Appendix T: EMPr

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

FOR THE DEVELOPMENT OF

ERF 28005, GEORGE (RESIDENTIAL APARTMENTS)



DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING REFERENCE: 16/3/3/5/D2/19/0008/26

November 2026

ENVIRONMENTAL MANAGEMENT PROGRAMME

for the development of

ERF 28005, GEORGE (RESIDENTIAL APARTMENTS)

This EMPr covers all relevant aspects of the development and management of Erf 28005, George (5,6987 ha in extent) as a site-specific EMPr for the relevant portion of the larger development authorised by the Environmental Authorisation (EA) issued on 22 August 2011 (Ref. EG12/2/3/2-D2/11-1192/08), as corrected on 29 August 2011 and amended on 26 February 2013 (Ref. 16/3/1/5/D2/19/0021/12), for the development of Portion 22 of Farm Kraaibosch No 195 and Erf 23333, George, with a mixed-use development (Business Zone I) on what was then described as Portion 8, now Erf 28005, George, as amended by the decision on the Part 2 amendment issued on dd MM yyyy (Ref. 16/3/3/5/D2/19/0008/26).

Proponent:		**EAP:**	
George Residential Apartments (Pty) Ltd Reg. No. 2026/016581/07		Virdus Works (Pty) Ltd Reg. No. 2018/585747/07	
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GLOSSARY, DEFINITIONS AND TERMS

Affected environment - Those parts of the socio-economic and biophysical environment affected by the development impacts.

Alien vegetation - All undesirable vegetation, defined as, but not limited to, all plants declared Category 1 and 2 invaders in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) Alien and Invasive Species Lists, 2016 (as amended).

Applicant – The holder of the environmental authorisation issued for the development and the activities and responsible for implementation of the conditions of authorisation. The term includes reference to the client and/or the developer.

Authorities - The national, provincial or local authorities that have a decision-making role or interest in the activities, construction or development.

Audit - Regular inspection and verification of construction activities for implementation of the EMPr.

Batch plant - A concrete or plaster mixing facility and associated equipment and materials.

BOCMA – Breede-Olifants Catchment Management Agency, responsible for water resource management and the authorisation of water uses in terms of the National Water Act, 1998 (Act 36 of 1998) in the area in the area (023 346 8038)

Building – As defined in the George Municipality Zoning Scheme Bylaw, 2023 (any structure or erection whatsoever irrespective of its nature or size).

Bund – Impermeable enclosure under / around a storage facility for hazardous substance or potential pollutant or any place where these substances are used on site, to contain any spillage.

Contractor - The principal person / company undertaking any construction activity related to the environmental authorisation.

Construction site – The entire area where construction activity occurs, including all access roads and tracks.

Construction activity - Any action taken by the contractor, his subcontractors, suppliers or personnel on the construction site, whether directly or indirectly related to the construction work.

Contaminated water – All water contaminated by the contractor's activities, e.g. concrete water and runoff from plant / personnel wash areas.

CEMPr - Construction Phase Environmental Management Programme. A plan for managing the potential impacts of the construction process.

CN – CapeNature, the administration of the Western Cape Nature Conservation Board (044 802 5300).

DFFE – Department of Forestry, Fisheries and the Environment (086 111 2468).

DEA&DP - Department of Environmental Affairs and Development Planning (George Office, 044 805 8600) – also "**Department**".

DWS – Department of Water and Sanitation (021 950 7100) – refer to **BOCMA**.

Environmental Control Officer (ECO) - Designation reserved for suitably qualified person acting as the development environmental manager or officer. It is the person responsible to the client / applicant / holder of the EA, tasked with implementing and controlling the environmental requirements and EMPr for the project.

Environmental Site Manager (ESM) - Designation reserved for suitably qualified person acting as the site environmental manager for a contractor. It is the person responsible to the contractor, tasked with implementing and controlling the environmental requirements and EMPr for a specific construction site during the construction period. The ESM must report to the ECO in keeping with the requirements of the EMPr.

Environmental Authorisation (EA) - Authorisation issued to and in the name of the applicant by the competent authority in terms of Chapter 5 of the National Environmental Management Act, 1998, Act 107 of 1998 and the Environmental Impact Assessment Regulations, 2014 (as amended), and includes any amendment thereof.

Environmental Awareness Training - An environmental education process for the contractor's management staff and labour force, which informs them of the requirements of the EMPr.

Engineer - A suitably qualified person who represents the applicant (holder of the EA) and is responsible for the design of construction activities and the technical and contractual implementation of the construction activity. An engineer will be responsible for each of the construction activities.

Environment - The biosphere in which people and other organisms live. It consists of:

- Renewable and non-renewable natural resources;
- Physical, infrastructural, social, economic, cultural, historical and political components of the area and the wider surroundings;
- Natural ecosystems and habitats; and
- Biological and natural surroundings whether or not modified by people.

Environmental impact - Any change to the environment, whether desirable or undesirable that would result directly or indirectly from any construction related activity.

Environmental incident - Any occurrence on or at a specific site and related to the activities on the site that could potentially have a negative effect on the environment, whether natural or man-made.

Erection – As defined in the applicable Zoning Scheme Bylaw (includes - the alteration, subdivision or conversion of, or addition to a building; and the re-erection or repair of a building which has been completely or partially destroyed or demolished) and includes building construction.

Height of building – As defined in the applicable Zoning Scheme Bylaw.

Heritage Western Cape (HWC) – is the provincial heritage resources authority for the province, in the Department of Cultural Affairs and Sport (021 483 9695).

Home Owners' Association (HOA) – A legal entity established by the applicant / developer of the site in terms of the Municipality's Bylaws, with the responsibility of the management and maintenance of all common property and structures on the site, such as internal open space, recreational facilities, and to ensure compliance with the site-specific EMPr.

Impact - The positive or negative effects on human well-being and/or on the environment.

Mitigate - The implementation of practical measures to reduce adverse impacts.

Municipality - The George Municipality, situate in George (General contact, 044 801 9111).

"No-Go" Areas - Areas identified as being environmentally sensitive in some manner and delineated on plan and / or on the site with pegs or fencing and which are out of bounds to unauthorised persons. Authorisation must be obtained prior to entry of a "no go" area.

OEMPr - Operational Phase Environmental Management Programme. A plan for managing the potential impacts of the use of the development and/or the completed development.

Property Owners' Association (POA) – A legal entity established by the applicant / developer of the larger area with the responsibility of the management and maintenance of all common property and structures, such as open space networks, and to ensure compliance with the EMPr.

Potentially hazardous substance - A substance that, in the reasonable opinion of the ECO and / or Engineer, could have a harmful effect on the environment.

Public authority - means an organ of state, any government department or agency, a municipality or a department of the provincial government.

Reasonable - Unless the context indicates otherwise, the term reasonable refers to the opinion of the Engineer after consultation with the ECO and a person, not an employee of the applicant (holder of the EA), suitably experienced in "environmental implementation plans" and "environmental management plans" (as defined in the National Environmental Management Act, 1998, Act 107 of 1998).

ROD - Record of Decision by DEA&DP or any other authority when authorising the development and includes "**Environmental Authorisation"**.

Search and Rescue - The systematic identification, physical extraction, and relocation (translocation) of indigenous fauna and flora, specifically species of conservation concern (SCC), protected, or threatened species from a designated development footprint before any site clearance or construction activities commence. It includes the temporary holding of rescued plant material in a nursery and its subsequent replanting at an approved receiving site.

Species of conservation concern (SCC) - Plant or animal species listed as threatened or protected in terms of national or provincial biodiversity legislation, or identified as such by the Department, CapeNature or a suitably qualified specialist, including, for this site, Gladiolus liliaceus and Kniphofia sp. as identified by the Department.

Nursery - A temporary holding facility, on or off the site, where rescued plant material is kept, propagated and maintained until it is replanted at an approved receiving site.

Solid waste - All solid waste, including metal sections, construction debris, chemical waste, excess cement / concrete, wrapping materials, timber, tins, cans, drums, wire, nails, food and domestic waste, e.g. plastic packets and wrappers.

Significant/significance - Significance can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e. level of significance and acceptability). It is a concept that makes use of value judgements and science-based criteria (i.e. biophysical, social and economic). Value judgement reflects the social perception of impact assessment.

Vegetation rehabilitation - The re-establishment of endemic and/or indigenous vegetation with a similar species composition to that which naturally occurred on the site or in the area.

Regulated area of a watercourse - As defined in the General Authorisations for water uses in terms of section 21(c) and (i) of the National Water Act, 1998 (GN 4167 of 8 December 2023), which includes, in respect of a wetland, a 500 m radius around the delineated boundary of the wetland.

Wetland - As defined in the National Water Act, 1998: land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

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1 BACKGROUND

1.1 Introduction

This environmental management programme (EMPr) is a site specific EMPr for implementation of a decision on the application for a Part 2 Amendment of the Environmental Authorisation (EA) issued on 26 February 2013 with reference: 16/3/1/5/D2/19/0021/12 in terms of Regulation 31 of the Environmental Impact Assessment Regulations 2014 (as amended) made in terms of the National Environmental Management Act, 1998, Act 107 of 1998 (NEMA). The original EA approved a mixed-use development (Business Zone I) on Erf 28005, George, then described as: Portion 8 of the development of Portion 22 of Farm Kraaibosch and Erf 23333, George for which an EMPr was approved and in terms of which the site was developed.

The Part 2 Amendment allows for the use of the site for residential development in apartment blocks up to four storeys in height and the rights to the development to be transferred from Laritza Investments 183 (Pty) Ltd to George Residential Apartments (Pty) Ltd, Reg. no. 2026/016581/07.

Virdus Works (Pty) Ltd was commissioned by the applicant to prepare and submit a new site-specific EMPr.

Upon its approval, this EMPr replaces the Environmental Management Programme for Garden Route East and Eden Meander (May 2012), accepted by the Department on 4 September 2012, insofar as it applies to Erf 28005. The approved Stormwater Management Plan for the Eden Meander development remains applicable and must be read with this EMPr. Until this EMPr is approved, any activities undertaken on Erf 28005 in terms of the existing EA, including the clearance of vegetation and the installation of stormwater infrastructure in accordance with the approved Stormwater Management Plan, are subject to the approved EMP of May 2012. Such activities must also comply with the search and rescue requirements of Section 2.4 and Annexure H and with the National Water Act, 1998.

1.2 Details of the environmental assessment practitioner

Dupré Lombaard, a registered EAP and planner (EAPASA 2019/304 / SACPLAN B/8076/1998) of Virdus Works has been appointed by the applicant to prepare the EMPr. Dupré Lombaard has been in environmental practice since 2000. Since then, he has prepared and submitted many environmental authorisation applications and undertaken assessment and management processes. He has worked on numerous related projects as EAP and environmental control officer (ECO), including the preparation of Environmental Management Programmes for and management of the construction activities of the Khayelitsha Railway Line Extension, Sea View Village development in Big Bay, Mfuleni housing developments, upgrading of the Astral Foods abattoir at Joostenbergvlakte, the Eden Meander retail node development in George, the decommissioning of the Paternoster Groepbelange aquaculture facility in Paternoster, and the Denel Land Systems acid plant redevelopment at Wellington.

Education and training:

- M.Sc. (Earth Sciences), 2000 – 2002 (cum laude) - University of the Western Cape. Focus on Fluvial Geomorphology, Hydrogeology, GIS, and Environmental Law.
- M.A. (Geography), 1985 – 1989 - University of the Orange Free State. Research in Urban Geography.
- Hons. B.A. (Geography), 1981 – 1982 - University of South Africa.
- B.Mil. (Economics and Geography), 1978 – 1980 - Military Academy (Faculty of Military Science, University of Stellenbosch).

Other certified training courses:

- Introduction to nature conservation, 1979 - Cape Provincial Administration.
- Transport and traffic engineering, 1991- SA Institute for Town and Regional Planners.
- Project Management for Environmental Managers, 2009 - University of the Free State.
- Integrated Water Resource Management, 2010 - University of the Western Cape.
- Accredited Green Building Professional, 2010 – Green Building Council of South Africa.
- SAMTRAC (SHEQ), 2010 - National Occupational Safety Association.
- Municipal Minimum Competency Training, 2014 - University of Stellenbosch.
- Commercial Mediation, 2016 - University of Cape Town.
- Servicios para el Control de Plagas, 2025 – La Escuela de Agricultura, Ganadería y Medioambiente Zaragoza.

Membership of professional and registration bodies:

- Registered Planner - SA Council for Town and Regional Planners since 1998 (B/8076/1998).
- Registered Environmental Assessment Practitioner - Environmental Assessment Practitioners Association of South Africa since 2021 (2019/304).
- Member of IAIA SA since 2001 (member 1060).

1.3 Purpose and content of the Environmental Management Programme

An Environmental Management Programme (EMPr) is recognised as a tool that can provide assurance that the applicant / project proponent has made suitable provision for mitigation of any identified negative environmental impacts. The EMPr provides a description of the methods and procedures for mitigating and monitoring impacts. It also contains environmental objectives and targets which the applicant / project proponent or developer needs to achieve in order to reduce or eliminate negative impacts. The EMPr must be used throughout the project life cycle or at least for the period for which it is intended, e.g. construction phase or construction and operations or in the very long term, decommissioning. The applicant and his agents should continuously update the EMPr to remain aligned with specific activities and the project as it progresses.

