undertake initial clearing in the early dry season (November to January) if possible. → Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go areas (remnant watercourses and buffers). These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the ECO. Cut and fill must be avoided where possible during the set-up of the construction site camp. → Any dumping / littering within the No Go areas is strictly prohibited. Spoil material must be appropriately disposed of at a registered waste disposal facility. → Topsoils and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation. → Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible. → Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities.

	→ An ECO must inspect the construction footprint on a weekly basis and must take immediate measures to address unforeseen disturbances to the remnant watercourses and buffers. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor. → Erosion should be monitored for and addressed immediately, especially after rainfall events. Implement erosion control measures if / where required. Examples of erosion control measures may include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags → Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the farm manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand. → Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go areas. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage. → All construction machinery and vehicles used within the site should be regularly serviced. → Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. → Mixing and transferring of chemicals or hazardous substances must take place outside of the remnant watercourses and its associated buffer area, and must take place on drip trays, shutter boards or other impermeable surfaces. → Drip trays must be utilised at all fuel dispensing areas. → Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of remnant watercourses and its associated buffer areas and should only occur on bunded areas with a water/oil/grease separator. → Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site.

	→ Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction in order to reduce the risk of leachate from imported materials contaminating the remnant watercourses. → Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it. → Construct temporary bunds around areas where cement is to be cast in situ. → Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. → Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the stormwater system or the remnant watercourses is strictly prohibited. → Washout must not be discharged into the no-go area or the stormwater system. A washout area should be designated, and wash water should be treated on-site. → Provide portable toilets where work is being undertaken (1 toilet per 10 construction workers). These toilets must be located within an area designated by the ECO outside of the no-go areas, should preferably be located on level ground, and must be regularly serviced and maintained. → Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly. → Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis. → In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent. An AIPS control plan must therefore be compiled which includes measures to control and prevent the proliferation of AIPS during the construction phase. → Should any pollution events occur, such as petrol spills, etc. the spread to watercourses should be prevented, by applying / covering with absorbent materials. In no circumstance should pollutants enter the SW system or the watercourses on site. → Residents, or tenants, should be made aware of the wetlands within the site Open Space Zone 2, and this area should be managed according to a landscape and maintenance /

	management plan enforced by a Homeowners Association (HOA). → Although wetlands typically require controlled access or fencing for long-term protection, these seep wetlands provide an important water source for the surrounding community. As such, continued access will need to be accommodated. This access should, however, be managed by the HOA to prevent littering, dumping, and other activities that could further degrade the wetlands.
Residual impacts:	Medium
Cumulative impact post mitigation	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Altered flow regime** Site clearance, infilling and compaction in the catchment area of the watercourses may result in alteration of the flow regime.
Nature of impact:	Negative
Extent and duration of impact:	Limited to project site; Permanent
Consequence of impact or risk:	Changes in surface and shallow subsurface flow may affect hydrological inputs to the seep wetlands, potentially increasing peak flows, reducing infiltration, or altering downstream erosion and sedimentation patterns. Given the current seriously modified (PES E) condition, consequences are limited but still ecologically relevant.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate cost / Moderate likelihood of success

Indirect impacts:	Increased downstream erosion and sedimentation in the Krom River. Reduced water retention in downstream ecosystems or increased runoff velocity. Potential waterlogging or drying of certain wetland zones.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low Medium
Cumulative impact post mitigation	Low – Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Erosion and Sedimentation** The removal of vegetation and stripping of soils from the construction footprint will result in the exposure of soils to erosive elements. An increase in stormwater runoff and velocities from exposed and compacted areas, particularly during peak rainfall periods, may result in the formation of erosion gullies and rills in the downslope watercourses. In addition, destabilisation of soils during the removal of vegetation and excavation activities, as well as the stockpiling of soils may result in an

	increase in the runoff of sediment laden stormwater into the downslope watercourses from the construction footprint, particularly during the rainy season.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Potential soil loss, watercourse sedimentation, slope destabilisation, and aquatic habitat degradation
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	Increased turbidity, smothering of aquatic biota, alteration of wetland hydrology, reduced infiltration, and long-term decline in water quality
Cumulative impact prior to mitigation:	Medium High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low

Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Nature of impact:	**Water quality impairment** The movement of construction vehicles and the use of machinery during construction increases the possibility of the contamination of the watercourses by hydrocarbons, oils and grease which may leak from the vehicles / machinery or spill during poor dispensing practices and enter the watercourses directly, or indirectly with stormwater runoff. There is also a possibility that the watercourses will be contaminated by the runoff/spillage of cement and other construction related materials from the construction footprint. Contamination of the watercourses by sewage may occur as a result of leakages from portable chemical toilet facilities, or the informal use of surrounding areas by workers. Additional impacts to the watercourses as a result of the disposal of solid waste (including litter and building material) may also occur.
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Moderate; may result in reduced water quality, toxicity to aquatic organisms, altered pH from cement contamination, nutrient loading from sewage, and overall degradation of aquatic ecosystem health.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	Potential harm to aquatic biota, reduced ecosystem functioning, nutrient enrichment, algal growth, and downstream impairment of wetland or riparian habitat.

Cumulative impact prior to mitigation:	Medium, especially if combined with other catchment disturbances or existing pollution pressures.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures recommended by the freshwater specialist.
Residual impacts:	Low
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** Increased employment opportunities and economic activity vs. potential disruption to local community cohesion.
Nature of impact:	**Positive** (job creation) and **negative** (social disruption due to construction and perceived change in town character).
Extent and duration of impact:	Local (Riebeek-Kasteel and immediate neighbours); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary boost to local economy; potential strain on community relations due to wedding venue controversy.

Probability of occurrence:	High (construction jobs certain; community concerns evident from public feedback).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no significant resource loss; social cohesion recoverable with time).
Degree to which the impact can be reversed:	High (economic benefits temporary; social impacts reversible post-construction with engagement).
Indirect impacts:	Increased demand for local services (e.g., suppliers); potential for resident dissatisfaction to affect future projects.
Cumulative impact prior to mitigation:	Moderate (economic gain offset by social tension from wedding venue placement).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (balancing economic benefits against community opposition).
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High (through community consultation and construction management).
Degree to which the impact can be mitigated:	High (via local hiring, communication, and design adjustments).
Proposed mitigation:	- Employ local labour; - Engage community through regular updates;
Residual impacts:	Minor lingering community dissatisfaction if wedding venue remains contentious.
Cumulative impact post mitigation	Low (mitigation reduces social tension while retaining economic benefits)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	

Potential impact and risk:	**Noise impacts** Disturbance to residents and wildlife from construction activities, e.g., machinery, traffic.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Temporary disruption to quality of life, potential annoyance to people in the surroundings
Probability of occurrence:	High (noise inherent to construction activities like earthmoving and building).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; temporary disturbance only).
Degree to which the impact can be reversed:	High (noise ceases upon construction completion; no lasting effects).
Indirect impacts:	Potential reduced appeal for tourism during construction; minor stress on community relations.
Cumulative impact prior to mitigation:	Moderate (combined with dust and traffic, affects liveability during construction).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (noticeable but temporary disruption in a small-town setting).
Degree to which the impact can be avoided:	Low (construction noise unavoidable, though intensity can be reduced).
Degree to which the impact can be managed:	High (through scheduling and equipment controls).
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noisy activities to daytime hours (e.g., 7 AM-5 PM); - Use low-noise equipment;

	- Install temporary sound barriers near sensitive areas (e.g., New Orleans neighbours); - Inform residents of schedule.
Residual impacts:	Minor residual noise during permitted hours; minimal disturbance with compliance.
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust** Air quality degradation from earthworks, vehicle movement, and material handling.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Temporary health risks (e.g., respiratory irritation), reduced visibility, and nuisance to residents.
Probability of occurrence:	High (dust generation inevitable during dry conditions and earthmoving).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; air quality recovers post-construction).
Degree to which the impact can be reversed:	High (dust settles after construction; no lasting environmental damage).
Indirect impacts:	High (dust settles after construction; no lasting environmental damage).
Cumulative impact prior to mitigation:	Moderate (combined with noise and traffic, impacts air quality and liveability).

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High
Degree to which the impact can be avoided:	Moderate (some dust generation unavoidable, but extent can be minimised).
Degree to which the impact can be managed:	High (through dust suppression techniques).
Degree to which the impact can be mitigated:	High (standard measures effectively reduce dust spread).
Proposed mitigation:	- Regular water spraying on exposed surfaces; - Cover stockpiles; limit vehicle speeds on-site; - Revegetate disturbed areas promptly; - Monitor dust levels near sensitive receptors.
Residual impacts:	Minor dust during dry, windy conditions despite mitigation; quickly dissipates.
Cumulative impact post mitigation	Low (mitigation reduces interaction with other impacts like noise).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Vegetation loss** Overall loss of ecological connectivity and degradation of the Krom River corridor due to construction; transformation of 11.1 ha of previously classified critically endangered vegetation which was previously farmed.
Nature of impact:	Negative (vegetation clearing, soil disturbance) and indirect (altered hydrology, invasive species spread)
Extent and duration of impact:	Local; Permanent

Consequence of impact or risk:	Potential loss of degraded ESA functionality, potential further degradation of Krom River ecosystem.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low (site already transformed, no significant protected species observed).
Degree to which the impact can be reversed:	Medium (rehabilitation possible with effort, especially along Krom River).
Indirect impacts:	Spread of invasive alien plants (e.g., Populus alba) into Krom River; socio-economic benefits from development offset by potential ecological decline.
Cumulative impact prior to mitigation:	Medium - Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem

	- The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. o Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Minor degradation of transformed veld, but moderate degradation of the Krom river corridor.
Cumulative impact post mitigation:	Moderate impact on CBA/ESA and river corridor.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Negligible**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts** Temporary disruption of scenic quality due to construction activities (e.g., machinery, stockpiles).
Nature of impact:	Negative (construction-related visual impacts and long-term design of the development to blend with townscape).
Extent and duration of impact:	Local (Erf 878 and immediate surrounds, e.g., R311, within 1.2 km); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary alteration of scenic views from R311 and nearby areas; reduced aesthetic appeal during construction.
Probability of occurrence:	Medium- High

Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; scenic quality recoverable post-construction).
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential minor reduction in tourism appeal during construction.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Moderate (A3's reduced footprint and single-storey design lessen impact)
Degree to which the impact can be managed:	High – (through construction phasing and screening)
Degree to which the impact can be mitigated:	High (effective measures can minimize visibility).
Proposed mitigation:	- The alternatives should be further explored to better fit the town grid and the site contours. The retention of Riebeek Hill as significant Open Space should be considered. - Architecture: The design of buildings needs to incorporate traditional typologies and details that will make a better fit with this historic town and prevent a modernist intrusion on a heritage landscape. - Landscape Plan: A Landscape Plan has already been prepared and a reference to traditional tree and shrub species is desirable e.g. Oak and Gum trees. - Tree Plan: Trees both on-site and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars, and indigenous/endemic species like Wild Olive. - Planting: There is no need to rigidly adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. - Fencing: Is always a key feature of Architectural/Landscape detailing as it strongly affects

	the edge condition. Subtle, well-detailed, traditional fencing options and colours are preferred. ClearVu fencing is not desirable especially along the R311. - Colouration: Colouration is a key tool to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourations today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. - Maintenance: Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. - Damage Control: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. - Pollution: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. - Monitoring: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted.	
Residual impacts:	Minor visual disruption during active construction (e.g., machinery visibility from R311); resolves quickly post-completion with A3's traditional design blending into the townscape	
Cumulative impact post mitigation:	Low (mitigation aligns with A3's long-term visual enhancement).	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**High (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE		

Potential impact and risk:	**Archaeological impacts** Disturbance or destruction of archaeological remains (ESA and MSA flakes, chunks, and a historical tile).
Nature of impact:	Negative: physical disturbance due to earthworks, construction, and infrastructure installation.
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Minor loss of degraded archaeological material graded as Not Conservation Worthy (NCW).
Probability of occurrence:	High (construction will likely disturb surface and subsurface remains).
Degree to which the impact may cause irreplaceable loss of resources:	Low (remains are degraded, isolated, and not significant; no graves or settlements identified).
Degree to which the impact can be reversed:	Low (once disturbed, physical remains cannot be restored to original context).
Indirect impacts:	Potential minor disruption to historical narrative of site, though negligible due to low significance.
Cumulative impact prior to mitigation:	Low (site already transformed by agriculture; additional impact is minimal).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (due to NCW grading and degraded context).
Degree to which the impact can be avoided:	Low (development footprint covers areas where remains were found).
Degree to which the impact can be managed:	High (monitoring and recording can manage any finds).
Degree to which the impact can be mitigated:	High (simple measures can address low significance remains).

Proposed mitigation:	→ No further archaeological mitigation is required. → No archaeological monitoring is required during construction phase excavations → If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
Residual impacts:	Negligible (loss of already disturbed, low value remains).
Cumulative impact post mitigation:	Very Low (mitigation ensures minimal additional impact).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic congestion and safety risks during construction due to delivery vehicles and equipment movement.
Nature of impact:	Negative; Temporary disruption to local traffic flow and potential safety hazards on Church Rd and Fontein St.
Extent and duration of impact:	Local (intersections along Church Rd and Fontein St); Short-term (construction period, likely 1-2 years).
Consequence of impact or risk:	Minor delays and increased risk of accidents at access points; moderate due to wedding venue-related traffic.
Probability of occurrence:	High – Construction activities are inevitable, with additional trips from wedding venue setup.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No loss of physical resources; temporary disruption only.

Degree to which the impact can be reversed:	High – Impacts cease post-construction; roads return to normal operation.
Indirect impacts:	Noise and dust affecting nearby residents; potential delays for public transport users.
Cumulative impact prior to mitigation:	Moderate – Combined effect of construction and background traffic growth by 2028.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Manageable but noticeable disruption during peak construction.
Degree to which the impact can be avoided:	Low – Construction traffic is unavoidable, though wedding venue removal in A3 reduces intensity.
Degree to which the impact can be managed:	High – Through scheduling and traffic control measures.
Degree to which the impact can be mitigated:	High – With proper planning and design adherence.
Proposed mitigation:	→ The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road; → The proposed access on Fontein Street should be designed according to local guidelines; → The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m); → Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document; → It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development.
Residual impacts:	Minor delays during peak construction periods.

Cumulative impact post mitigation:	Low – Mitigated to background levels with minimal additional effect.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Altered flow regime and erosion** An increase in stormwater runoff volumes and velocities from the bare / hardened surfaces associated with the proposed development, or from areas left bare as a result of construction related activities may result in channel and headcut erosion as well as sedimentation of the remnant watercourses.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Medium – potential for long-term alteration of hydrology, soil loss and degradation of watercourse functioning.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low-cost rehabilitation / Moderately high likelihood of success
Indirect impacts:	Increased sediment transport to downstream wetlands, reduced water quality, long-term degradation of ecological integrity and reduced habitat availability.
Cumulative impact prior to mitigation:	Medium-High – development adds to existing pressures on local hydrology and wetland systems.

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	Medium
Degree to which the impact can be avoided:	Medium – impacts can be reduced through sensitive design and routing of stormwater infrastructure.
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures proposed by the freshwater specialist.
Residual impacts:	Low – Medium
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Water quality impairment** The water quality of the remnant watercourses may be impacted as a result of the runoff of contaminated stormwater from the urban surface of the proposed development. Contaminants may include hydrocarbons, detergents, fertilizers and heavy minerals. However, with the inclusion of stormwater design measures which allow for the infiltration and treatment of stormwater this impact can be greatly reduced. With a housing/commercial development there is also a long-term risk that the remnant watercourses may be impacted on as a result of sewage surcharge or as a result of the leakage of sewage from poorly maintained pipes, manholes or sewage pumps.

Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Low to Medium – potential degradation of water quality, localised ecological stress and temporary reduction in aquatic habitat fitness.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low cost / Moderately high likelihood of success
Indirect impacts:	→ Decreased aquatic biodiversity due to reduced water quality. → Increased nutrient loads leading to algal growth or eutrophication in downstream areas. → Increased maintenance burden on downstream stormwater and wastewater systems. → Localised decline in ecosystem health.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High):	Low
Degree to which the impact can be avoided:	Medium – through proper stormwater treatment design, careful placement and maintenance of wastewater infrastructure.
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to mitigation measures proposed by the freshwater specialist.

Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socioeconomic impacts** Tourism and economic growth of the region vs. long-term change to town character and local lifestyle.
Nature of impact:	Positive (revenue, jobs)
Extent and duration of impact:	Local to regional (visitors from beyond Riebeek-Kasteel); long-term (duration of venue operation).
Consequence of impact or risk:	Economic upliftment for businesses; potential overburdening of infrastructure and resident discontent.
Probability of occurrence:	High (wedding venue likely to attract visitors; public concerns already noted).
Degree to which the impact may cause irreplaceable loss of resources:	Medium (loss of town's tranquil character difficult to quantify or replace).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Growth in hospitality sector; potential property value changes;
Cumulative impact prior to mitigation:	High

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	Moderate
Proposed mitigation:	- Employ local individuals during the operation phase.
Residual impacts:	Reduced community resistance due to job creation; manageable infrastructure load if mitigations are implemented effectively.
Cumulative impact post mitigation:	Medium-High (economic benefits remain, but community and infrastructure strain are reduced).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Ecological impacts** Ongoing degradation of the Krom River corridor and increased invasive alien plant infestation.
Nature of impact:	Negative
Extent and duration of impact:	Local (Krom River corridor and 11.1 ha site); Permanent unless actively managed.
Consequence of impact or risk:	Reduced ecological connectivity and potential further degradation of the CBA/ESA along the Krom River.

Probability of occurrence:	Probable (depends on maintenance practices; high if no alien control is implemented).
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Spread of invasive species downstream, affecting broader river ecology; increased veld fire risk.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium – Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem – included in the preferred layout - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal

	of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. o Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very -Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Visual impacts** Ongoing visual prominence of the single residential development on the top hill, competing with the church steeple and altering the town's scenic identity.
Nature of impact:	Negative – Permanent alteration of key sight lines (e.g., R311 southern approach, R46, Bothmanskloof Pass) and introduction of a new, dominant landmark.
Extent and duration of impact:	Local to regional (visible from R311, R46, and elevated points up to 1.8 km away); Permanent (for the lifespan of the development).
Consequence of impact or risk:	Erosion of the historic townscape's landmark qualities, reduced scenic appeal, and potential conflict with the town's cultural identity.
Probability of occurrence:	Definite - The venue's hilltop location ensures visibility from sensitive viewpoints as noted in the VIA.

Degree to which the impact may cause irreplaceable loss of resources:	High – Loss of visual heritage value, though not a tangible resource, is significant and difficult to restore.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Possible decline in visitor experience and local property values due to diminished scenic quality.
Cumulative impact prior to mitigation:	High – Reinforces existing visual intrusions and competes with established landmarks over time
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very High – High sensitivity of views (e.g., R311 gateway) and low VAC of the crest amplify the impact.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium – Lighting control and landscaping can reduce prominence, but not the venue's inherent visibility.
Degree to which the impact can be mitigated:	Medium – Screening with vegetation and subtle design can lessen, but not eliminate, the impact.
Proposed mitigation:	→ The retention of Riebeek Hill as significant Open Space should be considered. → Architecture: The design of buildings needs to incorporate traditional typologies and details that will make a better fit with this historic town and prevent a modernist intrusion on a heritage landscape. → Landscape Plan: A Landscape Plan has already been prepared and a reference to traditional tree and shrub species is desirable e.g. Oak and Gum trees. → Tree Plan: Trees both on-site and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars, and indigenous/endemic species like Wild Olive. → Planting: There is no need to rigidly adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections.

	→ Fencing: Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional fencing options and colours are preferred. ClearVu fencing is not desirable especially along the R311. → Colouration: Colouration is a key tool to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourations today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. → Maintenance: Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. → Damage Control: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. → Pollution: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. → Monitoring: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted. → Lighting: Lighting should be minimised and carefully controlled as part of the project's management plan. The use of green energy fittings and concepts should be encouraged and lighting developed with sensitivity to the rural landscape. → Landscape Maintenance: must be carried out at all times in line with these recommendations to help keep the scheme green and encouraging local biodiversity.
Residual impacts:	Persistent alteration of the ridge line and partial competition with the church steeple.

Cumulative impact post mitigation:	Medium-High – Mitigation reduces severity, but cumulative scenic degradation remains.	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**High (-)**
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Traffic Impact** Increased traffic volumes and potential congestion at intersections due to wedding venue and mixed-use components.	
Nature of impact:	Negative – Added trips with higher peaks from wedding events.	
Extent and duration of impact:	Local (Church Rd, Fontein St intersections); Long-term (duration of development operation).	
Consequence of impact or risk:	Moderate delays - with worse peak delays from wedding venue events; safety risks at access points.	
Probability of occurrence:	High – Wedding venue and mixed-use elements ensure consistent trip generation.	
Degree to which the impact may cause irreplaceable loss of resources:	Low – No physical resource loss; impacts are operational.	
Degree to which the impact can be reversed:	High – Traffic impacts reversible if wedding venue use is ceased	
Indirect impacts:	Increased demand for public transport; pedestrian safety risks without sidewalks; noise from wedding events.	
Cumulative impact prior to mitigation:	Moderate – Background 2028 traffic plus development trips, exacerbated by wedding venue peak events.	

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High – Noticeable impact on service levels, especially during wedding events.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	→ The proposed access off Church Rd should be designed according to the local and provincial guidelines. Attention should be given to sight distances from the access along Church Road; → The proposed access on Fontein Street should be designed according to local guidelines; → The route through the development connecting Church Road in the west with Fontein Street in the east should have a blacktop width of at least 6,0 m. Other internal access roads should have minimum blacktop widths of 5,5 m and bell-mouth radii of 6,0m (minimum 5,0m); → Off-street parking should be provided as per the Swartland Municipality Land Use Planning By-law document; → It is furthermore proposed that a surfaced sidewalk be provided along at least one side of the Class 5 Local Street (13 m reserve) through the development.
Residual impacts:	Slight delays during peak wedding events; minor pedestrian inconvenience if sidewalk use is low.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-

Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 4: PREVIOUSLY PREFERRED (PPP 5)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** Increased employment opportunities and economic activity vs. potential disruption to local community cohesion.
Nature of impact:	**Positive** (job creation) and **negative** (social disruption due to construction and perceived change in town character).
Extent and duration of impact:	Local (Riebeek-Kasteel and immediate neighbours); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary boost to local economy; potential strain on community relations due to wedding venue controversy.
Probability of occurrence:	High (construction jobs certain; community concerns evident from public feedback).

Degree to which the impact may cause irreplaceable loss of resources:	Low (no significant resource loss; social cohesion recoverable with time).
Degree to which the impact can be reversed:	High (economic benefits temporary; social impacts reversible post-construction with engagement).
Indirect impacts:	Increased demand for local services (e.g., suppliers); potential for resident dissatisfaction to affect future projects.
Cumulative impact prior to mitigation:	Moderate (economic gain offset by social tension from wedding venue placement).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (balancing economic benefits against community opposition).
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High (through community consultation and construction management).
Degree to which the impact can be mitigated:	High (via local hiring, communication, and design adjustments).
Proposed mitigation:	- Employ local labour; - Engage community through regular updates;
Residual impacts:	Minor lingering community dissatisfaction if wedding venue remains contentious.
Cumulative impact post mitigation	Low (mitigation reduces social tension while retaining economic benefits)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts**

	Disturbance to residents and wildlife from construction activities, e.g., machinery, traffic.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Temporary disruption to quality of life, potential annoyance to people in the surroundings
Probability of occurrence:	High (noise inherent to construction activities like earthmoving and building).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; temporary disturbance only).
Degree to which the impact can be reversed:	High (noise ceases upon construction completion; no lasting effects).
Indirect impacts:	Potential reduced appeal for tourism during construction; minor stress on community relations.
Cumulative impact prior to mitigation:	Moderate (combined with dust and traffic, affects liveability during construction).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (noticeable but temporary disruption in a small-town setting).
Degree to which the impact can be avoided:	Low (construction noise unavoidable, though intensity can be reduced).
Degree to which the impact can be managed:	High (through scheduling and equipment controls).
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noisy activities to daytime hours (e.g., 7 AM-5 PM); - Use low-noise equipment; - Install temporary sound barriers near sensitive areas (e.g., New Orleans neighbours);

	- Inform residents of schedule.
Residual impacts:	Minor residual noise during permitted hours; minimal disturbance with compliance.
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust** Air quality degradation from earthworks, vehicle movement, and material handling.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Temporary health risks (e.g., respiratory irritation), reduced visibility, and nuisance to residents.
Probability of occurrence:	High (dust generation inevitable during dry conditions and earthmoving).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; air quality recovers post-construction).
Degree to which the impact can be reversed:	High (dust settles after construction; no lasting environmental damage).
Indirect impacts:	High (dust settles after construction; no lasting environmental damage).

Cumulative impact prior to mitigation:	Moderate (combined with noise and traffic, impacts air quality and liveability).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High
Degree to which the impact can be avoided:	Moderate (some dust generation unavoidable, but extent can be minimised).
Degree to which the impact can be managed:	High (through dust suppression techniques).
Degree to which the impact can be mitigated:	High (standard measures effectively reduce dust spread).
Proposed mitigation:	- Regular water spraying on exposed surfaces; - Cover stockpiles; limit vehicle speeds on-site; - Revegetate disturbed areas promptly; - Monitor dust levels near sensitive receptors.
Residual impacts:	Minor dust during dry, windy conditions despite mitigation; quickly dissipates.
Cumulative impact post mitigation	Low (mitigation reduces interaction with other impacts like noise).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Vegetation loss** Overall loss of ecological connectivity and degradation of the Krom River corridor due to construction; transformation of 11.1 ha of previously classified critically endangered vegetation which was previously farmed.
Nature of impact:	Negative (vegetation clearing, soil disturbance) and indirect (altered hydrology, invasive species spread)

Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Potential loss of degraded ESA functionality, potential further degradation of Krom River ecosystem.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low (site already transformed, no significant protected species observed).
Degree to which the impact can be reversed:	Medium (rehabilitation possible with effort, especially along Krom River).
Indirect impacts:	Spread of invasive alien plants (e.g., Populus alba) into Krom River; socio-economic benefits from development offset by potential ecological decline.
Cumulative impact prior to mitigation:	Medium - Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to

	establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Minor degradation of transformed veld, but moderate degradation of the Krom river corridor.
Cumulative impact post mitigation:	Low impact on CBA/ESA and river corridor.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts** Construction inevitably gives rise to noise, disruption and dust, amongst others. These are well covered by Municipality Bylaws. Site destruction and damage is also coincident with quarrying especially to water, soil and vegetation. Changes to the water table by excavations can also have a heavy impact on the trees with death occurring a few years later.
Nature of impact:	Negative
Extent and duration of impact:	Local (Erf 878 and immediate surrounds, e.g., R311, within 1.2 km); short-term (construction phase, ~1-2 years).

Consequence of impact or risk:	Temporary alteration of scenic views from R311 and nearby areas; reduced aesthetic appeal during construction.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; scenic quality recoverable post-construction).
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential minor reduction in tourism appeal during construction.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ **Site Development Plan**: the new SDP is well integrated to site and town requiring no specific changes except possibly the uppermost ring of houses around the hilltop, which are more contemporary low-slung structures. → **Architecture:** The design and layout of buildings is better incorporated with the historic town, however, there are contemporary low-slung buildings on the hilltop that may seem out of place. → **Scheme Name:** The project name changed from Riebeeck Hill to Springbok Hill. This name change seems artificial and should be reconsidered. → **Landscape Plan:** A new landscape plan needs to be prepared; a reference to traditional tree and shrub species is desirable e.g Oak and Gum trees

	→ **Open Space:** has been carefully integrated into the core of the design. o However, guidelines to control the hillside vegetation in private backyard are needed. o In the absence of a landscape plan, planting themes linking in with the agricultural setting such as vineyards and orchards traditionally, or olive groves more recently, need to be developed. → **Tree Plan**: Trees both onsite and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars and indigenous/ endemic species like Wild Olive. o Items **4 Tree Plan, 5 Planting** and **7.1 Structure Colouration** require incorporation into the *Landscape Guidelines.* → **Planting:** There is no need to rigidity adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. → **Fencing:** Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional, traditional fencing options and colours are preferred. o ClearVu fencing is not desirable especially along the 311. → **Colouration:** Colouration is a key to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourant today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. o A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. → **Maintenance:** Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. → **Damage Control**: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. → **Pollution**: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas.

	→ **Monitoring**: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous vegetation (preferably endemic) vegetation must be planted. → **Lighting:** lighting should be minimised and carefully controlled as part of the project's management plan. The use of green energy fittings and concepts should be encouraged and lighting developed with sensitivity to the rural landscape. → Waterwise landscaping should be used wherever possible and green star building practices. → Landscape Maintenance: must be carried out at all times in line with these recommendations to help keep the scheme green and encouraging local biodiversity.	
Residual impacts:	Minor visual disruption during active construction (e.g., machinery visibility from R311); resolves quickly post-completion with A3's traditional design blending into the townscape	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Archaeological impacts** Disturbance or destruction of archaeological remains (ESA and MSA flakes, chunks, and a historical tile).	
Nature of impact:	Negative: physical disturbance due to earthworks, construction, and infrastructure installation.	
Extent and duration of impact:	Local; Short-term (during construction phase)	
Consequence of impact or risk:	Minor loss of degraded archaeological material graded as Not Conservation Worthy (NCW).	

Probability of occurrence:	High (construction will likely disturb surface and subsurface remains).
Degree to which the impact may cause irreplaceable loss of resources:	Low (remains are degraded, isolated, and not significant; no graves or settlements identified).
Degree to which the impact can be reversed:	Low (once disturbed, physical remains cannot be restored to original context).
Indirect impacts:	Potential minor disruption to historical narrative of site, though negligible due to low significance.
Cumulative impact prior to mitigation:	Low (site already transformed by agriculture; additional impact is minimal).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (due to NCW grading and degraded context).
Degree to which the impact can be avoided:	Low (development footprint covers areas where remains were found).
Degree to which the impact can be managed:	High (monitoring and recording can manage any finds).
Degree to which the impact can be mitigated:	High (simple measures can address low significance remains).
Proposed mitigation:	→ No further archaeological mitigation is required. → No archaeological monitoring is required during construction phase excavations → If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
Residual impacts:	Negligible (loss of already disturbed, low value remains).
Cumulative impact post mitigation:	Very Low (mitigation ensures minimal additional impact).

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic congestion and safety risks during construction due to delivery vehicles and equipment movement.
Nature of impact:	Negative; Temporary disruption to local traffic flow and potential safety hazards on Church Rd and Fontein St.
Extent and duration of impact:	Local (intersections along Church Rd and Fontein St); Short-term (construction period, likely 1-2 years).
Consequence of impact or risk:	Minor delays and increased risk of accidents at access points; moderate due to wedding venue-related traffic.
Probability of occurrence:	High – Construction activities are inevitable, with additional trips from wedding venue setup.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No loss of physical resources; temporary disruption only.
Degree to which the impact can be reversed:	High – Impacts cease post-construction; roads return to normal operation.
Indirect impacts:	Noise and dust affecting nearby residents; potential delays for public transport users.
Cumulative impact prior to mitigation:	Moderate – Combined effect of construction and background traffic growth by 2028.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Manageable but noticeable disruption during peak construction.

Degree to which the impact can be avoided:	Low – Construction traffic is unavoidable, though wedding venue removal in A3 reduces intensity.
Degree to which the impact can be managed:	High – Through scheduling and traffic control measures.
Degree to which the impact can be mitigated:	High – With proper planning and design adherence.
Proposed mitigation:	**Required road and Intersection upgrades** 1. **Intersection 2: Main Street / Maree Street** → Addition of a fourth (southbound) leg to create Access Road 2. Priority control remains adequate. 2. **Intersection 5: Fontein Street / Access Road 3** → Creation of a new three-legged, priority-controlled intersection to provide access to the Residential 1 and Residential 3 components. 3. **Intersection 6: Fontein Street / Kloof Street** → Addition of a third westbound leg (Access Road 4) for Residential 1 access. Priority control remains sufficient. 4. **Intersection 7: R311 (Church Road) / Farm Access / Access Road 1** → Convert to a 4-way stop-controlled intersection to address sight-distance limitations (±75 m northbound and >150 m southbound), reduce vehicle speeds, and improve pedestrian safety across the R311. **Sight-Distance and Safety Considerations** → Sight-distances at Access Roads 2, 3 and 4 exceed 100 m, meeting safety requirements. → Intersection 7 requires the 4-way stop as a sight-distance mitigation measure. → The 4-way stop also acts as a traffic-calming intervention along the R311, improving safety for both motorists and pedestrians. **Non-Motorised Transport (NMT) and Public Transport** → Continuous sidewalks must be provided within the development and connected to the existing CBD pedestrian network. → The CBD is adequately serviced by existing minibus-taxi operations, and the development does not require additional public transport facilities.

