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Reference number:Erf 21/195, GeorgeDate:7/25/2023

Enquiries:

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ATTENTION: MR N AGENBAG

Kantey & Templer Pty Ltd PO Box 458 George 6530

ERF 21/195, KRAAIBOSCH GEORGE: PROPOSED DEVELOPMENT

AVAILABILITY OF BULK WATER AND SEWER INFRASTRUCTURE & ASSOCIATED COSTS AND CHARGES

Your request dated 17 March 2023 to accommodate the proposed development in the George Municipal water and sewer system refers.

The George Municipality confirms that the proposed development was taken into consideration in the current water and sanitation master plans as part of the Kraaibosch development area.

A technical report was prepared by GLS dated 13 June 2023, attached to this letter as annexure A, B and C to confirm water and sanitation system upgrades required to support the proposed development.

PROPOSED DEVELOPMENT

The proposed implementation plan of the development, received as part of the technical report is included in Annexure A.

WATER AND SEWER BULK INFRASTRUCTURE CAPACITY

In line with general growth and demand, new supporting bulk infrastructure must be constructed, and existing infrastructure upgraded where necessary to accommodate the services demand of all new developments in George.

The capacity of the treatment works, and bulk infrastructure is discussed below.

Treatment Works

a) Water Treatment:

- The Water Treatment Works (old and new) is currently operating under constraint.
- A ±4.5MI/day capacity upgrade of the old treatment works is in progress with an estimated completion date of August 2023. A 20MI/day capacity upgrade of the new treatment works is in progress with an estimated completion date in the first part of 2025.
- The treatment works will have sufficient capacity for the development in its entirety once the ±20Ml/day capacity upgrade is commissioned.

Should a phased development be proposed, the Municipality will consider the demand per phase vs availability at the time.



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b) <u>Wastewater Treatment:</u>

- The Outeniqua Wastewater Treatment works has sufficient capacity to support the development.

Bulk Pipelines and Pump Stations

a) <u>Water</u>

- <u>Kraaibosch reservoir and tower reservoirs</u>: The development falls within the George Main Zone that supplies the Kraaibosch reservoir and tower zone. Sufficient spare capacity exists within the zones.

b) Sanitation

- <u>Meul Pump Station and Rising Main</u>: The pump station and a portion of the rising main is currently under development, with an anticipated commissioning date of October 2024. The pump station and rising main is operating near capacity. The pump station and associated rising main will have sufficient capacity for the development in its entirety once the upgrade to the pump station and rising main is commissioned.
- <u>Schaapkop Pump Station and Rising Main</u>: The pump station and a portion of the rising main is currently
 under development, with an anticipated commissioning date of June 2025. The pump station and rising
 main is operating near capacity. The pump station and associated rising main will have sufficient capacity
 for the development in its entirety once the upgrade to the pump station and rising main is commissioned.
- <u>Kraaibosch Pump Station</u>: The pump station has sufficient capacity to support the development. The upgrading of the pump station is not planned for implementation until 2036.

Should a phased development be proposed, the Municipality will consider the demand per phase vs availability at the time.

COMMENCEMENT OF DEVELOPMENT

The development, in its entirety or in phases, is subject to confirmation by the Director: Civil Engineering Services regarding the availability of water supply & treatment capacity and sanitation bulk conveyance & treatment capacity at the time of the development implementation, or if developed in phases before the commencement of each phase.

A development/implementation program is to be provided by the Developer when requesting confirmation of the capacity from the Director: Civil Engineering Services. If the Developer does not adhere to the program provided and approved by the Director: Civil Engineering Services, the Director: Civil Engineering Services will be entitled to revise the availability of such bulk capacity.

No development may connect to the municipal water and sewer system unless the required bulk and link infrastructure is available, and a services agreement is signed between the Developer and the Municipality.

Water and Sewer Bulk Infrastructure Upgrades Required

The summary of the technical report concludes that the total pro-rata cost for water and sewer infrastructure upgrades in support of the development amounts to R 11 850 000.00 excluding VAT.