There is no universally accepted standard format for EMPr's. The format needs to fit the circumstances for which the EMPr is being developed and the requirements of the Provincial Government of the Western Cape as set out in the relevant guideline document (Lochner, P. 2005. Guideline for Environmental Management Plans. CSIR Report No ENV-S-C 2005-053 H. Republic of South Africa, Provincial Government of the Western Cape,

Department of Environmental Affairs & Development Planning, Cape Town) and in the Environmental Impact Assessment Regulations, 2014, (as amended) (EIA Regs), made in terms of the National Environmental Management Act, 1998, Act 107 of 1998 (NEMA).

This document is structured in keeping with Appendix 4 of the EIA Regs, which determines that EMPr's should contain the following components:

Requirement: An EMPr must comply with section 24N of NEMA and include	**EIA Regs Appendix 4 Section**	**EMPr Section**
Details of the EAP who prepared the EMPr	1(a)(i)	1.2
The expertise of that EAP to prepare an EMPr, including a curriculum vitae	1(a)(ii)	1.2
A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description	1(b)	1.4
A map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers	1(c)	1.5
A description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including: - planning and design	1(d)(i)	2
- pre-construction activities	1(d)(ii)	3
- construction activities	1(d)(iii)	5
- rehabilitation of the environment after construction and where applicable post closure	1(d)(iv)	5.4
- operation activities	1(d)(v)	6
A description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated above will be achieved, and must, where applicable: - include actions to avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation	1(f)(i)	4, 5, 6
- comply with any prescribed environmental management standards or practices	1(f)(ii)	4
- comply with any applicable provisions of NEMA regarding closure, where applicable	1(f)(iii)	5.5
- comply with any provisions of the Act regarding financial provision for rehabilitation, where applicable	1(f)(iv)	7.1
The method of monitoring the implementation of the impact management actions contemplated above	1(g)	4, 5, 6, 7.2 – 7.4
The frequency of monitoring the implementation of the impact management actions contemplated above	1(h)	4, 5, 6
An indication of the persons who will be responsible for the implementation of the impact management actions	1(i)	4, 5, 6
The time periods within which the impact management actions contemplated above must be implemented	1(j)	5, 6 (Timing)
The mechanism for monitoring compliance with the impact management actions contemplated above	1(k)	7.5
A program for reporting on compliance, taking into account the requirements as prescribed by the Regulations	1(l)	7.6
An environmental awareness plan describing: - the manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work	1(m)(i)	7.4

- risks that must be dealt with in order to avoid pollution or the degradation of the environment	1(m)(ii)	2.2
Any specific information that may be required by the competent authority	1(n)	7.6

1.4 Description of the approved activity and authorisation conditions

Environmental authorisation was granted for the activities as described in the EA (Annexure A). The activity consists of a residential development in apartment blocks up to four storeys in height together with internal recreational facilities and services infrastructure.

The preferred layout (Figure 4) comprises 36 apartment blocks containing 680 residential units with 893 parking bays, covering approximately 40% of the site, together with a clubhouse, gymnasium, padel and tennis courts, a swimming pool and an outdoor recreation area, with access off Platinum Drive approximately 100 m from Park Road. The blocks along the south-western boundary with Blue Mountain Village are set back 21 m from the boundary, except the four southernmost blocks, which are set back 9,5 m and 7,5 m.

The development requires the following external engineering works, which are covered by this EMPr insofar as they are undertaken by or on behalf of the applicant: the upgrading of the Platinum Drive / Park Road intersection (Intersection 9) to a single-circulating roundabout; the connection of the internal stormwater system to the existing 1 250 mm culvert under Platinum Drive; and the bulk and reticulation sewer upgrades specified by the George Municipality (items OT_09.01 to OT_09.04, OT_V06.05, OT_26.01 and OT_47.01 of the External Engineering Services Report, Rev 3, November 2026, read with the George Municipality's letter of 12 December 2025 and the GLS assessment revised on 13 November 2026). These works do not trigger listed activities in terms of the EIA Regulations, 2014. They lie within existing road reserves and pump station sites inside the urban area of George, are below the applicable thresholds, and do not entail excavation within a watercourse or the clearance of 300 m² or more of indigenous vegetation (see Section 4.6 of the amendment report). Should the detailed design change any of these circumstances, the ECO must confirm before construction whether environmental authorisation is required. Any water use authorisation required for works within the regulated area of a watercourse must be confirmed with BOCMA before construction.

The following is a summary of the conditions of authorisation that are pre-conditions to implementation of the authorisation:

- Condition X. The activities may not commence until the closure of the appeal period and conclusion of an appeal process and then only after seven calendar days' notice, in writing, has been given to the Department before commencement of construction activities. The notice must make clear reference to the site details and EIA Reference number given above. The notice must also include proof of compliance with the following conditions described in the authorisation (Annexure A): Y, Y, Y and Y.
- Condition X. The applicant must in writing, within 14 (fourteen) calendar days of the date of this decision notify all registered Interested and Affected Parties ("I&APs") of the outcome of the application; the reasons for the decision as

included in Annexure X of the EA; the date of the decision; and the date when the decision was issued; draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of National Appeals Regulations, 2014, as detailed in Section F of the EA; draw the attention of all registered I&APs to the manner in which they may access the decision; provide the registered I&APs with the name of the holder (entity) of the EA; name of the responsible person for the EA; postal address of the holder; telephonic and fax details of the holder; e-mail address, if any, of the holder; the contact details (postal and/or physical address, contact number; facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.

- Condition X. The draft Environmental Management Programme (EMPr) submitted as part of the application for Environmental Authorisation must be amended to address the following aspects, and must be re-submitted to the Department and approved, prior to the start of construction activities. It must incorporate all the conditions given in the EA; Comply with section 24N of the National Environmental Management Act, 1998 and Appendix 4 of the Environmental Impact Assessment Regulations, 2014. An application for amendment to the EMPr must be submitted to the Department if any further amendments to the EMPr are proposed, other than those mentioned above, and this may only be implemented once the amended EMP has been authorised by the Department. The EMPr must be included in all contract documentation for all phases of implementation.

The following summary is of conditions that apply to the development activity:

- Condition Y. The holder must appoint a suitably experienced environmental control officer ("ECO") for the Construction Phase to monitor compliance with the provisions of the EMPr and conditions of the EA. Such appointment must take place prior to commencement of construction activities to ensure compliance with the EMPr and the conditions contained herein.
- Condition Y. A copy of the Environmental Authorisation, EMPr, audit reports and compliance monitoring reports must be kept at the site of the authorised activities and must be made available to anyone on request.
- Condition Y. Access to the site referred to in section C must be granted and the environmental reports mentioned above must be produced to any authorised official representing the Department who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.
- Condition Y. The holder must, for the period during which the environmental authorisation and EMPr remain valid ensure the compliance with the conditions of the environmental authorisation and the EMPr, is audited.
- Condition Y. The environmental audit report must be prepared and submitted to the Competent Authority, by an independent person (not the Environmental Assessment Practitioner (EAP) or the Environmental Control Officer (ECO)) with the relevant environmental auditing expertise.
- Condition Y. The holder must, within 7 days of the submission of the environmental audit report to the Competent Authority, notify all potential and registered I&AP's of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).
- Condition Y. The Environmental Audit Report must contain all the information required in Appendix 7 of the Environmental Impact Assessment Regulations, 2014.

- Condition Y. During the construction phase, the holder must undertake annual environmental audit(s) and submit these Environmental Audit Report(s) to the Competent Authority.
- Condition Y. The final construction phase Environmental Audit Report(s) must be submitted to the Competent Authority within six (6) months of completion of construction.
- Condition Y. During the operation phase, the holder must ensure that environmental audit(s) are performed as specified in the approved EMPr and submit these Environmental Audit Report(s) to the Competent Authority.
- Condition Y. No surface or groundwater may be polluted as a consequence of any actions on the site. The applicable requirements of the relevant legislation must be met.
- Condition Y. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artefacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains.

1.5 Locality of the authorised activities

Erf 28005, George, 5,6987ha in extent is located on the corner of Park Road and Platinum Drive in the Blue Mountain neighbourhood, on the southern side of the Eden Meander Lifestyle shopping centre. It is abutted by residential development inside of the Blue Mountain Estate on the north and southwestern sides, with office development to the south thereof.

The site is relatively flat with a slight southeasterly slope of 1:33, draining through the existing culvert under Platinum Drive and the municipal drainage line on Erf 26675 to the attenuation pond on that erf (the so-called Schaapkop Dam), from where it drains to the Meul River. Since the site was created and serviced in keeping with the 2013 EA, no buildings have been erected on it, and indigenous vegetation has re-established on it. The vegetation and the site characteristics are influenced, amongst others, by the fact that the storm water outlets from the abutting Blue Mountain development terminate on the site and are not correctly connected to the approved municipal system, by agricultural drainage channels and tracks across the site and by soil dumped in the north-eastern part of the site.

The national web-based environmental screening tool identifies the site as of very high sensitivity for terrestrial biodiversity (Garden Route Granite Fynbos, Critically Endangered) and aquatic biodiversity (Outeniqua Strategic Water Source Area), and of medium sensitivity for plant and animal species. The site sensitivity verification (July 2023) found secondary succession vegetation of low species diversity, with a population of

Kniphofia sp. in the northern portion, greater diversity (Erica spp., restios) in the southern portion, and two small wetland features attributed to stormwater ingress. During its site inspection on 6 October 2026 the Department recorded recovery of the vegetation, several Erica species, numerous Kniphofia sp. and individuals of Gladiolus liliaceus (Large Brown Afrikaner), and required a search and rescue operation for Gladiolus liliaceus and Kniphofia sp. (Section 2.4 and Annexure H).

The hydropedological assessment (Terra Soil Science, November 2023), which included an analysis of historical aerial photography from 1939 to 2005, concluded that the wetland signatures developed due to stormwater ingress and are of anthropogenic origin. A preliminary wetland delineation by a freshwater specialist (EnviroSwift, October 2026) identified hydrophytic vegetation and mottled soils over a substantial part of the site and expressed the opinion that the site was historically a hillslope seep wetland. The aquatic specialist (FEN Consulting, Site Sensitivity Report For Erf 28005 George, Western Cape Province, November 2026) appointed for the application has since confirmed that the wetland signatures on the site are artificial (human-induced): a natural wetland would not have developed but for the stormwater outlets that terminate on the site and the shallow topsoil over clayey alluvium with a perched water table (Engineering Geological Report TG23/030/3, Terra Geotechnical, August 2023). The aquatic specialist (A. Mileson, Pr.Sci.Nat., report FEN 26-5077) found no wet response on historical aerial photographs from 1957 to 2006. She concluded that the observed wet response, which is caused by stormwater ingress, the perched water table and earthworks on the site, would not persist under normal circumstances. It therefore does not meet the definition of a wetland or watercourse in the National Water Act, 1998, and the zones of regulation of that Act and of NEMA relating to watercourses do not apply to the site. The only wetland feature within 500 m of the site is the artificial stormwater impoundment about 211 m to the south. The Breede-Olifants Catchment Management Agency (BOCMA) has cleared the applicant to proceed with a water use licence application, which is being submitted. The conditions of any licence issued must be incorporated into this EMPr. The geographic coordinates of the site are: Lat: 33° 59' 10.892'' S | Lon: 22° 29' 50.686'' E



Figure 1: Activity site location (Erf 28005, George)



Figure 2: Site showing authorised development activities

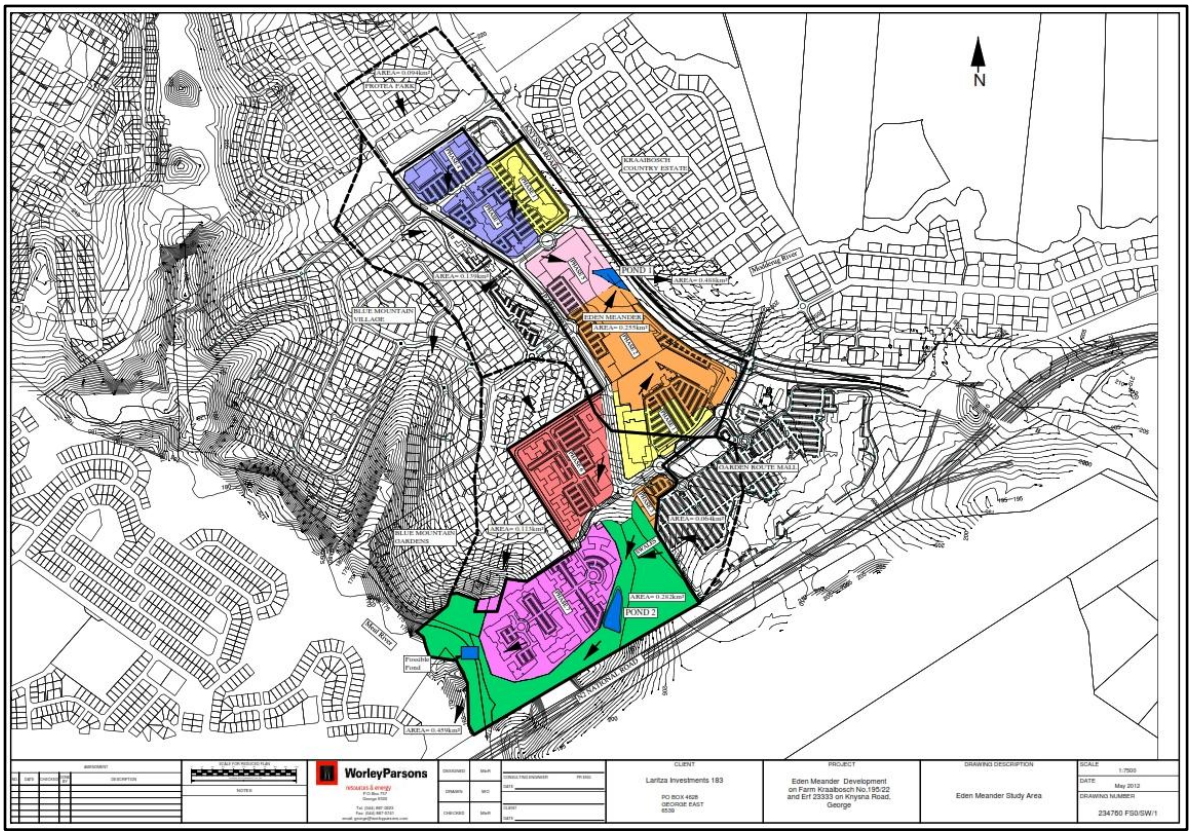

Figure 3: Blue Mountain development area storm water management plan



Figure 4: Site environmental sensitivities

2 IMPACT MANAGEMENT OUTCOMES - PLANNING AND DESIGN

The following outcomes are desired during the planning and design of the implementation actions of the authorisation (following numbered items):