	<u>Internal Road Layout and Parking</u> → All internal roads must retain a minimum 6 m surfaced width, providing one lane in each direction. → Parking supply must comply with the applicable Town Planning Scheme standards for each proposed land use. → Refuse removal must be accommodated on-site, with service vehicles able to access and manoeuvre safely in accordance with vehicle-tracking results.
Residual impacts:	Minor delays during peak construction periods.
Cumulative impact post mitigation:	Low – Mitigated to background levels with minimal additional effect.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Watercourse Habitat Loss** Approximately 100 m² (0.01 ha) of the degraded portion of Seep Wetland 1 will be permanently lost due to the placement of infrastructure. In addition, construction activities may cause temporary habitat disturbance to the remaining portions of Seep Wetland 1, Seep Wetland 2, and the Krom River corridor, including trampling, edge disturbance, vegetation damage, and soil compaction within and adjacent to these features. Routine operational activities - including landscaping, pedestrian movement, maintenance of services, and informal access - may result in ongoing edge disturbance to wetland and riparian habitats within Seep Wetland 1, Seep Wetland 2, and the Krom River corridor.
Nature of impact:	Negative
Extent and duration of impact:	Local; long term

Consequence of impact or risk:	Loss of degraded wetland habitat, reduction in ecological functioning, and potential long-term edge effects on remaining wetland/riparian systems.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (loss is limited to a small, already degraded area, but wetlands are inherently sensitive).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Increased erosion and sedimentation risk entering wetland systems. • Potential alteration of hydrological pathways. • Long-term disturbance of edge species and possible spread of alien vegetation
Cumulative impact prior to mitigation:	Medium (existing pressure on small seep wetlands makes additional loss meaningful at a local scale).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to Freshwater specialist mitigation measures in the report.
Residual impacts:	Low
Cumulative impact post mitigation:	Low

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low -ve**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Alteration of flow** Construction activities may temporarily alter the flow regime of remnant wetland and seep features, including short-term disruption of shallow subsurface flows and surface-water drainage patterns. The completed Eco-Lifestyle Estate may modify stormwater volumes and runoff pathways, potentially leading to localised erosion, sedimentation, or minor flow diversion within remnant watercourses.
Nature of impact:	Negative
Extent and duration of impact:	Local; Long-term
Consequence of impact or risk:	Potential alteration of natural hydrological functioning, increased localised erosion, increased stormwater concentrations, and reduced diffuse flow into seep wetlands.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low (flow paths are shallow and can be reinstated; wetland resources are sensitive but impacts are localised and reversible with proper design).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	• Increased sediment transport into wetlands and riparian areas. • Concentrated runoff causing incision or gully formation. • Reduced wetting of seep zones, potentially affecting vegetation composition. • Potential proliferation of alien vegetation in disturbed hydrological zones.

Cumulative impact prior to mitigation:	Medium (regional pressure on small remnant wetland systems increases sensitivity to any hydrological modifications)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium (careful design of stormwater infrastructure and strict construction controls can prevent most alterations).
Degree to which the impact can be managed:	High (hydrological controls, erosion management, and monitored reinstatement can effectively address impacts).
Degree to which the impact can be mitigated:	High (engineering and ecological measures can significantly reduce risk).
Proposed mitigation:	Refer to freshwater specialist mitigation measures added in this report.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Water Quality Impairment from Sedimentation:** Earthworks and soil disturbance may increase erosion and sediment mobilisation, resulting in sediment-laden runoff entering remnant watercourses if not adequately controlled.
Nature of impact:	Negative
Extent and duration of impact:	Local; long-term

Consequence of impact or risk:	Degradation of water quality, smothering of wetland vegetation, reduced infiltration in seep wetlands, increased turbidity, and temporary loss of ecological functioning in remnant drainage features.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (sedimentation may temporarily reduce ecological function, but resources can recover with rehabilitation; long-term irreversible loss is unlikely if managed).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Increased nutrient loading and potential eutrophication. • Decline in wetland and riparian habitat quality. • Promotion of alien invasive species in disturbed sediment-rich zones. • Reduced groundwater recharge where sediments clog natural infiltration pathways.
Cumulative impact prior to mitigation:	Medium (local wetlands already experience pressure from surrounding land use; any reduction in water quality adds to cumulative degradation).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to freshwater specialist mitigation measures.
Residual impacts:	Low

Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Nature of impact:	**Water Quality Impairment from Pollutants** Accidental spills of hydrocarbons, cement wash water, or other construction-related contaminants, as well as contaminated stormwater runoff, may impair water quality in adjacent freshwater features. Stormwater discharged from developed areas may contain hydrocarbons or other pollutants. Without adequate stormwater management, this may impact on the remaining seep systems and downstream drainage features.
Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Degradation of wetland and riparian water quality, toxicity to aquatic biota, reduced soil and water infiltration functions, and long-term impairment of ecological processes if pollutants persist in sediments.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (pollutants can cause localised damage, but with rapid response and rehabilitation, permanent loss is unlikely; hydrocarbons may bind to sediments and be slow to dissipate).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Decline in wetland vegetation health due to chemical exposure. • Potential toxicity to soil organisms and wetland invertebrates. • Long-term impairment of seep wetland functioning if pollutants accumulate.

	• Increased vulnerability to alien plant invasion where vegetation is stressed or damaged
Cumulative impact prior to mitigation:	Medium (regional pressure on small wetland systems means even minor pollution inputs contribute to cumulative decline).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	High (strict handling, storage, and disposal protocols can prevent most pollution risks).
Degree to which the impact can be managed:	High (spill response procedures and stormwater controls are effective when implemented properly).
Degree to which the impact can be mitigated:	High (engineering controls, containment systems, and best-practice site management significantly reduce risk).
Proposed mitigation:	Refer to freshwater specialist mitigation measures.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socioeconomic impacts** Tourism and economic growth of the region vs. long-term change to town character and local lifestyle.
Nature of impact:	Positive (revenue, jobs)

Extent and duration of impact:	Local to regional (visitors from beyond Riebeek-Kasteel); long-term (duration of venue operation).
Consequence of impact or risk:	Economic upliftment for businesses; potential overburdening of infrastructure and resident discontent.
Probability of occurrence:	High (wedding venue likely to attract visitors; public concerns already noted).
Degree to which the impact may cause irreplaceable loss of resources:	Medium (loss of town's tranquil character difficult to quantify or replace).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Growth in hospitality sector; potential property value changes;
Cumulative impact prior to mitigation:	High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	Moderate
Proposed mitigation:	- Employ local individuals during the operation phase.
Residual impacts:	Reduced community resistance due to job creation; manageable infrastructure load if mitigations are implemented effectively.
Cumulative impact post mitigation:	Medium-High (economic benefits remain, but community and infrastructure strain are reduced).

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Ecological impacts** Ongoing degradation of the Krom River corridor and increased invasive alien plant infestation.
Nature of impact:	Negative
Extent and duration of impact:	Local (Krom River corridor and 11.1 ha site); Permanent unless actively managed.
Consequence of impact or risk:	Reduced ecological connectivity and potential further degradation of the CBA/ESA along the Krom River.
Probability of occurrence:	Probable (depends on maintenance practices; high if no alien control is implemented).
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Spread of invasive species downstream, affecting broader river ecology; increased veld fire risk.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Low
Degree to which the impact can be avoided:	Medium – Low

Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem – included in the preferred layout - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very -Low (-)**
POST-CONSTRUCTION PHASE	

Potential impact and risk:	**Visual impacts** Ongoing visual prominence of the single residential development near the upper slopes, introducing built form into an area previously undeveloped and contributing to the town's rural–heritage setting. Potential long-term effects associated with lighting, landscape maturity, and maintenance.
Nature of impact:	Negative
Extent and duration of impact:	Local to regional (visible from R311, R46, and elevated points up to 1.8 km away); Permanent (for the lifespan of the development).
Consequence of impact or risk:	The placement of residential dwellings introduces a developed character into a landscape previously defined by open hilltops and cultural–heritage qualities. Although refined through Alternative 4, the development still represents a permanent shift in landscape character, but the degree of intrusion is substantially reduced and impacts are low to moderate compared to earlier alternatives.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	High – Loss of visual heritage value, though not a tangible resource, is significant and difficult to restore once development is completed.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Possible reduction in scenic quality experienced by visitors, residents, and tourists using gateway routes; potential influence on local sense of place and property values.
Cumulative impact prior to mitigation:	High – Adding new built form to an already sensitive and landmark-rich setting intensifies cumulative visual change and reinforces existing intrusions over time.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High

Degree to which the impact can be avoided:	Low – Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ **Site Development Plan**: the new SDP is well integrated to site and town requiring no specific changes except possibly the uppermost ring of houses around the hilltop, which are more contemporary low-slung structures. → **Architecture:** The design and layout of buildings is better incorporated with the historic town, however, there are contemporary low-slung buildings on the hilltop that may seem out of place. → **Scheme Name:** The project name changed from Riebeeck Hill to Springbok Hill. This name change seems artificial and should be reconsidered. → **Landscape Plan:** A new landscape plan needs to be prepared; a reference to traditional tree and shrub species is desirable e.g Oak and Gum trees → **Open Space:** has been carefully integrated into the core of the design. o However, guidelines to control the hillside vegetation in private backyard are needed. o In the absence of a landscape plan, planting themes linking in with the agricultural setting such as vineyards and orchards traditionally, or olive groves more recently, need to be developed. → **Tree Plan**: Trees both onsite and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars and indigenous/ endemic species like Wild Olive. o Items **4 Tree Plan, 5 Planting** and **7.1 Structure Colouration** require incorporation into the *Landscape Guidelines.* → **Planting:** There is no need to rigidity adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. → **Fencing:** Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional, traditional fencing options and colours are preferred.

	○ ClearVu fencing is not desirable especially along the 311. → **Colouration:** Colouration is a key to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourant today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. ○ A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. → **Maintenance:** Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. → **Damage Control**: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. → **Pollution**: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. → **Monitoring**: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous vegetation (preferably endemic) vegetation must be planted. → **Lighting:** lighting should be minimised and carefully controlled as part of the project's management plan. The use of green energy fittings and concepts should be encouraged and lighting developed with sensitivity to the rural landscape. → Waterwise landscaping should be used wherever possible and green star building practices. → Landscape Maintenance: must be carried out at all times in line with these recommendations to help keep the scheme green and encouraging local biodiversity. →
Residual impacts:	Low – Medium

Cumulative impact post mitigation:	Low-Medium – Mitigation reduces severity, but cumulative scenic degradation remains.	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Medium (-)**
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Traffic Impact** Increased traffic volumes and potential congestion at intersections due to wedding venue and mixed-use components.	
Nature of impact:	Negative – Added trips with higher peaks from wedding events.	
Extent and duration of impact:	Local (Church Rd, Fontein St intersections); Long-term (duration of development operation).	
Consequence of impact or risk:	Moderate delays - with worse peak delays from wedding venue events; safety risks at access points.	
Probability of occurrence:	High – Wedding venue and mixed-use elements ensure consistent trip generation.	
Degree to which the impact may cause irreplaceable loss of resources:	Low – No physical resource loss; impacts are operational.	
Degree to which the impact can be reversed:	High – Traffic impacts reversible if wedding venue use is ceased	
Indirect impacts:	Increased demand for public transport; pedestrian safety risks without sidewalks; noise from wedding events.	
Cumulative impact prior to mitigation:	Moderate – Background 2028 traffic plus development trips, exacerbated by wedding venue peak events.	

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High – Noticeable impact on service levels, especially during wedding events.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	**Required road and Intersection upgrades** 5. **Intersection 2: Main Street / Maree Street** → Addition of a fourth (southbound) leg to create Access Road 2. Priority control remains adequate. 6. **Intersection 5: Fontein Street / Access Road 3** → Creation of a new three-legged, priority-controlled intersection to provide access to the Residential 1 and Residential 3 components. 7. **Intersection 6: Fontein Street / Kloof Street** → Addition of a third westbound leg (Access Road 4) for Residential 1 access. Priority control remains sufficient. 8. **Intersection 7: R311 (Church Road) / Farm Access / Access Road 1** → Convert to a 4-way stop-controlled intersection to address sight-distance limitations (±75 m northbound and >150 m southbound), reduce vehicle speeds, and improve pedestrian safety across the R311. **Sight-Distance and Safety Considerations** → Sight-distances at Access Roads 2, 3 and 4 exceed 100 m, meeting safety requirements. → Intersection 7 requires the 4-way stop as a sight-distance mitigation measure. → The 4-way stop also acts as a traffic-calming intervention along the R311, improving safety for both motorists and pedestrians. **Non-Motorised Transport (NMT) and Public Transport** → Continuous sidewalks must be provided within the development and connected to the existing CBD pedestrian network.

	→ The CBD is adequately serviced by existing minibus-taxi operations, and the development does not require additional public transport facilities. **<u>Internal Road Layout and Parking</u>** → All internal roads must retain a minimum 6 m surfaced width, providing one lane in each direction. → Parking supply must comply with the applicable Town Planning Scheme standards for each proposed land use. → Refuse removal must be accommodated on-site, with service vehicles able to access and manoeuvre safely in accordance with vehicle-tracking results.
Residual impacts:	Slight delays during peak wedding events; minor pedestrian inconvenience if sidewalk use is low.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Visual Impacts
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	→ Refurbishment and Resale: The previous recommendations regarding Planning, Construction and Operation all apply to this process. The entire site can be dismantled and rehabilitate no longer needed and restored to an appropriate land use.

	This concludes the analysis of impacts and detailed recommendations for their mitigation. The chapter, Visual Management and Monitoring Plan follows. It gives recommendations for the management and monitoring of the environment and the given VIA recommendations.
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 5: PREFERRED

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** Increased employment opportunities and economic activity vs. potential disruption to local community cohesion.
Nature of impact:	**Positive** (job creation) and **negative** (social disruption due to construction and perceived change in town character).
Extent and duration of impact:	Local (Riebeek-Kasteel and immediate neighbours); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary boost to local economy; potential strain on community relations due to wedding venue controversy.
Probability of occurrence:	High (construction jobs certain; community concerns evident from public feedback).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no significant resource loss; social cohesion recoverable with time).
Degree to which the impact can be reversed:	High (economic benefits temporary; social impacts reversible post-construction with engagement).
Indirect impacts:	Increased demand for local services (e.g., suppliers); potential for resident dissatisfaction to affect future projects.

Cumulative impact prior to mitigation:	Moderate (economic gain offset by social tension from wedding venue placement).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (balancing economic benefits against community opposition).
Degree to which the impact can be avoided:	Moderate
Degree to which the impact can be managed:	High (through community consultation and construction management).
Degree to which the impact can be mitigated:	High (via local hiring, communication, and design adjustments).
Proposed mitigation:	- Employ local labour; - Engage community through regular updates;
Residual impacts:	Minor lingering community dissatisfaction if wedding venue remains contentious.
Cumulative impact post mitigation	Low (mitigation reduces social tension while retaining economic benefits)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts** Disturbance to residents and wildlife from construction activities, e.g., machinery, traffic.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term (during construction phase)
Consequence of impact or risk:	Temporary disruption to quality of life, potential annoyance to people in the surroundings

Probability of occurrence:	High (noise inherent to construction activities like earthmoving and building).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; temporary disturbance only).
Degree to which the impact can be reversed:	High (noise ceases upon construction completion; no lasting effects).
Indirect impacts:	Potential reduced appeal for tourism during construction; minor stress on community relations.
Cumulative impact prior to mitigation:	Moderate (combined with dust and traffic, affects liveability during construction).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (noticeable but temporary disruption in a small-town setting).
Degree to which the impact can be avoided:	Low (construction noise unavoidable, though intensity can be reduced).
Degree to which the impact can be managed:	High (through scheduling and equipment controls).
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noisy activities to daytime hours (e.g., 7 AM-5 PM); - Use low-noise equipment; - Install temporary sound barriers near sensitive areas (e.g., New Orleans neighbours); - Inform residents of schedule.
Residual impacts:	Minor residual noise during permitted hours; minimal disturbance with compliance.
Cumulative impact post mitigation	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust** Air quality degradation from earthworks, vehicle movement, and material handling.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Temporary health risks (e.g., respiratory irritation), reduced visibility, and nuisance to residents.
Probability of occurrence:	High (dust generation inevitable during dry conditions and earthmoving).
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; air quality recovers post-construction).
Degree to which the impact can be reversed:	High (dust settles after construction; no lasting environmental damage).
Indirect impacts:	High (dust settles after construction; no lasting environmental damage).
Cumulative impact prior to mitigation:	Moderate (combined with noise and traffic, impacts air quality and liveability).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High
Degree to which the impact can be avoided:	Moderate (some dust generation unavoidable, but extent can be minimised).

Degree to which the impact can be managed:	High (through dust suppression techniques).
Degree to which the impact can be mitigated:	High (standard measures effectively reduce dust spread).
Proposed mitigation:	- Regular water spraying on exposed surfaces; - Cover stockpiles; limit vehicle speeds on-site; - Revegetate disturbed areas promptly; - Monitor dust levels near sensitive receptors.
Residual impacts:	Minor dust during dry, windy conditions despite mitigation; quickly dissipates.
Cumulative impact post mitigation	Low (mitigation reduces interaction with other impacts like noise).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Vegetation loss** Overall loss of ecological connectivity and degradation of the Krom River corridor due to construction; transformation of 11.1 ha of previously classified critically endangered vegetation which was previously farmed.
Nature of impact:	Negative (vegetation clearing, soil disturbance) and indirect (altered hydrology, invasive species spread)
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Potential loss of degraded ESA functionality, potential further degradation of Krom River ecosystem.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low (site already transformed, no significant protected species observed).

