AGENDA

SOUTHERN CAPE JOINT MUNICIPAL PLANNING TRIBUNAL – GEORGE MUNICIPALITY
SUID-KAAP GEMEENSKAPLIKE MUNISIPALE BEPLANNINGSTRIBUNAAL – GEORGE MUNISIPALITEIT

Office of the Municipal Manager:
Civic Centre
GEORGE
6530

Kantoor van die Munisipale Bestuurder:
Burgersentrum
GEORGE
6530

Date/Datum: 28 May 2026

TO: All members of the Southern Cape Joint Municipal Planning Tribunal
AAN: Alle lede van die Suid-Kaap Gemeenskaplike Munisipale Beplanningstribunaal

Presiding Officer / Voorsittende Beampte:	Susan Human
Panel Members / Paneellede:	Carel Venter Evan Jacobs Dalene Carstens Garron Campbell
Alternative members / Alternatiewe lede:	Jaco Roux Elma Vreken

Notice is given that a meeting of the Southern Cape Joint Municipal Planning Tribunal – George Municipality will be held in George via Microsoft Teams on Tuesday, 30 June 2026 at 10:00.	Kennis geskied dat 'n vergadering van die Suid-Kaap Gemeenskaplike Munisipale Beplanningstribunaal – George Munisipaliteit gehou sal word in George op Microsoft Teams op Dinsdag, 30 Junie om 10:00.

SUSAN HUMAN
Chairperson / Voorsitter

ITEM	AGENDA	
1	OPENING OF MEETING	
2	CONFIRMATION OF REQUIREMENTS	
3	DETERMINATION OF VESTED RIGHTS	
4	DECLARATION OF CONSTITUTED MEETING	
5	APPLICATION FOR CONVENER/ORAL HEARING/ADDITIONAL ITEMS	
6	ITEMS FOR DISCUSSION	

6. ITEMS FOR DISCUSSION

ITEM	AGENDA	PAGES
6.1	CLOSURE, SUBDIVISION AND CONSOLIDATION– ERVEN 29231 AND 29245, GEORGE	3 – 46
6.2	REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE	47 - 498

LAND USE PLANNING REPORT
CLOSURE, SUBDIVISION AND CONSOLIDATION– ERVEN 29231 AND 29245, GEORGE

Reference number	4039621	Application submission date	10 March 2026	Date report finalized	5 May 2026
Delegation: 4.16.18.1 Sub delegation: LUP1.1 - AO: Category C5.N – **MPT**					

PART A: AUTHOR DETAILS				
First name(s)	Ilané			
Surname	Huyser			
Job title	Senior Town Planner			
SACPLAN registration no.	A/1664/2013			
Directorate/ Department	Planning and Development			
Contact details	ihuyser@george.gov.za			
PART B: APPLICANT DETAILS				
First name(s)	Marike			
Surname	Vreken			
Company name	Marike Vreken Urban and Environmental Planners			
SACPLAN registration no.	A/1101/1999	Is the applicant authorized to submit this application?	**Y**	N
Registered owner(s)	• Erf 29231: Cape Estates Properties Outeniqua (Pty)Ltd (the land vested with George Municipality, but a vesting transfer must still take place). • Erf 29245: Cape Estates Properties Outeniqua (Pty) Ltd			
PART C: PROPERTY DETAILS				
Property description (in accordance with Title Deed)	• Erf 29231, George • Erf 29245, George			
Physical address	Kraaibosch Park Estate	Town/City	George	
Current zoning	Erf 29231, George – Transport Zone II (Public Road) ; Extent (m^2/ ha)	Erf 29231, George – 629m^2	Are there existing buildings on the property?	Y **N**

6.1 CLOSURE, SUBDIVISION AND CONSOLIDATION– ERVEN 29231 AND 29245, GEORGE

	Erf 29245, George – Transport Zone III (Private Road)		Erf 29245, George – 1.5339 ha		**Y**	N
Applicable Zoning Scheme	George Integrated Zoning Scheme By-law, 2023 (hereafter referred to as ***"Zoning Scheme"***);					
Legislation	1. Land-use Planning By-Law for George Municipality, 2023 (hereafter referred to as ***"Planning By-Law"***); 2. George Municipal Spatial Development Framework, 2023 (hereafter referred to as ***"GMSDF"***);					
Current Land Use	Road purposes			Title Deed number & date	T42972/2021	
Any restrictive title conditions applicable?	Y	**N**	If Yes, list condition number(s)	N/A		
Any third-party conditions applicable?	Y	**N**	If Yes, specify	N/A		
Any unauthorised land use/building work?	Y	**N**	If Yes, explain	N/A		

PART D: PRE-APPLICATION CONSULTATION (ATTACH MINUTES)					
Has pre-application consultation been undertaken?	**Y**	N			
Reference Number	3932363	Date	19/11/2025	Official's name	Ilane Huyser

PART E: LIST OF APPLICATIONS (TICK APPLICABLE)							
a. Rezoning		b. Permanent departure		c. Temporary departure		d. Subdivision	
e. Consolidation		f. Amendment, suspension or deletion of restrictive conditions		g. Permissions required in terms of the zoning scheme		h. Amendment, deletion or additional conditions in respect of existing approval	
i. Extension of validity period		j. Approval of an overlay zone		k. Phasing, amendment or cancellation of subdivision plan		l. Permissions required in terms of conditions of approval	
m. Determination of zoning		**n. Closure of public place**	**x**	o. Consent use		p. Disestablishment of an HOA	
q. Rectify Breach of an HOA		r. Reconstruct building of non-conforming use		**Other**	**x**	**(Exempt subdivision)**	

PART F: APPLICATION DESCRIPTION

Consideration of the following applications applicable to Erven 29231 and 29245, George:

1. Closure in terms of Section 15(2)(n) of the Land Use Planning By-law for George Municipality, 2023 of a portion of public place being Portion A of Erf 29231, George (relating to the below mentioned exempted subdivision and consolidation application).

2. Exempted subdivision and consolidation in terms of Section 24(1)(c) of the Land Use Planning By-law for George Municipality, 2023 for a minor amendment to the common boundary between unregistered Erven 29231 and 29245, George.

PART G: LOCATION

The subject properties currently form the access to the Kraaibosch Park Residential Estate Development.

PART H: BACKGROUND AND HISTORY

Erf 29231, George constitutes a subdivided portion of the parent erf on which Kraaibosch Park was established and was subsequently zoned as a public street.

Although this section of road has not been formally transferred to the Municipality, it vests in the Municipality in terms of Section 25 of the Land Use Planning By-Law, 2023, as it is registered as a "Public Road" on the General Plan.

As this section formed part of the access to Kraaibosch Park, a gatehouse was constructed. However, the construction unfortunately encroached beyond the boundary of the private road erf (Erf 29245) onto the public street erf (Erf 29231) as can be seen below.

An application was submitted by the developer to Council for the acquisition of a 60m² of Erf 29231, George (area of the gate house). The application was approved at the Council meeting held on 23 March 2023, as reflected in the Council Resolution attached hereto as Annexure B.

Note: the Council Resolution erroneously refers to the entire public road (629m²) rather than specifically the 60m² portion. This error should not impact the outcome, and the resolution will be amended in due course.

PART I: SUMMARY OF APPLICANT'S MOTIVATION *(Annexure D)*

- Cape Estates Properties Outeniqua (Pty)Ltd are the owners of the Kraaibosch Ridge development that was established on Portion 370 of the Farm Kraaibosch No 195, George.
- The development commenced, and Phase 2 of the development is now located on Erf 29144, previously Erf 27668, George.
- Cape Estates Properties Outeniqua (Pty) Ltd has constructed a new gatehouse for the Kraaibosch Park Development on this land parcel (Portion of Beechwood Street – a public street), as it will improve the safety and security of the residents, whilst also providing ample stacking distance between Kraaibosch Ridge and Glenwood Avenue.

- The gatehouse was constructed on a portion of Erf 29231, a portion of public street that vests with George Municipality.
- An application for land alienation was submitted to George Municipality to purchase the portion of land where the gatehouse was constructed.
- The George Municipal Council resolved at their meeting held on 30 March 2023 that the portion of Erf 29231, George (±629m²) may be disposed of.
- This purpose of this land development application is to implement the Council Resolution to enable the alienation of the portion of public street that vested with the municipality.
- The proposed land development application is to close a portion of Erf 29231 as a "public road" (public place), and to subdivide and consolidate a portion of the closed public street with the abutting private street, to legalise the construction of the Kraaibosch Park gatehouse.

PART J: SUMMARY OF PUBLIC PARTICIPATION

Methods of advertising				Date published	Closing date for objections
Press	**Y**	N	N/A	**26 March 2026**	**27 April 2026**
Gazette	Y	N	**N/A**		
Notices to surrounding property owners	**Y**	N	N/A	**26 March 2026**	**27 April 2026**
Website	**Y**	N	N/A	**24 March 2026**	**27 April 2026**
Ward councillor	**Y**	N	N/A	**26 March 2026** (Mr Kruger)	**27 April 2026**
On-site display	**Y**	N	N/A	**26 March 2026**	**27 April 2026**
Community organisation(s)	Y	N	**N/A**		
Public meeting	Y	N	**N/A**		
Third parties	Y	N	**N/A**		
Other	Y	**N**	If yes, specify		
Total valid objections	0			Total invalid objections and petitions	0
Valid petition(s)	Y	**N**	If yes, number of signatures		
Community organisation(s) response	Y	N	**N/A**	Y	N **N/A**
Total letters of support	None				
Was the minimum requirement for public participation undertaken in accordance with relevant By-Law on Municipal Land Use Planning and any applicable Council Policy				**Y**	N

PART K: SUMMARY OF COMMENTS DURING PUBLIC PARTICIPATION

No objections or comments were received during the public participation process.

PART L: SUMMARY OF APPLICANT'S REPLY TO OBJECTIONS

N/A

PART M: SUMMARY OF COMMENTS FROM INTERNAL DEPARTMENTS AND/OR ORGANS OF STATE

Name of Department	Date	Summary of comments	Recommendation
ETS	19/05/2025	In order	In order.
CES (Traffic)	31/03/2026	In order	In order

CES	30/04/2026	CES take note and support the application, provided that all existing land use conditions applicable to the development continue to apply.	In order

PART N: MUNICIPAL PLANNING EVALUATION (REFER TO RELEVANT CONSIDERATIONS GUIDELINE)		
Is the proposal consistent with the principles referred to in chapter 2 of SPLUMA? (can be elaborated further below)	**Y**	N
Is the proposal consistent with the principles referred to in chapter VI of LUPA? (can be elaborated further below)	**Y**	N

(In)consistency with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) and with the principles referred to in Chapter VI of the Land Use Planning Act, 2014 (Act 3 of 2014) (Section 65 of the Planning By-Law)

The consistency of the application with the principles of SPLUMA and LUPA as read with Section 65 of the Planning By-Law was evaluated as follows:

No	Evaluation checklist (s. 65)	Yes	No	N/A
1(a)	Does the application submitted comply with the provisions of this by-Law?	X		
	Has the motivation submitted been considered?	X		
1(b)	Were the correct procedures followed in processing the application? (see land use application process checklist)	X		
	Was a condonation required and granted with regards to the process followed? *(see land use application process checklist)*			X
1(c)	Have the desirability guidelines as issued by the provincial minister to the utilise land for the proposed land uses been considered? *(not yet applicable)*			X
1(d)	Have the comments received from the respondents, any organs of state and the provincial minister been considered? *(s. 45 of LUPA)*			X
1(e)	Have the comments received from the applicant been considered?			X
1(f)	Have investigations carried out in terms of other laws and that are relevant to the application being considered?			X
1(g)	Was the application assessed by a registered town planner? *(see land use application process checklist)*	X		
1(h)	Has the impact of the proposed development on municipal engineering services been considered?	X		
1(i)	Is the application in line, consistent and/or compatible with the IDP of the Municipality?			X
	Is the application in line, consistent and/or compatible with the municipal SDF?			X
1(j)	Is the application in line, consistent and/or compatible with the IDP of the district Municipality including its SDF?			X
1(k)	Is the application in line, consistent and/or compatible with the structure plan applicable to the area?			X
1(l)	Is the application in line, consistent and/or compatible with the local SDF applicable to the area?			X
1(m)	Is the application in line, consistent and/or compatible with any other municipal policy or By-Law applicable to the proposed land use?			X
1(n)	Is the application in line, consistent and/or compatible with the provincial SDF?			X
1(o)	Is the application in line, consistent and/or compatible with the regional SDF *(SPLUMA)* or provincial regional SDF *(LUPA)*?			X
1(p)	Is the application in line, consistent and/or compatible with the applicable guidelines, standards, principles, norms or criteria set by national and/or provincial government?	X		

1(r)	Is the application in line the consistent and/or compatible with the following principles as contained in section 7 of SPLUMA / 59 of LUPA:				
	1.	The redress spatial and other development imbalances of the past through improved access to and use of land?			X
	2.	Address the inclusion of persons and areas previously excluded in the past, specifically informal settlements and areas characterised by wide-spread poverty and deprivation?			X
	3.	Enable the redress of access to land by disadvantaged communities and persons?			X
	4.	Does the application support access to / facilitate the obtaining of security of tenure and/or incremental informal settlement upgrading?			X
	5.	Has the potential impact of the development proposal on the value of the affected land /properties been considered?	X		
	6.	The impact of the application on the existing rights of the surrounding owners been recognised?	X		
	7.	Does the application promote spatially compact, resource frugal development form?			X
	8.	Can the development be accommodated within the existing fiscal (budget), institutional and administrative means of the Municipality? *(e.g. Infrastructure upgrades required – when, budgeted for, etc.)*			X
	9.	Has the protection of prime, unique and/or high potential agricultural land been considered?			X
	10.	Is the application consistent with the land use measures applicable to / contained in environmental management instruments?			X
	11.	Does the application promote and stimulate the equitable and effective functioning of land markets?			X
	12.	Have all current and future costs to all parties for the provision of infrastructure and social services been considered?	X		
	13.	Does the application promote development that is sustainable, discourages urban sprawl, encourages residential densification and promotes a more compact urban form?			X
	14.	Will the development result in / promote the establishment of viable communities?			X
	15.	Does the development strive to ensure that the basic needs of all the citizens are met in an affordable way?			X
	16.	Will the development sustain and/or protect natural habitats, ecological corridors and areas of high bio-diversity importance?			X
	17.	Will the development sustain and/or protect provincial heritage and tourism resources?			X
	18.	Will the development sustain and/or protect areas unsuitable for development including floodplains, steep slopes, wetlands, areas with a high-water table, and landscapes and features of cultural significance?			X
	19.	Will the development sustain and/or protect the economic potential of the relevant area or region?			X
	20.	Has provision been made in the development to mitigate against the potential impacts of climate change?			X
	21.	Does the development include measures to reduce consumption / conserve water and energy resources? *(renewable energy, energy saving, water saving, etc.)*			X
	22.	Does the development take into account sea-level rise, flooding, storm surges, fire hazards?			X
	23.	Does the development take into account geological formations and topographical (soil and slope) conditions?			X
	24.	Will the development discourage illegal land occupation – w.r.t. Informal land development practices?			X