2.1 Required actions

The applicant is responsible for the appointment of an ECO and for auditing of the EMPr implementation as set out in the environmental authorisation, summarised as follows:

- The holder of the EA (applicant) must appoint a suitably experienced environmental control officer (ECO) for the Construction Phase to monitor compliance with the provisions of the EMPr and conditions of the EA. Such appointment must take place prior to commencement of construction activities to ensure compliance with the EMPr and the conditions contained herein.
- The applicant (holder of the EA) must ensure compliance with the conditions of the environmental authorisation and the EMPr for as long as the EA is valid and ensure that implementation activities are audited.
- Prior to any site clearance, including any vegetation clearance for the installation or connection of stormwater pipes, a search and rescue of species of conservation concern and conservation-worthy plants, in particular Gladiolus liliaceus and Kniphofia sp. as required by the Department, must be conducted by appropriately experienced and skilled people in accordance with Section 2.4 and the Plant Search and Rescue Plan (Annexure H). Rescued vegetation must be replanted in the landscaped areas of the development or relocated to an adjacent natural area, e.g. the open space around the Schaapkop Dam, or to another site with similar soil conditions as agreed with the relevant stakeholders, in the order of preference set out in Section H.8 of Annexure H.
- Prior to any site clearance, the applicant must obtain the water use licence applied for from BOCMA in terms of section 21(c) and (i) of the National Water Act, 1998, or BOCMA's written confirmation that no licence is required, and must comply with its conditions. The General Authorisation registered for the Schaapkop Dam on Erf 26675 (Register No. 29012693) does not by itself authorise water uses on Erf 28005.
- Category 1 and 2 invasive alien plants must be removed from the site prior to construction and controlled for the duration of the construction phase, and thereafter by the Body Corporate in accordance with the National Environmental Management: Biodiversity Act, 2004, Alien and Invasive Species Regulations.
- The environmental audit report must be prepared and submitted to the Competent Authority (DEA&DP), by an independent person with the relevant environmental auditing expertise (not the Environmental Assessment Practitioner (EAP) or the Environmental Control Officer (ECO).
- The applicant must, within 7 days of the submission of the environmental audit report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).
- The Environmental Audit Report must contain all the information required in Appendix 7 of the Environmental Impact Assessment Regulations, 2014 (as amended).

- During the construction phase, the applicant must undertake annual environmental audit(s) and submit these Environmental Audit Report(s) to the Competent Authority.
- The final construction phase Environmental Audit Report(s) must be submitted to the Competent Authority within six (6) months of completion of construction.
- During the operation phase, the applicant must ensure that an environmental audit is performed as specified in the approved EMPr and submit this Environmental Audit Report to the Competent Authority.

The contractor will undertake the construction work required for the activity and will appoint an ESM and bear all costs relating to the implementation of this EMPr and construction management on the construction site. The contractor must be conversant with all legislation pertaining to the health and safety and the environment, including provincial acts and ordinances and local government by-laws and regulations, which may be applicable to the contract. The responsibilities of the contractor include, but are not limited to, the following:

- Inform the applicant (holder of the EA), as well as the ECO, should environmental damage or deviations from the EMPr occur.
- Adhere to the conditions of the EMPr and the environmental authorisation.
- Assist in finding solutions to environmental problems that may arise during construction.
- Carry out instructions issued in the site instruction book / monitoring records by the ECO and /or ESM.
- Oversee the implementation of mitigating / rehabilitation measures.
- Environmentally educate and raise the awareness of the labourers and staff as to the sensitivity of the environment and to instil the correct attitude in them.

The contractor and the ESM must be briefed by the ECO on his obligations towards environmental controls and methodologies in terms of the EMPr prior to work commencing.

The ECO shall report to the holder of the authorisation and shall be responsible for ensuring compliance with the conditions contained in the EMPr. Responsibilities of the ECO include the following:

- Attend contractor site meetings as and when necessary, to be able to report on and respond to any environmental issues and be issued copies of minutes of such meetings.
- Obtain, examine and approve method statements where necessary.
- Advise the contractor on environmental issues within the defined work areas.
- Review the site diaries regarding records of site activities that may pertain to the environment and reconcile the entries with observations made during site inspections.
- Recommend corrective action to the contractor and the applicant (holder of the EA) where construction activities are not in compliance with the EMPr.
- Act where "no go" areas are violated, or in danger of being violated, and to inform the applicant (holder of the EA) of the occurrence and action taken.
- Act when prescriptive conditions are violated, or in danger of being violated, and inform the contractor and applicant (holder of the EA) of the occurrence immediately and act, e.g. issuing of penalties.

- Maintain the EMPr documentation and ensure compliance with the prescriptive conditions.
- Ensure the submission of audit reports as required in the environmental authorisation.

The ESM must be on site daily and shall report to the contractor and the ECO and shall be responsible for ensuring compliance with the implementation of the conditions of authorisation and the EMPr on a specific construction site. Responsibilities of the ESM include the following:

- Environmental awareness training for contractor staff and labourers.
- Attendance of contractor site meetings.
- Regular reports on environmental issues to the ECO.
- React and respond to environmental issues.
- Prepare method statements in consultation with the contractor where necessary.
- Advise the contractor on environmental issues on the site through entries in the site diary.
- Recommend corrective action to the contractor where construction activities are not in compliance with the EMPr.
- Take immediate action on site where clearly defined and agreed "no go" areas are violated, or in danger of being violated, and to inform the ECO of the occurrence and action taken.
- Take immediate action on site when prescriptive conditions are violated, or in danger of being violated, and advise the contractor to take corrective action.
- To be contactable by the public regarding matters of environmental concern as they relate to the development (register of complaints and actions to be kept and included in monthly reports).
- Ensure compliance by the contractor with the EMPr.
- Submit monthly reports to the ECO.

The above role-players commit themselves to a process of protecting and rehabilitating the environment, which will include leaving the development area, access roads, adjacent water bodies, rivers and streams and the construction site in a good condition at the end of the construction phase. In doing so, the role-players commit themselves to the following :

- The environment being as defined above;
- Adhering to all legislation that is relevant to the environment;
- Adhering to the environmental specifications as set out in the EMPr;
- Protection of the environment, amongst others by limiting the extent of all activities related to the development and construction to the areas demarcated for development at the handover of the site to the contractor;
- Rehabilitation of the environment and specifically all natural vegetation and surface water areas disturbed as a result of construction activities;
- Employing local labourers and skills development; and
- Environmentally sensitive construction techniques.

2.2 Predicted impacts to be considered

The contractor and ECO shall identify likely impacts before commencing with any construction activity. Thereafter the contractor shall programme the work in such a

manner that the effects of the construction avoid any impact occurrence. If avoidance or prevention is not practicable, the contractor shall provide method statements and mitigation measures for the ECO's approval, to limit and contain the magnitude, duration and intensity of the impact. In such situations the contractor shall demonstrate that he can carry out any repair and reinstatement of the damaged environment.

The assessment of the proposed development indicated that the following broad impacts are related to the authorised development:

The table below synthesises the broad environmental and socio-economic impacts identified for the proposed four-storey residential development on Erf 28005, George, along with the corresponding management and mitigation measures recommended by specialists for inclusion in the site-specific EMPr.

Environmental Aspect / Impact Theme	**Broad Potential Impact Description**	**Proposed Specialist Mitigation & Management Measures**
Traffic and Transport	Increased peak-hour trip generation (442 peak-hour trips) and shift in traffic flow patterns relative to authorised commercial use, causing potential localized intersection delays.	• Upgrade the Platinum Drive / Park Road intersection (Intersection 9) to a single-circulating roundabout. • Provide 893 on-site parking bays (1.31 bays/unit), exceeding observed peak demand rates. • Construct primary site access off Platinum Drive (~100 m from Park Road) with sufficient internal gatehouse stacking length to eliminate queuing onto public roads. • Ensure pedestrian crossings and non-motorised transport (NMT) connections at access points and roundabouts align with municipal safety standards.
Visual and Aesthetic Character	Visual intrusion and contrast from introducing 15 m (four-storey) mid-rise residential structures adjacent to single-storey residential properties in Blue Mountain Estate and view corridors along the N2 and Knysna Road.	• Implement the preferred alternative layout featuring increased boundary setbacks of 21 m along the south-western interface (with southernmost blocks at 7.5–9.5 m). • Incorporate a stepped massing profile (reducing boundary-facing edges to three storeys) and horizontal façade articulation. • Apply a muted, earthy paint palette (warm greys, beiges, terracottas) with low-sheen/matte exterior finishes. • Specify low-reflectance glazing (visible light reflectance <20%) and avoid mirror glass or polished metal finishes on upper levels. • Establish a minimum 3 m wide landscaped buffer zone of indigenous trees and shrubs along boundary walls under a 5-year landscape management plan.

Environmental Aspect / Impact Theme	Broad Potential Impact Description	Proposed Specialist Mitigation & Management Measures
		• Install downward-facing, fully shielded external lighting fixtures with motion-activated perimeter security lighting and zero upward/sideways spill. • Erect solid 2 m high temporary construction hoarding along southern and western boundaries.
Privacy and Overshadowing	Loss of privacy due to upper-storey windows/balconies facing neighbouring gardens, and localized winter solstice morning shadow effects on adjacent properties in Geelbos Street.	• Maintain 21 m building setbacks and stepped roof profiles adjacent to Blue Mountain Village. • Screen or omit upper-level balconies on boundary-facing façades of the nearest residential blocks. • Plant indigenous canopy trees within boundary setbacks to filter ground-level and mid-level lines of sight.
Terrestrial and Aquatic Biodiversity	Clearance of 5.6987 ha of re-established indigenous vegetation regrowth (including Erica spp., Kniphofia sp. and the geophyte Gladiolus liliaceus, and potentially other *species of conservation concern*) and disturbance to the artificial (human-induced) wetland conditions caused by stormwater discharged onto the vacant site, which do not constitute a wetland or watercourse in terms of the National Water Act (FEN Consulting, November 2026).	• Conduct a botanical walk-through survey during the appropriate flowering season (spring to early summer) by a suitably qualified botanist prior to site clearance. • Search, rescue, and translocate species of conservation concern to an approved nursery and receiving sites under a CapeNature permit, in accordance with the Plant Search and Rescue Plan (Annexure H). • Obtain the water use licence applied for from BOCMA, or its written confirmation that no licence is required, before site clearance, and comply with its conditions. • Connect historical un-linked stormwater outlets from Blue Mountain Village into the municipal stormwater network.
Geotechnical and Stormwater Management	Geotechnical constraints (shallow water table, high clay content) and increased post-development stormwater runoff affecting soil stability or adjacent properties.	• Commission a detailed geotechnical investigation by a professional engineer prior to submitting structural building plans or confirm the applicability of the Engineering Geological Report TG23/030/3 (Terra Geotechnical) for four-storey buildings, with specific reference to bearing capacity, settlement and groundwater conditions. • Implement a Municipal-approved Stormwater Management Plan ensuring post-development peak runoff does not exceed pre-development levels or impact adjacent properties, and which accommodates the stormwater ingress from surrounding developments identified in the hydropedological assessment.

Environmental Aspect / Impact Theme	Broad Potential Impact Description	Proposed Specialist Mitigation & Management Measures
		• Protect exposed bare soil surfaces with temporary seeding or erosion control matting during construction phases.
Noise and Nuisance	Nuisance noise and dust generated during the multi-year construction phase, and operational ambient noise from vehicle movement, refuse collection, and communal amenities.	• Enforce the construction phase provisions of this EMPr, covering working hours, dust suppression, noise monitoring, and an active complaints register overseen by an independent Environmental Control Officer (ECO). • Locate fixed mechanical plant (generators/pumps), main refuse collection areas, and active recreational facilities (padel/tennis courts, clubhouse) away from common residential boundaries. • Enforce complex conduct rules and restrict outdoor court usage to standard daytime hours in compliance with the Western Cape Noise Control Regulations.
Socio-Economic and Municipal Infrastructure	Increased demand on municipal bulk services (water, sewer, electricity, solid waste) alongside positive capital investment (R2.94 billion sales impact), employment creation (4 414 construction jobs, 199 operational jobs), and compact urban housing supply.	• Comply with George Municipality services capacity confirmations and Development Charges Policy or services agreements prior to construction. • Fit all apartment units with low-flow water fittings, dual-flush toilets, individual water/electricity meters, water-wise landscaping, and rainwater harvesting systems. • Prioritise local labour and SMME procurement opportunities throughout the construction phase.