Degree to which the impact can be reversed:	Medium (rehabilitation possible with effort, especially along Krom River).
Indirect impacts:	Spread of invasive alien plants (e.g., Populus alba) into Krom River; socio-economic benefits from development offset by potential ecological decline.
Cumulative impact prior to mitigation:	Medium - Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction.

	○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Minor degradation of transformed veld, but moderate degradation of the Krom river corridor.
Cumulative impact post mitigation:	Low impact on CBA/ESA and river corridor.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts** Construction inevitably gives rise to noise, disruption and dust, amongst others. These are well covered by Municipality Bylaws. Site destruction and damage is also coincident with quarrying especially to water, soil and vegetation. Changes to the water table by excavations can also have a heavy impact on the trees with death occurring a few years later.
Nature of impact:	Negative
Extent and duration of impact:	Local (Erf 878 and immediate surrounds, e.g., R311, within 1.2 km); short-term (construction phase, ~1-2 years).
Consequence of impact or risk:	Temporary alteration of scenic views from R311 and nearby areas; reduced aesthetic appeal during construction.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low (no permanent loss; scenic quality recoverable post-construction).
Degree to which the impact can be reversed:	High

Indirect impacts:	Potential minor reduction in tourism appeal during construction.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ **Site Development Plan: the new SDP is now well integrated to the site and town requiring no further changes.** → **Architecture: The design and layout of buildings is now well integrated with the historic townscape requiring no further changes.** → **Scheme Name:** The project name changed from Riebeeck Hill to Springbok Hill. This name change seems artificial and should be reconsidered. → **Landscape Plan: A Landscape Plan with reference to traditional tree and shrub species has been prepared, e.g. Oak and Gum trees, popular horticultural species and cultivars.** → **Open Space:** has been carefully integrated into the core of the design. o However, guidelines to control the hillside vegetation in private backyard are needed. o Planting themes linking in with the agricultural setting, such as vineyards and orchards traditionally, or olive groves more recently, are incorporated in the Landscape Site Development Plan Rev 2 (26 August 2026) and the August 2026 plant list, approved by HWC. → **Tree Plan**: Trees both onsite and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars and indigenous/ endemic species like Wild Olive.

	○ Items **4 Tree Plan, 5 Planting** and **7.1 Structure Colouration** require incorporation into the *Landscape Guidelines.* → **Planting:** There is no need to rigidity adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections. → **Fencing:** Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional, traditional fencing options and colours are preferred. ○ ClearVu fencing is not desirable especially along the 311. → **Colouration:** Colouration is a key to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourant today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. ○ A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. → **Maintenance:** Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. → **Damage Control**: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. → **Pollution**: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. → **Monitoring**: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous vegetation (preferably endemic) vegetation must be planted. → **Lighting:** lighting should be minimised and carefully controlled as part of the project's management plan. The use of green energy fittings and concepts should be encouraged and lighting developed with sensitivity to the rural landscape. → Waterwise landscaping should be used wherever possible and green star building practices.

	→ Landscape Maintenance: must be carried out at all times in line with these recommendations to help keep the scheme green and encouraging local biodiversity.	
Residual impacts:	Minor visual disruption during active construction (e.g., machinery visibility from R311); resolves quickly post-completion with Alternative 5's traditional design blending into the townscape	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Archaeological impacts** Disturbance or destruction of archaeological remains (ESA and MSA flakes, chunks, and a historical tile).	
Nature of impact:	Negative: physical disturbance due to earthworks, construction, and infrastructure installation.	
Extent and duration of impact:	Local; Short-term (during construction phase)	
Consequence of impact or risk:	Minor loss of degraded archaeological material graded as Not Conservation Worthy (NCW).	
Probability of occurrence:	High (construction will likely disturb surface and subsurface remains).	
Degree to which the impact may cause irreplaceable loss of resources:	Low (remains are degraded, isolated, and not significant; no graves or settlements identified).	
Degree to which the impact can be reversed:	Low (once disturbed, physical remains cannot be restored to original context).	

Indirect impacts:	Potential minor disruption to historical narrative of site, though negligible due to low significance.
Cumulative impact prior to mitigation:	Low (site already transformed by agriculture; additional impact is minimal).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (due to NCW grading and degraded context).
Degree to which the impact can be avoided:	Low (development footprint covers areas where remains were found).
Degree to which the impact can be managed:	High (monitoring and recording can manage any finds).
Degree to which the impact can be mitigated:	High (simple measures can address low significance remains).
Proposed mitigation:	→ No further archaeological mitigation is required. → No archaeological monitoring is required during construction phase excavations → If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist (J Kaplan 082 3210172) and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
Residual impacts:	Negligible (loss of already disturbed, low value remains).
Cumulative impact post mitigation:	Very Low (mitigation ensures minimal additional impact).
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Traffic Impact** Increased traffic congestion and safety risks during construction due to delivery vehicles and equipment movement.

Nature of impact:	Negative; Temporary disruption to local traffic flow and potential safety hazards on Church Rd and Fontein St.
Extent and duration of impact:	Local (intersections along Church Rd and Fontein St); Short-term (construction period, likely 1-2 years).
Consequence of impact or risk:	Minor delays and increased risk of accidents at access points; moderate due to wedding venue-related traffic.
Probability of occurrence:	High – Construction activities are inevitable, with additional trips from wedding venue setup.
Degree to which the impact may cause irreplaceable loss of resources:	Low – No loss of physical resources; temporary disruption only.
Degree to which the impact can be reversed:	High – Impacts cease post-construction; roads return to normal operation.
Indirect impacts:	Noise and dust affecting nearby residents; potential delays for public transport users.
Cumulative impact prior to mitigation:	Moderate – Combined effect of construction and background traffic growth to 2030.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Manageable but noticeable disruption during peak construction.
Degree to which the impact can be avoided:	Low – Construction traffic is unavoidable.
Degree to which the impact can be managed:	High – Through scheduling and traffic control measures.
Degree to which the impact can be mitigated:	High – With proper planning and design adherence.
Proposed mitigation:	9. **Required road and intersection upgrades (Traffic Impact Study, Route2, version 005, 2 September 2026):** 10. Intersection 5, Fontein Street / Access Road 2: priority controlled, with an eastbound third leg. 11. Intersection 6, Fontein Street / Kloof Street: priority controlled, with an eastbound third leg (Access Road 3).

	12. Intersection 7, R311 (Church Road) / Farm Access Road / Access Road 1: staggered intersection with 4-way stop control and a fourth westbound leg (Access Road 1). This addresses the sight distance limitation (±75 m northbound and >150 m southbound), reduces vehicle speeds and improves pedestrian safety across the R311. 13. Sight distances at Intersections 2, 5 and 6 exceed 100 m and are sufficient. 14. Sidewalks are to be provided throughout the development, linking with the Riebeek Kasteel CBD. Existing minibus-taxi services are sufficient. 15. Parking is to be provided in accordance with the Town Planning Scheme, and refuse removal on site. 16. A Site Traffic Assessment (STA) is required with the final SDP. 17. Left-in only access off the R311 not for large scale commercial use
Residual impacts:	Minor delays during peak construction periods.
Cumulative impact post mitigation:	Low – Mitigated to background levels with minimal additional effect.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Watercourse Habitat Loss** Approximately 100 m² (0.01 ha) of the degraded portion of Seep Wetland 1 will be permanently lost due to the placement of infrastructure. In addition, construction activities may cause temporary habitat disturbance to the remaining portions of Seep Wetland 1, Seep Wetland 2, and the Krom River corridor, including trampling, edge disturbance, vegetation damage, and soil compaction within and adjacent to these features. Routine operational activities - including landscaping, pedestrian movement, maintenance of services, and informal access - may result in ongoing edge disturbance to wetland and riparian habitats within Seep Wetland 1, Seep Wetland 2, and the Krom River corridor.

Nature of impact:	Negative
Extent and duration of impact:	Local; long term
Consequence of impact or risk:	Loss of degraded wetland habitat, reduction in ecological functioning, and potential long-term edge effects on remaining wetland/riparian systems.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (loss is limited to a small, already degraded area, but wetlands are inherently sensitive).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Increased erosion and sedimentation risk entering wetland systems. • Potential alteration of hydrological pathways. • Long-term disturbance of edge species and possible spread of alien vegetation
Cumulative impact prior to mitigation:	Medium (existing pressure on small seep wetlands makes additional loss meaningful at a local scale).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Refer to Freshwater specialist mitigation measures in the report.
Residual impacts:	Low

Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low -ve**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Alteration of flow** Construction activities may temporarily alter the flow regime of remnant wetland and seep features, including short-term disruption of shallow subsurface flows and surface-water drainage patterns. The completed Eco-Lifestyle Estate may modify stormwater volumes and runoff pathways, potentially leading to localised erosion, sedimentation, or minor flow diversion within remnant watercourses.
Nature of impact:	Negative
Extent and duration of impact:	Local; Long-term
Consequence of impact or risk:	Potential alteration of natural hydrological functioning, increased localised erosion, increased stormwater concentrations, and reduced diffuse flow into seep wetlands.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low (flow paths are shallow and can be reinstated; wetland resources are sensitive but impacts are localised and reversible with proper design).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	• Increased sediment transport into wetlands and riparian areas. • Concentrated runoff causing incision or gully formation. • Reduced wetting of seep zones, potentially affecting vegetation composition.

	• Potential proliferation of alien vegetation in disturbed hydrological zones.
Cumulative impact prior to mitigation:	Medium (regional pressure on small remnant wetland systems increases sensitivity to any hydrological modifications)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium (careful design of stormwater infrastructure and strict construction controls can prevent most alterations).
Degree to which the impact can be managed:	High (hydrological controls, erosion management, and monitored reinstatement can effectively address impacts).
Degree to which the impact can be mitigated:	High (engineering and ecological measures can significantly reduce risk).
Proposed mitigation:	Refer to freshwater specialist mitigation measures added in this report.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Water Quality Impairment from Sedimentation:** Earthworks and soil disturbance may increase erosion and sediment mobilisation, resulting in sediment-laden runoff entering remnant watercourses if not adequately controlled.
Nature of impact:	Negative

Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Degradation of water quality, smothering of wetland vegetation, reduced infiltration in seep wetlands, increased turbidity, and temporary loss of ecological functioning in remnant drainage features.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (sedimentation may temporarily reduce ecological function, but resources can recover with rehabilitation; long-term irreversible loss is unlikely if managed).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Increased nutrient loading and potential eutrophication. • Decline in wetland and riparian habitat quality. • Promotion of alien invasive species in disturbed sediment-rich zones. • Reduced groundwater recharge where sediments clog natural infiltration pathways.
Cumulative impact prior to mitigation:	Medium (local wetlands already experience pressure from surrounding land use; any reduction in water quality adds to cumulative degradation).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Refer to freshwater specialist mitigation measures.

Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Nature of impact:	**Water Quality Impairment from Pollutants** Accidental spills of hydrocarbons, cement wash water, or other construction-related contaminants, as well as contaminated stormwater runoff, may impair water quality in adjacent freshwater features. Stormwater discharged from developed areas may contain hydrocarbons or other pollutants. Without adequate stormwater management, this may impact on the remaining seep systems and downstream drainage features.
Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Degradation of wetland and riparian water quality, toxicity to aquatic biota, reduced soil and water infiltration functions, and long-term impairment of ecological processes if pollutants persist in sediments.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium (pollutants can cause localised damage, but with rapid response and rehabilitation, permanent loss is unlikely; hydrocarbons may bind to sediments and be slow to dissipate).
Degree to which the impact can be reversed:	Medium
Indirect impacts:	• Decline in wetland vegetation health due to chemical exposure. • Potential toxicity to soil organisms and wetland invertebrates. • Long-term impairment of seep wetland functioning if pollutants accumulate.

	• Increased vulnerability to alien plant invasion where vegetation is stressed or damaged
Cumulative impact prior to mitigation:	Medium (regional pressure on small wetland systems means even minor pollution inputs contribute to cumulative decline).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	High (strict handling, storage, and disposal protocols can prevent most pollution risks).
Degree to which the impact can be managed:	High (spill response procedures and stormwater controls are effective when implemented properly).
Degree to which the impact can be mitigated:	High (engineering controls, containment systems, and best-practice site management significantly reduce risk).
Proposed mitigation:	Refer to freshwater specialist mitigation measures.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socioeconomic impacts** Tourism and economic growth of the region vs. long-term change to town character and local lifestyle.
Nature of impact:	Positive (revenue, jobs)

Extent and duration of impact:	Local to regional (visitors from beyond Riebeek-Kasteel); long-term (duration of venue operation).
Consequence of impact or risk:	Economic upliftment for businesses; potential overburdening of infrastructure and resident discontent.
Probability of occurrence:	High (wedding venue likely to attract visitors; public concerns already noted).
Degree to which the impact may cause irreplaceable loss of resources:	Medium (loss of town's tranquil character difficult to quantify or replace).
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Growth in hospitality sector; potential property value changes;
Cumulative impact prior to mitigation:	High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	Moderate
Proposed mitigation:	- Employ local individuals during the operation phase.
Residual impacts:	Reduced community resistance due to job creation; manageable infrastructure load if mitigations are implemented effectively.
Cumulative impact post mitigation:	Medium-High (economic benefits remain, but community and infrastructure strain are reduced).

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High (+)**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Ecological impacts** Ongoing degradation of the Krom River corridor and increased invasive alien plant infestation.
Nature of impact:	Negative
Extent and duration of impact:	Local (Krom River corridor and 11.1 ha site); Permanent unless actively managed.
Consequence of impact or risk:	Reduced ecological connectivity and potential further degradation of the CBA/ESA along the Krom River.
Probability of occurrence:	Probable (depends on maintenance practices; high if no alien control is implemented).
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Spread of invasive species downstream, affecting broader river ecology; increased veld fire risk.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Low
Degree to which the impact can be avoided:	Medium – Low

Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	- All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem – included in the preferred layout - The olive trees discussed under Heading 7.1 of the Botanical Assessment should be considered for replanting into green belts or gardens. - All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system. - Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor; - An integrated waste management approach must be implemented during construction. ○ Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.
Residual impacts:	Low
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very -Low (-)**
POST-CONSTRUCTION PHASE	

Potential impact and risk:	**Visual impacts** Ongoing visual prominence of the single row of single storey dwellings on the southern edge of Riebeek Hill and the remaining hillside dwellings, introducing built form into an area previously undeveloped and contributing to the town's rural–heritage setting. Potential long-term effects associated with lighting, landscape maturity, and maintenance.
Nature of impact:	Negative
Extent and duration of impact:	Local to regional (visible from R311, R46, and elevated points up to 1.8 km away); Permanent (for the lifespan of the development).
Consequence of impact or risk:	The placement of residential dwellings introduces a developed character into a landscape previously defined by open hilltops and cultural–heritage qualities. Although refined through Alternatives 4 and 5, the development still represents a permanent shift in landscape character, but the degree of intrusion is substantially reduced and impacts are low to moderate compared to earlier alternatives.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	High – Loss of visual heritage value, though not a tangible resource, is significant and difficult to restore once development is completed.
Degree to which the impact can be reversed:	Low
Indirect impacts:	Possible reduction in scenic quality experienced by visitors, residents, and tourists using gateway routes; potential influence on local sense of place and property values.
Cumulative impact prior to mitigation:	High – Adding new built form to an already sensitive and landmark-rich setting intensifies cumulative visual change and reinforces existing intrusions over time.

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low – Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ **Site Development Plan: the new SDP is now well integrated to the site and town requiring no further changes.** → **Architecture: The design and layout of buildings is now well integrated with the historic townscape requiring no further changes.** → **Scheme Name:** The project name changed from Riebeeck Hill to Springbok Hill. This name change seems artificial and should be reconsidered. → **Landscape Plan: A Landscape Plan with reference to traditional tree and shrub species has been prepared, e.g. Oak and Gum trees, popular horticultural species and cultivars.** → **Open Space:** has been carefully integrated into the core of the design. o However, guidelines to control the hillside vegetation in private backyard are needed. o Planting themes linking in with the agricultural setting, such as vineyards and orchards traditionally, or olive groves more recently, are incorporated in the Landscape Site Development Plan Rev 2 (26 August 2026) and the August 2026 plant list, approved by HWC. → **Tree Plan**: Trees both onsite and adjacent need to be mapped to ensure their conservation and incorporation into the development, including both traditional heritage tree species like oaks, gums and poplars and indigenous/ endemic species like Wild Olive. o Items **4 Tree Plan, 5 Planting** and **7.1 Structure Colouration** require incorporation into the *Landscape Guidelines.* → **Planting:** There is no need to rigidity adhere to any "indigenous-only" kind of botanical extremism in an urban setting, especially one with strong historic connections.