It should be noted that upgrades to the bulk sanitation infrastructure <u>includes interim arrangements (section 4.4.3 of</u> the technical report) until such time that the infrastructure of the neighbouring development to the East, Erf 3/195 is <u>in place to allow drainage of the development</u>. The interim infrastructure requirements are considered development specific and will be for the full account of the developmer.

Table 2: Summary of General and Development Specific Upgrade to the Water and Sewer System
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Description	Report reference	Water (excl. VAT)	Sewer (excl. VAT)	Total (excl. VAT)
General items to address existing problems: Bulk System	3.4.1	R 2 409 000.00	R 2 879 000.00	R 5 288 000.00
Development Specific items: Distribution / Reticulation System	-	R 0.00	R 0.00	R 0.00

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Description	Report reference	Water (excl. VAT)	Sewer (excl. VAT)	Total (excl. VAT)
General items to address existing problems: Distribution / Reticulation System	4.4.1	R 0.00	R 9 000.00	R 9 000.00
Development Specific items: Distribution / Reticulation System	3.5.2 4.4.2	R 1 756 000.00	R 4 797 000.00	R 6 553 000.00
Total		R 4 165 000.00	R 7 685 000.00	R 11 850 000.00

Reimbursement of expenditure

In term of section 66(4) of the Planning By-law, the Developer will be required to make a proportional contribution to municipal public expenditure according to the normal need arising from the approval. The Developer will be reimbursed for the actual expenditure incurred for any services provided by the Developer above the normal need, up to the maximum value equal to the applicable Development Charges calculated for the services as per the approval, subject to normal escalation.

For this development, the development specific items required are confirmed in sections 3.5.2, 4.4.2 and 4.4.3 (interim requirements) of the technical report.

Availability of bulk services

Some of the bulk water and sewer system items are currently being addressed, i.e., the extension of the capacity of the Water Treatment Works, the Meul and Schaapkop pump stations and associated rising mains. Development Contributions payable by the Developer will cover the cost of the pro-rated development contribution of these infrastructure items.

However, the remaining items (referred to as general items in the technical report) must be addressed to accommodate the development and are to be constructed by the Developer. The pro-rata amount more than the development specific demand will be credited against the Development Contributions payable. The Developer's appointed registered Engineer will be required to submit a motivational report, indicating the quantum of services provided.

Description	Estimated Cost	Estimated Pro- rata Cost	Pro-rata %	DC Credit % of actual cost
Water (refer to section 3.5.1 and 3.5.2)			
General items to address existing problems: Bulk Water System ^A	R 360 721 000	R 2 409 000	0.67%	99.33%
Development Specific items: Water Distribution System	R 1 756 000	R 1 756 000	100%	0%
Sewer (refer to section 4.3.1, 4.4.1 and	d 4.4.2)			
General items to address existing problems: Bulk Sewer System ^A	R 264 873 000	R 2 879 000	1.09%	98.91%
General items to address existing problems: Sewer System	R 423 000	R 9 000	2.13%	97.87%
Development specific items: Sewer System	R 14 855 000	R 4 797 000	32.29%	0%

Table 3: Items to be addressed by the Developer for which credits may be applicable

Notes:

The above costs are indicative only and will vary according to actual cost of construction.

^A Under construction by George Municipality

Link services requirements

The Developer will not be entitled for any reimbursement relating to the provision of any link and/or internal services.

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A portion of the sanitation infrastructure of the development is dependent on the neighbouring development to the East, Erf 3/195. The Developer will be required to construct, operate, and maintain such interim sanitation infrastructure at own cost until such time that the sanitation infrastructure of Erf 3/195 is commissioned. The interim infrastructure requirements and those ultimate infrastructure requirements to connect to Erf 3/195 and Erf 88/195 are considered development specific and will be for the account of the developer.

Development Charges

The current total development charges (DCs) relating to Civil Engineering Services (roads, water, and sanitation services only), and in accordance with the current guidelines, for the proposed development were calculated on 26 October 2022 and amount to R 8 762 098.73 excluding VAT. This amount includes for water, sanitation, and road development contributions applicable at the time of approval of the development.