2.3 Pre-operations environmental management planning

Prior to commencement of construction, the applicant and/or contractor must:

- Obtain the Department's approval of this EMPr before commencement of construction - applicant.
- Submit notice of compliance with the relevant conditions of the EA and intent to commence construction activities to the DEA&DP at least seven days before commencement - applicant.
- Obtain the water use licence from BOCMA, or its written confirmation that no licence is required,, and incorporate its conditions into this EMPr - applicant.
- Complete the plant search and rescue in accordance with Section 2.4 and submit the search and rescue completion report to the Department - applicant and botanist.
- Obtain the George Municipality's written comment / approval of the spacing of the site access from Park Road and of the required road network upgrades - applicant.
- Obtain current confirmation of services capacity from the Directorate: Civil Engineering Services of the George Municipality - applicant.
- Submit a construction traffic and access management plan to the George Municipality for approval - contractor.

- Have temporary construction signs made in compliance with the South African Road Traffic Sign Manual, 2000 (as amended), issued by the Department of Transport. These signs must be erected on and around all construction sites - contractor.
- Determine an employment and a communications policy and implement same to avoid on-site congregation of jobseekers and owners or representatives of small enterprises seeking opportunities - contractor.

The desired outcome is an appropriately planned construction phase, where every stakeholder is aware of the need to conserve the environment and mitigate any potential impacts.

2.4 Plant search and rescue

The Department requires a search and rescue operation for Gladiolus liliaceus and Kniphofia sp., and requires the EMPr to describe the search and rescue operation and the nursery requirements to ensure that the operation succeeds. The site sensitivity verification also recommended the rescue of Kniphofia, Halleria and Diospyros plants. Search and rescue procedures, including an inventory of bulbous species by a qualified botanist, are also required by Condition 12 of the EA and Section 2.6 of the approved EMP of May 2012. The requirement therefore applies to any clearance of vegetation on Erf 28005, including clearance for stormwater infrastructure in terms of the existing EA. The Plant Search and Rescue Plan is included as Annexure H. It must be finalised by the appointed botanist after the pre-rescue survey and submitted to the Department before any site clearance. The plan must comply with the following minimum provisions:

- **Specialist:** The plan must be compiled, and the search and rescue supervised, by a suitably qualified botanist registered with the South African Council for Natural Scientific Professions (SACNASP), with appropriately experienced horticultural staff undertaking the physical rescue.
- **Inventory:** A walk-through survey of the entire site must be undertaken during the appropriate flowering season, as determined by the botanist, to compile an inventory of species of conservation concern and conservation-worthy plants, with particular attention to bulbous species (geophytes). Individual plants and populations to be rescued must be marked in the field and their positions recorded by GPS and shown on a plan.
- **Permits and consent:** All required permits for the removal, possession and translocation of protected flora must be obtained from CapeNature before rescue commences, and the written consent of the owner of any receiving site must be obtained.
- **Timing:** The rescue must be completed before any vegetation clearance on the site. Geophytes such as Gladiolus liliaceus should, where practicable, be lifted during their dormant period once they have been marked during flowering. No vegetation may be cleared until the botanist and the ECO have confirmed in writing that the search and rescue has been completed.
- **Nursery:** Rescued plants that cannot be replanted immediately must be held in a nursery identified in the plan, either a temporary nursery in the contractor's yard (outside any no-go area) or an established indigenous nursery off the site. The nursery must provide shade netting and wind protection, a reliable supply of water from an authorised source with irrigation suited to each species, and well-drained growing medium comparable to the soils of the site. Geophytes must be stored or

potted in labelled containers and Kniphofia clumps must be potted in deep bags with sufficient root volume. The nursery must keep a register of all plants received, losses and replanting, and must control weeds, pests and diseases.

- **Receiving sites:** Rescued plants must be replanted in the landscaped areas of the development (including the boundary landscape buffer), in the public open space around the Schaapkop Dam or in another approved site with similar soil and moisture conditions, within the appropriate planting season.
- **Monitoring and success criteria:** The survival of rescued plants in the nursery and at the receiving sites must be monitored for at least 12 months after replanting, with a target survival rate to be set in the plan. Failed plants must be replaced from nursery stock where available.
- **Reporting:** A search and rescue completion report, with the inventory, numbers of plants rescued per species, their destinations and photographs, must be submitted to the ECO and the Department before site clearance, and a survival monitoring report must be included in the environmental audit reports.
- **Fauna:** Immediately before and during vegetation clearance, the ECO or a suitably qualified specialist must inspect the area to be cleared and relocate any slow-moving fauna (e.g. frogs, reptiles and tortoises) to suitable habitat outside the construction area.

3 IMPACT MANAGEMENT OUTCOMES - PRE-CONSTRUCTION ACTIVITIES

3.1 Approvals, permits and licensing requirements for operations

All engineering designs and plans must be submitted to the Municipality for approval prior to commencement of any construction activities. All building plans must be submitted to the Municipality for approval prior to commencement of any building construction. Construction activities must comply with the authorisation and the EMPr.

The following approvals, permits and confirmations must also be obtained, where applicable, before the activities to which they relate commence: the water use licence applied for from BOCMA in terms of section 21(c) and (i) of the National Water Act, 1998, or BOCMA's written confirmation that no licence is required; CapeNature permits for the search and rescue and translocation of protected flora; the George Municipality's approval of the site development plan and the landscape development plan, the roundabout and access designs, the services agreement and wayleaves for external services; and the consent of the owners of any off-site receiving areas and work areas.

3.2 Method statements

Method statements from the contractor will be required for specific sensitive actions on request of the authorities or the ECO. A method statement forms the base line information on which sensitive area work takes place and is a "live document" in that modifications are negotiated between the contractor and ECO, as circumstances unfold. All method statements will form part of the EMPr documentation and are subject to all terms and conditions contained in the original EMPr document. The contractor must submit the method statement to the ECO, who must ensure that it is workable and approve it before any particular construction activity commences. Work may not commence until the method statement has been approved by the ECO, or if it requires a departure from the authorisation / EMPr, then also the authorities.

A method statement describes the scope of the intended work in a step-by-step manner for the ECO to understand the contractor's intentions. This will enable interaction in devising mitigation measures, which would minimise environmental impact during these actions. For each instance where the contractor must submit a method statement, it should clearly indicate the following:

- What: a brief description of the work to be undertaken;
- How: a detailed description of the process of work, methods and materials;
- Where: a description / sketch of the locality / outcome of work (if applicable);
- When: the sequencing of actions with due commencement dates and completion date estimates; and
- What thereafter: how the work area will be rehabilitated and returned to its original state prior to the activity or the agreed state.

3.3 Environmental engineering design requirements

The works, during and after construction, must make special provision for the prevention of polluted and sediment loaded run-off from leaving the site and entering the municipal stormwater system, the attenuation pond on Erf 26675 (Schaapkop Dam) and the Meul River. The engineer must prescribe methods and designs for water run-off systems that feed into filtering ponds, detention structures, and the storm water management infrastructure on the site.

No surface drainage of run-off from any hardened surface shall be allowed directly into the natural system, due the risk of erosion and effect on the river systems, primarily through siltation and reduced water quality.

No surface drainage of water from any construction activity shall be allowed to run off the construction site other than through a planned and designed system.

All contaminated water from the construction site must be contained on the site and be allowed to filter into the soil in a position where no erosion risk occurs or it must be polished by the removal of all contaminants, e.g. litter, cement, silt, acid, fuel, oil and other substances that could cause harm to the aquatic environment and released through an appropriately designed storm water management system.

The stormwater system must be designed in accordance with the approved Stormwater Management Plan for the Eden Meander development and the requirements of the George Municipality, so that post-development peak runoff does not exceed pre-development levels. The design must accommodate the stormwater entering the site from the surrounding developments (including the outlets from Blue Mountain Village and the culvert at the northern boundary), which must be intercepted and conveyed in a controlled manner to the municipal system. Energy dissipation must be provided at all outlets.

The landscape development plan (Kainos Landscape Architects, Rev 03, 17 November 2026) must be finalised in accordance with Section 9.1.3 of the VIA and approved by the George Municipality before construction. In particular, it must provide a boundary planting buffer of at least 3 m along the southern and western boundaries, planted with indigenous species appropriate to the Garden Route. It must identify the areas where rescued plants and salvaged topsoil will be used (Annexure H), and must meet its irrigation demand (estimated at about 446 kl per week) as far as practicable from rainwater harvesting or other non-potable sources. The landscape management plan must cover at least five years after installation, with annual assessment and replacement of failed planting.

3.4 Environmental awareness training for employees and contract workers

Awareness training should address, but not be limited to, the demarcation of the site, the erection of the camp site for construction teams, establishment of working and storage areas, training of staff and labourers in emergency responses, protection of flora, fauna, natural features and any archaeological material of significance that may be discovered, cultural issues (e.g. religious activities), landscaping and re-vegetation of indigenous plants and trees, refuse and waste management, dust and noise control, effluent and storm water management, hazardous material use and handling, fire prevention measures, hygiene, pollution control measures, monitoring and reporting, penalties and the system of claims and damages.

The awareness program must include hygiene, maintenance of the integrity of the environment, waste management and water saving. It should specifically address the demarcation of no-go areas and the protection of natural vegetation, the routing of construction vehicles and the handling and removal of all waste.

The contractor and the ESM will be responsible for ensuring that the environmental training or education course and the requirements in the EMPr are presented to the staff and labourers. The contractor will be responsible for training of sub-contractors and their staff and labourers, either by arranging with the ESM to undertake such training whenever new sub-contractors come on site or by presenting the course and confirming such actions with the ECO. During construction, if new labourers arrive on the site, the contractor shall be responsible for ensuring that they are aware of the environmental specifications.

3.5 Site management

3.5.1 Contractor's yard.

A suitable contractor's yard must be identified by the contractor, and its location must be approved by the ECO prior to its establishment. The yard, material storage, equipment parking and site offices must be located on the northern portion of the site, outside the landscaped setback areas along the southern and western boundaries and outside any no-go area.

The contractor's yard is intended for storage, administration and the location of facilities for the labourers and staff. Only security personnel may be accommodated in the contractor's yard, with a maximum occupation of five people.

3.5.2 Demarcation of out of bounds / no-go areas

Any "no-go" areas must be clearly and effectively demarcated (or fenced) prior to the commencement of any construction activities. Danger tape attached to a wire fence may be used for this purpose. All demarcation material, items and tape must be maintained for the duration of the construction phase. Signage must be placed on the "no-go" boundary demarcation, to clearly indicate that there shall be no access to the area.

No-go areas include plants and populations marked for rescue until they have been rescued, any wetland areas and buffers confirmed by BOCMA or prescribed in a water use authorisation, the nursery and receiving sites, and the adjoining properties.

The construction site must also be demarcated as such, to advise the general public not to enter it and of all construction activities that could cause harm.

3.5.3 Hygiene

All staff and labourers must be advised of the unacceptability of defecating and urinating in public and anywhere else than in a toilet or ablution facility. The staff and labourers must be made aware of the importance of waste management, with specific reference to placing of empty food containers and wrappers into refuse bins at clearly defined eating areas.

Toilets, at a ratio of one toilet per 12 people employed on the site (labourers and staff) must be erected for the full duration of construction activities. All employees must be advised to only use the site ablutions for "relief", to specifically prevent the use of the surrounding bush as an informal toilet area. Sanitation provision and servicing of the ablutions must be to the satisfaction of the municipality. The contractor must ensure that toilets are emptied and cleaned weekly and before any builders' holiday and that the service provider uses approved sewerage disposal points for dumping of the waste. Temporary toilets shall be of a neat construction and shall be provided with doors and locks and shall be secured to prevent them blowing over.

3.5.4 Site instruction book and diary

The contractor must keep these records in the site office. The responsible parties will use the site instruction book entries for the recording of general site instructions. The site instruction book will also be used for the issuing of stop work orders for the purposes of immediately halting any particular activities of the contractor in view of the environmental risk that they may pose. The records must be available to the authorities

for inspection or on request to a member of the public. Contractor's meeting minutes must reflect environmental queries, agreed actions and dates of eventual compliance. These minutes form part of the official environmental record and must be recorded in the site diary.

3.5.5 Fires and cooking facilities

The contractor must provide adequate facilities for all staff and labourers so that they need not supplement their comforts on site by accessing what can be taken from the natural surroundings. Fires are not permitted on site, unless in a specially constructed barbeque / braai and limited to a single fireplace. Activities that may pose a fire risk must be identified and suitable preventative measures must be put in place to prevent any possible damage by fire. Contractors must inform the staff of the risk of fire and fire prevention and emergency procedures in the event of a fire. Firefighting equipment shall be supplied by the contractor at suitable locations.

The Contractor shall ensure that energy sources are available at all times for construction and supervision personnel for heating and cooking purposes.

4 IMPACT MANAGEMENT OUTCOMES AND ACTIONS

The desired impact management outcomes will be achieved by the actions as set out hereafter.