	25.	Does the development benefit the long term social, economic and environmental priorities for the area *(sustained job opportunities, sustained income, integrated open space network, etc.)* over any short-term benefits *(job creation during construction, short term economic injection, etc.)*?			X
	26.	Does the development contribute towards the optimal use of existing resources, infrastructure, agriculture, land, minerals and/or facilities?			X
	27.	Does the development contribute towards social, economic, institutional and physical integration aspects of land use planning?			X
	28.	Promotes and supports the inter-relationships between rural and urban development?			X
	29.	Does the development promote the availability of employment and residential opportunities in close proximity to each other or the integration thereof?			X
	30.	Does the development promote the establishment of a diverse combination of land uses?			X
	31.	Does the development contribute towards the correction of distorted spatial patterns of settlements within the town/city/village?			X
	32.	Does the development contribute towards and /or promote the creation of a quality and functional open spatial environment?			X
	33.	Will the development allow the area or town to be more spatially resilient that can ensure a sustainable livelihood for the affected community most likely to be affected by economic and environmental shocks?			X
1(s)	Is the application in line with the applicable provisions contained in the applicable zoning scheme regulations (By-Law)? (e.g., Definitions, land use description and development parameters)		X		

Comments:

The proposal is in line with the applicable planning legislation (SPLUMA and LUPA). The application only aims to facilitate the closure, subdivision and consolidation of a portion of Erf 29231, George (60m^2) to accommodate the existing gatehouse to Kraaibosch Park in accordance with a Council resolution.

~~(In)~~consistency with the IDP/Various levels of SDF's/Applicable policies

N/A

(In)consistency with guidelines prepared by the Provincial Minister

N/A

Outcomes of investigations/applications i.t.o other laws

A Council resolution in relation to the purchase of a portion of Erf 29231, George was issued as per the minutes of the meeting held on 30 March 2023. (refer to council resolution attached as Annexure B). As mentioned before, said resolution erroneously refers to the entire public street (629m²) rather than only the 60m² Portion A. This error should not impact the outcome, and the resolution will be amended in due course.

Existing and proposed zoning comparisons and considerations.

- Erf 29231, George is zoned Transport Zone II (Public Street) in terms of the George Integrated Zoning Scheme By-law, 2023.
- Once the said portion is closed as a public place, Section 14 of said zoning scheme determines that the closed Portion A of Erf 29231, George will take the zoning of the property to which it is being consolidated as highlighted in the extract below.
- Thus, once the said portion is consolidated, it will be automatically rezoned to Transport Zone III (Private Road).

DEEMED ZONING OF CLOSED PUBLIC PLACES

14. The zoning of land that was previously a public place, vested in or owned by the Municipality and that is closed, is determined as follows:

(1) if the land is transferred to an abutting land owner, that portion of the land falls in the same zone as that of the abutting land belonging to the abutting owner; or

(2) the Municipality must determine which zoning applies to the land if—

(a) the land is transferred to an abutting land owner and that owner owns abutting properties falling into more than one zone; or

(b) in any other case not provided for in this section.

The need and desirability of the proposal

The need and desirability for the proposed development have been considered in terms of the following factors:

No.	Evaluation check list	Yes	No	N/A
1	Will the natural environment and/or open space systems be negatively affected?		X	
2	Will application result in trees/indigenous vegetation being removed on site or in the road reserve?		X	
3	Does the application have any negative impact on heritage resources?		X	
4	Will the character of the surrounding area be negatively affected?		X	
5	Will the architectural character of the streetscape be negatively affected?		X	
6	Will there be any negative impact on vehicle traffic and pedestrian safety?		X	
7	Will there be a negative impact on traffic movement?		X	
8	Will there be a negative impact on vehicle sight distances?		X	
9	Are there adequate on-site parking / loading facilities provided?			X
10	Are there adequate vehicle access/ egress to the property?	X		
11	Will the neighbour's amenity to sunlight be negatively affected?		X	
12	Will the application result in overshadowing onto neighbours' properties?		X	
13	Will the neighbour's amenity to privacy / enjoyment of their property / views be negatively affected?		X	
14	Will the proposal have a negative impact on scenic vistas or intrude on the skyline		X	
15	Will the intended land use have a negative impact on adjoining uses?		X	
16	Will the land use pose a potential danger to life or property in terms of fire risks, air pollution or smells or compromise a person's right to a safe and secure environment?		X	
17	Will there be a negative impact on property values?		X	
18	Will the application result in a nuisance, noise nuisance, and disturbance to neighbours?		X	
19	Will adequate open space and/or recreational space be provided (for residential developments)?			X
20	Will approval of the application set a precedent?		X	

Assessment of objections/comments

N/A

PART O: ADDITIONAL PLANNING EVALUATION FOR REMOVAL OF RESTRICTIONS

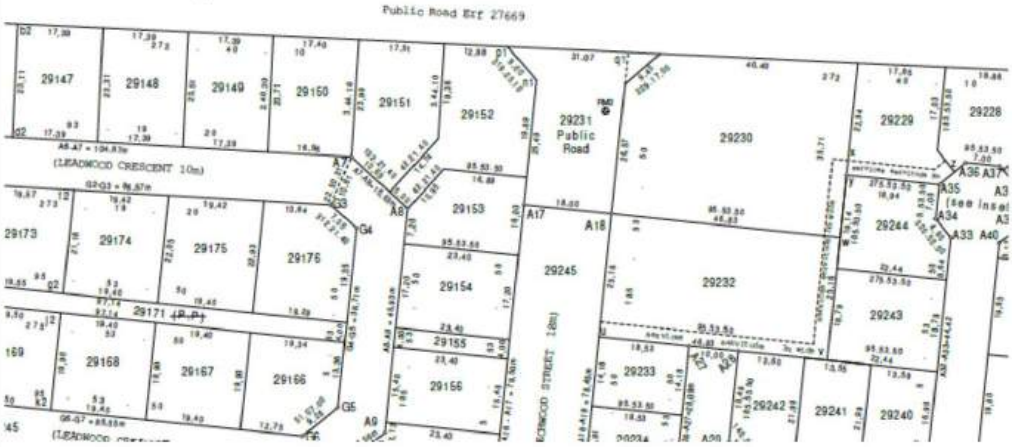
N/A

PART P: SUMMARY OF EVALUATION

Application overview

It is the applicant's intention to close and subdivide a portion of the "public road" (public place) being Portion A of Erf 29231, George, and consolidate it with a private road, being Erf 29245, George, to accommodate the existing gatehouse of the Kraaibosch Park residential development.

Although this section of public street has not been formally transferred to the George Municipality, it vests in the Municipality in terms of Section 25 of the Land Use Planning By-Law, 2023, as indicated on the extract of the related General Plan below.



Conclusion

The proposal relates to a cadastral exercise and will not have a negative impact on the surrounding developments, streetscape or overall functioning of the adjoining public street network or vehicle access to Kraaibosch Park (e.g. vehicle stacking distances).

Thus, on the balance of all considerations in terms of Section 65 of the Land-Use Planning By-Law for George Municipality, 2023, it is found that the applications for closure of a portion public place, being Portion A of Erf 29231, George, (to be determined by the Tribunal) and exempted subdivision and consolidation of Portion A of Erf 29231, George with Erf 29245, George (to be determined by the Authorised Official) cannot be considered undesirable and are therefore **SUPPORTED**.

PART Q: RECOMMENDATION

A. That the application for the Closure in terms of Section 15(2)(n) of the Land Use Planning By-law for George Municipality, 2023 of a portion of public place being Portion A of Erf 29231, George (relating to a separate exempted subdivision and consolidation application as stated in decision B. below);

BE APPROVED in terms of Section 60 of said By-law for the following reasons:

REASONS FOR DECISION

i) Council resolved that the proposal is in order, in accordance with the resolution dated 30 March 2023.
ii) The proposal will not have an adverse impact on the surrounding area or its character.
iii) The proposal will not have a negative impact on the adjacent neighbouring developments, streetscape or functionality of the public road.

Subject to the following conditions imposed in terms of Section 66 of the said Planning By-Law:

CONDITIONS OF THE DIRECTORATE: PLANNING AND DEVELOPMENT

General conditions

1. That in terms of the Land Use Planning By-law for the George Municipality, 2023, the approval shall lapse if not implemented within a period of five (5) years from the date it comes into operation.
2. This approval shall be taken to cover only the closure of a 60m² portion (Portion A) of Erf 29231, George as applied for and as indicated on the subdivision plan, Plan No. Pr2259GEO29231-Sub01 dated 22 July 2022 drawn by Marike Vreken Urban & Environmental Planners attached hereto as "***Annexure A***" which bear Council's stamp and shall not be construed as to depart from any other Council requirements or legal provision.
3. Portion A of Erf 29231, George must be consolidated with Erf 29245, George.

Implementation conditions

4. The closure of public place will be regarded as implemented on approval by the Surveyor General as well as the registration of the consolidated erf in terms of the Deeds Registries Act.

Notes:

i. Building plans to be submitted for approval in accordance with the National Building Regulations (NBR) for the Gate House.

ii. Stormwater must be dispersed responsibly, and the stormwater management, retention and erosion measures must be addressed on the building plans.

iii. An approved Surveyor General diagram be submitted to the Directorate: Planning and Development for record purposes that also reflects the closure of the public place.

iv. In terms of Section 14 of the George Integrated Zoning Scheme By-Law, 2023, the zoning of the closed public place (Portions A) will adopt the same zoning as the Erf 29245, George viz. Transport Zone III (private road).

v. Proof of the registration of the consolidation of Portion A with Erf 29245, George at the Chief Survey General and Deeds Office should be submitted with the building plans.

vi. Civil Engineering Services Department took note of the proposal and stated that that all existing land use conditions applicable to the development shall continue to apply.

B. The Senior Manager: Town Planning in terms of Delegation number 4.1.17.3.12 of 24 April 2025 hereby confirms that the application submitted in terms of Section 24(1)(c) of the Land Use Planning By-law for George Municipality, 2023, for the subdivision of Erf 29231, George into a Portion A (60m²) and a Remainder; and simultaneous consolidation of Portion A with Erf 29245, George, as indicated on the subdivision plan, Plan No. Pr2259GEO29231-Sub01 dated 22 July 2022 drawn by Marike Vreken Urban & Environmental Planners attached hereto as "***Annexure A***" which bear Council's stamp; **IS EXEMPTED** in accordance with Section 24(2) from the requirements of Section 15 of said Bylaw for the following reason:

Reason:

i) The subdivision and consolidation results in a minor adjustment of the common boundaries between the two properties by less than 10%.

12 May 2026

C. PETERSEN (B/8336/2016) **DATE**
SENIOR MANAGER: TOWN PLANNING

PART R: ANNEXURES

Annexure A	Subdivision and Consolidation Plan
Annexure B	Council Resolution
Annexure C	Motivation
Annexure D	Locality Plan
Annexure E	General Plan

RECOMMENDED /~~NOT RECOMMENDED~~

I. HUYSER (A/1664/2013) — **05.05.2026**
ACTING SENIOR MANAGER: TOWN PLANNING — **DATE**

RECOMMENDED/ ~~NOT RECOMMENDED~~

C. PETERSEN (B/8336/2016) — **12 May 2026**
SENIOR MANAGER: TOWN PLANNING — **DATE**

APPLICATION FOR CLOSURE OF PUBLIC PLACE APPLICABLE TO ERF 29231, GEORGE (I HUYSER)

