



Johan Neethling Environmental Services cc

ENVIRONMENTAL IMPACT ASSESSMENTS

EXECUTIVE SUMMARY

DRAFT BASIC ASSESSMENT REPORT (PRE-APP)

PROPOSED RESIDENTIAL DEVELOPMENT (GLETWYN GARDENS, KUILSRIVIER) ON REM 419/12, REM 419/62, REM 419/82, 419/11, 419/10 AND 419/117 STELLENBOSH

BACKGROUND AND DESCRIPTION OF THE PROPOSED DEVELOPMENT

Environmental Authorisation (EA) is sought for the Gletwyn Gardens Residential Development in Kuilsrivier on Portions of Farm Saxenburg No 419, Stellenbosch.

The development is proposed on the following portions: Rem 419/12, Rem 419/62 and Rem 419/82 owned by the Vorentoe Property Trust and Portions 419/11 and 419/117 and Rem 419/10 and owned by the South African National Roads Agency Ltd (SANRAL). The Applicants, Buffdaxco 10 (Pty) Ltd, have an agreement with the respective landowners to launch this application.

The proposal is for a high-density residential development consisting of 875 apartments in 61 buildings of 3 storeys each (ground floor plus 3 floors above). A total of 508 one bedroom, 244 two bedroom and 123 three bedroom apartments are planned. The 875 apartments will be served with 1548 parking bays both for visitors and residents.

A clubhouse for residents is proposed to the southern side of the development footprint.

The total area of the site is 9.7ha. This gives a gross density of 76.5 units per ha, including the Eskom servitude of 2.6ha. The proposed development footprint is 7.1ha in extent excluding the Eskom servitude. This gives a density of 104.5 units/ha.

Open Space of 18509 m² is proposed. This amounts to 31% of the site. The minimum required is 5849m² which amounts to 10% of the site. The proposed open space area is therefore more than 3 times that which is required by the City of Cape Town for this type of development.

An onsite sewerage treatment package plant of 400kl/day maximum capacity is proposed. This plant will consist of a pump station with 12 hr storage capacity and 5x80 kl/day modules of containerized membrane Bio-Reactors (MBR) (these can be implemented in a phased approach), a sludge handling and disposal facility and an emergency overflow connection to the existing sewerage network. Treated waste water will discharge into a temporary storage dam, with a 900 m³ capacity, from which the treated water will be pumped to a large irrigation dam. Landscaped areas and gardens in the estate will be irrigated from this dam.

Access to the proposed residential development is proposed via Zevenhof Road, with the main security controlled entrance opposite the existing Zevenhof Road/Kavalier Street intersection. An

emergency access is proposed off Skilpaddam Road. Roundabouts are proposed at the Kavalier Street- and Siena Crescent-intersections along Zevenhof Road to assist vehicles from the side streets to enter Zevenhof Road, as well as function as traffic calming along Zevenhof Road.

The Storm Water Management Plan depicts the location of the on-site stormwater attenuation facilities and how these facilities will be able to fulfil both the roles of public open space and detention ponds. To improve the quality of storm water, so-called Bio-retention cells will be introduced where storm water is retained for a longer periods and aquatic vegetation used to polish the water before release.



Fig 1: Locality and farm portions



Fig 1: Proposed site development plan

LISTED ACTIVITIES AND LEGISLATIVE REQUIREMENTS

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
12	<p>The development of—</p> <ul style="list-style-type: none"> (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; <p>where such development occurs—</p> <ul style="list-style-type: none"> (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; — <p>excluding—</p>	<p>The drainage channel that crosses the site is to be re-routed along the Eskom servitude to form a feature in the landscaping of the open space area. The old channel is considered a watercourse and it is expected that the rerouted channel will retain this status.</p> <p>Some infrastructure such as pedestrian and vehicle bridges, foot paths, roads and other infrastructure of more than 100m² may be constructed within 32m of the banks of the re-routed channel.</p>

	<p>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p> <p>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</p> <p>(dd) where such development occurs within an urban area;</p> <p>(ee) where such development occurs within existing roads, road reserves or railway line reserves; or</p> <p>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</p>	
19	<p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p>	

28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional.	The whole site is used for agricultural purposes and developing the residential estate triggers this listed activity. The site is 9.5ha in extent and about 7.1ha will be developed. The rest will form open space and gardens. The site is considered to be outside the urban edge and the threshold for triggering this listed activity is 1ha.
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ALTERNATIVES

A non-perennial water course (storm water drainage channel) crosses the site from north-east to south-west. Retaining the channel in its present position would have meant a wide buffer zone on either side of the channel of undevelopable land apart from open space and landscaping. **This was the 1st Alternative considered.** It was non-preferred due to the constraints placed on the development potential of the site.

The fact that a very large portion of the site, within the Eskom power line servitude, can in any event only be used for open space, landscaping and recreation, led to the design and planning of the **2nd Alternative (Preferred)**. In this preferred alternative the storm water channel no longer runs diagonally across the site but is realigned to within the Eskom servitude. The old channel will be filled in, greatly enhancing the development potential of the site.