Appointed contractors, under the supervision of the applicant (holder of the EA) or project managers and the ECO, will undertake the construction project and be responsible for all construction phase impact management actions.

The applicant must include a copy of the letter of authorisation from the DEA&DP and this EMPr in the contract documents during the tender process for the project and thereafter the contractor must keep a record thereof on the site. The provisions of this EMPr are binding on the developer (applicant / holder of the authorisation) and the contractor for the duration of the construction period. The undertaking in Annexure B hereto must be signed by the applicant and the contractor prior to handover of the site for construction and it shall be binding on both parties.

The tables in the following sections contain the impact management actions required to avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation. Each table addresses the following:

- The method of monitoring the implementation of the impact management actions.

- The frequency of monitoring the implementation of the impact management actions.
- An indication of the persons who will be responsible for the implementation of the impact management actions.
- The time periods within which the impact management actions contemplated above must be implemented.

All the prescribed actions comply with prescribed environmental management standards or practices. The provisions of NEMA regarding closure and financial provision for rehabilitation do not apply to the authorised residential development; the rehabilitation of areas disturbed during construction is addressed in Section 5.4.

5 IMPACT MANAGEMENT OUTCOMES - CONSTRUCTION ACTIVITIES

The following outcomes are desired during the construction phase:

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Botanical Search and Rescue	Rescue and translocate species of conservation concern (e.g., *Gladiolus liliaceus*, *Kniphofia sp.*, *Erica spp.*) to an approved nursery and receiving sites under CapeNature permits prior to site clearance, in accordance with Section 2.4 and Annexure H.	Pre-clearance walk-through survey by a botanical specialist during the flowering season; nursery register and condition inspections; inspection of translocation recipient sites and permit compliance verification.	Once pre-construction; weekly during site clearing; monthly nursery and receiving site inspections for 12 months after replanting.	Qualified Botanist / Environmental Control Officer (ECO).	Pre-construction (flowering season as determined by the botanist) and early site clearance.
Aquatic and Wetland Verification	Obtain the water use licence applied for from BOCMA (or its written confirmation that no licence is required) prior to site clearance; comply with its conditions.	On-site aquatic verification assessment and review of historical stormwater discharge outlets from Blue Mountain Village. (Verification completed: FEN Consulting, November 2026.)	Once prior to site establishment.	Qualified Aquatic Specialist / ECO.	Pre-construction phase.

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Fauna Rescue	Prevent the killing or injury of frogs, reptiles and other slow-moving fauna during vegetation clearance.	Pre-clearance inspection of the area to be cleared; record of fauna relocated.	Immediately before and during vegetation clearance.	ECO / suitably qualified specialist / Main Contractor.	Site clearance.
Sewer Tie-ins (Schaapkop Outfall)	Prevent spills and overflows of raw sewage (about 570–580 l/s) during the replacement of the Schaapkop outfall sewer by completing each new section off-line and connecting both ends within one hour.	Approved method statement; watertightness test before tie-in; weather check and standby equipment before each tie-in; incident register.	Before and during each tie-in.	Main Contractor / George Municipality / ECO.	Construction of external services.
Invasive Alien Plant Control	Remove Category 1 and 2 invasive alien plants and prevent their spread from stockpiles and disturbed areas.	Visual inspection of the site, stockpiles and landscaped areas; record of clearing.	Prior to construction; monthly during construction.	Main Contractor / ECO.	Pre-construction and throughout construction.
Cadastral Boundary and Setback Verification	Ensure 21 m south-western boundary setbacks (7.5–9.5 m for southernmost blocks) are strictly maintained and address physical boundary wall encroachments.	Land surveyor pegging audit, physical measurement from boundary walls, and plan compliance check.	Prior to site setup and at foundation pegging.	Professional Land Surveyor / Structural Engineer / ECO.	Pre-construction and foundation layout phase.
Visual Screening and Site Establishment	Enclose southern and western boundaries with 2 m high solid neutral hoarding; locate laydown areas, offices, and stockpiles on the northern portion of the site.	Visual inspection of hoarding placement, paint finish, and layout of laydown/storage areas relative to adjacent residential receptors.	Initial setup inspection; bi-weekly audits thereafter.	Main Contractor / ECO.	Site establishment and throughout construction.
Topsoil Stripping and Erosion Control	Prevent topsoil degradation and wind/water erosion; preserve topsoil resources for boundary landscape buffer rehabilitation.	Visual audit of topsoil stockpile heights (<2 m), temporary seeding/matting application, silt fencing, and perimeter berms.	Weekly during earthworks; post-heavy rainfall events (>15 mm).	Main Contractor / ECO.	Earthworks and active civil construction phase.
Geotechnical and Foundation Preparation	Ensure structural stability of four-storey buildings considering shallow groundwater and high clay content soils.	Geotechnical investigation report review, soil compaction testing, groundwater monitoring, and structural engineering inspections.	Continuous during foundation excavation and concrete casting.	Geotechnical / Civil Engineer / Main Contractor.	Substructure and foundation phase.

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Stormwater Runoff and Siltation Control	Prevent off-site siltation, erosion, or unmanaged runoff affecting neighbouring residential properties or municipal street reserves.	Inspection of temporary attenuation ponds, silt traps, cut-off channels, and stormwater outlet connections to the municipal grid.	Weekly during wet periods; post-rainfall event inspections.	Site Civil Engineer / ECO / Main Contractor.	Earthworks and civil infrastructure installation.
Traffic Management and Site Access	Maintain safe access off Platinum Drive (~100 m from Park Road), prevent vehicle stacking on public roads, and protect municipal road surfaces.	Gatehouse logbook audits, traffic queuing observations, site entrance stacking checks, and road surface damage surveys.	Daily by Site Manager; bi-weekly ECO compliance audit.	Contractor Site Agent / ECO.	Throughout construction phase.
Noise and Vibration Control	Prevent noise nuisance and vibration impacts on neighbouring residents and the Blue Mountain Retirement Village in compliance with Western Cape Noise Control Regulations.	Audit of working hours (07:00–17:00 weekdays), acoustic decibel checks at boundary lines upon complaint, and equipment silencer inspections.	Weekly random audits; immediate verification upon complaint.	Main Contractor / ECO.	Throughout construction phase.
Dust Suppression and Air Quality	Prevent windblown dust from impacting surrounding homes, commercial areas, and road corridors.	Inspection of water cart dampening schedules, enforce 20 km/h site speed limit, and verify covering of haul trucks transporting loose material.	Daily visual checks by Contractor; bi-weekly ECO audit.	Main Contractor / ECO.	Site clearance, earthworks and dry weather periods.
Waste and Hazardous Material Management	Maintain a clean site, prevent soil/groundwater contamination from fuels or chemicals, and dispose of waste at licensed municipal sites.	Inspection of waste separation skips, disposal waybills, bunded fuel storage areas (>110% capacity), and spill kit availability.	Weekly site waste and chemical storage audits.	Main Contractor / ECO.	Throughout construction phase.
Boundary Landscaping Buffer	Establish a 3 m wide indigenous plant screen along the south-western boundary to filter views and soften the mid-rise building interface.	Landscape Architect audit of plant species selection, density, drip irrigation setup, and health under the 5-year Landscape Management Plan.	Monthly during planting; quarterly during 12-month defect liability period.	Professional Landscape Architect / ECO.	Building finishing phase prior to operational occupancy.
Community Liaison and Complaints Handling	Maintain transparent communication with Blue Mountain Village HOA and resolve neighbour grievances promptly.	Verification of boundary notice boards, audit of the site Public Complaints Register, and review of liaison meeting minutes.	Continuous register maintenance; monthly ECO report inclusion.	Contractor Public Liaison Representative / ECO.	Pre-construction through to operational handover.

Over and above the aforementioned, it is necessary to reiterate the following aspects:

5.1 Dust management

The surrounding environment, property owners and users must not be exposed to significant dust-related impacts, which cause nuisance and health risks. Dust levels may not exceed that specified in the National Dust Control Regulations (GN R827 of 1 November 2013), i.e. 600 mg/m²/day (30-day average) at the adjoining residential properties and 1 200 mg/m²/day in non-residential areas. Dust fallout monitoring must be undertaken at the south-western boundary if complaints are received or visible dust leaves the site.

5.2 Noise management

The surrounding environment, property owners and users must not be exposed to and impacted by noise arising from the construction activities, which must comply with the relevant legislation (Western Cape Noise Control Regulations, PN 200 of 2013, as amended).

5.3 Replacement of the Schaapkop outfall sewer

The replacement of sections of the Schaapkop outfall gravity sewer (items OT_09.01 to OT_09.04) involves an existing pipeline that conveys raw sewage at peak design flows of about 570–580 l/s. At these flows, any interruption or blockage would cause a spill or overflow of large volumes of raw sewage into the street stormwater system and the Schaapkop River within minutes. The work must therefore comply with the following:

- **Method statement:** The contractor must submit a method statement for the replacement and the tie-ins, approved by the George Municipality (Civil Engineering Services) and reviewed by the ECO, before any work on the outfall begins. It must identify the receiving and discharge manholes for each section, the tie-in sequence, the standby equipment and the spill response.
- **Off-line construction:** Each new section must be constructed in full, including manholes, bedding and backfill, between its receiving and discharge manholes while the existing pipe remains in service. The new section must be inspected and must pass the specified watertightness test before it is connected.
- **Tie-in:** The existing manholes must be broken open and the new section connected at both ends in a single, pre-planned operation, completed within one hour. All materials, equipment and personnel must be on site and ready before the existing system is opened.
- **Timing:** Tie-ins must take place during the lowest-flow period (normally late at night or early in the morning), in dry weather and never when rain is forecast, because the outfall cannot convey peak wet-weather flows. They must be coordinated with the Municipality's operational staff at the Schaapkop and upstream pump stations, so that the available sump storage is drawn down beforehand.

- **Standby measures:** Over-pumping (bypass) equipment with the capacity specified in the method statement, a vacuum tanker and a spill kit (including hydrated lime and absorbent material) must be on standby at each tie-in. Stormwater inlets downstream of the tie-in points must be temporarily sealed or bunded.
- **Existing pipe and spoil:** Decommissioned sections of the existing pipe must be removed or filled and sealed. Soil contaminated with sewage must be disposed of at a licensed waste disposal facility, and excavated material must be stockpiled away from drainage lines.
- **Spill response:** Any spill must be contained immediately, the affected area cleaned and disinfected, and the incident reported within 24 hours to the George Municipality, the Department and BOCMA, in accordance with section 30 of NEMA and section 20 of the National Water Act, 1998. The ECO must record the incident and its remediation in the monthly report.
- **Supervision:** The ECO, or a person appointed by the ECO, must be present during every tie-in.

5.4 Public realm management

The contractor must implement appropriate measures to control interaction between the construction site and the public realm (roads and open spaces), to prevent accidents.

Appropriate signage must be erected by the contractor at strategic places around the site to warn about the risk of the construction activities and the need for caution by all road users.

5.5 Temporary and permanent site closure procedures

The contractor and the ECO must agree on site closure procedures to ensure that no negative effects occur during periods of inactivity on the site. These must take cognisance of all the outcomes as set out herein.

On completion of the construction phase and any related activities, all areas utilised for the construction activities have to be rehabilitated by removal of all rubble, litter, contaminated soils, structures and infrastructure solely intended for the construction phase and the ECO must certify the site as cleared to the applicant.

Environmental aspect	Monitoring method	Frequency	Responsible party	Timing
If a construction site is closed for a period exceeding one week, a checklist procedure shall be carried out by the contractor in consultation with the ESM. The contractor's safety officer (appointed in terms of the Occupational Health and Safety Act, 1993, Act 85 of 1993), must also check the site and report jointly with the ESM to the ECO on the following:	Site inspection and reporting records	Periodic	Contractor and ECO	During construction and at closure
Fuels / flammables / hazardous materials stores.				
Ensure fuel stores as low in volume as possible.				
Leaks and spills.				
Outlets secure / locked.				
Bunds empty.				
Fire extinguishers serviced and accessible.				
Secure storage areas from accidental damage e.g. vehicle collision.				
Emergency and contact numbers displayed visibly.				
Adequate ventilation to all storage areas.				
Safety officer check prior to closure of site.				
All trenches and manholes secured.				
Fencing and barriers in place.				
Notice boards and signs visible and secured.				
Emergency and management procedures displayed visibly.				
Security officers briefed.				
Fire hazards identified – Emergency Services and security officers notified of any potential threats, e.g. large brush stockpiles and fuel storage.				
Pipe stockpiles wedged and secured.				
Scaffolds secure.				
Inspection schedule and log available to security or contracts staff.				
Cranes and construction equipment secure.				
The ESM must check and report to the ECO on the following:	Site inspection and reporting records	Periodic	Contractor and ECO	During construction and at closure
Wind and dust mitigation in place, e.g. straw, brush packs, dust netting.				
Slopes and stockpiles at stable angle.				
Re-vegetated areas watered, watering schedules and supply secured.				