PAJA

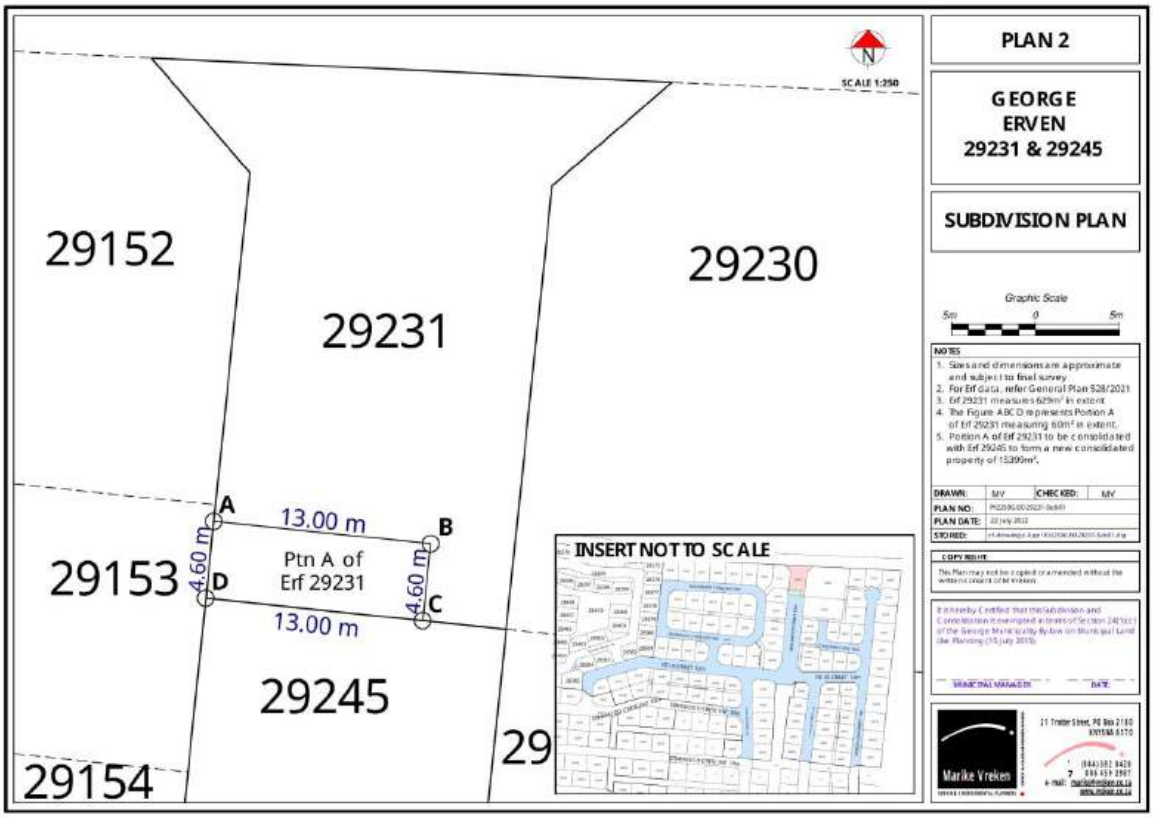
NO	PROCESS CHECK	YES	NO	N/A
1.	Has this application been assessed/ evaluated by a registered town planner as required in terms of section 64(g) of the by-law?	X		
2.	Was the report submitted by the town planner a fair and objective reflection of the relevant information available and have all relevant information been attached to the report?	X		
3.	Did the town planner exercise due diligence in evaluating the application, is the report balanced (does not show any unfair prejudice) and were the conclusions reached reasonable and rationally linked to the relevant information available?	X		
4.	Was the town planner empowered in terms of the Municipality's system of delegations to evaluate the application?	X		
5.	Was the decision maker empowered in terms of the Municipality's system of delegations to decide on the application?	X		
6.	Was adequate information available for the decision maker to make a fair, reasonable and objective decision on the application?	X		
7.	If not, can it be demonstrated that the necessary attempts were made to obtain this information before the decision was taken?			X
8.	Was all the available information which impacts on the application made available to the decision maker?	X		
9.	Was all relevant information taken into account when making the decision?	X		
10.	Was all irrelevant information noted in the town planners report and reasons given as to why it should be disregarded when making the decision stated in the report?			X
11.	Was the town planner's evaluation, to the best of the decision makers knowledge, potentially influenced by an error of law?		X	
12.	Is the decision taken logical, clear, concise, and fair?	X		
13.	Can the decision be justified – i.e. rationally and reasonably linked to the information provided (critical information available) and relevant facts contained in the report?	X		
14.	Were written reasons given for the decision taken?	X		
15.	Can these reasons be reasonably and rationally linked to the relevant facts and the decision taken?	X		
16.	Were conditions of approval imposed with the decision?	X		
17.	Can these conditions be lawfully imposed as contemplated by Sections 66 of the Planning By-law?	X		
18.	Are these conditions fair and can they be reasonably and rationally linked to the development proposal submitted, the relevant facts contained in the town planners report, the decision taken and the reasons for such decision?	X		

APPROVED AS RECOMMENDED/ ~~**REFUSED/ REFER BACK TO APPLICANT/ REFER TO TRIBUNAL**~~

D. POWER (A/1973/2014)
DEPUTY DIRECTOR: DEVELOMENT AND ENVIRONMENTAL PLANNING/ AUTHORISED OFFICIAL

12 MAY 2026
DATE

ANNEXURE A


PLAN 2
GEORGE
ERVEN
29231 & 29245
SUBDIVISION PLAN
SCALE 1:250
29152
29231
29230
29153
29245
29154
29
A
B
C
D
13.00 m
13.00 m
4.60 m
4.60 m
Ptn A of
Erf 29231
INSERT NOT TO SCALE
Graphic Scale
5m
0
5m
NOTES
1. Sizes and dimensions are approximate and subject to final survey
2. For Erf data, refer General Plan 528/2021
3. Erf 29231 measures 629m² in extent
4. The Figure ABCD represents Portion A of Erf 29231 measuring 60m² in extent.
5. Portion A of Erf 29231 to be consolidated with Erf 29245 to form a new consolidated property of 1539m².
DRAWN:
MV
CHECKED:
MV
PLAN NO:
PLAN DATE:
STORED:
COPYRIGHT
Marike Vreken

ANNEXURE B

GEORGE
THE CITY FOR ALL REASONS

EXTRACT OF THE DRAFT MINUTES: ORDINARY COUNCIL MEETING HELD ON 30 MARCH 2023

9.10 **WAIVING OF THE VESTING RIGHT OVER ERF 29231 GEORGE FOR THE CONSTRUCTION OF A GATEHOUSE [5.1.7]**

Proposed by Councillor Hill and seconded by Councillor Kruger, it was

RESOLVED TO RECOMMEND TO COUNCIL

(a) That Council **TAKE NOTE** of Section 7 of the Asset Transfer Regulations listed in the report;

(b) That it **BE DECIDED** that the portion of Erf 29231 George (±629m² in extent), is not required for the minimum level of basic Municipal service delivery in terms of Section 14(2) of the Municipal Finance Act 2003, (Act 56 of 2003);

(c) That the vesting transports of the public places and roads within the Kraaibosch Ridge development **BE FINALISED** at the cost of the developer;

(d) That the waiving of the vesting rights of Erf 29231 George within the Kraaibosch Ridge development, **BE APPROVED**;

(e) That the transfer of the portion of Erf 29231 George, that vest in the Municipality, to the House Owners Association of the Kraaibosch Ridge Development at the amount of R20 000.00, VAT included, **BE APPROVED** in principle;

(f) That Erf 29231 George (629m² in extent) be **CLOSED** as a public road (transport zone II) and **REZONED** to private road (transport zone III) to be included in the Kraaibosch Ridge Development at the cost of the applicant;

(g) That in addition to (f) above, a **ROAD CLOSURE AND REZONING** process for the portion to be subdivided for the erection of the gate house, be followed should it be required;

(h) That the intention of Council to alienate Erf 29231 George, **BE ADVERTISED** for public comments and representations;

(i) That this approval be considered as **FINAL APPROVAL** should no counter proposals be received;

ANNEXURE B (continue)

GEORGE
THE CITY FOR ALL REASONS

EXTRACT OF THE DRAFT MINUTES: ORDINARY COUNCIL MEETING HELD ON 30 MARCH 2023

(j) That the developer (applicant) be responsible for **ALL COSTS**, which include the advertisements and the road closures and rezoning processes;

(k) That this approval is **SUBJECT THERETO**, that all administrative, technical and legal requirements are adhered to.

Date: 3/4/2023

Deputy Director: Corporate Services (Admin) (Mr E Ganza)

Date: 3/4/2023

Director: Corporate Services (Mrs K Moodley)

ANNEXURE C

GEORGE ERVEN 29231 & 29245
(PORTIONS OF ERF 29144)
KRAAIBOSCH PARK, GEORGE

APPLICATION FOR:

CLOSURE OF A PORTION OF A PUBLIC PLACE & THE CONFIRMATION OF AN EXEMPTED SUBDVISION & CONSOLIDATION

CLIENT: CAPE ESTATES PROPERTIES OUTENIQUA (PTY)LTD
PREPARED BY: MARIKE VREKEN URBAN & ENVIRONMENTAL PLANNERS

Marike Vreken

FEBRUARY 2026

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SECTION A :	BACKGROUND

1. BACKGROUND

Cape Estates Properties Outeniqua (Pty)Ltd are the owners of the Kraaibosch Ridge development that was established on Portion 370 of the Farm Kraaibosch No 195, George. The development commenced, and Phase 2 of the development is now located on Erf 29144, that was previously Erf 27668.

Cape Estates Properties Outenqiua (Pty) Ltd has constructed a new gatehouse for the Kraaibosch Park Development on this land parcel (Portion of Beechwood Street – a public street), as it will improve the safety and security of the residents, whilst also providing ample stacking distance between Kraaibosch Ridge and Glenwood Avenue. The gatehouse was constructed on a portion of Erf 29231, a portion of public street that vested with George Municipality.

An application for land alienation was submitted to George Municipality to purchase the portion of land where the gatehouse was constructed. The George Municipal Council resolved at their meeting held on 30 March 2023 that the portion of Erf 29231 George (±629m²) may be disposed of. Refer to **ANNEXURE A** for the Council decision.

This purpose of this land development application is to implement the Council Resolution to enable the alienation of the portion of public street that vested with the municipality. The proposed land development application is to close a portion of George Erf 29231 as a public road, and to subdivide and consolidate a portion of the closed public street with the abutting private street, to legalise the construction of the Kraaibosch Park Gatehouse.

1.1. Pre-Application Consultation

The proposal was discussed by the Town Planning Section of the Municipality, and the feedback was received 28 November 2025. A copy of the Pre-Application feedback is attached as ANNEXURE B. The following points were highlighted for the applicant to address with the land development application:

Comment	Response
A council resolution to be submitted with the application.	*Refer to **ANNEXURE A***
To motivate in terms of zoning scheme, MSDF etc.	*Refer to **Par.5.3** & **Par.9***
Encroachments over the public road (Erf 29231) from the adjacent residential erven to be noted and rectified.	*A survey will be conducted and if it is determined that there are encroachments, this will be rectified as a separate application, by the applicable landowner.*
Applicant to submit a land use application for the closure of a public place.	*Refer to **Par.** 2 & **Par 5.1***

ANNEXURE C (continue)

Comment	Response
Access at this location to be confirmed and cleared with CES before application is submitted. Accesses to align with the Kraaibosch Road Master Plan	*Refer to **Par.4.1***
This access should be in accordance with the Kraaibosch Master Plan which shows NO access at this point (access to be closed) however the department may (in principle) consider an emergency access (not a full access).	*Refer to **Par.4.1***
The shape of the subdivision to be motivated.	*To accommodate the existing gate house.*
Consent/mandates from the HOA to be acquired	*Refer to **ANNEXURE B***

2. THE APPLICATION

Marike Vreken Urban and Environmental Planners have been appointed by **Cape Estates Properties Outeniqua(Pty)Ltd** to prepare and submit the required application documentation (refer to **ANNEXURE D** for the Signed Company Resolution & Power of Attorney and **ANNEXURE E**: Application Form) for:

(i) The closure of a portion of Public Street Erf 29231, an unregistered portion of Erf 29144 George in terms of Section 15(2)(n) of the George Municipality Land Use Planning By-Law, 2023; and

(ii) The confirmation of an exempted subdivision & consolidation in terms of Section 24(1)(c) of the George Municipal Planning Bylaw for a minor amendment to the common boundary between unregistered Erven 29231 & 29245 George.

3. PROPERTY DESCRIPTION, SIZE AND OWNERSHIP

A copy of the Title Deed (T42972/2021) for George Erf 29144 and the deed searches for George Erven 29231 & 29245 containing the details outlined below are attached as **ANNEXURE F** & **ANNEXURE G** respectively. The Surveyor General Diagram SG527/2021 (George Erf 29144) is attached as **ANNEXURE H** and General Plan No 528/2021 (Subdivision of Erf 29144 George) is attached as **ANNEXURE I** to this report.

	Erf 29231	Erf 29245
Property Description:	George Erf 29231 (Portion of Erf 27668), situated in the Municipality and Division of George, Province of the Western Cape.	George Erf 29245 (Portion of Erf 27668), situated in the Municipality and Division of George, Province of the Western Cape.
Title Deed No:	T42972/2021	T42972/2021

ANNEXURE C (continue)

	Erf 29231	Erf 29245
Registered Property Owner:	Cape Estates Properties Outeniqua (Pty)Ltd (*the land vested with George Muncipality, but a vesting transfer must still take place).*	Cape Estates Properties Outeniqua (Pty)Ltd
Property Size:	629 (Six Hundred & Twenty-Nine) Square metres.	1.5339 (One comma Five Three Three Nine) Hectares
Title Deed Restrictions:	There are no title deed restrictions that prevent the proposed application.	There are no title deed restrictions that prevent the proposed application.
Servitude:	A temporary right of way servitude. See attached **ANNEXURE H**.	A temporary right of way servitude. See attached **ANNEXURE H.**
Bonds:	There is a bond registered with Investec Erf 29144. A copy of the Bond Holder's Permission is attached as **ANNEXURE J**.	There is a bond registered with Investec Erf 29144. A copy of the Bond Holder's Permission is attached as **ANNEXURE J**.

SECTION B : DEVELOPMENT PROPOSAL

4. DEVELOPMENT SPECIFICATIONS

*(Refer to **Plan 2**: Subdivision Plan)*

Cape Estates Properties Outeniqua (Pty) Ltd has constructed a new gatehouse for the Kraaibosch Park Development on a portion of unregistered Erf 29231 (Portion of Beechwood Street), as it will improve the safety and security of the residents, and create a sense of arrival, whilst also providing ample stacking distance between Kraaibosch Ridge and Glenwood Avenue.

ANNEXURE C (continue)

FIGURE 1: EXISTING GATEHOUSE

Erf 29231 is a portion of public street (Beechwood Street), that vested with George Municipality, even though it is still registered in the name of the developers. This small portion of public street provides access to only the Kraaibosch Ridge Private development, from Glenwood Avenue.

The proposal is to close George Erf 29231 as a public road, and to subdivide and consolidate a portion of the closed public street with the abutting private street, to legalise the Kraaibosch Park Gatehouse.

4.1. Access & Roads

Access to the group housing site is currently obtained from Glenwood Avenue via the existing gatehouse. This will become an emergency access only and the main access to the estate will be from the western boundary off the public street (Erf 30677) directly north of the proposed utility erf (Erf 30665) as indicated on the figures below.