	→ **Fencing:** Is always a key feature of Architectural/Landscape detailing as it strongly affects the edge condition. Subtle, well-detailed, traditional, traditional fencing options and colours are preferred. o ClearVu fencing is not desirable especially along the 311. → **Colouration:** Colouration is a key to fitting any development into the landscape. There is a strong tendency for monotonous charcoal/grey estate colourant today and black fencing ClearVu fencing. These are not traditional colours in the Cape and detract from both contemporary and historic environments. o A subtle combination of scheme colours needs to be developed that will avoid a mass approach to colouration with a high visual impact. → **Maintenance:** Landscape Maintenance, both private and public, including streetscapes, needs to be integrated into the scheme. → **Damage Control**: All parties must make every effort to control the destruction of soils and vegetation on site, especially any remnants of natural vegetation. These must not be damaged under any circumstances. → **Pollution**: Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas. → **Monitoring**: Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous vegetation (preferably endemic) vegetation must be planted. → **Lighting:** lighting should be minimised and carefully controlled as part of the project's management plan. The use of green energy fittings and concepts should be encouraged and lighting developed with sensitivity to the rural landscape. → Waterwise landscaping should be used wherever possible and green star building practices. → Landscape Maintenance: must be carried out at all times in line with these recommendations to help keep the scheme green and encouraging local biodiversity. →

Residual impacts:	Low – Medium	
Cumulative impact post mitigation:	Low-Medium – Mitigation reduces severity, but cumulative scenic degradation remains.	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Traffic Impact** Increased traffic volumes and potential congestion at intersections due to wedding venue and mixed-use components (worst-case 171 AM and 171 PM peak hour trips, Traffic Impact Study version 005).	
Nature of impact:	Negative – Added trips with higher peaks from wedding events.	
Extent and duration of impact:	Local (Church Rd, Fontein St intersections); Long-term (duration of development operation).	
Consequence of impact or risk:	Moderate delays - with worse peak delays from wedding venue events; safety risks at access points.	
Probability of occurrence:	High – Wedding venue and mixed-use elements ensure consistent trip generation.	
Degree to which the impact may cause irreplaceable loss of resources:	Low – No physical resource loss; impacts are operational.	
Degree to which the impact can be reversed:	High – Traffic impacts reversible if wedding venue use is ceased	
Indirect impacts:	Increased demand for public transport; pedestrian safety risks without sidewalks; noise from wedding events.	

Cumulative impact prior to mitigation:	Moderate – Background 2030 traffic plus development trips, exacerbated by wedding venue peak events.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High – Noticeable impact on service levels, especially during wedding events.
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	18. Required road and intersection upgrades (Traffic Impact Study, Route2, version 005, 2 September 2026): 19. Intersection 5, Fontein Street / Access Road 2: priority controlled, with an eastbound third leg. 20. Intersection 6, Fontein Street / Kloof Street: priority controlled, with an eastbound third leg (Access Road 3). 21. Intersection 7, R311 (Church Road) / Farm Access Road / Access Road 1: staggered intersection with 4-way stop control and a fourth westbound leg (Access Road 1). This addresses the sight distance limitation (±75 m northbound and >150 m southbound), reduces vehicle speeds and improves pedestrian safety across the R311. 22. Sight distances at Intersections 2, 5 and 6 exceed 100 m and are sufficient. 23. Sidewalks are to be provided throughout the development, linking with the Riebeek Kasteel CBD. Existing minibus-taxi services are sufficient. 24. Parking is to be provided in accordance with the Town Planning Scheme, and refuse removal on site. 25. A Site Traffic Assessment (STA) is required with the final SDP. 26. Left-in only access off the R311 (Intersection 9): The left-in only access off the R311 is retained. It serves only the small retail erf, the retirement village and the events and wedding venue, and no longer serves the fuel station and commercial hub on which the Department of Infrastructure's 2024 comment was based. Its use is therefore substantially lower than in earlier layouts. The access will be designed so that no right turn can be made into it from the R311 and no vehicle can exit onto the R311, by means of a median on the R311 and a narrowed, single one-way entry lane (Traffic Impact

	Study, Section 6.11). The final geometric design will be submitted to the Western Cape Department of Infrastructure for approval before construction of the access.
Residual impacts:	Slight delays during peak wedding events; minor pedestrian inconvenience if sidewalk use is low.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Visual Impacts
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	→ Refurbishment and Resale: The previous recommendations regarding Planning, Construction and Operation all apply to this process. The entire site can be dismantled and rehabilitate no longer needed and restored to an appropriate land use. This concludes the analysis of impacts and detailed recommendations for their mitigation. The chapter, Visual Management and Monitoring Plan follows. It gives recommendations for the management and monitoring of the environment and the given VIA recommendations.
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

NO-GO

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Vegetation clearance** Status quo remains
Nature of impact:	Positive; No additional vegetation clearance, no opportunity to improve the current status of the site
Extent and duration of impact:	Local; Permanent as long as the site remains undeveloped.
Consequence of impact or risk:	Prevents habitat loss and land degradation
Probability of occurrence:	Certain as no development will proceed.
Degree to which the impact may cause irreplaceable loss of resources:	None; preserves existing resources
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High +ve**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts** No job creation, income generation, or local economic stimulation.
Nature of impact:	Negative, as no development would mean no job creation, income generation, or local economic stimulation. Positive, as the rural and small-town character is preserved, which may benefit tourism reliant on natural and cultural landscapes
Extent and duration of impact:	Local; Long-term as the status quo remains
Consequence of impact or risk:	Moderate; limits economic growth and employment opportunities for local communities but preserves existing land use patterns.

Probability of occurrence:	Certain, as no development will proceed.
Degree to which the impact may cause irreplaceable loss of resources:	Low; socioeconomic opportunities are lost but natural and cultural resources remain intact
Degree to which the impact can be reversed:	Reversible, if the development is considered in future.
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High -ve**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Freshwater impact** Although it is unknown whether the site would be further developed in future, it is assumed that the area would remain as is, which is in a disturbed condition. The No-Go option would result in the continuation of impact to the onsite wetlands due to current onsite and adjacent land uses – and would therefore still result in negative impact to the wetlands onsite.
Nature of impact:	N/A
Extent and duration of impact:	N/A
Consequence of impact or risk:	N/A
Probability of occurrence:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A

POST-CONSTRUCTION	
Potential impact and risk:	**Socioeconomic impacts**
Nature of impact:	Negative, as no long-term employment opportunities, increased property values, or enhanced municipal revenues will result from the non-development. Positive, as local lifestyle and sense of place remain unchanged, benefiting tourism focused on natural and cultural appeal.
Extent and duration of impact:	Local; long-term as the status quo is maintained indefinitely.
Consequence of impact or risk:	Moderate; limits potential economic growth but preserves the rural character.
Probability of occurrence:	Certain, as no development will proceed.
Degree to which the impact may cause irreplaceable loss of resources:	Low; no socioeconomic resources are lost but potential economic gains are foregone.
Degree to which the impact can be reversed:	Reversible if development is reconsidered in the future.
Indirect impacts:	Reduced potential for local business growth and infrastructure development. Potential stagnation in local service demand and investment.
Cumulative impact prior to mitigation:	Negative cumulative impact due to continued limited economic activity and employment.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (negative impact).
Degree to which the impact can be avoided:	Not applicable, as the impact is inherent to the NO-GO alternative.
Degree to which the impact can be managed:	Low, due to limited options for stimulating the local economy without development.
Degree to which the impact can be mitigated:	Low to moderate, depending on the success of alternative economic strategies.
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
DECOMMISSIONING PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-

Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

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.

BOTANICAL ASSESSMENT (APP G1)

The Botanical Assessment conducted for the proposed development on Erf 878 (<11.1 ha), located within the urban edge of Riebeek Kasteel, provides a detailed evaluation of the site's vegetation and ecological context.
Key findings of the assessment include:

Vegetation Type and Conservation Status

- → The site is situated within Swartland Shale Renosterveld, a critically endangered vegetation type identified by the SA Vegetation Mapping (2018). Approximately 90% of this vegetation type has been transformed, against a conservation target of 26%, rendering these targets unachievable.
- → The site itself is entirely degraded due to historical and ongoing agricultural activities, primarily dryland cultivation of commercial crops spanning over a century. Although cultivation ceased 10–15 years ago (or longer), the land has been used for grazing by small antelope (e.g., springbok), with some hardy pioneer species re-establishing in previously disturbed areas.

Site Condition and Development Footprint

- The proposed development will transform approximately 11.1 ha of degraded natural veld into urban erven, with the footprint confined almost exclusively to already transformed areas exhibiting little potential for rehabilitation.
- No unique habitats (e.g., heuweltjies) or protected/endangered plant species were observed. The most notable botanical feature is the presence of a few young *Olea europaea* (wild olive) trees at the foot of a small hill.

Critical Biodiversity Areas (CBA) and Ecological Support Areas (ESA)

- According to the 2017 Western Cape Biodiversity Spatial Plan (WCBSP), a small area on the hilltop is designated as a CBA, and the Krom River, bordering the site to the north, is identified as an ESA. However, site inspections confirmed that both the CBA and ESA are degraded, with no undisturbed natural veld remaining.
- The Krom River, while compromised by surrounding urban and agricultural impacts, represents the only potential ecological corridor. Google imagery suggests that the section adjacent to Erf 878 is relatively better preserved compared to other nearby stretches, though still degraded.

Alien Vegetation

Alien invasive species, including *Acacia mearnsii* (black wattle), *Melia azedarach* (syringa), and *Populus alba* (white poplar), were observed. The white poplar, located near the Krom River, poses a significant risk due to its potential to form dense stands via root suckers, which could obstruct water channels, increase siltation, and reduce stream flow.

Impact Assessment

- The proposed footprint will be relatively small (<12 ha) within the urban edge and impacting only on transformed natural veld.
- The No-Go option is not likely to result in a "no-impact" scenario, for it will have a negative socio-economic impact (and slow degradation may still continue).
- Without mitigation, the development's cumulative impact is rated as Medium-Low, primarily due to potential effects on the Krom River, CBA, and ESA. With appropriate mitigation, this can be reduced to **Very Low.**
- The "No-Go" option would not result in a "no-impact" scenario, as it would entail negative socio-economic consequences while degradation of the site may persist.

Impact Management Measures

The following general mitigation actions should also be implemented:

→ All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report.
→ A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies.
→ The layout of the development footprint should take the sensitivity of the Krom River into account and should aim to establish a suitable corridor along this river system in order to allow for potential rehabilitation of this ecosystem.
→ The olive trees discussed under Heading 7.1 should be considered for replanting into green belts or gardens.
→ All listed alien invasive tree species must be removed from the site, while special care must be taken with the removal of white poplar (in order to ensure it does not enter the river system.
→ Lay-down areas or construction sites must be located at least 30m away from the Krom River corridor;
→ An integrated waste management approach must be implemented during construction.

- Construction related general and hazardous waste may only be disposed of at suitably approved waste disposal sites.

GEOTECHNICAL REPORT (APP G2)

→ **Soil Profiles:** The site is characterized by two distinct geotechnical zones:
  - **Southern Soil Profile:** Comprises thin colluvial soils, often gravelly, overlying cohesive residual Malmesbury soils or weathered schist bedrock.
  - **Northern Soil Profile:** Characterized by sandy and silty sandy soils (alluvial wash) underlain at shallow depths by cohesive stiff clayey sands.

→ **Subgrade Quality:** Subgrade conditions across both profiles are generally worse than G9 quality, necessitating specific civil design for road layerworks.

→ **Groundwater and Seepage:** Seasonal perched water tables develop at the contact between coarse surficial soils and underlying cohesive soils or bedrock. Field investigations noted sodden ground and surface seepage, particularly in lower-lying northern areas.

→ **Excavability:** All materials to a depth of 1.3m are classified as "Soft Excavation," grading to "Intermediate Excavation" in deeper schist layers.

→ **Material Suitability:** While on-site gravelly and sandy soils are suitable for engineered fill, their utility is strictly dependent on moisture content; waterlogged soils are unsuitable for construction.

2. Impact Management and Mitigation Measures

To ensure the stability of the development's infrastructure and road network, the following engineering measures are required:

Site Preparation and Subgrade Management

→ **Trial Pit Remediation:** All trial pits must be identified and loose backfill replaced with sand compacted to at least 95% of mod AASHTO dry density to prevent soft spots.

→ **Vegetation Removal:** Strip all grass and fynbos, including roots, to an average depth of 75mm to 100mm.

→ **Compaction Requirements:** The subgrade for all internal roads must be compacted to a minimum of 95% of mod AASHTO maximum dry density to ensure G9 quality.

→ **Seasonal Construction:** In the Northern Soil Profile, construction should ideally be restricted to dry periods to avoid soil "pumping" and subgrade failure due to high moisture levels.

Subsurface Drainage Requirements

→ **Southern Profile:** Installation of toe drains is essential where the contact between coarse surficial soils and impermeable bedrock is exposed in cuttings.

→ **Northern Profile:** Conventional fin-type subsurface drainage must be installed adjacent to all roads, with inverts placed at or below 0.9m to intercept the perched water table.

→ **Spring Management:** Formal surface and subsurface drainage measures must be implemented to control and direct existing spring flows.

Slope Stability and Engineering

→ **Temporary Cut Batters:** Temporary slopes for excavations between 1.0m and 1.5m must maintain a 1:0.5 batter in the Southern Profile and a 1:1 batter in the Northern Profile.

→ **Permanent Slopes:** Permanent cut slopes must be battered at 1:1, while embankments require a 1:2 batter. All permanent slopes must be vegetated and protected against concentrated stormwater runoff.

→ **Compaction Testing:** Quality control must be maintained through nuclear densimeter testing and supplementary mod compaction laboratory tests rather than DCP testing

HERITAGE IMPACT ASSESSMENT (APP G3)

The following technical summary details the findings and prescribed mitigation measures of the Heritage Impact Assessment (HIA) HWC Submission Report of 31 August 2026 conducted for Erf 878, Riebeek Kasteel, in accordance with Section 38(8) of the National Heritage Resources Act.

1. Findings of the Assessment

→ **Statement of Cultural Significance:** Riebeek Kasteel is identified as a highly representative 19th-century "church town" (kerk dorp) and is recommended for formal protection as a Grade IIIA heritage area. Erf 878 is assessed as having Grade IIIA significance for its aesthetic and historic landscape values, while the on-site historic fountain (well) is graded IIIA.
→ **Archaeological Sensitivity:** Field surveys recorded a limited number of Early and Middle Stone Age flakes and a single fragment of a late 19th-century floor tile. These resources are located in severely transformed agricultural contexts and are graded as Not Conservation Worthy (NCW). No human remains or graves were encountered.
→ **Visual Environment:** The site is highly visible from the R311 scenic route but less so from within the town itself. Earlier development iterations (Alternatives 1-3) were found to have a major negative impact due to intrusion into the hill crest and obstruction of critical sightlines.
→ **Alternative 5 Suitability:** The HIA supports the Rev 78 Subdivision and Rezoning Plan, the SDP, the Architectural Guidelines and the Landscape Masterplan. HWC IACom endorsed the HIA and approved the Rev 78 drawing package in its Final Comment of 30 September 2026 (Appendix G3d).

2. Impact Management and Mitigation Measures

To ensure the proposed development integrates with the historic townscape, the following mandatory measures must be implemented:

Urban Design and Connectivity

→ **Grid Alignment:** Align the development layout with the historic town grid to "complete" fragmented town blocks and ensure the project reads as a continuation of the town.
→ **Access Control:** Maintain an open and publicly accessible development, with the exception of the retirement village component.
→ **Traffic Limitation:** Restrict through-vehicular traffic across the site; access from Church Street must be limited to service vehicles and specific retail/resort users to preserve the rural arrival experience.

Topographical and Visual Protection

→ **Hill Crest:** Retain the hilltop undeveloped. Only one row of single storey residences may be developed on the southern edge of the hilltop and site boundary, protecting the topographical "green frame" of the town.
→ **Hill Park:** Establish the hill crest as a public park featuring Renosterveld species and public pedestrian paths.
→ **Sightline Preservation:** Protect the primary "view cone" from the R311 across the site toward the Dutch Reformed Church steeple through the strategic placement of parklands and wetland areas.

→ **Transitional Edges:** Reimagine the western boundary along the R311 as a transitional zone using agricultural building typologies, "werf" walls, and olive groves to soften the urban-rural interface.