The Developer is reminded of the following Clause relating to the calculation of development charges: "Any amendments or additions to the proposed development which is not contained within the calculation sheet as stated in clause 2 above which might lead to an increase in the proportional contribution to municipal public expenditure, will result in the recalculation of the development chargers and the amendment of these conditions of approval or the imposition of other relevant conditions of approval."

In addition, the development charges amount is subject to amendment based on annual escalation and applicable at the time that development contributions are due for payment. The Council has an approved Development Contributions Policy and guidelines for the calculation of DCs.

Kindly confirm your acceptance of the above in writing.

Yours faithfully,

JANNIE KOÈGELENBERG DIRECTOR: CIVIL ENGINEERING SERVICES

ANNEXURES

- A Technical report by GLS (13 June 2023)
- B Figure 1 Required works Water: George Erf 195 Portion 21
- C Figure 2 Required works Sewer: George Erf 195 Portion 21

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Carla Swanepoel

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From:	Daniel Greeff <dgreeff@george.gov.za></dgreeff@george.gov.za>
Sent:	Tuesday, 25 October 2022 16:48
То:	rob@dvmgeo.co.za
Cc:	Rasmus Esterhuysen
Subject:	RE: External Email > : George: Pieterkoen Development: Capacity and DC Request
Attachments:	Groenkloof.pdf; Kraaibosch 2.pdf; Kraaibosch 1.pdf
Follow Up Flag:	Follow up
Flag Status:	Flagged

Mr Hall,

There is a proposed switching substation site (erf 26012) adjacent to the development. The development will connect directly to the switching substation via a 185/3 AL 11kV underground cable that will supply adjacent developments as well. We can discuss further at the meeting.

Kind Regards Danie Greeff Pr.Eng Electro-Technical Services: Deputy Director – Planning & Design

Office: 044 874 3917 Cell: 061 037 9496 Email: <u>dgreeff@george.gov.za</u>



From: rob@dvmgeo.co.za <rob@dvmgeo.co.za>
Sent: Tuesday, 18 October 2022 09:26
To: Daniel Greeff <Dgreeff@george.gov.za>
Subject: External Email > : George: Pieterkoen Development: Capacity and DC Request

Caution: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Morning Danie

Trust you are keeping well!

Attached a capacity and DC calculation request for the above-mentioned development

Please advise at your earliest convenience and confirm receipt





R Fivaz Director: Civil Engineering Services Manager: Land development E-mail: jmfivaz@george.gov.za Tel: +27 (0)44 801 9278

Reference number:Portion 21/195, GeorgeDate:06/02/2025

Enquiries:

R Fivaz 044 801 9350

ATTENTION: MR JUSTIN BRANFORD

Pieterkoen Development Company (Pty) Limited PO Box 92 George 6530

APPLICATION FOR REZONING AND SUBDIVISION OF THE FARM PIETER KOEN (KRAAIBOSCH 195/21), GEORGE - STORMWATER MANAGEMENT PLAN.

Regarding correspondence (16/3/3/1/D2/19/0033/24) dated **18 November 2024** regarding the draft Basic Assessment Report (BAR) for the proposed development on Portion 21 of Farm 195, George.

With respect to Clause 2.5 Stormwater management plan, the Municipality confirm the following:

1. Preliminary Design Compliance

The preliminary stormwater management plan, as submitted, aligns with the **CSIR Red Book guidelines** and incorporates **Sustainable Urban Drainage Systems (SuDS)** principles. Based on our initial review, the proposed designs conform to the municipality's applicable standards and requirements for stormwater management.

2. Detailed Design Assessment

While the preliminary design meets municipal standards, a detailed evaluation will be conducted once the final design plans are submitted. This assessment will ensure that all technical elements, including servitudes, runoff management, and structural details, are fully compliant.