ANNEXURE C (continue)

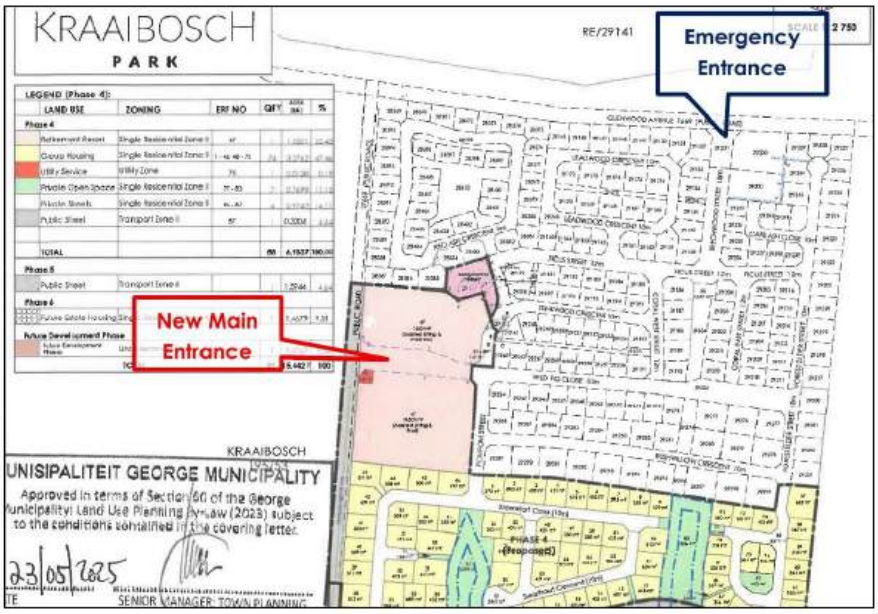


FIGURE 2: EXTRACT APPROVED SUBDIVISION PLAN

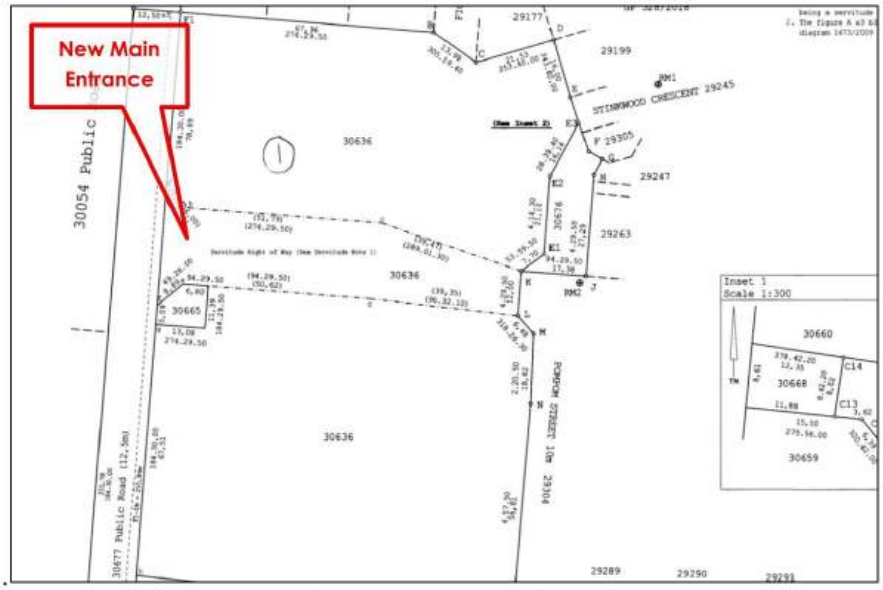


FIGURE 3: EXTRACT GENERAL PLAN NO 1415/2025

ANNEXURE C (continue)

5. STATUTORY SPECIFICATIONS

The following land development applications are lodged in terms of the George Municipality's By-Law on Municipal Land Use Planning (2023) to achieve the desired outcome.

5.1. Proposed Closure of Public Place

The Surveyor General's status report (attached as **ANNEXURE K**) confirms that Erf 29231 George is shown as "Public Road" in the Surveyor General's records.

MARIKE VREKEN TOWN PLANNERS CC
P.O. BOX 2180
KNYSNA
6570

2026-02-10

MY REF: Geor.195 V.13 p211

Your ref: Email
Dated: 2026-02-06

Attention: Dale Bastian

Note: THIS STATUS REPORT IS VALID FOR 3 YEARS.

Sir

STATUS REPORT: CLOSURE OF A PORTION OF PUBLIC ROAD ERF 29231 ADJOINING ERVEN 29153 AND 29245 GEORGE

1. The proposed closure of land as shown on the attached plan **lettered A B C D** represents: **A portion of Public Road Erf 29231 George Vide General Plan SG No. 528/2021.**

   It is shown as **Public Road** in my records.

2. **FOR OFFICE USE**: The following properties will be endorsed: **Public Road Erf 29231 George**

3. Status Report fees: **R275.00** (Received p209)
   Endorsement fees amount to: **R180.00** ( )

4. I require a copy of diagrams suitable for registration purposes, surveyed and framed by a land surveyor, of the following: **Public Road Erf 29231 George and portion to be closed.**

5. A written consent (accompanied by a sketch) is required in **terms of Section 23(3) of the George Municipality's Municipal Planning By-Law, 2015 for the amendment of: General Plan No: N/A**

FIGURE 4: EXTRACT SG STATUS REPORT

The proposal is also for the closure of a portion Erf 29231 (an unregistered portion of Erf 29144. An application is therefore made for the closure of portion of a public place, in terms of Section 15(2)(n) of the George Municipality Land Use Planning By-Law, 2023.

5.2. Exempted Subdivision & Consolidation (Minor Amendment to common boundaries change less than 10%)

The proposal is for the subdivision of George Erf 29231 into 2x portions (Portion A =60m² and a remainder). Also, to allow for the consolidation of the subdivided Portion A of George Erf 29231 with George Erf 29245.

ANNEXURE C (continue)

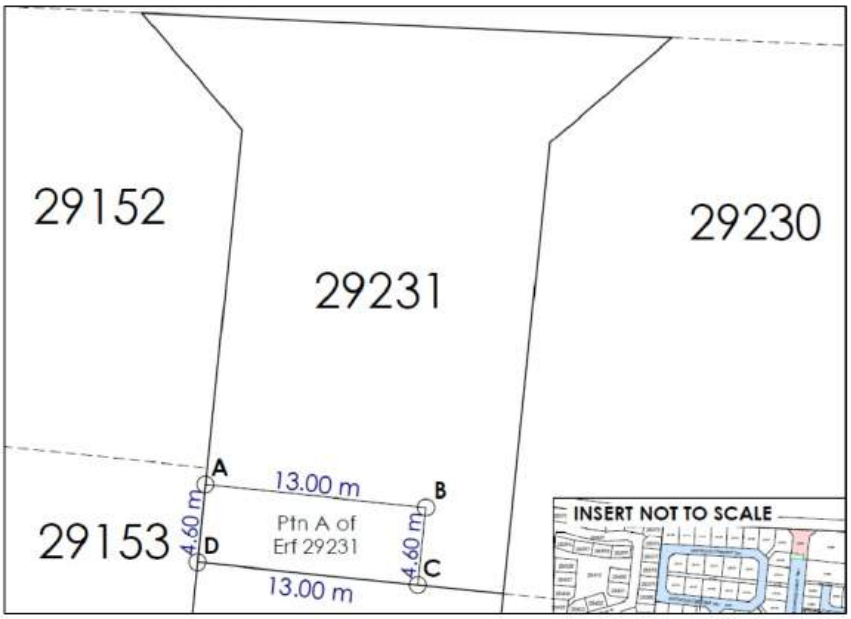


FIGURE 5: PROPOSED SUBDIVISON

The decrease in size of George Erf 29231 will be 9.53% and the increase in size of George Erf 29245 will be 0.39%. It should be noted that this subdivision and consolidation, is exempted from a formal land development application, in terms of Section 24(1)(c) of the George Municipal Planning Bylaw, 2023.

EXEMPTION OF CERTAIN SUBDIVISIONS AND CONSOLIDATIONS

24. (1) The subdivision or consolidation of land does not require the approval of the Municipality in the following cases:

(a) a subdivision or consolidation that arises from the implementation of a court ruling;

(b) a subdivision or consolidation that arises from an expropriation;

(c) a minor amendment to the common boundary between two or more land units if the resulting change in area of any of the land units does not exceed 10 percent;

(d) the consolidation of a closed public place with an abutting erf;

(e) the construction or alteration of a public or proclaimed street;

(f) the registration of a servitude or lease agreement for—

FIGURE 6: EXTRACT - GEORGE MUN PLANNING BY-LAW (SEC.24)

The proposal is for the confirmation of an exempted subdivision & consolidation in terms of Section 24(1)(c) of the George Municipal Planning Bylaw for a minor amendment to the common boundary between unregistered Erven 29231 & 29245 George.

ANNEXURE C (continue)

5.3. George Integrated Zoning Scheme By-Law, 2023

When a public place is closed if the land is transferred to an abutting landowner, that portion of the land falls in the same zone as that of the abutting land belonging to the abutting owner in terms of Section 14 of the George Integrated Zoning Scheme By-Law, 2023. The closed portion of public street therefore after the closure automatically reverts to Transport Zone III (TUZIII) from Transport Zone II (TUZII).

DEEMED ZONING OF CLOSED PUBLIC PLACES

14. The zoning of land that was previously a public place, vested in or owned by the Municipality and that is closed, is determined as follows:

(1) if the land is transferred to an abutting land owner, that portion of the land falls in the same zone as that of the abutting land belonging to the abutting owner; or

(2) the Municipality must determine which zoning applies to the land if—

(a) the land is transferred to an abutting land owner and that owner owns abutting properties falling into more than one zone; or

(b) in any other case not provided for in this section.

FIGURE 7: EXTRACT GEORGE MUN ZONING SCHEME BY-LAW (SEC.14)

ANNEXURE C (continue)

SECTION C :	CONTEXTUAL INFORMANTS

6. LOCALITY

(Refer to Plan 1: Locality Plan)

The "application area" is located in Kraaibosch Park, George and is bordered by Glenwood Avenue north. The GPS coordinates for the centre of the application area are at 33°58'28.08"S and 22°30'34.32"E.

FIGURE 8: LOCALITY

7. CURRENT LAND USE AND ZONING

7.1. Land Use

George Erf 29231 is currently used as a public street providing access to the Kraaibosch Park Development and George Erf 29245 is currently used as a private street within the Kraaibosch Park Development.

7.2. Zoning

- George Erf 29231 is currently zoned as Transport Zone II (TUZII) (Public Street) in terms of the George Integrated Zoning Scheme By-Law, 2023.
- George Erf 29245 is currently zoned as Transport Zone III (TUZIII) (Private Street) in terms of the George Integrated Zoning Scheme By-Law, 2023.

FIGURE 9: EXTRACT GEORGE GIS -ZONINGS

8. CHARACTER OF THE AREA

The application area is situated in an area characterised predominantly by residential land uses with established residential areas surrounding the application area, more specifically various group housing developments.

FIGURE 10: SURROUNDING SUBURBS

ANNEXURE C (continue)

It is therefore the considered opinion that the proposed minor amendment of property boundaries will not negatively impact on the character of the area. The proposal will not change the character of the area, and in no way impact any of the neighbouring properties.

9. EXISTING POLICY FRAMEWORKS

9.1. Western Cape Provincial SDF (2014)

The Western Cape Provincial SDF was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda".

The PSDF sets out a policy framework within which the Western Cape Government will carry out its spatial planning responsibilities. Each of the three spatial themes contributes to the achievement of the Western Capes's strategic objectives. These policies are categorised into three themes, namely:

- **Resources:** Sustainable use of spatial assets and resources
- **Space Economy:** Opening up opportunities in the Space Economy
- **Settlement:** Developing Integrated and sustainable settlements

Planning Implication:
The Western Cape Spatial Development framework has a strong emphasis on revitalising urban spaces creating an urban living environment which is more convenient, efficient and aesthetically pleasing to residents. The subject property is situated inside the urban edge of George Municipal area and within the existing residential estate. The provincial SDF is a provincial scale planning document rather than a municipal scale. Meaning, that an application for minor amendment of property boundaries is not directly applicable to the spatial planning policies of the PSDF. The proposal is on such a small scale it is difficult to indicate how it will comply or deviate from the Western Cape Spatial Development Framework which applies to provincial scale planning.

9.2. George Municipal SDF (2023)

The Municipal Spatial Development Framework 2023, for the period May 2023 to May 2027, is now deemed the adopted policy, which guides spatial growth and development in George. The MSDF provides clarity with respect to the manner in which land-use, development, and investment will be supported to build a spatial form which facilitates the vision and strategic objectives of the Municipality.

The George MSDF plays a leading role in the broader municipal planning system. The MSDF is the spatial expression of the IDP while at the same time, the MSDF couches the IDP within a long-term spatial vision for the municipal area that seeks to implement the vision, principles and policy directives set out in national and provincial legislation, strategies, policies and plans. Therefore, decisions made by sectors, spheres and entities of the public sector should be consistent with and work towards realising the vision, spatial strategies and plan set out in the MSDF.

George Municipality's vision, as encapsulated in its 2022 – 2027 Integrated Development Plan (IDP), is to be "a city for a sustainable future". To this end, the following 5 Strategic goals are identified within the George SDF:

- Develop and grow George;
- Safe, clean and green;
- Affordable quality services;
- Good governance and human capital; and
- Ensure good governance and human capital in George.

The spatial policies and policy guidelines guide decision-making on resource allocation, sector planning, land use management and land development programmes. It is important to note some of the key policies of the SDF have a bearing on this application.

From the above discussion regarding the George MSDF; the following conclusion can be made:

- The subject property is situated inside the urban edge and urban area of Kraaibosch and the George Municipality.

Therefore, this proposed development is regarded as being consistent with the George Spatial Development Framework as it does not conflict with the purpose of the relevant designation in the spatial development framework and urban development is supported.