Architectural and Landscape Guidelines

→ **Vernacular Idiom:** Enforce strict Architectural Design Parameters based on contemporary Cape Vernacular, utilizing simple rectangular forms, double-pitched roofs, and neutral earth tones.
→ **Building Scale:** Limit hillside dwellings to single storey (4.5 m wallplate and 8.0 m roof apex), and Erven 35 to 40 to single storey with a 2.7 m wallplate and no habitable roof space.
→ **Street Interface:** Position buildings close to street boundaries with verandas to contribute to an intimate village streetscape.
→ **Landscaping:** Implement a Landscape Plan that includes both traditional cultural species (e.g., Oaks) and indigenous Renosterveld to weave the development into the existing townscape.
→ **Archaeology:** If any buried human remains are uncovered during construction excavations, these must be immediately reported to the archaeologist and Heritage Western Cape. Burials must not be disturbed until inspected by the archaeologist.
→ **EMPr:** The VIA construction and operational phase mitigations, and the landscape maintenance of the public spaces, must be included in the EMPr (HWC Final Comment, 30 September 2026).

Archaeological Protocols

→ **Discovery Protocol:** While no further archaeological mitigation is required prior to construction, any accidental discovery of human remains must be reported immediately to the project archaeologist and Heritage Western Cape

URBAN DESIGN REPORT (APP G4)

1. Urban Design Findings

→ **Town Structure:** Riebeek Kasteel is characterized by a strong East-West road grid (Main, Retief, and Van Riebeeck Streets) with buildings typically situated on street boundaries to create intimate village streetscapes.
→ **Site Context:** The property serves as a critical transition zone between the agricultural landscape (vineyards and olive groves) and the historic village core.
→ **Topographical Informants:** The southern portion of the site is guided by natural topography, while the northern portion is more rigorously aligned with the town's existing grid.
→ **Visual Landmarks:** The Dutch Reformed Church steeple is the primary visual ordering element, and maintaining clear view lines from the western entry (Church Street) is essential to the town's identity.
→ **Pedestrian Connectivity:** The town currently has a fragmented public open space system; the site presents an opportunity to link the town centre to natural assets like the hill crest.

2. Impact Management and Mitigation Measures

To ensure the development functions as a seamless extension of the town fabric, the following urban design mandates are established:

Spatial Integration and Grid Alignment

→ **Completion of Town Blocks:** Align all new residential plots with the existing town grid to "complete" fragmented blocks and maintain the town's original grain.

- → **Street Interface:** Situate houses on the street boundary with mandatory verandas to contribute to an intimate, active street interface.
- → **Density Graduation:** Concentrate higher-intensity mixed-use and commercial components on the northern portion adjacent to the town centre, with lower-intensity single residential units on the southern slopes.

Movement and Access Management

- → **Pedestrian-First Design:** Establish five pedestrian access points from the north and east to create a continuous route from the town centre to "The Barn" and the hilltop.
- → **Through-Access Restriction:** Limit vehicular access from Church Street to service the retail and resort components only; no through-vehicular access to Fontein Street is permitted to preserve the rural arrival experience.
- → **Parking Integration:** Utilize paved parking under pergolas or trees for mixed-use precincts to soften the visual impact of vehicular infrastructure.

Landscape and Visual Mitigation

- → **Transitional Edge Layering:** Reimagine the western boundary (Church Street) as a "transitional zone" using agricultural typologies (werf walls and olive groves) to provide a rural foreground for the village extension.
- → **View Corridor Protection:** Preserve clear "view lines" from Church Street toward the church steeple by managing building heights and placements.
- → **Topographical Containment:** Enforce strict architectural limits on the upper slopes, permitting only single storey forms that blend into the landscape.
- → **Wetland Park System:** Integrate the stormwater retention system into a "wetland park" following natural drainage patterns, serving as both an ecological amenity and a privacy threshold for the retirement village

ARCHITECTURAL GUIDELINES (APP G5)

Findings of the Assessment

- → **Contextual Siting:** The development must appreciate existing farmsteads and the historic town centre, favouring smaller footprint clusters over linear arrangements to maintain visual integrity.
- → **Topographical Sensitivity:** Sloping sites require a balance where buildings adhere to ground contours to prevent visual disruptions and excessive topographical modification.
- → **Design Philosophy:** The guidelines promote "genius loci" (spirit of place) through design homogeneity, ensuring structures act as "unobtrusive background buildings" rather than competing with the historic townscape.
- → **Zone-Specific Visions:**
    - **Southern Hill Edge Residential:** Single storey dwellings, with Erven 35 to 40 limited to a 2.7 m wallplate and no habitable roof space.
    - **Hillside Residential:** A traditional continuation of existing village architecture with strict focus on height and pedestrian movement.
    - **Mixed-Use Village:** A pedestrian-centred artisanal node with active ground-floor workshops and upper-level residences.
    - **Retirement Village:** A fine-grained, medium-density single-storey precinct.
    - **Resort Zone:** A "werf-based" complex designed to present as a traditional rural farmstead.
    - **Business Zone:** A limited roadside retail component reflecting a farmstall typology along the R311.

2. Impact Management and Mitigation Measures

To mitigate visual and heritage impacts, the following binding design parameters must be enforced:

Building Scale and Massing

- → **Height Restrictions:** Hillside dwellings are single storey with a 4.5 m wallplate and an 8.0 m roof apex, and Erven 35 to 40 are limited to a 2.7 m wallplate. Mixed-use buildings are double storey with a 5.5 m wallplate and a 10.0 m roof apex. Retirement village and business buildings are single storey with a 3.5 m wallplate and a 6.0 m roof apex. The events venue is single storey with a 5.0 m wallplate and an 8.0 m roof apex. A summary of permitted storeys and heights in metres is included in the Architectural Guidelines (Rev 17, September 2026).
- → **Fragmentation:** Large buildings (resorts, mixed-use units, retirement institutions) must be fragmented into smaller components to reduce perceived mass.
- → **Core Buildings:** Primary dwellings must be expressed as rectangular "barn" forms not exceeding 150 m² per volume, joined by secondary linking elements.

Architectural Elements and Materials

- → **Colour Palette:** Wall colours must be natural (sage or sandy tones); brilliant whites, intense blacks, and vivid colours are prohibited.
- → **Roofing:** Roofs must use recessive medium-to-dark charcoal colours. Permitted materials include steel sheeting or dark grey flat concrete tiles; thatch and clay tiles are prohibited.
- → **Facade Articulation:** Mandatory verandahs/stoeps (minimum 50% of the street facade for most zones) are required to support an intimate, pedestrian-oriented streetscape.
- → **Windows and Doors:** Windows must be vertically proportioned and constructed of grey or white powder-coated aluminium. Horizontally proportioned openings must be recessed 1500mm behind shading devices.

Boundary and Landscape Management

- → **Permeability:** Street-facing boundary walls are restricted to 1200mm in height and must be visually permeable. Lateral/rear walls between properties are limited to 1800mm.
- → **Prohibited Materials:** Vibracrete (precast), PVC, and bagged brickwork walls are strictly prohibited.
- → **Site Services:** All A/C units, geysers, heat pumps, and conduits must be designed into the structure and concealed from street view.
- → **Lighting Control:** Street lighting is limited to 3.0m bollard types with shielded fixtures and a maximum of 3000 Kelvin to prevent light spillage. Private security floodlighting is discouraged and must be motion-regulated.

Procedural Oversight

- → **DRC Approval:** All building plans must be endorsed by the Design Review Committee (DRC), comprising an Architect, Landscape Architect, and Urban Designer, prior to municipal submission.
- → **Landscape Implementation:** The developer must complete the primary landscaping portions prior to subsequent building phases to ensure vegetation is established.

TRAFFIC IMPACT ASSESSMENT (APP G6)

The following technical summary details the findings and recommendations of the Traffic Impact Study (Route2, version 005, dated 2 September 2026) conducted for the proposed development on Erf 878, Riebeek Kasteel. This assessment is a critical component in securing development rights by demonstrating that the project will have a manageable impact on the local transport network.

1. Findings of the Traffic Impact Assessment

- → **Trip Generation:** The development is projected to generate a worst-case total of 171 weekday AM and 171 PM peak hour trips.
- → **Intersection Performance:** Capacity analyses conducted using AutoJ software indicate that the majority of affected intersections currently operate, and will continue to operate, at an acceptable Level of Service (LOS A or B). The assessment concludes that the proposed development traffic will have limited to no impact on the functionality of adjacent roads and intersections.
- → **Sight Distances:** Field assessments confirmed sufficient sight distances (>100m) at most proposed access points, including Intersections 2, 5 and 6. A sight distance constraint of approximately 75m was identified northbound at the R311 intersection (Access 1), necessitating specific mitigation.
- → **Public and Non-Motorized Transport:** The Riebeek Kasteel CBD is currently well-served by minibus-taxi services, and no additional public transport facilities are required. Existing pedestrian infrastructure within the CBD provides a viable base for integration.
- → **Manoeuvrability:** Vehicle tracking simulations confirm that the internal road layout can easily accommodate standard passenger cars, municipal refuse trucks, and emergency vehicles.

2. Impact Management and Mitigation Measures

To facilitate the additional development traffic and ensure safety, the following engineering and management measures are required:

- → **Intersection Upgrades:**
  - o **Intersection 5 (Fontein Street/Access Road 2):** Priority controlled, with an eastbound third leg.
  - o **Intersection 6 (Fontein Street/Kloof Street):** Priority controlled, with an eastbound third leg (Access Road 3).
  - o **Intersection 7 (R311/Farm Access/Access 1):** This intersection must be 4-way stop-controlled. This measure is required to mitigate the 75m northbound sight distance limitation and serve as a speed deterrent on the R311, improving pedestrian safety.
- → **Access and Road Design:**
  - o Access points (Rev 78): Access 1 off the R311 (4-way stop), two accesses off Fontein Street, and a left-in only access off the R311.
  - o **Left-in only access off the R311 – retained however it is motivated that the left-in-only access no longer serves a commercial hub and fuel station and therefore the impact is significantly reduced.**
- → **Pedestrian Infrastructure:** New sidewalks must be constructed throughout the development and linked directly to the existing sidewalk network of the Riebeek Kasteel CBD to promote non-motorized transport.
- → **Operational Management:**
  - o On-site refuse removal must be integrated into the development's operational plan.
  - o Parking provision must strictly adhere to the requirements of the Town Planning Scheme.

These traffic mitigation measures ensure that the development aligns with provincial and municipal transport standards, supporting the successful acquisition of development rights.

AGRICULTURAL COMPLIANCE (APP G7)

- → **Site Sensitivity Verification:** The assessment formally disputes the "Very High" agricultural sensitivity classification generated by the national screening tool. The entire site is verified as having **Medium agricultural sensitivity** based on its actual cropping potential.
- → **Agricultural Production Potential:** While the climate, terrain, and soil suitability could theoretically allow for viable crop production, practical factors render the site's agricultural potential **non-existent**.
- → **Constraint Factors:** The potential to deliver agricultural produce is limited by the fact that the Municipal Spatial Development Framework (SDF) designates the site for non-agricultural urban use.
- → **Impact on Food Security:** The development footprint is below the threshold for requiring conservation as agricultural land. The proposed land use change will result in **minimal loss** of future agricultural production potential in terms of national food security.
- → **Regional Context:** Although the site is located within the Swartland Protected Agricultural Area (PAA), it consists of land that is not viable for cropland and therefore does not warrant prioritized protection.
- → **Overall Acceptability:** From an agricultural impact perspective, the development is assessed as being of **low significance** and is recommended for approval.

Impact Management and Mitigation Measures

- → **Avoidance as Mitigation:** The most effective mitigation for agricultural impact is the avoidance of viable croplands; this project has fulfilled this requirement by selecting a site that lacks viable arable potential.
- → **Specific Measures:** No specific mitigation measures or monitoring requirements are necessary for the protection of agricultural production potential, as the development poses a **negligible degradation risk** to agricultural resources.
- → **Micro-siting:** The specialist confirms that micro-siting of infrastructure would make no material difference to agricultural impacts because the site is not utilized for any agricultural activities.
- → **Conditions of Approval:** The recommendation for the approval of the proposed development from an agricultural perspective is **not subject to any conditions**

AQUATIC BIODIVERSITY IMPACT ASSESSMENT (APP G8)

- → **Identified Watercourses:** The site contains the non-perennial Krom River along the northern boundary and two seep wetland systems (Seep 1 and Seep 2) sustained primarily by groundwater emergence.
- → **Site Sensitivity:** The Combined Aquatic Biodiversity Theme Sensitivity is verified as "Very High" due to the site's location within the Boland Strategic Water Source Area (SWSA) and the confirmed presence of onsite watercourses.
- → **Ecological Status:** All identified watercourses (Seep Wetland 1, Seep Wetland 2, and the Krom River) are assessed as being in a "Seriously Modified" condition (PES Category E) due to historical agricultural disturbance, excavation, and canalization.
- → **Importance and Sensitivity:** Despite their degraded state, the seep wetlands maintain "Moderate" Ecological Importance and Sensitivity (EIS) and "Moderate to Moderately High" Wetland Ecosystem Services (WES) value, largely serving as a critical water source for the surrounding community.
- → **Preferred Alternative Performance:** The specialist assessed Alternative 4 (Revision 71), which avoids all functional portions of Seep Wetland 2 and the Krom River, placing them within protected open space. Encroachment is strictly limited to approximately 100 m² of the already degraded lower portion of Seep Wetland 1. Alternative 5 carries forward this freshwater layout, so the findings apply equally to Alternative 5.

→ **Authorization Recommendation:** Residual risks following mitigation are assessed as "Low," and the specialist recommends that the development be authorized under a General Authorisation (GA) rather than a full Water Use License Application (WULA).

Impact Management and Mitigation Measures

→ **Buffer Implementation:** Mandatory buffer areas must be established, consisting of 15–20 m for the seep wetlands and 10 m for the above-ground sections of the Krom River.
→ **No-Go Area Demarcation:** The functional portions of the wetlands and river must be strictly demarcated as "No-Go Areas" during the construction phase to prevent non-essential activities, equipment storage, or stockpiling within sensitive zones.
→ **Hydrological Connectivity:** Post-development throughflow from Seep Wetland 1 must be facilitated via indigenous vegetated earthen swales connecting to the Krom River to maintain habitat and hydrological connectivity.
→ **Stormwater Control:** No direct or untreated stormwater discharge is permitted; runoff must be managed through vegetated swales, detention ponds, and flow dissipaters to ensure diffuse, treated release.
→ **Sediment and Erosion Management:** Stormwater infrastructure must incorporate sediment traps and debris grates, and all systems must be monitored for erosion and siltation after heavy rainfall events throughout the project lifecycle.
→ **Sanitation Safety:** The development must connect to the municipal mainline or utilize fully contained conservancy tanks; no on-site sewage treatment, irrigation with effluent, or soak-aways are permitted.
→ **Emergency Containment:** Manholes located upslope of watercourses must include emergency storage or bunded containment to provide a two-hour peak flow buffer in the event of a surcharge.
→ **Operational Oversight:** The Homeowners Association (HOA) must implement a long-term management plan that includes monthly monitoring of buffer health, control of Alien Invasive Plant Species (AIPS), and managed community access to the spring areas to prevent further degradation.

Specialist Mandate: A formal groundwater impact assessment must be conducted as part of the Water Use Authorisation (WUA) process.

ARCHAEOLOGICAL IMPACT ASSESSMENT (APP G10)

A field study conducted revealed:

→ A small number of Early Stone Age (ESA) and Middle Stone Age (MSA) flakes and chunks in a degraded and disturbed context, either embedded in gravel or on the surface of a gravel road circling the site.
→ A few isolated stone pieces were identified in the strips of land that have been bushcut near a small stream/wetland.
→ No formally retouched tools (e.g., bifaces, points) or evidence of early human occupation/settlement.
→ A fragment of a late 19th/early 20th-century blue and white willow pattern glazed floor tile found among rubble in the northeastern site portion (Point 029).
→ Grading: Archaeological remains are deemed Not Conservation Worthy due to their small number, isolation, and disturbed context.
→ Graves: No graves were identified during the assessment.

Anticipated Impact

The site has been heavily transformed by historical agriculture, and the anticipated impact on tangible archaeological heritage resources is expected to be very low.

Impact Management Measures

Given the low significance and degraded context of the findings:

- → No specific conservation or mitigation measures are recommended for the archaeological remains identified during the site visit.
- → The lack of graves or significant occupation evidence eliminates the need for further protective actions in those respects.

VISUAL IMPACT ASSESSMENT (APP G11)

The following technical summary details the findings and prescribed mitigation measures of the **Visual Impact Assessment (VIA)** (New World Associates, dated 9 September 2026) for the preferred development of Erf 878, Riebeek Kasteel.