Environmental aspect	Monitoring method	Frequency	Responsible party	Timing
Detention ponds or channels in place and maintained.				
Water contamination and pollution prevention measures in place and operational.				
Fuels and hazardous stores secured.				
Cement and materials stores secured.				
Toilets empty and secured.				
Refuse bins empty and secured (lids).				
Bunds emptied, clean and treated.				
Drip trays empty and secure.				
Structures vulnerable to high winds secure.				
The Contractor is to ensure that all temporary closure requirements are met before closing the site.	Site inspection and reporting records	Periodic	Contractor and ECO	During construction and at closure

6 IMPACT MANAGEMENT OUTCOMES - OPERATIONAL ACTIVITIES

The following outcomes are desired over a long term as operational activities management outcomes:

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Landscape Buffer and Visual Maintenance	Maintain the 3 m wide indigenous boundary landscape buffer, stepped massing profile, muted earthy paint palette, and low-reflectance exterior finishes to minimize long-term visual intrusion on Blue Mountain Estate.	Visual audit of plant health and canopy growth, replacement of dead/failed vegetation under the Landscape Management Plan, and inspection of building exterior paint and setback areas.	Quarterly during Year 1; bi-annually for Years 2–5; annually thereafter.	Body Corporate / Property Management Company / Landscape Contractor.	Operational phase (minimum 5-year initial management plan).
Lighting and Glare Control	Prevent light spill, glare, and night-time light pollution into surrounding residential properties and transport corridors (N2 and Knysna Road).	Night-time visual inspection of downward-facing, fully shielded bollards/fixtures, movement-activated perimeter lights, and verification of zero upward/sideways light spill.	Bi-annually, and immediately upon receipt of lighting complaints.	Body Corporate / Facilities Manager.	Operational phase (lifetime of complex).

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Traffic, Access and Parking Management	Ensure efficient vehicular movement off Platinum Drive, eliminate gatehouse stacking onto public roads, and ensure all 893 on-site parking bays remain available without street overflow.	Operational audits of the automated gatehouse tag access system, parking allocation checks, and monitoring of vehicle queue lengths at the Platinum Drive access point.	Daily gatehouse operation; monthly parking and traffic flow audits.	Property Management Company / Estate Security.	Operational phase.
Operational Noise and Amenities Management	Prevent noise nuisances and ambient disturbance for adjacent residents in Blue Mountain Village and the Retirement Village in compliance with Western Cape Noise Control Regulations.	Enforcement of complex conduct rules regarding padel/tennis court hours, clubhouse events, and mechanical plant maintenance (generators/pumps); acoustic decibel monitoring upon complaint.	Continuous rule enforcement; bi-annual mechanical plant service checks; immediate audit upon complaint.	Body Corporate / Property Management Company.	Operational phase.
Stormwater Infrastructure and Drainage	Maintain effective stormwater attenuation, prevent off-site flooding or siltation onto neighbouring properties, and maintain correct drainage connections.	Physical inspection and clearing of internal catchpits, attenuation ponds, grid connections, and stormwater outlets linked to the municipal network.	Bi-annually (before and after major rain seasons) and immediately after extreme rainfall events.	Body Corporate Maintenance Manager / Civil Engineer.	Operational phase.
Invasive Alien Plant Control	Prevent the establishment and spread of invasive alien plants in the landscaped areas and the boundary buffer.	Visual inspection of landscaped areas and removal of Category 1 and 2 invasive alien plants.	Bi-annually.	Body Corporate / Landscape Contractor.	Operational phase.
Water Efficiency and Conservation	Minimize municipal potable water consumption and promote long-term water conservation across all 680 residential units.	Utility audit of individual water meter readings, inspection of low-flow fittings, communal rainwater harvesting tanks for irrigation, and drip irrigation efficiency checks.	Monthly water consumption audits; quarterly irrigation system inspections.	Body Corporate / Facilities Manager.	Operational phase.
Solid Waste and Recyclables Management	Prevent odor, litter, pest infestation, or visual degradation from operational domestic waste.	Inspection of the central enclosed refuse facility on Platinum Drive, waste separation/recycling skips, and municipal waste collection schedules.	Weekly refuse room inspection.	Property Management / Cleaning Services Contractor / George Municipality.	Operational phase.

Environmental Aspect / Activity	Desired Impact Management Outcome	Monitoring Methods	Monitoring Frequency	Responsible Person / Party	Timing
Community Grievance Management	Maintain transparent communication with the Blue Mountain Village Home Owners' Association and resolve operational complaints promptly.	Review and logging of neighbour grievances in the Operational Public Complaints Register; bi-annual liaison review with Blue Mountain HOA representatives.	Continuous register maintenance; bi-annual liaison review.	Body Corporate Trustees / Property Manager.	Operational phase.

7 MONITORING AND INSTITUTIONAL ARRANGEMENTS

7.1 Institutional framework

This EMPr informs the applicant and the contractor of their duties in the fulfilment of the project and EMPr objectives, with reference to the prevention and mitigation of environmental impacts caused by construction activities associated with the project. The obligations imposed by the EMPr are legally binding in keeping with the environmental and other legislation, inclusive of municipal bylaws, as specified herein and the conditions imposed in the authorisation of the activity. If any conditions and obligations contained in this document contradict those specified in the standard or project specifications then the more stringent requirement shall prevail, provided that the conditions of the EA and of any water use authorisation shall prevail in all cases.

The land development aspect of the project falls under the jurisdiction of the George Municipality, represented by the planning department that considers and implements the land use applications and approvals related to the authorised development. Approval of the EMPr must be granted by the DEA&DP, prior to commencement of construction activities and must be submitted to the Municipality as a record of the management actions applied on site, following which the environmental aspects of the project fall under the jurisdiction of the Department.

Rescued plants translocated to receiving areas outside the site must be maintained by the applicant for at least 12 months after replanting, in consultation with the owner of the receiving area and the ECO.

Financing of environmental management requirements as outlined in this document, including environmental audits and reviews, are the joint and/or several responsibilities of the applicant and any contractor, as set out above.

7.2 Monitoring programme

The monitoring is essential and should comprise three main aspects:

7.2.1 Baseline measuring

Prior to the start of the project / activity, the site situation and status of the environmental parameters (prior to any impacts associated with the project or activity) must be recorded by the ECO. Recording should include a full photographic record that complies with the following:

- Be fully referenced, e.g. date, time and place of each photo;
- Include all access roads to the site for pavement damage record;
- Include all adjoining buildings for dust and damage record;
- Include the boundary walls and the adjoining properties in Blue Mountain Village for a pre-construction condition record;
- Include the wet areas, stormwater outlets entering the site and the plants and populations marked for rescue;
- Be completed before site handover to the contractor;

- Signed by the contractor as reference record prior to commencement of construction; and
- Should be secured in print and digitally.

7.2.2 Impact (or performance) monitoring

This monitoring should occur periodically and at regular intervals during the construction and where prescribed the operational phase and must be implemented to ensure that environmental impacts are within the predicted levels and that specified environmental performance and rehabilitation targets are being achieved. Monitoring should include a written and photographic record that complies with the following:

- Be fully referenced, e.g. date, time and place of each photo or note;
- Include all areas to be cleared and rehabilitated;
- Include the nursery and the receiving sites of rescued plants, with survival records;
- Include the stormwater outlets, silt traps and the culvert under Platinum Drive;
- Be available to all role-players upon request;
- Be in written and digital format;
- Be fully referenced with places, dates and names; and
- Include a record of events for audit purposes.

7.2.3 Compliance monitoring

This monitoring must ensure that the prescribed mitigation measures are having the predicted and desired effect. The compliance monitoring must be conducted regularly and in keeping with a predetermined checklist that lists all the impacts and mitigation measures contained in this EMPr. A copy of each checklist must be filed on site with the contractor. Where any departure from the EMPr, the environmental authorisation or any statutory obligation occurs or where any damage occurs, a written instruction on remedial action must be issued to the contractor and it must be filed with the applicant (holder of the EA) as well.

7.3 Reporting on compliance

The requirements of Regulation 34 of the Environmental Impact Assessment Regulations, 2014 (as amended) must be adhered to. It determines that the holder of the Environmental Authorisation (applicant) must appoint and remunerate a suitably qualified independent person to conduct an environmental audit to audit compliance with the conditions of the EA and the EMPr.

The appointed auditor must undertake regular environmental audits according to the frequency specified in the EA and submit the prescribed audit report to the competent authority (DEA&DP). The audit report must provide verifiable findings on the level of compliance with the provisions and conditions of the EA and the EMPr.

The ECO must compile monthly compliance reports during the construction phase, including the complaints register and the status of the search and rescue, nursery and receiving sites. The reports must be submitted to the applicant, kept on site and made available to the Department on request.

7.4 Environmental awareness plan

Environmental awareness training must be conducted prior to the commencement of construction activities as set out above. All stakeholders (applicant, contractor, ECO, ESM) must be familiar with the content and requirements of the EMPr and take responsibility for its proper implementation. The applicant is ultimately responsible for ensuring compliance with the EMPr and should include it and reference to it in all contract documentation.

The detail and content of the EMPr and the EA must be explained to all staff during awareness training and where possible, should all supervisors be provided with appropriate hard copy material, such as training notes, or relevant extracts of the EMPr.

The ECO is responsible for ensuring compliance with the training plan and must liaise with the contractor to allow for all construction staff, sub-contractors and service providers to attend environmental awareness training sessions prior to commencing related activities on site.

7.5 Penalty system

Any failure to comply with the EMPr will lead to fines being imposed on the responsible party.

The ECO will recommend for the imposition of fines and penalties for non-compliance with the EMPr and the applicant will have the right to deduct fines from any amounts due to contractor or other responsible party on a regular basis, for failure to comply with the terms and conditions of the EMPr. The applicant, on being notified of the imposition of the fine or penalty, shall take into account inter alia, the nature of the offence, the seriousness of its impact on the environment, the degree of prior compliance / non-compliance, the extent of the contractor's overall compliance with environmental protection requirements and, in particular, the extent to which it is considered necessary to impose a sanction in order to eliminate / reduce future occurrences. All deducted fines shall be used solely for rehabilitation of the environment on completion of the construction activity and the use of the funds shall be open to audit and public scrutiny. The detail of the fines and specific infringements are set out in the Annexure hereto.

7.6 Specific information required by the competent authority

The Department, in its comment of 9 October 2026 on the draft amendment report, requires the following, which are addressed as indicated:

- Search and rescue of Gladiolus liliaceus and Kniphofia sp., and the nursery requirements to ensure its success - Sections 2.1, 2.4 and Annexure H.
- Consultation with BOCMA to confirm whether a wetland occurs on the site, and clarification of the water use authorisation for the development - Sections 1.5, 2.1, 2.3 and 3.1 (FEN Consulting site sensitivity verification, November 2026, and water use licence application).
- Written comment / approval of the George Municipality on the spacing of the site access from Park Road and the road network upgrades - Section 2.3.

- Current confirmation of services from the Directorate: Civil Engineering Services of the George Municipality - Section 2.3.
- Geotechnical verification of the founding conditions for the increased building heights - Section 2.2.

ANNEXURE A: ENVIRONMENTAL AUTHORISATION

ANNEXURE B: PRO FORMA CONTRACTOR AGREEMENT

Client / Applicant: ……

Contract No: …… Contract Title: ……

AGREEMENT RELATING TO THE PROTECTION OF THE ENVIRONMENT AND COMPLIANCE WITH THE CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

The Contractor will not be given right of access to the Site until this form has been signed

I / we, ……{Contractor} record as follows:

1. I / we, the undersigned, do hereby declare that I / we am / are aware of the increasing requirement by society that construction activities shall be carried out with due regard to its impact on the environment.

2. In view of this requirement of society and a corresponding requirement by the employer (client / applicant) with regard to this Contract, I / we will, in addition to complying with the letter of the terms of the Contract dealing with protection of the environment, also take into consideration the spirit of such requirements and will, in selecting appropriate employees, plant, materials and methods of construction, in-so-far as I / we have the choice, include in the analysis not only the technical and economic (both financial and with regard to time) aspects but also the impact on the environment of the options. In this regard, I / we recognise and accept the need to abide by the "precautionary principle" which aims to ensure the protection of the environment by the adoption of the most environmentally sensitive construction approach in the face of uncertainty with regard to the environmental implications of construction.

3. I / we have signed the Declaration of Understanding with respect to the EMPr.

4. I / we acknowledge and accept the right of the employer to deduct, should he so wish, from any amounts due to me / us, such amounts (hereinafter referred to as fines) as the ECO shall certify as being warranted in view of my / our failure to comply with the terms of the Contract dealing with protection of the environment, subject to the following:

5. The ECO and / or employer, in determining the amount of such fine, shall take into account inter alia, the nature of the offence, the seriousness of its impact on the environment, the degree of prior compliance / non-compliance, the extent of the Contractor's overall compliance with environmental protection requirements and, in particular, the extent to which he considers it necessary to impose a sanction in order to eliminate / reduce future occurrences.

6. The ECO shall, with respect to any fine imposed, provide me / us with a written statement giving details of the offence, the facts on which the ECO has based his assessment and the terms of the Contract (by reference to the specific clause) which has been contravened.

Signed …… Date ……

ANNEXURE C: DECLARATION OF UNDERSTANDING

I, ... representing

....., hereby declare that I have read and understood the contents of the Environmental Management Programme (read together with the Project Specifications) for the

Contract ..... relating to the construction activities set out herein above. I also declare that I understand my responsibilities in terms of enforcing and implementing the environmental specifications for the Contract.

Signed: .....

Place: .....

Date: .....

ANNEXURE D: FINES AND PENALTIES FOR INFRINGEMENTS

The maximum fine for any infringement is R90 000,00 (ninety thousand Rand). The maximum fine shall be imposed for any re-occurrence of an infringement. For each re-occurrence a previously given fine will be doubled. Fines may also be imposed for aspects contained in the EMPr but not listed here at the general rate of R5 000,00 for the first occurrence and up to three times the amount (R15 000,00) for repeat infringements.