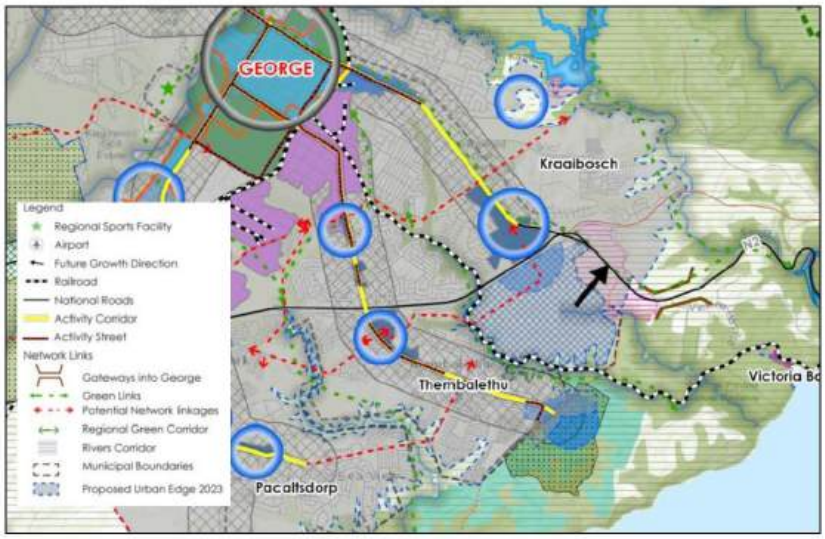


FIGURE 11: EXTRACT GEORGE SDF

The SDF is the primary spatial tool for guiding development within the municipal area. The SDF echoes the principles laid down by the provincial SDF including densification, the importance of compact settlements and walkability and the promotion of a mixture of uses in close proximity to one another.

Section 19 (2) of the Western Cape Land Use Planning Act states the following:
"...If a spatial development framework or structure plan does not specifically provide for the utilisation or development of land as proposed in a land use application or a land development application, but the proposed utilisation or development does not conflict with the purpose of the relevant designation in the spatial development framework or structure plan, the utilisation or development is regarded as being consistent with that spatial development framework or structured plan..." The proposed development is therefore consistent with the George SDF.

9.3. George Integrated Development Plan (2022/2027)

The George Council opted to adopt a new five-year IDP for the period 2022 – 2027. The IDP is a municipal planning instrument that drives the process to address the socio-economic challenges as well as the service delivery and infrastructure backlogs experienced by communities in the municipality's area of jurisdiction. The IDP is the municipality's principal five-year strategic plan that deals with the most critical development needs of the municipal area (external focus) as well as the most critical governance needs of the organisation (internal focus).

FIGURE 12: GEORGE IDP: VISION, MISSION & VALUES

The application area is located in **Ward 22** of the George Municipal Area. None of the identified ward-based needs and priorities has a direct bearing or any reference to the proposal.

ANNEXURE C (continue)

Planning Implication:

The IDP is a municipal planning tool to integrate municipal planning and allocate municipal funding to achieve strategic objectives that will contribute to the overall municipal vision. This proposal relieves the duty from the local authority by alienating the portion and maintaining it as part of their property. The municipality also generates funds with the sale of the portion of land, therefore growing the revenue base of the local municipality. It was also confirmed that the proposal will not impact service delivery. The proposal is therefore consistent with the George Integrated Development Plan and the strategic objectives to achieve the desired vision for George.

ANNEXURE C (continue)

SECTION D :	MOTIVATION

10. ASSESSMENT OF APPLICATIONS

10.1. Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

Section 42 of SPLUMA prescribes certain aspects that have to be taken into consideration when deciding on an application. These are:

(1). Development principles set out in Chapter 2 of SPLUMA

(2). Protect and promote the sustainable use of agricultural land

(3). National and provincial government policies the municipal spatial development framework, and take into account: —

(i) the public interest.

(ii) the constitutional transformation imperatives and the related duties of the State.

(iii) the facts and circumstances relevant to the application.

(iv) the respective rights and obligations of all those affected.

(v) the state and impact of engineering services, social infrastructure, and open space requirements.

(vi) any factors that may be prescribed, including timeframes for making decisions.

10.2. George Municipality Bylaw on Municipal Land Use Planning (2023)

The George Municipality Bylaw on Municipal Land Use Planning (2023) as promulgated by G.N 8747 dated 21 April 2023 states in Section 65 the general criteria necessary for considering an application by the municipality.

It must be noted that the application has not undergone the notice phase of the application process and that the information below is the necessary information required by the municipality to process the application. The following criteria must be considered when evaluating the desirability of this land development application:

Criteria	Reference in Report
The impact of the proposed land development on **municipal engineering services**.	N/A
The **integrated development plan**, including the municipal spatial development framework.	Par.9.3
The applicable **local spatial development frameworks** adopted by the Municipality.	Par.9.2

ANNEXURE C (continue)

Criteria	Reference in Report
The applicable **structure plans**.	*n/a*
The applicable **policies of the Municipality** that **guide decision-making**.	Par.10.2
The **provincial spatial development framework**.	Par.9.1
Where applicable, a **regional spatial development framework** contemplated in section 18 of the Spatial Planning and Land Use Management Act or provincial regional spatial development framework.	*n/a*
The policies, principles and the planning and development norms and criteria set by the national and provincial government.	Par.10.1
The matters referred to in Section 42 of the Spatial Planning and Land Use Management Act. Principles referred to in **Chapter VI (6) of the Western Cape Land Use Planning Act.**	Par.16
Applicable provisions of the **zoning scheme**.	Par.5.3
any **restrictive condition** applicable to the land concerned	*n/a*

11. CONSISTENCY WITH SPATIAL PLANNING POLICIES

As described in **Par.9** of this report, the proposal is consistent with the relevant spatial planning policies. The proposal is consistent with the relevant spatial planning policies for the following reasons:

i. The scale of this application is considered insignificant to be associated with the spatial planning policies of the Provincial Spatial Development framework, however, the proposal ensures the efficient use of the piece of land and complies with the strategic objectives as set out in the Western Cape Spatial Development Framework.

ii. The proposal would contribute to the growing the revenue base, will not impact on service delivery of the local municipality and is consistent with the strategic objectives as set out in the IDP.

12. REASON FOR APPLICATION

The application is submitted to give effect to the Municipal Council's resolution approving the sale of a portion of municipal land to the adjoining landowners and to facilitate the conclusion and implementation of the Council Resolution.

The proposal seeks to formally close the relevant portion of public road, subdivide it, and consolidate the subdivided portion with the adjoining private street within the estate. This is required to regularise the existing gatehouse and associated access control infrastructure, which currently encroaches onto municipal land.

The application is therefore necessary to align the cadastral boundaries with the approved land use and on-site infrastructure, ensure legal certainty regarding ownership and maintenance responsibilities, and formalise the gatehouse as part of the private estate's access control system.

13. ALIENATION OF MUNICIPAL LAND APPLICATION

An application for land alienation was submitted to George Municipality to purchase this portion of land. The George Municipal Council resolved at their meeting held on 30 March 2023 that the portion of Erf 29231 George (±629m²) may be disposed of. Refer to **ANNEXURE A** for the Council decision.

The portion of land is not utilised by any other member of the public or the Municipality. The purpose of this application, therefore, is to give effect to the relevant Council resolution and concluded the Deed of Sale. Approval of this land development application is required to formalise the transfer of the purchased land portion into the name of the Kraaibosch Park Homeowners Association. It would be meaningless to agree to sell the portion of land and not allow the owners to fully utilise it as per intended use as per the application which has not since changed and is as per the sale agreement.

14. NO IMPACT ON ENGINEERING SERVICES & INFRASTRUCTURE

The proposed land parcel to be alienated, will not impact any municipal services and as confirmed by Council is not required for the minimum level of basic Municipal service delivery in terms of Section (14(2) of the Municipal Finance Act 2003, (Act 56 of 2003). The portion of public street only provided access to Kraaibosch Park.

15. NO IMPACT ON EXISTING RIGHTS

The land use applications will not impact any existing land use right currently enjoyed by the neighbouring properties. The subject property is not currently used to provide any meaningful access other than to the applicant, and it will not impact the provision of any services to surrounding residents as confirmed by George Municipality.

16. WESTERN CAPE LAND USE PLANNING ACT, 2014 (ACT 3 OF 2014)

The purpose of this Provincial legislation is to consolidate legislation in the Province pertaining to provincial planning, regional planning and development, urban and rural development, regulation, support and monitoring of municipal planning and regulation of public places and municipal roads arising from subdivisions; to make provision for provincial spatial development frameworks; to provide for minimum standards for, and the efficient coordination of, spatial development frameworks; to provide for minimum norms and standards for effective municipal development management; to regulate provincial development management; to regulate the effect of land development on agriculture; to provide for land use planning principles; to repeal certain old-order laws, and to provide for matters incidental thereto.

Section 59 of this Act prescribes the Land Use Planning Principles that apply to all land development in the province. These are summarised in the tables below. The tables below aim to summarise how the proposed development complies with these principles.

ANNEXURE C (continue)

16.1. Spatial Justice

Criteria	Compliance	Planning Implication
Past spatial and other development imbalances must be redressed through improved access to and use of land.	**N/A**	*This policy is not applicable to the application area.*
Spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation.	**N/A**	*This policy does not apply to the application.* *Not a Spatial Development Framework or Policy.*
Spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons.	**N/A**	*This policy does not apply to the application.*
Land use management systems should include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas and informal settlements.	**N/A**	*This policy does not apply to the application.*
Land development procedures must include provisions that accommodate access to, and facilitation of, the security of tenure and the incremental upgrading of informal areas.	**Applicable to George Municipality**	*The municipality must process this application within the prescribed guidelines of the George Bay Land Use Planning bylaw.*
A competent authority contemplated in this Act or other relevant authority considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property will be affected by the outcome of the application.	**Applicable to George Municipality**	*The municipality must process this application within the prescribed guidelines of the George Bay Land Use Planning bylaw.*

ANNEXURE C (continue)

Criteria	Compliance	Planning Implication
The right of owners to develop land in accordance with current use rights should be recognised.	**N/A**	▪ *This policy does not apply to the application area and proposal.*

16.2. Spatial Sustainability

Criteria	Compliance	Planning Implication
Promote land development that is spatially compact, resource-frugal and within the fiscal, institutional, and administrative means of the relevant competent authority in terms of this Act or other relevant authority.	**Comply**	▪ *The proposal is resource frugal, as all activities will make use of the existing services.* ▪ *The proposed development is within an established urban environment* ▪ *No additional service capacity is required to enable the proposal.*
Ensure that special consideration is given to the protection of prime, unique, and high-potential agricultural land.	**N/A**	*Not agricultural land.*
Uphold consistency of land use measures in accordance with environmental management instruments.	**Comply**	▪ *The application area is located within an existing urban area and does not trigger any environmental listed activities in terms of the National Environmental Management Act (1998).*
Promote and stimulate the effective and equitable functioning of land markets.	**Comply**	▪ *The alienated portion being consolidated with the subject properties of land will not affect the size of the properties in such a manner that it will influence the value to such an extent that it influences the functionality of the land markets.* ▪ *The proposed development is consistent with the character of the surrounding area.* ▪ *It will not negatively impact the value of its surrounding properties.*
Consider all current and future costs to all parties for the provision of infrastructure and social services in land developments.	**Comply**	▪ *The portion of land being alienated, is deemed not needed to provide the minimum level of basic Municipal Services.*
Promote land development in locations that are sustainable and limit urban sprawl.	**Comply**	▪ *The proposed development is within an existing urban area.* ▪ *No urban sprawl will be created as a result of the proposed development.* ▪ *The proposal is merely the amendment of the property boundaries.*

Criteria	Compliance	Planning Implication
		▪ *The proposal leads to a more sustainable use of the piece of land that will be maintained by the new landowner.*
Result in communities that are viable.	**Comply**	▪ *The proposal will not detract from the existing character of the area and contributes to a more viable community by allowing the property owners to fully utilize and maintain the portion of underutilized land.*
Strive to ensure that the basic needs of all citizens are met in an affordable way.	**Comply**	▪ *This principle is not applicable to the applicant or this development.*
The sustained protection of the environment should be ensured.	**Comply**	▪ *In line with all Environmental policy documents and legislation.* ▪ *The application area is located within the existing urban area and within the existing urban fabric.*

16.3. Spatial Efficiency

Criteria	Compliance	Planning Implication
Land development optimises the use of existing resources and infrastructure.	**COMPLY**	▪ *Refer to **Par.14**.*
Integrated cities and towns should be developed.	**N/A**	*This policy is applicable to township developments.*
Policy, administrative practice, and legislation should promote speedy land development.	**Applicable to George Municipality**	▪ *The municipality should process this application within the prescribed time frames of the George Land Use Planning bylaw, 2023.*

16.4. Spatial Resilience

Criteria	Compliance	Planning Implication
Flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.	**Comply**	▪ *The proposal is consistent with the various applicable spatial plans, policies and land use management systems.* ▪ *It will have no negative impact on the livelihood of the community.* ▪ *The proposed application complies with the requirements of the George Land Use Planning bylaw, 2023.*

ANNEXURE C (continue)

16.5. Good Administration

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
All spheres of government should ensure an integrated approach to land use planning.	**Applicable to George Municipality**	▪ *This principle has no direct bearing on the application; however, the George Municipality is obligated to consider the application fairly and within the timeframes provided in terms of the municipal planning bylaw.* ▪ *What is however important is that all decision-making is aligned with sound policies based on national, provincial and local development policies.*
All government departments must provide their sector inputs and comply with any other statutory requirements during the preparation or amendment of spatial development frameworks.		
The requirements of any law relating to land development and land use must be met timeously.		
The preparation and amendment of spatial plans, policy, zoning schemes and procedures for land development and land use applications, should include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them.		
The legislation, procedures and administrative practice relating to land development should be clear, promote predictability, trust, and acceptance in order to inform and empower members of the public.		
A spatial development framework, zoning scheme or policy should be developed in phases and each phase in the development thereof should include consultation with the public and relevant organs of state and should be endorsed by the relevant competent authority.		
Decision-making procedures should be designed to minimise negative financial, social, economic, or environmental impacts.		
Development application procedures should be efficient and streamlined, and timeframes should be adhered to by all parties.		

ANNEXURE C (continue)

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
Decision-making in all spheres of government should be guided by and give effect to statutory land use planning systems.		