3. Environmental Considerations

The municipality acknowledges the proximity of the watercourse to the site and emphasizes the importance of preventing contamination in runoff. The detailed design phase will incorporate necessary mitigation measures, which will be reflected in the Environmental Management Programme (EMP).

We trust this confirmation is satisfactory. Should you require any further information or clarification, please do not hesitate to contact our office.

Kindly confirm your acceptance of the above in writing.

Yours faithfully, PΡ

JANNIE KOEGELENBERG DIRECTOR: CIVIL ENGINEERING SERVICES





R Fivaz Director: Civil Engineering Services Manager Land Development E-mail: jmfivaz@george.gov.za Tel: +27 (0)44 801 9350

Reference number:Portion 21/195, GeorgeDate:06/02/2025

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R Fivaz 044 801 9350

ATTENTION: MR JUSTIN BRANFORD

Pieterkoen Development Company (Pty) Limited PO Box 92 George 6530

APPLICATION FOR REZONING AND SUBDIVISION OF THE FARM PIETER KOEN (KRAAIBOSCH 195/21), GEORGE – ROADS MASTER PLAN.

Regarding correspondence (16/3/3/1/D2/19/0033/24) dated **18 November 2024** regarding the draft Basic Assessment Report (BAR) for the proposed development on Portion 21 of Farm 195, George.

With respect to Clause 2.6 Access, the Municipality confirm the following:

The George Municipality confirm that the proposed development on Portion 21 of Farm 195, Kraaibosch, align with the Kraaibosch Roads Masterplan and its associated traffic infrastructure requirements. Below is an overview of the key details:

1. Inclusion in the Kraaibosch Roads Masterplan and Cost Model

The proposed development is fully integrated into the 2022 Kraaibosch Roads Masterplan and Cost Apportionment Model. The anticipated trip generation and associated traffic impacts have been considered in the overall traffic planning and modelling for the area.

2. Proposed Access via Road 2

As indicated, access to the development is planned via Road 2, which complies with the Western Cape Government's Access Management Guidelines. The proposed access points, including their spacing and capacity, are in line with the objectives outlined in the Kraaibosch Roads Masterplan. The access for Portion 21 of Farm 195 will undergo further evaluation during the Site Development Plan (SDP) review process to ensure compliance with all relevant standards.

3. Evaluation during the SDP Review Stage

While Road 2 has been prioritized as the access route for this development, a comprehensive evaluation of its integration with the surrounding road network will be conducted during the SDP review and approval phase. This assessment will include verification of road design, intersection performance, and compliance with municipal standards, as well as assessing its conformity with the Kraaibosch Roads Cost Model at the time of submission.

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4. Recommendations from the Traffic Impact Assessment (TIA)

Based on the Traffic Impact Assessment (TIA) conducted for the development, the following key recommendations are provided:

• Increased Demand and Capacity Requirements:

In line with the TIA, the full road network is being extended to accommodate further developments in alignment with the Kraaibosch Road network and projected 2031 traffic. The consultant, SMEC, has been appointed to review the full model and make recommendations regarding which road elements within the model will require upgrading to ensure timely capacity alignment. Portion 21 of Farm 195, as part of the model, will financially contribute to the model to ensure proper capacity alignment in a timely manner.

Access Spacing for Adjacent Properties:

The TIA identifies two substandard access points on the southern edge of Road 2 (adjacent to ERF 195/56 and ERF 26013). In line with the TIA's recommendation, these access points will need to align with the model, ensuring that the access spacing adheres to the specifications indicated in the Kraaibosch Roads Masterplan.

5. Further Assessment and Implementation

The recommendations outlined above will be incorporated into the ongoing planning and design processes. A detailed assessment of access routes, along with the operational performance of surrounding intersections, will be carried out during the SDP review to ensure that the traffic impact is effectively managed and compliant with municipal standards.

We trust this confirmation is satisfactory. Should you require any further information or clarification, please do not hesitate to contact our office.

Kindly confirm your acceptance of the above in writing.

Yours faithfully,

JANNIE KOEGELENBERG DIRECTOR: CIVIL ENGINEERING SERVICES