- → **Visual Sensitivity:** The receiving environment has a **moderate-high sensitivity** as it is located within a historic "church town" and a high-value agricultural cultural landscape.
- → **Visibility Profile:** The site is highly visible from the **R311 (Church Street)** scenic route but visibility from within the existing town is limited due to ground-level screening, vegetation, and topography.
- → **Impact Nature:** The development's visual impact is characterized by district extent, long-term duration, and medium intensity with a definite probability.
- → **Significance Rating:** The VIA rates the visual impact as of medium significance, provided that the prescribed mitigation measures are implemented.
- → **Alternative 5 (Rev 78):** The VIA finds that the SDP is now well integrated to the site and town, and the architecture with the historic townscape, requiring no further changes. A Landscape Plan with traditional tree and shrub species has been prepared.

Impact Management and Mitigation Measures

To reduce visual intrusion and preserve the town's character, the following measures are mandatory:

- → **Topographical Preservation:** Keep the hill crest free of buildings and strictly limit building heights on the slopes to protect the hill crest skyline and topographical "green frame".
- → **View Corridor Protection:** Protect the formal **"view cone"** from the R311 toward the Dutch Reformed Church steeple through the strategic placement of open spaces.
- → **Transitional Edge Management:** Reimagine the western boundary (R311) as a **transitional zone** using agricultural typologies, such as olive groves, "werf" walls, and simple barn-shaped structures.
- → **Architectural Idiom:** Enforce strict guidelines based on **contemporary Cape Vernacular** (e.g., pitched roofs, verandas, neutral earth tones) to ensure structures remain visually recessive.
- → **Landscape Integration:** Implement the Landscape Site Development Plan (26 August 2026) and plant list (August 2026), utilizing a mix of **indigenous Renosterveld species** and traditional cultural species (e.g., Oaks) to blend the development into the townscape.
- → **Hill Park Establishment:** Dedicate the hill crest as a **public "Hill Park"** with pedestrian trails to integrate the site into the town's existing open space system.
- → **Monitoring and Management:** Adhere to a formal **Visual Management and Monitoring Plan** throughout the project lifecycle to ensure the long-term efficacy of mitigation

→ **EMPr:** The VIA construction and operational phase mitigations, and the landscape maintenance of the public spaces, must be included in the EMPr (HWC Final Comment, 30 September 2026).

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

As above

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.

N/A

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

Positive Impacts

- → **Urban Integration:** The development functions as a pedestrian-oriented extension that "stitches" the site into the historic town fabric by aligning with the existing grid and establishing continuous walking routes.
- → **Public Amenities:** A significant portion of the site is dedicated to a public "Hill Park" on the crest of Riebeek Hill, providing the community with managed access to Renosterveld areas and recreational trails.
- → **Housing Diversity:** The project addresses local demand by providing a range of housing typologies, including low-density residential, townhouses, and a secure retirement village.
- → **Infrastructure Upgrades:** The developer is committed to bulk service contributions, including for municipal reservoir storage and sewer capacity upgrades in Pieter Cruythoff Avenue, which will resolve existing regional service constraints.
- → **Socio-Economic Gains:** The proposal generates substantial employment during construction and long-term operational phases while increasing the municipal rate base to support public services.

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.

No risks of climate change are expected to influence the proposed development.

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

None.

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 mitigation measures, as indicated by the specialist team, have assisted in the evolution of the layout alternatives. The mitigation measures have been added to the conditions of authorisation and EMP to ensure implementation.

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

The development process for Erf 878 in Riebeek Kasteel involved a detailed and iterative assessment of five layout alternatives and the No-Go option, with the objective of identifying the most practicable and environmentally responsible configuration for the site. The mitigation hierarchy comprising avoidance, minimisation, rehabilitation and offsetting was applied throughout the assessment to ensure that negative impacts were avoided where possible, unavoidable impacts were minimised, and positive environmental, visual, heritage and socio-economic outcomes were maximised. This process

drew on extensive public participation feedback, specialist studies (heritage, visual, urban design, botanical, freshwater), and compliance with the municipal planning context.

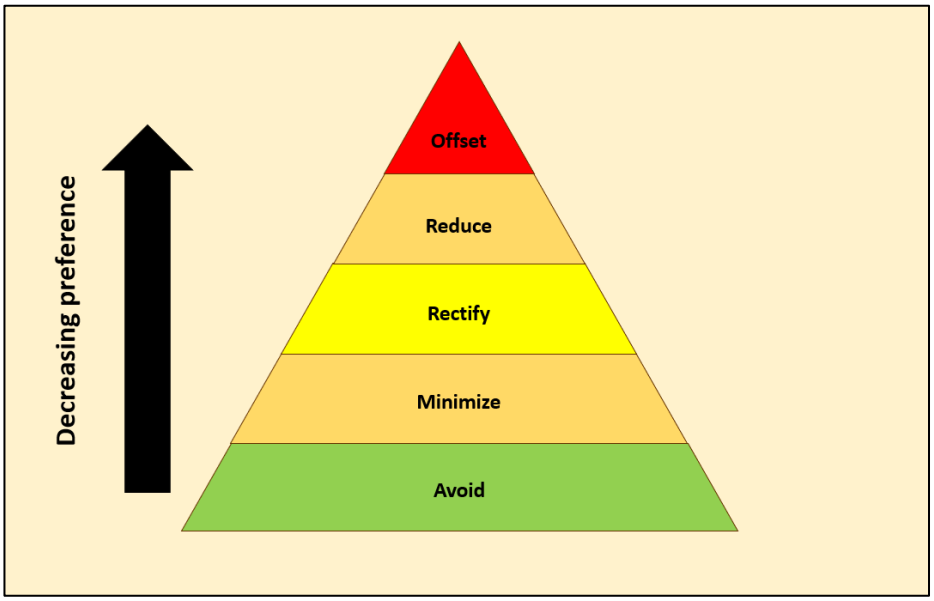


Figure 32. Mitigation hierarchy

Avoidance

In applying the principle of avoidance, the design team sought to eliminate significant impacts at the earliest stages by assessing the site's visual sensitivities, hydrological features, heritage resources and ecological constraints. Alternative 1 did not adequately apply avoidance, as it positioned a wedding venue on the crest of Riebeek Hill, introduced a fuel station adjacent to the wetland and fountain, and proposed only limited open space provision. These elements resulted in high potential impacts on the historic sightline from Church Street to the church, compromised the sense of place, and posed risks to the hydrological system. Alternative 2 removed the wedding venue but introduced a significantly higher-density residential area with approximately 137 erven, while still retaining the fuel station. Although the removal of the wedding venue partially addressed visual concerns, this alternative did not adequately avoid impacts on cultural landscape significance or water resources.

Alternative 3 incorporated more substantial avoidance measures and responded to many of the shortcomings identified in the previous options. The fuel station was entirely removed, thereby eliminating the risk of groundwater and surface water contamination. The hilltop area was redesigned to accommodate low-density, single-storey dwellings with architectural controls that reduced the visual impact on the skyline. Open space areas were incorporated along the Krom River and seep wetland, and wetland buffers were applied based on specialist inputs, effectively avoiding development within sensitive hydrological areas. However, the retention of some hilltop residential units continued to result in visual impacts in relation to the historic sightline.

The most significant positive impact of Alternative 5 (carried forward from Alternative 4) is its near-complete avoidance of all confirmed freshwater features, including Seep Wetland 2 and the above-ground sections of the Krom River. These features, together with their recommended 15–20 m buffers, are fully incorporated into Open Space Zone 2, ensuring long-term ecological protection, hydrological functioning, and rehabilitation opportunities. Only approximately 100 m² (0.01 ha) of degraded Seep Wetland 1 is unavoidably affected by infrastructure placement, while the functioning portion of Seep Wetland 1 is included within open space and protected through a 20 m buffer.

Ecologically, Alternative 5 results in the lowest habitat loss, avoids intrusion into ESA2, preserves ecological connectivity, and limits disturbance to already-transformed areas. Vegetation clearing, earthworks, and fauna displacement are significantly reduced compared with all previous alternatives. The compact footprint also reduces stormwater risks, erosion potential, and cumulative landscape disturbance through a controlled and well-planned stormwater discharge along the northeastern portion of the property.

Heritage and visual impacts are greatly reduced. The layout retains the historic Church Street sightline, maintains the prominence of the church, and situates structures in a manner that complements the low-rise character of the landscape. The removal of intrusive elements such as the reduction of number of residential erven and the restriction of development on visually sensitive sections of Riebeek Hill further strengthen heritage conservation outcomes. Alternative 5 moved the southern hill erven down slope and enlarged the Hill Park, as required by HWC IACom.

Minimisation

Minimisation was applied most effectively in the refinement from Alternatives 1 and 2 through to Alternatives 3, 4 and 5. While early alternatives introduced high-impact land uses with limited mitigation, the later stages focused on reducing the scale, density and height of structures, integrating open space more strategically, and improving the layout's alignment with the existing urban fabric. Alternative 5, the preferred option, reflects the strongest application of minimisation by reducing development intensity on visually prominent areas, ensuring that building massing does not intrude into key viewpoints, and structuring the layout to minimise cut-and-fill requirements. This alternative also provides expanded open space networks, ensuring ecological continuity across the site and preserving the visual permeability of the landscape.

Rehabilitation

Rehabilitation was considered across all alternatives, based on the understanding that the site has been significantly transformed through historical agricultural activities. Alternatives 1 and 2 offered limited opportunities for ecological rehabilitation due to extensive hard infrastructure and the presence of a fuel station. Alternatives 3 and 4, however, significantly improved the potential for ecological restoration by removing the fuel station, expanding open space along the Krom River, and incorporating areas with confirmed hydrological function into conservation-oriented spaces. Alternative 4 provides the greatest opportunity for long-term rehabilitation, as it secures the wetland, seepage zones and river corridor within undeveloped open space where restoration and management interventions can be meaningfully implemented.

Offsetting is generally only applied when significant residual impacts remain after avoidance, minimisation and rehabilitation have been fully implemented. In this instance, because Alternative 5 effectively avoids all high-sensitivity ecological features, minimises unavoidable impacts through spatial design and building controls, and maximises rehabilitation opportunities in degraded riparian and wetland areas, no significant residual impacts remain that would trigger a need for biodiversity offsets. The iterative refinement of the alternatives ensured that environmental losses were minimal and that ecological functioning could be sustained without offset requirements.

Based on the above considerations, no additional alternatives beyond Alternatives 1 to 5 were deemed reasonable or feasible. Introducing entirely new land-use concepts or drastically reducing the scale of development would either compromise the project's economic viability or fail to support municipal planning objectives for growth within the urban edge. Site-specific constraints, such as topography, the distribution of ecological sensitivities, and the limited conservation value of historically transformed areas, further restrict the range of realistic options. The No-Go alternative, while eliminating all project-related impacts, would not align with the site's zoning or the municipality's spatial development priorities. Through the progressive refinement of the alternatives, Alternative 5 has emerged as the option that most effectively applies the mitigation hierarchy, balances environmental and heritage considerations, and meets the project's

functional requirements. It is therefore regarded as the best practicable environmental option for the proposed development.

MITIGATION HIERARCHY SPECIFICALLY TO ALTERNATIVE 5 – FINAL PREFERRED LAYOUT:

The iterative design process leading to the preferred Alternative 5 was specifically structured to satisfy the NEMA mitigation hierarchy. This approach directly addresses the "fatal flaws" identified in the 2025 Heritage Western Cape (HWC) Final Comment, which noted that earlier iterations inappropriately bypassed the "Avoid" and "Minimise" steps in favour of secondary mitigation (landscaping).

The following technical summary details the systematic application of the hierarchy to the development of Erf 878:

1. Avoidance (Primary Design Informant)

Alternative 5 prioritizes the avoidance of significant heritage and ecological resources, a step that was absent in previous "precinct-based" models.

- → **Topographical Avoidance:** Responding to IACom's 2025 recommendation of a 170 m cut-off line, the crest of Riebeek Hill is kept free of development as the Hill Park, with only a single row of single storey erven on its southern edge. This avoids breaking the ridgeline and preserves the town's topographical "green frame". No building elements extend above the 175 m contour (Urban Design Report Rev 3.5).
- → **Aquatic Avoidance:** The layout re-engineered the road and erf network to successfully avoid all functional portions of Seep Wetland 2 and the above-ground Krom River corridor.
- → **Social/Urban Avoidance:** The "introverted gated neighborhood" model was discarded to avoid the spatial erosion of the town's historic grid.
- → **Visual Avoidance:** The design avoids obstructing the primary sightline from the R311 to the Dutch Reformed Church (DRC) steeple by dedicating a clear "view cone" or corridor as open space.

2. Minimisation (Scale and Intensity Reduction)

Where total avoidance of the site footprint was not possible due to urban infill requirements, the project team minimized the intensity of development.

- → **Commercial Scale:** Large-scale retail and fuel station concepts were replaced with a limited "Business Zone 1" (275 m^2) utilizing a low-impact farmstall typology.
- → **Height and Density:** Building intensity is concentrated on the lower-lying northern portion. Dwellings on the sensitive southern slopes are restricted to single storey forms, with Erven 35 to 40 limited to a 2.7 m wallplate, to minimize their silhouette against the hill.
- → **Aquatic Encroachment:** Through-road infrastructure was re-aligned to limit unavoidable encroachment to approximately 100 m^2 of the already degraded lower portion of Seep Wetland 1.

3. Mitigation (Active Management Measures)

Alternative 5 implements active measures to reduce the severity of residual impacts that could not be avoided or minimized.

- → **Architectural Parameters:** Strict guidelines mandate a contemporary Cape Vernacular idiom (simple rectangular forms, double-pitched roofs, and neutral earth tones) to ensure the development acts as an "unobtrusive background".
- → **Buffer Zones:** Mandatory buffers of 15–20m for seeps and 10m for the Krom River are maintained and incorporated into Open Space Zone 2.
- → **Stormwater Engineering:** A technically sized system (991 m^3 volume) manages runoff to pre-development levels using vegetated swales and detention ponds as bio-filters.
- → **Traffic Management:** A 4-way stop at the R311/Access 1 intersection is mandated to mitigate sight distance constraints and act as a speed deterrent.

4. Rehabilitation and Restoration

The project aims to restore ecological processes that were historically compromised by agricultural practices.

- → **Renosterveld Restoration:** The hill crest is dedicated as a public "Hill Park" where existing alien vegetation (e.g., Black Wattle) will be removed and replaced with restored Renosterveld species.
- → **Ecological Connectivity:** Post-development throughflow from Seep Wetland 1 will be facilitated via indigenous vegetated swales connecting to the Krom River to enhance hydrological and habitat connectivity.
- → **Alien Plant Management:** A long-term management plan is mandated for the HOA to monitor buffer health and control invasive species within the site boundaries.

SECTION J: GENERAL

1. Environmental Impact Statement

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

Summary of the Key findings of the EIA:

The EIA identified Erf 878 as the only viable developable vacant land in Riebeek Kasteel meeting essential criteria for economic viability, location, size, accessibility, and topography, making it an ideal site for the envisaged variety of residential styles (low-density erven, town housing, flats). Its position within the urban edge and designation in the draft 2023 Swartland Municipal Spatial Development Framework (SDF) for residential and business development underscored its suitability, despite its current Agriculture 1 zoning, necessitating a land use planning application for rezoning and subdivision. This strategic location inside the urban edge supports the project's feasibility and integration with existing infrastructure.

The 2018 South African Vegetation Map classified the natural vegetation on Erf 878 as critically endangered Swartland Shale Renosterveld. However, the site's long history of agricultural use over a century of dryland cultivation followed by grazing has left it entirely degraded, with no remnants of this vegetation type. The Botanical Assessment study conducted on site confirmed that, after 10 years without cultivation, only pioneer vegetation has re-established, rendering the site suitable for urban development with minimal ecological loss. The presence of alien invasives (e.g., *Acacia mearnsii*, *Populus alba*) and a degraded Krom River corridor (an ESA) were noted, but impacts are rated Medium-Low without mitigation, reducible to Very Low with measures like river protection and invasive removal.

The Heritage and Visual Impact Assessments identified a significant sightline from Church Street across the centre of Erf 878 in a northeasterly direction towards the old church, located approximately 500 meters away on a ridge. Initial concerns raised by these assessments regarding the potential obstruction of this view by the proposed wedding venue were effectively addressed in Alternatives 4 and 5. This preferred alternative option incorporates an open space erven on the hilltop, thereby preserving the visual corridor. The Archaeological Assessment identified degraded remains (such as ESA/MSA flakes and a historical tile) deemed "Not Conservation Worthy", indicating a very low heritage impact that requires no further mitigation or monitoring. Furthermore, the current layout (Alternative 5) replicates the block-type pattern characteristic of historic Riebeek Kasteel, featuring single-storey structures with traditional architectural styles. This approach is considered to preserve the town's sense of place and integrate harmoniously with the R311 cultural

route. While the visual impacts were assessed as moderate to high without mitigation and assessed to be of medium significance after mitigation, as they can be significantly reduced through landscaping and design controls.