Construction camp/materials storage area **R2 500,00**
Camp and storage location area not approved by ECO.
Non-security personnel housed on site.
No water and washing facilities provided for staff.
Untidiness and litter at camp and storage area.

Toilet facilities **R5 000,00**
Use of other areas for toilet purposes and / or disposal of chemicals / waste.
Too few toilets.
Toilets dirty and unhygienic.

Materials use, handling, storage and transport **R5 000,00**
Fuel storage:
Unclean and filled fuel tanks and containers stored within undesignated storage area.
No bunds and containment liners in bund - in conflict with EMPr (on soil, no containment, no MSDS).
Hazardous materials:
No emergency procedure to deal with accidents and incidents in place and incidents not reported.
Chemicals and / or waste spilled on ground.
Spills not cleared up immediately.
No register of spills or incidents of hazardous materials.
Use of cement / concrete:
Concrete mixed directly on ground and not on mortar boards and outside of contractor's yard.
Concrete remains not removed immediately and disposed of as waste.

Demarcation of the site **R3 500,00**
Access routes not demarcated, and construction signage not erected.
No demarcation of sensitive 'no-go' areas.
Clearing activities or construction work prior to demarcation of 'no-go' areas.
Areas outside demarcated working areas cleared, damaged or levelled.

Method statements **R1 500,00**
Late or non-submission of method statement.

Earthworks **R5 000,00**
Removal and stockpiling of soil in an unspecified manner.
Stockpiles not located and aligned to minimise impacts or soil removed from site.
Any other materials spoiled or stockpiled without the written permission of the ECO.
Slopes disturbed during construction phase and not stabilised.

Protection of environment **R15 000,00**
Unapproved vegetation removal, damage or tampering.
Animals or birds caught or killed.
Natural features defaced or damaged.
Spill or overflow of sewage caused by failure to follow the approved tie-in method statement.

Vegetation cleared before the search and rescue has been completed and signed off by the botanist and ECO **R30 000,00**
Damage to plants marked for rescue, the nursery or receiving sites.
Unauthorised entry into, or works in, a wetland or buffer area demarcated as a no-go area.

Refuse and waste management **R2 500,00**
No on-site implementation of waste management system.
Waste not collected and contained immediately.
Burning, burying or disposing of waste other than as prescribed.
Waste not disposed of at an approved landfill.

Water consumption **R2 500,00**
Water drawn from unauthorised source.
Water wastage.
No metering.

Dust and noise control **R15 000,00**
Non-compliance with EMPr or National Building Regulations regarding noise.
No dust control netting / cloth or fences.

Effluent and storm water management **R12 500,00**
Effluent and storm water deposited into veld or river.
No precautions to prevent pollution of ground and water resources.
Mechanical equipment dirty and leaking.
Servicing and refuelling of vehicles and equipment not in contractor's yard or over drip trays on site.
No drip trays or drip trays not regularly emptied.
Oil, petrol and diesel-soaked sand not immediately disposed of as hazardous waste to a registered hazardous waste disposal site.
Contaminated water not collected in a conservancy tank or removed from site in appropriate manner.
Washing of trucks delivering concrete / concrete chutes on-site or elsewhere along routes.

Emergency Procedures **R1 500,00**
General:
No emergency procedures set up prior to commencing work.
ECO not advised of any emergencies on site and no record of action taken.
Fire:
Open fires permitted on site and necessary precautions not taken to ensure that fires are not started as a result of site activities.
Inadequate fire-fighting equipment on site.
Safety:
Un-roadworthy construction vehicles used on public roads.
Construction vehicles not adhering to speed limits.
Construction vehicles' loads not secured and national regulations not adhered to.

Uncovered material in vehicles during transportation.
Security:
Security personnel not supplied with protective clothing, office / guard house, ablution, water and refuse collection.
No facilities for cooking and heating supplied for security personnel.

Rehabilitation of the site and contractor's camp **R30 000,00**
Construction equipment and excess aggregate left on site after work completed.
Roads and tracks damaged and not rehabilitated.

Signage **R5 500,00**
No suitable signage erected for staff.
No public information boards erected.

Environmental awareness training **R1 500,00**
No initial environmental awareness training session held for new personnel.

ANNEXURE E: PROJECT START-UP CHECKLIST

ENVIRONMENTAL ASPECT	YES/NO (√ or X)	COMMENTS AND RECOMMENDATIONS
Environmental method statements submitted and approved.		
Copy of the EMPr is on site and declarations signed.		
Environmental awareness training has been given to everyone and the attendance register complete.		
Telephone numbers of emergency services / emergency plan available.		
List of hazardous materials on site, with storage, handling and disposal procedures and relevant MSDS sheets.		
Location and type of fencing erected for no-go area.		
Solid waste management system has been established.		
Wastewater management system has been established.		
Location of construction camp and working area infrastructure complies with specifications.		
Fire-fighting equipment is on site and in good working order.		
Baseline monitoring completed.		
Site administration system set up (diaries).		
Signage in place on and off site.		
Legally correct water and services connections established.		
Authorities approved all construction activities.		
Method statement for the Schaapkop outfall sewer tie-ins approved by the George Municipality and reviewed by the ECO.		
Plant search and rescue completed and signed off by the botanist and ECO; nursery established.		
BOCMA confirmation of wetland status / water use authorisation obtained.		

Completed by: ..... Sign: ..... Date: .....

ANNEXURE F: WEEKLY CHECKLIST

ENVIRONMENTAL ASPECT	YES/NO (√ or X)	COMMENTS AND RECOMMENDATIONS
Contractor's camp neat and tidy, labourers' facilities acceptable.		
Waste control and removal system is being maintained.		
Fire-fighting equipment maintained.		
Wastewater control system is being maintained.		
Boundary and other fences are being maintained.		
Water use management.		
All equipment in good working order and no leakages are visible.		
Site instruction book and diary.		
No-go areas and natural features undisturbed.		
Nursery and rescued plants maintained; register up to date.		
Dust control measures in place and effective.		
Noise control measures are working effectively.		
Erosion control measures in place and are effective.		
Site and alien clearing and landscaping as per plan.		
Hygiene of facilities and toilets.		
Fires and cooking facilities adhere to EMPr.		
Hazardous material storage compliant and no contamination.		
Signage maintained.		
Instructions, transgression and penalties recorded in site diary.		

Completed by: ..... Sign:..... Date: .....

ANNEXURE G: PRO FORMA METHOD STATEMENT FOR USE BY CONTRACTORS

(Word / digital version available on request from EAP)

CONTRACT:…… DATE:……

PROPOSED ACTIVITY (give title of method statement and reference number from the EMPr):

WHAT WORK IS TO BE UNDERTAKEN (give a brief description of the works):

WHERE ARE THE WORKS TO BE UNDERTAKEN (where possible, provide an annotated plan and a full description of the extent of the works):

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start	End

HOW ARE THE WORKS TO BE UNDERTAKEN (provide as much detail as possible, including annotated maps and plans where possible):

Note: please attach extra pages if more space is required

Responsible person: ……

ANNEXURE H: PLANT SEARCH AND RESCUE PLAN

PLANT SEARCH AND RESCUE PLAN: ERF 28005, GEORGE

DRAFT – November 2026

Item	Details
Applicant	[Name of holder of the EA]
Plan prepared by	Virdus Works (Pty) Ltd (EAP), for review and adoption by the appointed botanist
Appointed botanist	Dr Brian du Preez [to be confirmed; SACNASP registration number]
Appointed nursery	[Name and address of nursery, or "temporary on-site nursery"]
Receiving site(s)	[Description and owner consent reference]
CapeNature permit	[Permit number and expiry date]
Version	Draft 1 – to be finalised after the pre-rescue survey (Section H.6.1)

H.1 Purpose and background

This Plant Search and Rescue Plan forms part of the Environmental Management Programme (EMPr) for the residential development of Erf 28005, George, and gives effect to Section 2.4 of the EMPr. It sets out how plants of conservation concern and conservation-worthy plants will be identified, rescued, held in a nursery and re-established before the vegetation on the site is cleared.

In its comment of 9 October 2026 on the draft amendment report, the Department of Environmental Affairs and Development Planning (the Department) recorded that, during its site inspection on 6 October 2026, the vegetation showed signs of recovery, several *Erica* species and numerous individuals of *Kniphofia* sp. were present, and a few individuals of *Gladiolus liliaceus* (Large Brown Afrikaner) were recorded. The Department requires a search and rescue operation for *Gladiolus liliaceus* and *Kniphofia* sp., and requires the EMPr to describe the operation and the nursery requirements to ensure that it succeeds.

The site sensitivity verification (July 2023) found secondary succession vegetation of low species diversity, with a population of *Kniphofia* in the north / north-western portion and greater diversity (*Erica*, restios and other species) in the southern portion. It recommended that *Kniphofia*, *Halleria* and *Diospyros* plants be rescued and used in natural landscaping or replanted in a natural environment.
During the public participation process, interested and affected parties reported that Gladiolus fourcadei, a threatened (Red-listed) species, had been seen on the site. The species was not recorded by the specialists or by the Department, but the pre-rescue survey must search for it specifically (Section H.5).

The aquatic specialist (FEN Consulting, November 2026) has confirmed that the wetland signatures on the site are artificial (human-induced) and do not constitute a wetland or watercourse in terms of the National Water Act, 1998. They are the result of the stormwater outlets that terminate on the site, together with the shallow, highly organic topsoil over silty / clayey alluvium with a perched water table recorded in the Engineering Geological Report TG23/030/3 (Terra Geotechnical, August 2023). This plan is required regardless of the wetland status, because it gives effect to the Department's botanical requirement and to Condition 12 of the EA, which requires the EMP to include procedures for the search and rescue of conservation-worthy vegetation, including an inventory of plants, especially bulbous species, by a qualified botanist (see also Section 2.6 of the approved EMP of May 2012). The moist, clay-rich soil conditions are, however, relevant to the handling of the rescued plants and to the selection of receiving sites (Sections H.7 and H.8).

H.2 Objectives and scope

The objectives of the plan are to:

- locate, record and mark all individuals of the target species (Section H.5) on the site before any vegetation is cleared;
- rescue as many of the marked plants as is practicable, with the priority on *Gladiolus liliaceus* and *Kniphofia* sp.;
- hold rescued plants in a nursery under conditions that ensure their survival until they can be replanted;
- re-establish the rescued plants in the landscaped areas of the development or in an approved natural receiving site with similar soil and moisture conditions;
- salvage the topsoil seed bank of the more diverse southern portion of the site for use in the landscaping; and
- monitor the survival of the rescued plants and report the results to the Department.

The plan applies to the whole of Erf 28005 and to any area outside the erf that will be cleared for the development, including the routes of external services. No vegetation may be cleared anywhere on the site, including for the installation or connection of stormwater pipes, and whether the clearance is undertaken in terms of the existing EA and the approved EMP of May 2012 or in terms of the amended EA and this EMPr, until the search and rescue has been completed and signed off (Section H.6.6).

H.3 Legal requirements and permits

Environmental Authorisation and EMPr: The search and rescue is a requirement of Condition 12 of the EA issued on 22 August 2011 (as corrected on 29 August 2011 and amended on 26 February 2013) and of the approved EMP of May 2012, as well as of this EMPr and the Department's comment of 9 October 2026. It must be completed before any site clearance.

Provincial nature conservation legislation: Many indigenous flora, including members of the iris family (Iridaceae), are protected in the Western Cape. Before any plants are removed, the botanist must confirm with CapeNature which permits are required for picking, possessing, transporting and replanting the target species. The applicant must obtain those permits. A copy of each permit must be kept on site and at the nursery.

Landowner consent: The written consent of the owner of any receiving site outside Erf 28005 (e.g. the George Municipality for public open space) must be obtained before any plants are moved there.
National Water Act: BOCMA has cleared the applicant to proceed with a water use licence application in terms of section 21(c) and (i) of the National Water Act, 1998 (Act 36 of 1998). No vegetation may be cleared until the licence, or BOCMA's written confirmation that no licence is required, has been obtained. The rescue must comply with the conditions of that authorisation.

Alien and invasive species: Category 1 and 2 invasive alien plants (e.g. *Cortaderia selloana* (Pampas Grass) and *Eucalyptus* saplings recorded on the site) may not be moved to the nursery or receiving sites. They must be removed and disposed of in accordance with the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) and its Alien and Invasive Species Regulations.

H.4 Roles and responsibilities

Role	Responsibilities
Applicant (holder of the EA)	Appoint the botanist and the nursery; obtain the CapeNature permits and landowner consent; fund the rescue, nursery holding, replanting and 12 months of aftercare; submit the reports to the Department.
Botanist (SACNASP-registered)	Finalise this plan; undertake the pre-rescue survey; identify and mark the plants; supervise the rescue, nursery holding and replanting; set and assess the success criteria; compile the completion and monitoring reports.
Environmental Control Officer (ECO)	Verify that no clearing takes place before sign-off; inspect the marked plants, nursery and receiving sites; record non-compliance; include the status of the rescue in the monthly ECO reports.