17. CONCLUSION

In light of this motivation, and the information contained in the foregoing report, it is clear that the application for:

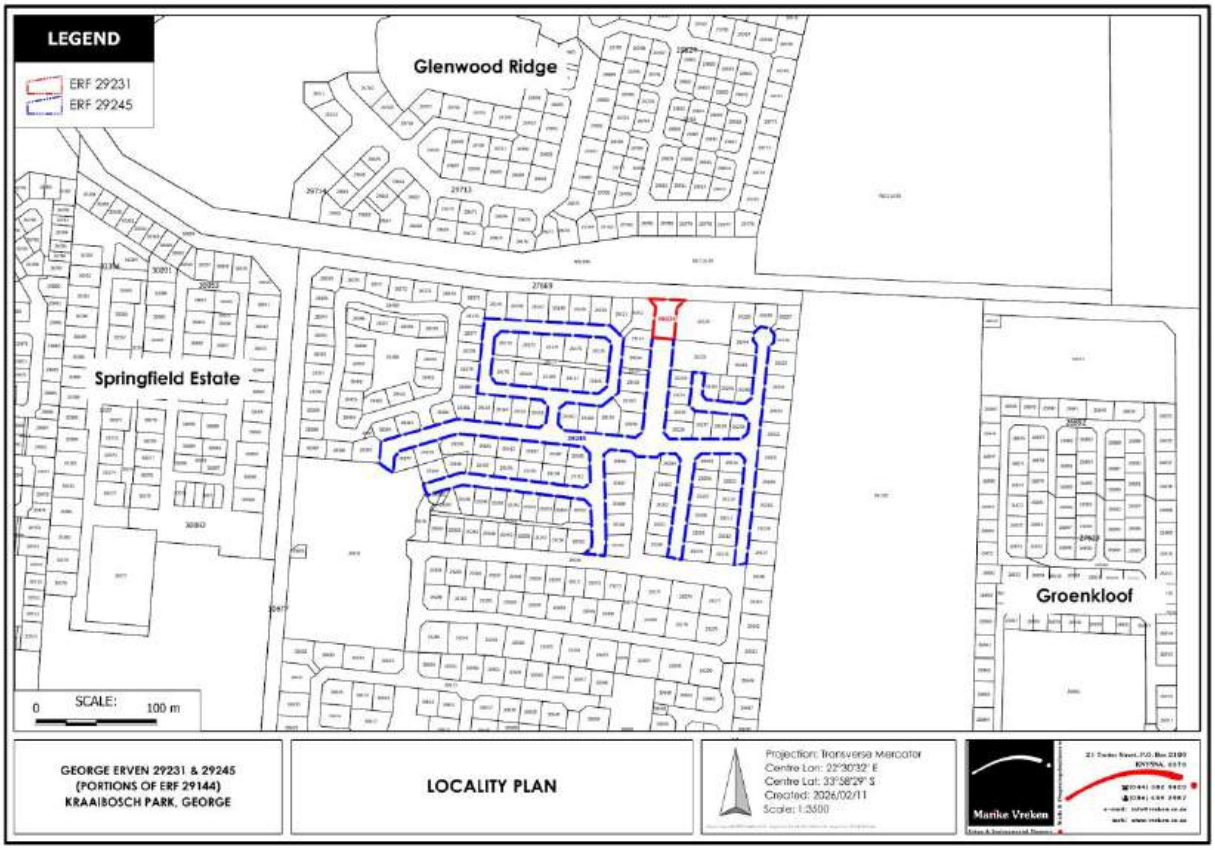
(i) The closure of a portion of Public Street Erf 29231, an unregistered portion of Erf 29144 George in terms of Section 15(2)(n) of the George Municipality Land Use Planning By-Law, 2023; and

(ii) The confirmation of an exempted subdivision & consolidation in terms of Section 24(1)(c) of the George Municipal Planning Bylaw for a minor amendment to the common boundary between unregistered Erven 29231 & 29245 George.

Meets the criteria as set out in The Spatial Planning and Land Use Management Act (SPLUMA) and the George Municipality's By-Law on Municipal Land Use Planning (2023), is desirable and it is therefore recommended that the application be supported by the relevant authorities and approved by George Municipality.

Marike Vreken Urban and Environmental Planners
February 2026

ANNEXURE D


LEGEND
ERF 29231
ERF 29245
Glenwood Ridge
Springfield Estate
Groenkloof
0
SCALE:
100 m
GEORGE ERVEN 29231 & 29245
(PORTIONS OF ERF 29144)
KRAAIBOSCH PARK, GEORGE
LOCALITY PLAN
Projection: Transverse Mercator
Centre Lon: 22°30'32" E
Centre Lat: 33°58'29" S
Created: 2026/02/11
Scale: 1:3500
Marike Vreken

ANNEXURE E

6.2 REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

GEORGE
THE CITY FOR ALL REASONS

DIRECTORATE: PLANNING AND DEVELOPMENT

LAND USE PLANNING REPORT

APPLICATION FOR REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

Reference number	4022632	Application submission date	9 February 2026	Date report finalized	13 May 2026
Delegation: 4.17.1.17 of 24 April 2025 (AO: Category C2. A(c)_MPT)					

PART A: AUTHOR DETAILS						
First name(s)	Robert Henk					
Surname	Janse van Rensburg					
Job title	Town Planner					
SACPLAN registration number	A/2925/2020					
Directorate/ Department	Planning and Development					
Contact details	044 801 9477 / rhjansevanrensburg@george.gov.za					
PART B: APPLICANT DETAILS						
First name(s)	Rudolf					
Surname	Schröder					
Company name	Zutari					
SACPLAN registration number	A/151/2009		Is the applicant authorised to submit this application?		**Y**	N
Registered owner(s)	George Municipality					
PART C: PROPERTY DETAILS						
Property description (in accordance with Title Deed)	Remainder Erf 464, George					
Physical address	PW Botha Boulevard		Town/City	George		
Current zoning	Undetermined	Extent(m^2/ha)	Unavailable (commonage)	Are there existing buildings on the property?	Y	**N**
Applicable Zoning Scheme	George Integrated Zoning Scheme By-Law, 2023 (hereafter "***Zoning Scheme***")					

6.2 REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

Legislation	Spatial Planning and Land Use Management Act, 2013 (hereafter ***"SPLUMA"***) Western Cape Land Use Planning Act, 2014 (hereafter ***"LUPA"***). Land-use Planning By-Law for George Municipality, 2023 (hereafter ***"Planning By-Law"***). Provincial Spatial Development Framework, 2014(hereafter ***"PSDF"***). George Municipal Spatial Development Framework, 2023 (hereafter ***"MSDF"***). George South-East Local Spatial Development Framework, 2015 (hereafter ***"LSDF"***).					
Current Land Use	Undetermined			Title Deed number	GEQ15-15/1922 The title deeds are attached as **Annexure E.** The SG Diagram is attached as **Annexure F.**	
Any restrictive title conditions applicable?	Y	**N**	If Yes, list condition number(s)	N/A		
Any third-party conditions applicable?	Y	**N**	If Yes, specify	N/A		
Any unauthorised land use/building work?	Y	**N**	If Yes, specify	N/A		

PART D: PRE-APPLICATION CONSULTATION (ATTACH MINUTES)						
Has a pre-application consultation been undertaken?	**Y**	N	The pre-application is attached as **Annexure D.**			
Reference Number	Collab no. 3505358	Date of consultation	11 December 2024	Official's name	N. Swanepoel	

PART E: LIST OF APPLICATIONS (TICK APPLICABLE)							
a. Rezoning	**X**	b. Permanent departure		c. Temporary departure		**d. Subdivision**	**X**
e. Consolidation		f. Amendment, suspension or deletion of restrictive conditions		g. Permissions required in terms of the zoning scheme		h. Amendment, deletion or additional conditions in respect of existing approval	
i. Extension of validity period		j. Approval of an overlay zone		k. Phasing, amendment or cancellation of subdivision plan		l. Permissions required in terms of conditions of approval	
m. Determination of zoning		n. Closure of a public place		o. Consent use		p. Disestablishment of a Home Owners Association	
q. Rectify Beach of Home Owners Association		r. Reconstruct building of non-conforming use		Other			

PART F: APPLICATION DESCRIPTION

Consideration of the following applications on Remainder Erf 464, George:

1. Subdivision, in terms of Section 15(2)(d) of the Land Use Planning By-law for George Municipality, 2023, of Remainder Erf 464, George, to create Portion A of approximately 16.54 hectares and a Remainder.

2. Rezoning, in terms of Section 15(2)(a) of the Land Use Planning By-law for George Municipality, 2023, of Portion A of Remainder Erf 464, George, from "Undetermined Zone" to a "Subdivisional Area" comprising the following:

   a) x8 Industrial Zone II Erven;
   b) x1 Community Zone I Erf;
   c) x1 Transport Zone I Erf;

d) x1 Open Space Zone II Erf;
e) x1 Transport Zone II Erf;

3. Subdivision, in terms of Section 15(2)(d) of the Land Use Planning By-law for George Municipality, 2023, of the Subdivisional Area on Portion A (portion of Remainder Erf 464, George) into 12 portions comprising the following:

a) x8 Industrial Zone II Erven;
b) x1 Community Zone I Erf;
c) x1 Transport Zone I Erf;
d) x1 Open Space Zone II Erf;
e) x1 Transport Zone II Erf;

PART G: LOCATION

The proposed Metro Grounds Industrial development is located on a portion of the Remainder of Erf 464, George, in the George Industrial area east of York Street and north of the N2. The site is located at the intersection of PW Botha Boulevard and Ossie Urban Street, roughly halfway between Nelson Mandela Boulevard and York Street, adjacent to an existing substation and the proposed future Go George bus depot.

- **Figure 1:** Area selection of Remainder Erf 464, George
- **Figure 2:** Project Area
- **Figure 3:** Zoning Extract

Figure 1: Selection of Remainder Erf 464, George

Figure 2: Project Area

Figure 3: Zoning Extract

PART H: BACKGROUND AND HISTORY

- The George Municipality (GM) proposes industrial development on a portion of the Remainder of Erf 464, George. The project is referred to as Metro Grounds Industrial Development.

- The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development.
- The site is within the urban development boundary and identified for catalytic development in the George Spatial Development Framework, 2023.
- An area excluded from the proposed layout earmarked for the expansion of the Go-George Bus Depot site adjacent to the site has been approved on 27 March 2026.

PART I: SUMMARY OF APPLICANT'S MOTIVATION

**The notes in italics did not form part of the applicant's motivation report and are merely for explanation purposes.*

The motivation report is attached as **Annexure C.**

Proposed development

- The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate a mixed-use development.
- The industrial development component intends to accommodate industry erven, appropriate to the site context and facilitate small and medium enterprise development.
- The small industrial stands will be released to users or buyers.
- The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility, ideally for a vocational training establishment.
- A portion of the site includes a portion of the Bus Depot site, as described in the background and history section.
- The proposed development gains access from PW Botha Boulevard, and recent updates to the layout plan show a connection with the future Rand Street extension for an additional access point.

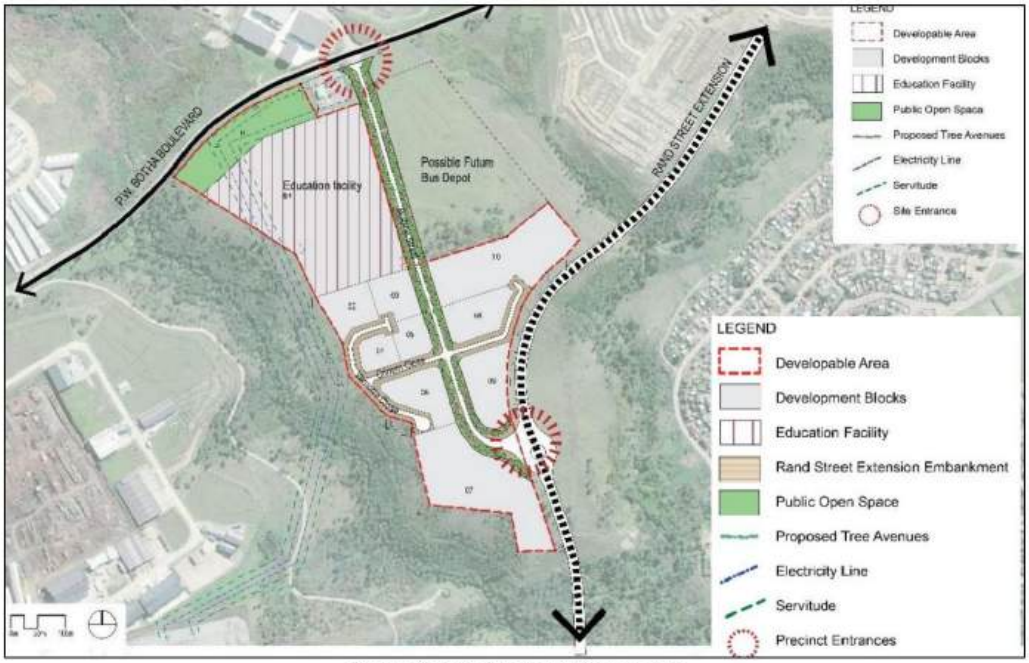


Figure 4: Development Framework

The proposed subdivision and zoning plan is illustrated below and attached as ***Annexure A.***

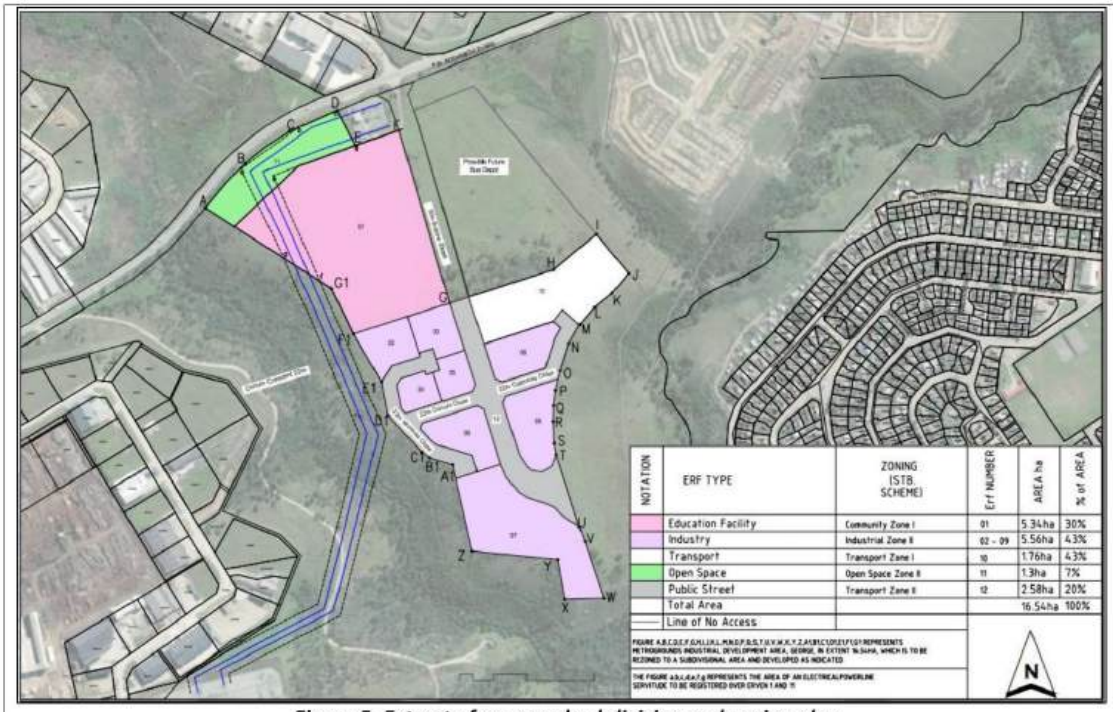


Figure 5: Extract of proposed subdivision and zoning plan

Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) & Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA)

- The application complies with the five principles of SPLUMA.
- The land use planning principles of LUPA (Section 59) are, in essence, the expansion of the five development principles of SPLUMA listed above.