Noise levels will see a very slight increase during construction and operation, as noted in the EIA, but this will be gradual and absorbed over time as buildings and greening (e.g., trees from the VIA's landscape plan) progress, dissipating impacts naturally. The Traffic Impact Assessment projected a worst-case 171 AM and 171 PM peak hour trips (version 005, September 2026), manageable with well-designed accesses (Church Rd, Fontein St) operating at good service levels, supported by parking, public transport facilities, and a sidewalk. No significant water bodies beyond the fountain and river corridor affect the site, and runoff management aligns with existing drainage patterns to the Berg River.

In conclusion, the EIA's key findings affirm Erf 878's suitability for Alternative 5 due to its degraded ecological state, strategic zoning, and manageable impacts. The integration of specialist studies, namely Botanical (minimal ecological value, river focus), Heritage (low archaeological significance), Visual (sight line preservation, townscape fit), and Traffic (lower acceptable, mitigable impacts), informed a design that avoids significant environmental harm, minimizes disruptions (e.g., noise, traffic), and enhances community benefits (e.g., housing, accessibility). Alternative 5 emerged as the best practicable environmental option, refined through public input and specialist recommendations, ensuring sustainable development within Riebeek Kasteel's urban fabric.

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 B.**

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.

Alternatives 1 and 2

- → **Negative Impacts (Environment):** Both layouts presented the highest ecological risks, as they encroached significantly into the functional portions of the seep wetlands and the Krom River Ecological Support Area (ESA). These alternatives would have resulted in extensive habitat loss, fragmentation, and the disruption of critical hydrological pathways.
- → **Negative Impacts (Community):** These iterations utilized an "introverted gated precinct" model that was detached from the historic town grid. From a heritage perspective, they were deemed culturally unsuitable because they obstructed the iconic sightline from the R311 toward the Dutch Reformed Church (DRC) steeple and introduced a wedding venue on the hill that competed with the church as a visual focal point.

Alternative 3

- → **Positive Impacts:** This alternative offered improvements by shifting much of the development footprint to disturbed areas and preserving the historic view corridor toward the DRC steeple. It restricted building heights on the slopes to single-storey to reduce visual intrusion.
- → **Negative Impacts/Risks:** Despite improvements, Alternative 3 still required development on the upper slopes of Riebeek Hill and encroached into wetland buffer zones. Authorities and the community still perceived it as a detached residential enclave that failed to "stitch" the site into the existing town fabric.

Alternative 4 (Previously Preferred, PPP 5)

- → **Positive Impacts:** This alternative represents a "substantial aesthetic improvement" by functioning as a pedestrian-oriented extension of the town rather than an isolated precinct. It successfully avoids all functional

portions of Seep Wetland 2 and the above-ground Krom River. It preserves the hill crest as a public park for the community.

→ **Risks and Technical Mitigation:** Residual risks, such as minor encroachment (~100 m²) into the degraded portion of Seep Wetland 1, are rated as "Low" following the implementation of 10–20m buffers and the integration of a technically sized 991 m³ stormwater attenuation system into a "wetland park".

Alternative 5 (Final Preferred Alternative)

→ **Positive Impacts:** Alternative 5 retains the benefits of Alternative 4 and responds to the HWC IACom Further Requirements. The southern hill erven were moved down slope, the Hill Park was enlarged, and the Church Street view cone is kept open. The VIA finds the SDP and architecture now well integrated with the town, requiring no further changes. HWC IACom endorsed the HIA and approved the Rev 78 drawing package on 30 September 2026.

→ **Risks and Technical Mitigation:** The freshwater risks and mitigation of Alternative 4 apply unchanged, as the freshwater layout is carried forward.

Summary of Positive Impacts (Preferred Alternative 5)

→ **Urban and Spatial Integration:** The development aligns residential plots with the historic town grid to complete fragmented town blocks, reinforcing the town's original grain.

→ **Community Amenities:** Dedicates 26.5% of the application area to Open Space Zone 2, including the "Hill Park" which provides the community with managed access to Renosterveld areas and recreational trails.

→ **Infrastructure Upgrades:** Bulk water and sewer upgrades are funded through Development Contributions calculated by Swartland Municipality.

→ **Housing Diversity:** Provides a range of housing typologies, including 46 low density residential erven, 24 townhousing units in a secure retirement village, and 7 mixed-use erven with ground-floor workshops to support local entrepreneurs.

→ **Socio-Economic Gains:** Generates substantial employment during both the construction and long-term operational phases while increasing the municipal rate base.

Summary of Negative Impacts and Risks (Preferred Alternative 5)

→ **Visual Transformation:** The development will cause a noticeable change to the landscape, particularly for immediate neighbors, with residual visual significance rated as "Moderate" after strict architectural and landscape mitigation.

→ **Traffic Volume Increase:** The development is estimated to generate a worst-case 171 AM and 171 PM peak hour trips; capacity analyses confirm limited to no impact on adjacent roads and intersections. These figures are a worst case: the events and wedding venue was modelled as a 200-seat conference facility, Business 1 was excluded, no trip reductions were applied, and the left-in only access off the R311 (Intersection 9) was not analysed.

→ **Left-in only access off the R311 -** the left-in-only access off the R311 is retained. It is reiterated that, in the final layout alternative 5, it no longer services the fuel station and commercial hub and therefore its impact is significantly reduced.

→ **Environmental Loss:** There is an unavoidable permanent loss of approximately 100 m² of the degraded lower section of Seep Wetland 1 to accommodate necessary road infrastructure.

→ **Construction Impacts:** Short-term risks include noise, dust, and potential sedimentation of watercourses, which will be managed through a formal Environmental Management Programme (EMPr) and a designated Environmental Control Officer (ECO).

- → **Economic Displacement:** A risk exists that new retail along the R311 may draw customers away from the existing central business district.
- → **Geotechnical and Hydrological Risks:** The northern portion of the site is prone to seasonal waterlogging, which requires the installation of conventional fin-type subsurface drainage for all roads and a formal groundwater impact assessment during the water use authorization process

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

As the appointed Environmental Assessment Practitioner (EAP) appointed by the applicant to apply for Environmental Authorisation in terms of NEMA, I have compiled the following list of **Impact Management Outcomes (IMOs)**. These outcomes represent the measurable end-states required to ensure the development is technically sound, heritage-compliant, and environmentally sustainable in accordance with the NEMA mitigation hierarchy.

1. Heritage and Visual Integrity

- → **Ridgeline Preservation:** The topographical "green frame" and ridgeline of Riebeek Kasteel are maintained by keeping the hill crest free of buildings as the Hill Park, with only a single row of single storey dwellings on its southern edge.
- → **Visual Sightline Protection:** The Dutch Reformed Church steeple remains the dominant visual anchor of the town, ensured by the permanent protection of an unobstructed view corridor (view cone) from the R311 across the site.
- → **Townscape Integration:** The development functions as a seamless extension of the historic village core, evidenced by the alignment of internal roads with the existing town grid and the completion of fragmented town blocks.
- → **Architectural Homogeneity:** The unique "sense of place" (genius loci) is preserved through the mandatory application of contemporary Cape Vernacular design parameters to all structures, ensuring they act as a recessive background to the historic town.

2. Aquatic and Freshwater Biodiversity

- → **Resource Avoidance:** The ecological integrity of high-sensitivity watercourses is maintained by the complete avoidance of permanent development within Seep Wetland 2 and the Krom River corridor.
- → **Buffer Functionality:** Aquatic resources are protected from edge effects through the implementation of mandatory 10m–20m vegetated buffers, which must be incorporated into Private Open Space Zone 2 for long-term management.
- → **Hydrological Connectivity:** Post-development throughflow from Seep Wetland 1 to the Krom River is sustained via a network of indigenous vegetated earthen swales.
- → **Encroachment Limitation:** Unavoidable permanent loss of aquatic habitat is restricted to a maximum of 100 m^2 of the already degraded lower portion of Seep Wetland 1.

3. Hydrology and Stormwater Management

- → **Runoff Attenuation:** Post-development peak stormwater discharge into the municipal system and natural watercourses does not exceed pre-development flow rates, achieved through a functional on-site attenuation system with a minimum storage capacity of 991 m^3.

- → **Water Quality Maintenance:** No untreated or sediment-laden stormwater enters the Krom River, with all surface runoff pre-filtered through bio-remediation swales and detention ponds prior to discharge.
- → **Subsurface Drainage Stability:** Road infrastructure integrity is secured against seasonal waterlogging through the installation of fin-type subsurface drainage at depths below 0.9m in the northern soil profiles.

4. Civil Infrastructure and Sustainability

- → **Bulk Service Security:** Regional water and sewer security are maintained without additional stress on existing residents, secured through Development Contributions, calculated by Swartland Municipality, for the bulk reservoir storage (±R21.4m) and outfall sewer upgrades (±R2.8m).
- → **Sanitation Safety:** The risk of untreated sewage discharge into the environment is eliminated through a direct connection to the municipal mainline, with manholes upslope of watercourses equipped with 2-hour peak flow emergency containment.

5. Botanical and Ecological Management

- → **Biodiversity Conservation:** No net loss of "critically endangered" Swartland Shale Renosterveld occurs outside the already transformed development footprint, with the hill crest successfully rehabilitated as a "Hill Park".
- → **Alien Plant Control:** The site remains free of Category 1 and 2 invasive species, with a focus on the eradication of White Poplar from the Krom River system, as part of a long-term management plan.

6. Traffic, Archaeology, and Social Welfare

- → **Road Safety:** Safe vehicular access at the R311/Access 1 intersection is achieved through the implementation of a 4-way stop to mitigate limited sight distances and deter excessive speeds.
- → **Non-Motorized Connectivity:** Pedestrian priority is established via a network of sidewalks throughout the site that link directly to the Riebeek Kasteel CBD.
- → **Left-in only access off the R311 -** the left-in-only access off the R311 is retained. It is reiterated that, in the final layout alternative 5, it no longer services the fuel station and commercial hub and therefore its impact is significantly reduced.
- → **Heritage Resource Protection:** The Grade IIIA historic fountain (well) is preserved in situ and integrated into a publicly accessible, vegetated setting.
- → **Archaeological Oversight:** No significant archaeological resources are destroyed, ensured by adherence to a strict "accidental discovery" protocol for human remains during all earthworks, with any burials reported to the archaeologist and Heritage Western Cape.

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.

N/A

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.

Recommended for Environmental Authorisation with the following conditions:

1. Spatial and Heritage Constraints

- → **Development Cut-off:** No building footprints or permanent infrastructure are permitted within the Hill Park (Portion 80) on the crest of Riebeek Hill, to preserve the topographical green frame.
- → **View Corridor:** A formal, unobstructed "view cone" from the R311 toward the Dutch Reformed Church steeple must be maintained as per the Masterplan.
- → **Architectural Compliance:** All structures must adhere to the Architectural Guidelines (Rev 17, September 2026), specifically the contemporary Cape Vernacular idiom, height restrictions (single storey on the hill, with a 2.7 m wallplate on Erven 35 to 40), and recessive colour palettes.
- → **Heritage Resource:** The Grade IIIA historic well/fountain must be preserved in situ and incorporated into the landscaped open space.
- → **HWC Final Comment:** The drawings approved by HWC IACom on 30 September 2026 must be implemented. The VIA construction and operational phase mitigations, and the landscape maintenance of the public spaces, must be included in the EMPr.

2. Aquatic and Ecological Mitigation

- → **Buffer Zones:** Mandatory 15m–20m buffers for seep wetlands and 10m for the above-ground Krom River must be established and demarcated as "No-Go" areas during construction.
- → **Hydrological Connectivity:** Post-development throughflow must be maintained via vegetated earthen swales connecting Seep Wetland 1 to the Krom River.
- → **Alien Plant Management:** Category 1 and 2 invasive species, specifically White Poplar, must be eradicated from the site in accordance with a long-term management plan.
- → **Specialist Mandate:** A formal groundwater impact assessment must be completed during the Water Use Authorisation (WUA) process, and application for General Authorisation ito the National Water Act should be completed as a condition of EA.

3. Civil Engineering and Stormwater

- → **Attenuation Standards:** An onsite system must be commissioned to attenuate a 1:50-year peak storm event, providing a minimum storage volume of 991 m^3.
- → **Runoff Quality:** All surface runoff must be treated via bio-filters, vegetated swales, and detention ponds prior to discharge into the Krom River.
- → **Infrastructure Upgrades:** The developer must fulfill Development Contributions for municipal reservoir storage (±R21.4m) and bulk sewer capacity (±R2.8m) in Pieter Cruythoff Avenue.
- → **Geotechnical Drainage:** Fin-type subsurface drainage must be installed adjacent to all roads in the northern soil profile at depths below 0.9m to manage seasonal waterlogging [Source 9, services report].

4. Traffic and Access Management

- → **Intersection Safety:** A 4-way stop control must be implemented at the R311/Access 1 intersection to mitigate sight distance constraints and deter speed.
- → **Through-Traffic Restriction:** Vehicular access from Church Street (R311) must be limited to service and commercial users; no through-access to Fontein Street is permitted.

→ **Non-Motorized Transport:** Pedestrian sidewalks must be constructed throughout the site and linked directly to the Riebeek Kasteel CBD.

→ **Left-in only access off the R311 -** the left-in-only access off the R311 is retained. It is reiterated that, in the final layout alternative 5, it no longer services the fuel station and commercial hub and therefore its impact is significantly reduced.

5. Environmental Oversight and Archaeology

→ **Onsite Supervision:** A suitably qualified Environmental Control Officer (ECO) must be appointed to monitor compliance with the EMPr and specialized mitigation measures.

→ **Archaeological Protocol:** In the event of an accidental discovery of human remains or significant artifacts, all work in the immediate area must cease, and Heritage Western Cape must be notified. Burials must not be disturbed until inspected by the archaeologist.

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

Deferred groundwater assessment to be conducted as part of the WUA and listed as condition of EA. As always with development projects of this nature there are some uncertainties about the fluctuations in the economic climate that may influence the timing of the economic benefits that are to be derived.

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.

The EA should be valid for a period of at least 10 years. The portion of the Environmental Authorisation that deals with operational aspects should be open-ended.

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.

There is a structure on the property where seepage water collects. This source of water may be used for construction purposes and as a source of irrigation water for use on the property. Other measures of water saving that could be imposed by the Swartland Municipality may be restricting garden irrigation during certain warm daylight hours, incremental potable water pricing amongst other.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

All waste generated within the jurisdiction of the Swartland municipal area must abide by the municipal regulations pertaining to waste separation, reduction, reuse and recycling.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

Due to the unbridled rising cost of power supply implemented by Eskom, as well as the erratic surety of supply, there has been a very strong migration by individual homeowners and micro-business to solar power installations in South Africa. During the last two years this solar power generation equates collectively to the equivalent of a Medupi Eskom power station. This tendency is also expected to manifest itself in the proposed 878 residential and business development.

In addition the new buildings on Erf 878 will have to conform to building specifications as laid down by the Swartland Municipal By-laws pertaining to building regulations related to energy efficiency.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

I Allan Geldenhuys for Silver Solutions 3371 cc e there is more f 2011/049555/23

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

02/11/2026

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

SILVER SOLUTIONS 3371 CC

Signature of the Applicant: Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I **MICHELLE NAYLOR** EAP Registration number EAP **2019/698** 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;

MNaylor

03/11/2026

Signature of the EAP: Date:

Lornay Environmental Consulting (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I **N/A** 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):

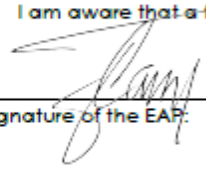
Lornay Environmental Consulting

DECLARATION OF THE SPECIALIST

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

I Johann Lanz, 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.



9 November 2023

Signature of the EAP: Date:

SoilZA

Name of company (if applicable):

Lornay Environmental Consulting

DECLARATION OF THE SPECIALIST

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

I JL BOTHA, 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: 09/11/2026

ROUTE 2 - TRANSPORT STRATEGIES CC

Name of company (if applicable):

Lornay Environmental Consulting

DECLARATION OF THE SPECIALIST

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

I BRIDGET ODONOGHUE 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.

B O'Donoghue — 7 NOVEMBER 2026

Signature of the EAP: Date:

BRIDGET ODONOGHUE ARCHITECT HERITAGE SPECIALIST ENVIRONMENT

Name of company (if applicable):

Lornay Environmental Consulting

DECLARATION OF THE SPECIALIST

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

I Neil Basson, 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.



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Signature of the EAP: Date:

Grow Architecture

Name of company (if applicable):

Lornay Environmental Consulting

DECLARATION OF THE SPECIALIST

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

I Jonathan Kaplan, 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.

Jonathan Kaplan — 08 November 2026

Signature of the EAP: Date:

Agency for Cultural Resource Management

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

I **Bruce Eitzen**, 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
- 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 Specialist: Bruce Eitzen. Date: 9 September, 2026

New World Associates, Landscape Architects

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):