Role	Responsibilities
Rescue team / horticultural contractor	Lift, handle, transport and pot or replant the plants under the supervision of the botanist; collect seed and cuttings.
Nursery operator	Receive, record and maintain the plants in accordance with Section H.7; keep the nursery register; report losses and pest or disease problems to the botanist.
Main contractor	Protect the marked plants and the nursery from construction activities; do not clear any area before written sign-off; strip and stockpile topsoil as directed.
Landscape contractor / Body Corporate	Incorporate rescued plants and salvaged topsoil in the landscaping; maintain the replanted areas after handover.

H.5 Target species

The target species are listed below. The botanist must confirm the identity of the species on the site (including the *Kniphofia* species, recorded in the SSVR as *K. uvaria*) and must add any other species of conservation concern or conservation-worthy plants found during the pre-rescue survey.

Species	Priority	Growth form and habitat	Rescue approach
Gladiolus liliaceus (Large Brown Afrikaner)	High (Department requirement)	Cormous geophyte (iris family) of heavy clay soils; grows in the cool, wet season and is dormant in summer; flowers in spring to early summer. Red List status: Least Concern.	Mark plants while in leaf or flower. Lift the corms, with the cormlets, once the leaves have died back; store them dry, or pot them; replant at the start of the winter rains.
Gladiolus fourcadei (reported by I&APs)	Survey target	Threatened (Red-listed) cormous geophyte reported by I&APs but not recorded by the specialists or the Department; reported to be best identified from October to December.	Search for it specifically during the pre-rescue survey. If it is found, mark and record the plants, notify CapeNature and the Department, and follow CapeNature's advice on rescue or protection in place before any clearance near the plants.
Kniphofia sp. (probably *K. uvaria*, Red Hot Poker)	High (Department requirement)	Clump-forming perennial with fleshy roots, typical of damp and seasonally wet places; numerous on the site, especially in the north / north-western portion.	Lift whole clumps with a large root ball; divide large clumps into sections with several growing points; pot or replant immediately. Plants resent disturbance and may take a season to recover, so expect reduced flowering in the first year.
Halleria lucida (Tree Fuchsia)	Medium (SSVR)	Shrub or small tree.	Lift small individuals (up to about 1 m) with a root ball. For larger plants, take semi-hardwood cuttings and collect seed.
Diospyros dichrophylla (Poison Star-apple)	Medium (SSVR)	Shrub or small tree.	As for *Halleria lucida*.
Erica spp. (incl. *E. gracilis*)	Medium	Fine-rooted fynbos shrubs, more common in the southern portion; sensitive to root disturbance and to fertiliser.	Mature plants seldom survive transplanting. Collect seed and cuttings, translocate small plants as intact sods with their soil, and salvage the topsoil of the southern portion.
Other geophytes (e.g. *Hypoxis villosa*, *Pauridia flaccida*, *Oxalis* spp., *Zantedeschia aethiopica*)	Low (when found)	Bulbs, corms and tubers recorded in the SSVR.	Rescue when encountered during the rescue of the priority species; suitable for the landscaped areas.

H.6 Search and rescue method

H.6.1 Pre-rescue survey

The botanist must survey the entire site on foot in parallel transects not more than 5 m apart, during the flowering period of the target species. The survey must include a specific search for Gladiolus fourcadei and other threatened species, for which the botanist may consult the Custodians of Rare and Endangered Wildflowers (CREW). For *Gladiolus liliaceus* and *Kniphofia* sp. this is spring to early summer, which means the survey should take place as soon as possible in the current season (November–December 2026) while the plants and their leaves are still visible. If the survey cannot cover the flowering period of a target species, a second survey must be done in the next flowering season before clearing of the relevant area.

Each plant or group of plants to be rescued must be marked in the field with a numbered, brightly coloured peg or flag that will remain visible after the leaves of geophytes have died back. Its position must be recorded by GPS. Photographs must be taken.

The botanist must compile a rescue register (Appendix H1) and a map showing all marked plants, the estimated number of individuals per species, the areas from which topsoil is to be salvaged, and any other species of concern that are found.

The survey results must be used to finalise this plan, including the nursery capacity, the receiving sites and the success criteria.

The marked plants and populations must be demarcated as no-go areas until they have been rescued.

H.6.2 Permits and preparation

Obtain the CapeNature permits and the receiving site owner's consent (Section H.3).
Prepare the nursery (Section H.7) and, where plants will be replanted directly, the receiving site, before any plants are lifted.

Brief the rescue team on the identification of the target species, the handling methods and the labelling system.

H.6.3 Rescue methods

Geophytes (including _Gladiolus liliaceus_): Lift the corms with a garden fork or spade, digging at least 200–300 mm deep and wide enough around the marked position to avoid damaging the corm and cormlets. Lifting is best done once the leaves have died back. If the plants must be lifted while in leaf, lift them with an intact block of soil and pot them immediately without disturbing the roots. Keep the cormlets with the parent corm.

Kniphofia_ sp.: Water the clump thoroughly the day before lifting. Lift the whole clump with a spade, keeping as large a root ball as possible. Cut the leaves back by about half to reduce moisture loss. Large clumps may be divided into sections with several growing points and healthy roots. Pot or replant the same day.

Woody plants (_Halleria lucida_, _Diospyros dichrophylla_): Only lift individuals that can be moved with an intact root ball (generally up to about 1 m tall). Prune them back by about one third after lifting. For larger plants, take cuttings and collect seed for propagation in the nursery.

Erica_ spp. and restios: Collect ripe seed and take cuttings for propagation by a specialist fynbos nursery. Small plants may be lifted as intact sods, about 300 mm × 300 mm × 200 mm deep, and moved directly to the receiving site.

Topsoil seed bank: At the time of clearance, the topsoil of the southern portion (to a depth of about 150–200 mm, as directed by the botanist) must be stripped separately and stockpiled in heaps not higher than 1,5 m, in

an area that will not be disturbed. It must be kept free of invasive alien plants and used in the landscaping as soon as possible, preferably within six months, because the viability of the seed bank declines with time.

H.6.4 Handling, labelling and transport

Every plant, pot, bag or batch must be labelled with its register number, species and date of rescue.
Lifted plants must be kept moist and shaded and must not be left exposed to sun or wind. Plants must reach the nursery or receiving site and be potted or replanted on the day of lifting.

Plants must be transported in a covered vehicle, packed so that root balls are not crushed or broken.

H.6.5 Fauna

Immediately before and during the rescue and the subsequent clearance, the ECO or a suitably qualified specialist must check the area for frogs, reptiles, tortoises and other slow-moving fauna and relocate them to suitable habitat outside the construction area, as required by Section 2.4 of the EMPr.

H.6.6 Completion and sign-off

Once the rescue is complete, the botanist and the ECO must confirm in writing that all the marked plants have been rescued, or that the reasons why individual plants could not be rescued have been recorded.

The search and rescue completion report (Section H.10) must be submitted to the ECO and to the Department before any vegetation is cleared.

H.7 Nursery requirements

Rescued plants that cannot be replanted immediately must be held in a nursery that meets the requirements below. The nursery may be a temporary nursery in the contractor's yard on the northern portion of the site, outside any no-go area and protected from construction activities, or an established indigenous plant nursery in the George area. An established nursery is preferred for the *Erica* seed and cuttings and for any holding period of more than three months.

Aspect	Minimum requirement
Location and security	Level, well-drained area, fenced and lockable, away from dust, vehicle movement and stockpiles; accessible for watering and inspection. On-site nurseries must be shown on the site layout and approved by the ECO.
Shelter	Shade netting of about 40% over plants recovering from transplanting, with wind protection on the exposed sides. Plants must be hardened off in full sun for at least four weeks before replanting.
Water	A reliable supply of water from an authorised source (municipal connection, rainwater or other authorised source), within the George Municipality's water restrictions in force at the time. Irrigation must suit each species: regular watering of *Kniphofia* and woody plants; moderate watering of geophytes while in leaf; and no watering of dormant geophytes in summer, to prevent corm rot.
Containers	*Kniphofia* clumps and woody plants: deep nursery bags (at least 10–20 litre, depending on root ball size). Geophytes: individual pots or seedling trays of adequate depth (planting depth about two to three times the height of the corm). Seed and cuttings: trays as directed by the nursery.
Growing medium	A well-drained, acidic to neutral mix of composted bark or loam and coarse sand, with about one third of topsoil from the site to retain the soil micro-organisms. For geophytes, use about 50% loam and 50% sand with a pH of about 6,0–6,5. No phosphate-rich fertiliser may be used on *Erica* or other fynbos plants.

Aspect	Minimum requirement
Dormant geophytes	Corms lifted dry may be stored over summer in labelled paper bags or trays in a cool, dry, well-ventilated and rodent-proof place, and inspected monthly for rot. Alternatively, they may be kept in their pots, dry and in the shade, until the autumn.
Hygiene and pests	Containers and benches must be clean; weeds must be removed regularly; invasive alien plants may not be brought into the nursery. Corms must be protected against rodents and porcupines, and plants against snails, aphids and fungal rot. Diseased plants must be isolated.
Records	The nursery must keep a register (Appendix H1) of all plants received, potted, divided, lost and dispatched, cross-referenced to the rescue register numbers, and must report losses of more than 10% in any month to the botanist.
Inspections	Weekly by the nursery operator; monthly by the ECO (as part of the ECO report); at least quarterly by the botanist, who must advise on corrective action.
Holding period	As short as possible and generally not more than 12 months. Plants must be replanted in the first suitable planting season after the receiving site is ready (Section H.8).

H.8 Receiving sites and replanting

Rescued plants must be replanted in the following order of preference:

1. Within the development, in the landscaped areas and the landscaped buffer along the southern and western boundaries, in accordance with the landscape development plan (Kainos Landscape Architects, Rev 03, 17 November 2026), which includes Kniphofia beds and a fynbos mix suited to rescued plants, as finalised in consultation with the botanist. The moist, clay-rich soils of the site suit *Kniphofia* and *Gladiolus liliaceus*.
2. In a nearby area of natural or semi-natural public open space with similar soil and moisture conditions that will not be developed, such as the open space around the attenuation pond on Erf 26675 (Schaapkop Dam), subject to the owner's written consent and the CapeNature permit.
3. Any other site approved by the botanist, CapeNature and the landowner, for example a conservation or botanical garden that will accept the plants.

Receiving sites must have similar soil and moisture conditions to the source habitat, be secure from future development, and be free of invasive alien plants or be cleared of them before planting.

Replanting must comply with the following:

- **Timing:** Geophytes must be planted in autumn at the start of the winter rains (about April to June). *Kniphofia* and woody plants are best planted in autumn or winter. Planting at other times requires irrigation until the plants are established.
- **Method:** Prepare planting holes larger than the root ball and loosen the soil to about 300 mm. Plant at the same depth as in the source habitat (corms at about 70–100 mm), water in thoroughly and apply a mulch of chipped indigenous material. No phosphate-rich fertiliser may be used.
- **Marking:** Mark replanted plants or groups so that they can be found during monitoring, and record their positions by GPS.
- **Aftercare:** Water weekly during the first dry season unless there is sufficient rain. Control weeds and invasive alien plants at the receiving sites for at least 12 months.

H.9 Monitoring and success criteria

What	When	By whom
Marked plants protected (no-go areas intact)	Weekly until rescued	ECO
Nursery condition and register	Weekly / monthly / quarterly	Nursery operator / ECO / botanist
Survival of replanted plants	3, 6 and 12 months after replanting	Botanist

What	When	By whom
Emergence and flowering of geophytes	First growing and flowering season after replanting	Botanist

The botanist must set the success criteria after the pre-rescue survey. As a minimum, the following targets apply:
- at least 70% survival of rescued *Kniphofia* and woody plants 12 months after replanting;
- emergence of at least 70% of the replanted *Gladiolus liliaceus* corms in the first growing season after replanting; and
- the establishment of propagated *Erica* plants in the landscaped areas, as recorded in the 12-month monitoring report.

If a target is not met, the botanist must identify the cause and recommend corrective action, such as additional irrigation, replacement from nursery stock or propagated material, or the protection of plants from grazing or trampling. The applicant must implement the recommendations.

H.10 Records and reporting

Rescue register and nursery register (Appendix H1): kept up to date by the botanist and nursery operator and made available to the ECO and the Department on request.

Search and rescue completion report: submitted to the ECO and the Department before site clearance. It must contain the survey findings and map, the CapeNature permit, the number of plants rescued per species, their destination (nursery or receiving site), photographs, any plants that could not be rescued and the reasons, and the written sign-off by the botanist and the ECO (Section H.6.6).

Monitoring reports: at 3, 6 and 12 months after replanting, including the survival rates against the success criteria and any corrective action. These reports must be included in the environmental audit reports submitted in terms of the EA and EMPr, and in any reports that the CapeNature permit requires.

H.11 Indicative programme

Activity	Indicative timing
Appoint botanist and nursery; apply for CapeNature permits	Immediately
Pre-rescue survey, marking and register (flowering season)	November–December 2026, or the next spring if missed
Rescue of *Kniphofia*, woody plants and seed / cuttings	After the permit is issued and before clearance
Lifting of *Gladiolus liliaceus* corms	After the leaves have died back (early to mid-summer), and before clearance
Completion report and sign-off	Before any vegetation clearance
Topsoil salvage from the southern portion	At the start of clearance
Nursery holding	Until the first suitable planting season after the receiving site is ready
Replanting	Autumn / winter (about April–July)
Monitoring and reporting	3, 6 and 12 months after replanting

Appendix H1: Rescue and nursery register (template)

No.	Species	GPS position	Qty	Date lifted	Destination	Date replanted	Condition / remarks