Other legislation and frameworks

- The spatial interventions, concepts and principles underpinning the proposed Metro Grounds development are aligned with the NDP objectives to broaden the economic base of the town of George through the supply of suitable property that complements existing land uses.
- By promoting development within the urban edge, NEMA principles are considered, and a spatial strategy that is environmentally sustainable and which creates a balance between development and the protection of natural resources, is presented. The proposed layout for the Metro Grounds industrial development has been designed to strategically protect environmentally sensitive natural elements as far as possible; this is in line with the NEMA principles.
- The proposed development will contribute towards inclusive and sustainable economic growth, which promotes economic opportunities and choices. This is in line with the principle of inclusion and access as well as growth, resulting in alignment with the Integrated Urban Development Framework.
- The spatial planning principles and strategies underpinning the proposed development of the Metro Grounds Industrial Development site align with the PSDF, contributing towards growing the Western Cape economy and using infrastructure investment as the primary lever to bring about the required urban spatial transitions.
- The proposal to develop the Metro Grounds Industrial Development site will support the Municipality's Strategic Goal 1 in the IDP to develop and grow George.
- The land development and service provision of the Metro Grounds Industrial Development is informed by the MSDF.
- The proposed Metro Grounds Industrial Development is fully aligned with the developmental objectives of the area as outlined in the LSDF.

Site Characteristics

- All areas with slopes greater than 25% have been excluded from the development footprint. The development footprint also became subsequently smaller as environmental sensitivities were confirmed.
- The site is identified as having no current or future agricultural production potential.
- No cultural or historically significant elements have been identified.
- The proposed Metro Grounds Industrial Development does not pose significant risks to civil aviation as the development will not introduce any obstacles taller than those already present on site and in adjoining industrial areas.

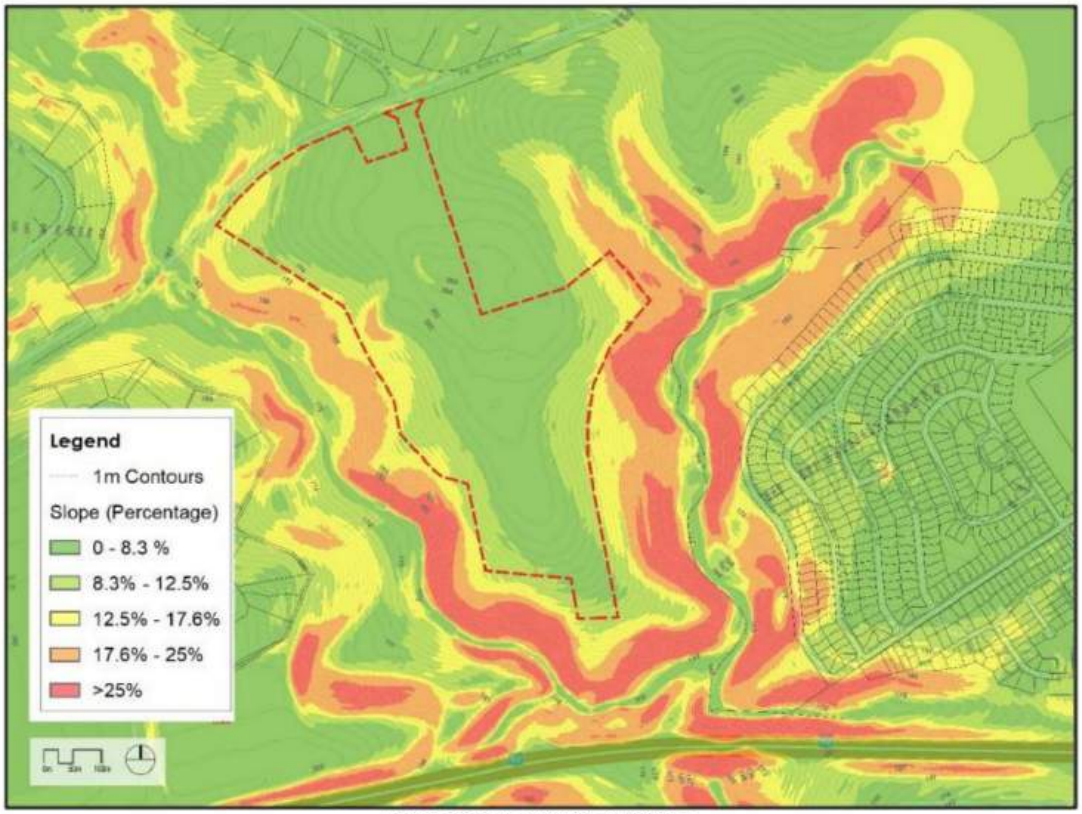


Figure 6: Topography and Slope

Parking, Access and Traffic

- The Metro Grounds hierarchy of streets differs in width from 30m to 22m.
- The site's primary access is off PW Botha Boulevard in the north.
- Direct access from and connection to the Rand Street Extension can occur once the road has been constructed, but in the interim, this central boulevard (Bulbine Street) terminates in the south with a circle.
- This will not impact the development's functioning as the street network can accommodate the required movement, providing access to all development parcels without the through-route.
- A detailed Traffic Impact Assessment has been undertaken to examine and advise on the proposed internal road network for the Metro Grounds Industrial Development.
- The Zoning Scheme should be used to determine the parking requirements for the various land uses.

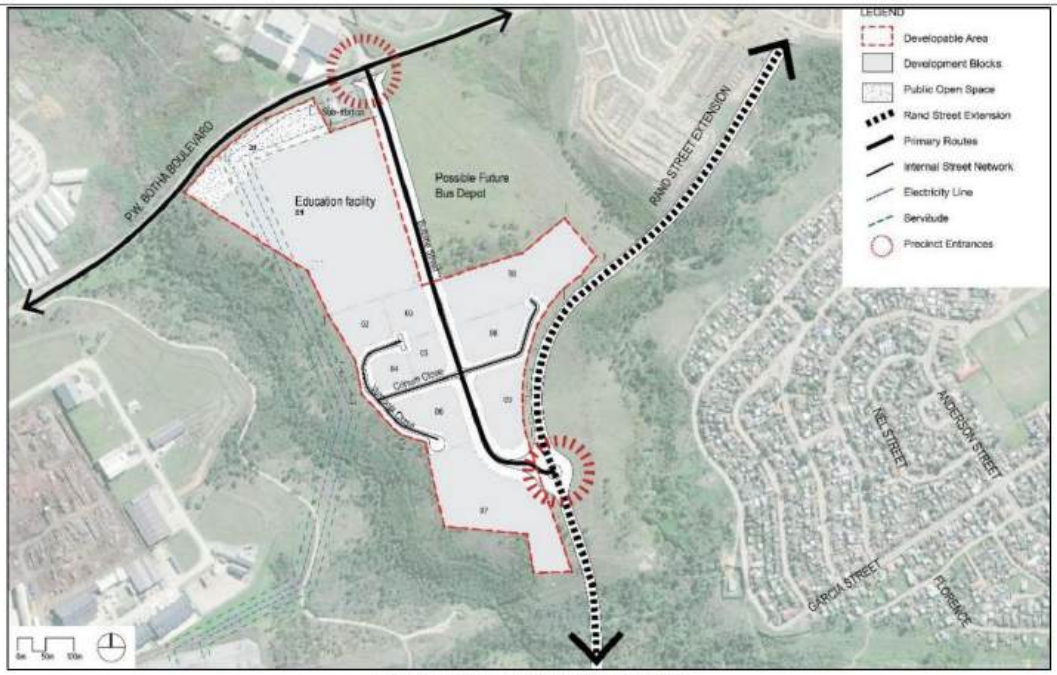


Figure 7: Access and Movement

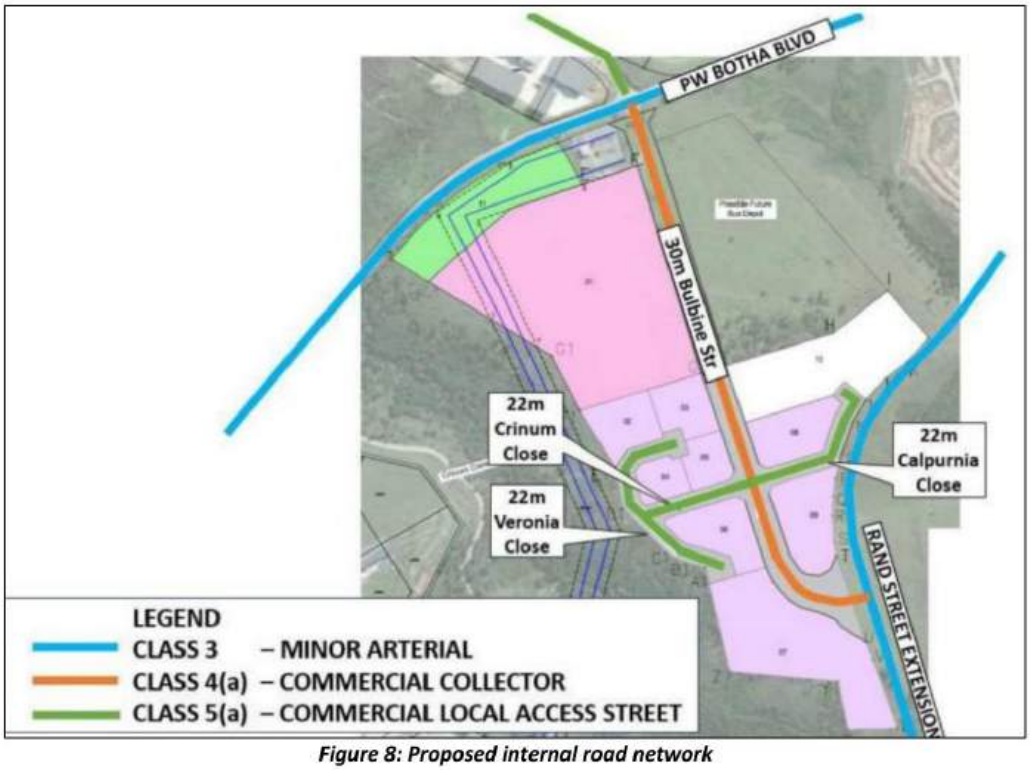


Figure 8: Proposed internal road network

Environmental and Heritage Concerns

- Several environmental specialist studies have been undertaken to confirm environmental sensitivities identified on site during the feasibility stage of the project.
- These environmental studies further shaped and informed the layout design of the proposed development and culminated in the final layout that formed the basis of this land use planning application.
- The site of the proposed development is not directly affected by any flood lines. The civil engineering services department at George Municipality indicated that flood lines have been delineated for the Rand Street extension and are currently under review. The intention is that the impact of this development on the flood lines, if any, should be considered as part of the study.

Character of the Area and Desirability

- The proposed development is in line with the existing land uses within the George industrial area. The Metro Grounds Industrial Development will complement and add value to the area by providing additional opportunities for economic growth.
- The community will, as a result, realise an increased sense of security and human well-being, and the development will also contribute to the character of the area.
- The proposed industrial use, albeit light industry, is buffered from residential use (Metro Grounds Residential Subsidy Housing Project and Borcherds) by "green lungs", and the anticipated use of the educational erf is similar to the existing Africa Skills Facility along PW Botha Boulevard.

Engineering Services

- The civil and electrical engineering investigations detail the planned infrastructure associated with the proposed development.
- The proposed development is within the urban edge and will connect to existing infrastructure in the vicinity of the site. The impact on engineering services is therefore minimal.
- The designs of all infrastructure will be approved by the Municipality before construction and will be certified by professional engineers after construction.

PART J: SUMMARY OF PUBLIC PARTICIPATION

Methods of advertising					**Date published**	**Closing date for objections**
Press (George Herold)	**Y**	N	N/A		19 February 2026	20 March 2026
Gazette	Y	**N**	N/A			
Notices	**Y**	N	N/A		19 February 2026 (31 via email and 3 notices via post)	20 March 2026
Website & Media	**Y**	N	N/A		19 February 2026	20 March 2026
Ward councillor	**Y**	N	N/A		19 February 2026 (email: Cllr. Johnson)	20 March 2026
On-site display	**Y**	N	N/A		19 February 2026	20 March 2026
Community organisation(s)	Y	N	**N/A**		N/A	
Public meeting	Y	N	**N/A**		N/A	
Third parties	Y	N	**N/A**		N/A	
Other	**Y**	N	If yes, specify	The notice was also sent to: WC DEADP (Planning & Environment), Heritage Western Cape, DAFF, Cape Nature, WC Department of Transport & Public Works, Western Cape Agriculture, Western Cape Department of	19 February 2026	20 April 2026

				Education, GIPTN (Go George)						
Total valid objections				1				Total invalid objections and petitions		0
Valid petition(s)			Y	**N**	If yes, the number of signatures		N/A			
Community organisation(s) response			Y	N	**N/A**	Ward Councillor Response		Y	**N**	N/A
Total letters of support			N/A							
Was the minimum requirement for public participation undertaken in accordance with the relevant By-Law on Municipal Land Use Planning and any applicable Council Policy									**Y**	N

PART K: SUMMARY OF COMMENTS DURING PUBLIC PARTICIPATION

**The notes in italics did not form part of the objection and are merely for explanatory purposes.*

One (1) objection and two (2) comments were received and summarised in Table 1 below: The comments and objections with responses are attached as **Annexure G.**

Table 1: Summary of comments / objections

Western Cape Department of Education - *(Objection)*
• The Western Cape Department of Education (WCED) noted its objection to the application on the basis that it is the third land use application in relation to Erf 464, George (Metro Grounds), that does not make provision for educational facilities. • The WCED requires a minimum of 2.5 hectares to be set aside for a secondary school facility within the portion designated for educational purposes.
GIPTN (GO George) – *(Comment)*
• GIPTN has no objection to the proposed rezoning and subdivision, subject to the following: Bulbine Street can accommodate large buses for possible future use, including indented bays on either side. This is especially important because access to the proposed future bus depot would likely be on Bulbine Street.
CapeNature – (Comment*)*
• CapeNature has previously submitted comments on the Draft Basic Assessment Report (DBAR) for the proposed Metro Grounds Industrial Development (see attached). We confirm that our comments in respect of the current application remain unchanged and are applicable to the current application.