The new channel under the Eskom Power Lines was designed to accommodate expected higher rainfall and more intense storm events due to climate change. The new channel will be landscaped and will form part of the open space and recreation area.

HERITAGE

After submitting a NID to Heritage Western Cape the latter indicated in a ROD dated 21 July 2020 that, as there is no reason to believe that the proposed residential development on Portions 10, 11, 12, 62, 82, 117 Farm No 419, Kuilsriver will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required

ROADS

The security-controlled access is proposed to consist of two lanes in and two lanes out ($\pm 3,5$ metres wide each), as well as a services lane ($\pm 5,0$ metres wide). The security controls are proposed ± 45 metres from the splitter island of the roundabout to Zevenhof Road, which is considered sufficient to accommodate stacking at the access.

Calculations in the TIA indicate that the proposed Gletwyn Gardens Development will generate a total of 799 AM trips (200 In and 599 Out) and 799 PM trips (599 in and 200 out). The TIA suggests a number of interventions to accommodate the expected volume of traffic generated by the Gletwyn Gardens development.

A second access for emergencies is proposed off Skilpaddam Road. This access will also be used by construction vehicles during the construction phase.

SERVICES

Potable water supply

The proposed development area forms part of the city's water supply masterplan of the area. Water supply will be provided from the existing network and the 6000 kl Zevenwacht reservoir. New water supply networks and connecting mains may have to be constructed.

Sewer

An onsite site sewerage treatment package plant of 400kl/day maximum capacity is proposed. This plant will consist of a pump station with 12 hr storage capacity, 5x 80 kl/day modules of containerized membrane Bio-Reactors (MBR) (these can be implemented in a phased approach), a sludge handling and disposal facility and an emergency overflow connection to the existing sewerage network. Treated waste water will discharge into a temporary storage dam, with a 900 m³ capacity, from which the treated water will be pumped to a large irrigation dam. Landscaped areas and gardens in the estate will be irrigated from this dam.

Electricity

The electricity supply requirements will be finalised at detail design stage and communicated with City of Cape Town Electrical Planning Department. The latter indicated that the necessary electrical capacity for the development is available but is not reserved for the development. It will be allocated on a first come first serve basis. The official application process must be followed to reserve the necessary capacity.

Traffic

The security-controlled access is proposed to consist of two lanes in and two lanes out (\pm 3,5 metres wide each), as well as an emergency/services lane (\pm 5,0 metres wide). The security controls are proposed \pm 45 metres from the splitter island of the roundabout to Zevenhof Road, which is considered sufficient to accommodate stacking at the access.

Calculations in the TIA indicate that the proposed Gletwyn Gardens Development will generate a total of 799 AM trips (200 In and 599 Out) and 799 PM trips (599 in and 200 out).

The TIA indicates a number of interventions to accommodate the expected volume of traffic generated by the Gletwyn Gardens development.

Stormwater management

In the Storm Water Management Plan cognizance was taken of the requirements of the City of Cape Town policy entitled "Management of urban storm water impacts policy", which stipulates that the sustainable urban drainage system (SUDS) approach be used to reduce the quality and quantity impacts of storm water on receiving aquatic environments. The Storm Water Management Plan shows the various components of the storm water system and to improve the quality of storm water so-called Bio-retention cells will be introduced where storm water is retained for longer periods and aquatic vegetation used to polish the water before release.

SUMMARY OF ASSESSMENT OF IMPACTS

Impact	Significance rating after mitigation
Construction phase	
Employment opportunities	Medium (positive)
Traffic impacts	Low (negative)
Noise impact	Low (negative)
Visual impact	Low (negative)
Dust impact)	Low (negative)
Operational Phase	
Traffic impacts)	Low (Negative)
Noise impact	Negligible
Visual impact	Medium (Negative)
Employment and contractor opportunities	Medium (Positive)

CONCLUSION

The proposed development will tie into the services infrastructure in the area. The site has been identified in forward planning exercises as urban in terms of the Tygerberg District Spatial Plan and for urban development in Government Notice 874/1982 dated 07-05-1982 which indicates that the land units to the west of Zevenwacht Link Road have been excluded from the provisions of Act 70/1970.

Development is feasible and ecologically acceptable as it would occur on previously cultivated land. Similar activities occur in the surrounding area. The site is easily accessible along major roads in the vicinity. Impacts identified can be mitigated to acceptable levels of significance.

The construction phase will create employment and contractor opportunities at various skills levels. During the operational phase of the estate employment opportunities in the fields of security, maintenance, gardening and domestic work can be expected. Contractors will also benefit by supplying services such as electrical repairs, plumbing and garden maintenance.

In summary, due to a lack of sensitive ecological features on site, forward planning documents designating the site for urban development and the economic benefits it is the EAPs professional consideration that the activity be authorised.