PART L: SUMMARY OF APPLICANT'S REPLY TO OBJECTIONS

The applicant has provided their response to objections / comments (refer to **Annexure G**) and is tabled below:

Table 2: Reply to Comments/Objections

Western Cape Department of Education - *(Objection)*
• The George Municipality is proposing an educational property that measures roughly 5.34ha in size as part of the Metro Grounds Development. • Also noted with regard to educational facilities currently available in George, there are about eight school sites available that measure roughly 25ha in size. • There is also the Olympia School site that is under development with about 34ha of vacant land. In previous discussions, the potential development of an education site on the property directly opposite the Gwayang Development area has been considered. • The George Municipality is also considering the possibility of a school site on the future Riding Club Development. • A previous development concept for the Garden Route Dam site also included educational facilities of around 13.66ha in size. • The concern raised about the lack of educational facilities in George is noted.

- However, sufficient space is available for the development of schools in George, and future planning by the George Municipality includes consideration of additional school sites.
- The provision of a tertiary educational facility on the Metro Grounds Industrial Development is in direct response to a demand for such a facility identified by the Municipality.

GIPTN (GO George) – *(Comment)*

- No response to the GIPTN Unit was required.

CapeNature – (Comment*)*

- Comments are being addressed as part of the Environmental Authorisation Application.
- No comments received impacting the land use planning application

PART M: SUMMARY OF COMMENTS FROM INTERNAL DEPARTMENTS AND/OR ORGANS OF STATE		
Name of Department	**Date**	**Summary of comments and recommendation**
Civil Engineering Services	21/02/2026	In order. See attached development conditions.
Civil Engineering Services (Traffic)	02/03/2026	In order.
Electro-technical Services	10/02/2026	In order. Electricity Development Charges to be applicable on the connection / transfer of subdivided erven.
Parks	10/02/2026	In order.
Waste	10/02/2026	In order. To be compliant with Waste Management By-Law
Environmental	03/03/2026	In order. The application is supported, subject to compliance with the requirements set out in the Environmental Authorisation (if granted). A detailed landscaping plan must be prepared for the Open Space Zone (Erf No. 11). The area is to be utilised for additional tree planting and landscaping to enhance the visual amenity, ecological function, and overall entrance character of the mixed-use development.
Spatial Planning	09/02/2026	In Order. The proposed development aligns with the intent of the Council and the George MSDF's strategic planning.
Building Control	09/02/2026	In order. Supported subject to: Building plan to be submitted in terms of section 4 of the National Building Regulations and Building Standards Act, 103 of 1977, for the development. Building plans to comply with SANS 10400 and any other applicable legislation. No construction may commence until such time as a building plan has been approved. The property may only be used for the intended purpose once a Certificate of Occupation has been issued. Further comments will be provided on submission of building plans. Additional building plan application fees, calculated in terms of the approved tariffs, will be applicable should structures already be commenced with or completed without the approval of the Local Authority.

PART N: MUNICIPAL PLANNING EVALUATION (REFER TO RELEVANT CONSIDERATIONS GUIDELINE)		
Is the proposal consistent with the principles referred to in Chapter 2 of SPLUMA? (can be elaborated further below)	**Y**	N
Is the proposal consistent with the principles referred to in Chapter VI of LUPA? (can be elaborated further below)	**Y**	N

(In)consistency with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) and with the principles referred to in Chapter VI of the Land Use Planning Act, 2014 (Act 3 of 2014) and Section 65 of the Planning By-Law

The consistency of the application with the principles of SPLUMA and LUPA as read with Section 65 of the Planning By-Law was evaluated as follows:

No	Evaluation checklist		Yes	No	N/A
	Section 65				
65(a)	Does the application submitted comply with the provisions of the Land Use Planning By-law for George Municipality, 2023?		X		
65(b)	Has the motivation submitted been considered?		X		
	Were the correct procedures followed in processing the application? (see land use application process checklist)		X		
	Was a condonation required and granted with regards to the process followed? *(see land use application process checklist)*				X
65(c)	Have the desirability guidelines, as issued by the provincial minister to utilize land for the proposed land uses been considered? *(not yet applicable)*				X
65(d)	Have the comments received from the respondents, any organs of state and the provincial minister been considered? *(s. 45 of LUPA)*		X		
65(e)	Have the comments received from the applicant been considered?		X		
65(f)	Have investigations carried out in terms of other laws which are relevant to the application been considered?		X		
65(g)	Was the application assessed by a registered town planner? *(see land use application process checklist)*		X		
65(h)	Has the impact of the proposed development on municipal engineering services been considered?		X		
65(i)	Is the application in line, consistent and/or compatible with the IDP of the Municipality?		X		
	Is the application in line, consistent and/or compatible with the Municipality's SDF?		X		
65(j)	Is the application in line, consistent and/or compatible with the IDP of the district Municipality including its SDF?				X
	Is the application in line, consistent and/or compatible with the district Municipality's SDF?				X
65(k)	Is the application in line, consistent and/or compatible with the applicable local SDF?		X		
65(l)	Is the application in line, consistent and/or compatible with the applicable policies of the Municipality that guide decision making?				X
65(m)	Is the application in line, consistent and/or compatible with the provincial SDF?		X		
65(n)	Is the application in line, consistent and/or compatible with the regional SDF *(SPLUMA)* or provincial regional SDF *(LUPA)*?				X
65(o)	Is the application in line, consistent and/or compatible with the applicable policies, guidelines, standards, principles, norms, or criteria set by national and/or provincial government?		X		
65(p)	Is the application in line, consistent and/or compatible with the matters referred to in Section 42 of SPLUMA?		X		
65(q)	Does the application comply with the requirements of Section 42(2) of SPLUMA, supported by the relevant environmental reports?				X
65(r)	Is the application in line or consistent and/or compatible with the following principles as contained in Sections 7 of SPLUMA and 59 of LUPA:				
	1.	The redress of spatial and other development imbalances of the past through improved access to, and use of land?			X
	2.	Address the inclusion of people and areas previously excluded in the past, specifically, informal settlements and areas characterized by widespread poverty and deprivation?			X
	3.	Enable the redress of access to land by disadvantaged communities and persons?			X
	4.	Support access to / facilitate the obtaining of security of tenure and/or incremental informal settlement upgrading?			X
	5.	Has the potential impact of the development proposal on the value of the affected land /properties been considered?	X		

6.	Has the impact of the application on the existing rights of the surrounding owners been recognised?	X		
7.	Does the application promote spatially compact, resource frugal development form?	X		
8.	Can the development be accommodated within the existing fiscal (budget), institutional and administrative means of the Municipality? *(e.g. Infrastructure upgrades required – when, budgeted for, etc.)*	X		
9.	Has the protection of prime, unique, and/or high potential agricultural land been considered?	X		
10.	Is the application consistent with the land use measures applicable to / contained in environmental management instruments?	X		
11.	Does the application promote and stimulate the equitable and effective functioning of land markets?	X		
12.	Have all current and future costs to all parties for the provision of infrastructure and social services been considered?	X		
13.	Does the application promote development that is sustainable, discourages urban sprawl, encourages residential densification, and promotes a more compact urban form?	X		
14.	Will the development result in / promote the establishment of viable communities?	X		
15.	Does the development strive to ensure that the basic needs of all the citizens are met in an affordable way?			X
16.	Will the development sustain and/or protect natural habitats, ecological corridors, and areas of high biodiversity importance?	X		
17.	Will the development sustain and/or protect provincial heritage and tourism resources?			X
18.	Will the development sustain and/or protect areas unsuitable for development including flood plains, steep slopes, wetlands, areas with a high-water table, and landscapes and features of cultural significance?	X		
19.	Will the development sustain and/or protect the economic potential of the relevant area or region?	X		
20.	Has provision been made in the development to mitigate against the potential impacts of climate change?	X		
21.	Does the development include measures to reduce consumption / conserve water and energy resources? *(renewable energy, energy saving, water saving, etc.)*			X
22	Does the development consider sea-level rise, flooding, storm surges, fire hazards?			X
23	Does the development consider geological formations and topographical (soil and slope) conditions?			X
24.	Will the development discourage illegal land occupation – w.r.t. Informal land development practices?	X		
25.	Benefits the long-term social, economic, and environmental priorities for the area *(sustained job opportunities, sustained income, integrated open space network, etc.)* over any short-term benefits *(job creation during construction, short term economic injection, etc.)*?	X		
26.	Contributes towards the optimal use of existing resources, infrastructure, agriculture, land, minerals, and/or facilities?	X		
27.	Contributes towards social, economic, institutional, and physical integration aspects of land use planning?	X		
28.	Promotes and supports the inter-relationships between rural and urban development?			X
29.	Promotes the availability of employment and residential opportunities in close proximity to each other or the integration thereof?	X		

	30.	Promotes the establishment of a diverse combination of land uses?	X		
	31.	Contributes towards the correction of distorted spatial patterns of settlements within the town/city/village?			X
	32.	Contributes towards and/or promotes the creation of a quality and functional open spatial environment?			X
	33.	Will the development allow the area or town to be more spatially resilient that can ensure a sustainable livelihood for the affected community most likely to be affected by economic and environmental shocks?			X
*1(s)	Is the application in line with the applicable provisions contained in the applicable zoning scheme regulations (by-law)? (e.g. definitions, land use description and development parameters)		X		

Comments in respect of the above table:

*1(s): The application submitted is in line with all development parameters applicable to the proposed zonings.

George Municipal Spatial Development Framework, 2023 (MSDF)

The Metro-Grounds Industrial Development is identified in the MSDF as a key driver for industrial development in the Municipality, which includes industrial opportunities, and the proposed Go George Bus Depot relocation site as a transport facility (the latter already approved).

According to MSDF Policy B3: PG a, the industrial area extension is to be prioritised. The implementation measure under the policy is clear that new industrial (range of erf sizes and industry types) areas are identified for implementation. The Metro Grounds Industrial area and Gwayang Industrial areas are being packaged for release. The Metro Grounds Industrial Development is identified as a catalytic project and implementation action item in the MSDF.

The Rand Street extension, which is an integral part of the development, is identified as a priority investment area, and access integration to the Rand Street extension is to be prioritised. The Thembalethu LSDF also proposes that a link road from Thembalethu along Nqwenesha Street, past the wastewater treatment works, be considered to tie in with the Rand Street extension to improve access to the industrial area from Thembalethu.

George South-East Local Spatial Development Framework, 2015

The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015.

The proposed Metro Grounds Industrial Development is fully aligned with the developmental objectives of the area as outlined in the LSDF.

The spatial interventions, concepts, and principles underpinning the proposed Metro Grounds Industrial Development align with the NDP objectives to broaden the economic base of the town of George by supplying suitable property that complements existing land uses.

The Metro Grounds Industrial Development is identified within and aligned with the MSDF and the LSDF, adhering to the spatial planning objectives and guidelines of the George Municipality.

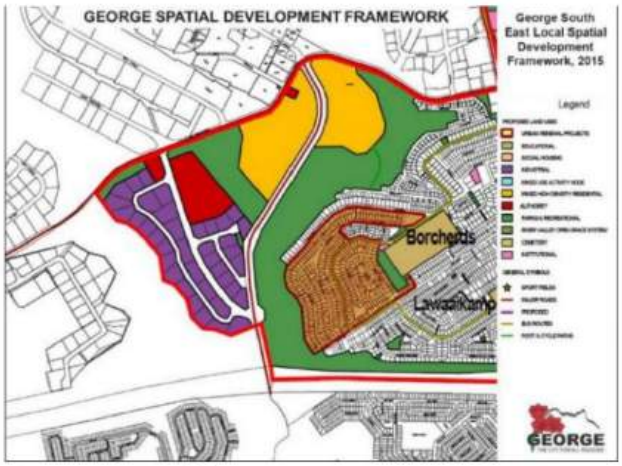


Figure 9: Extract of the LSDF

(In)consistency with guidelines prepared by the Provincial Minister
N/A

Outcomes of investigations / applications i.t.o other laws.

Civil Engineering Services Report
A Civil Engineering Services Report was completed on 7 November 2025 by Zutari (Refer to **Annexure H)**. The following conclusions / recommendations were made in terms of the Engineering Services Report:

From the information available, it appears that sufficient capacity exists within the existing infrastructure services to support the proposed development. However, confirmation will be required by George Municipality for the following:

- Ad-hoc studies by GLS to confirm whether the existing water and sanitation infrastructure and distribution networks will have sufficient capacity to accommodate the development.
- Confirmation from the Fire Department on the type of fire hydrants and coupling type.
- Confirmation from the Water Services Operational Department on the type of water meter to be allowed for.
- Confirmation from the Roads and Stormwater Department on the surfacing of internal roads.
- Confirmation from the Directorate: Community Services in terms of solid waste removal and landfill capacity.

From the internal comments provided by the various departments, it is concluded that infrastructure capacity is sufficient to accommodate the development.

Electrical Services Report
An Electrical Services Report was completed on 24 February 2025 by CMB Consulting Engineers (Refer to **Annexure I)**. Specific conclusions / recommendations were not mad; however, the following is stated:

- There are two existing 66kV municipal overhead lines and three existing 11kV overhead lines / underground cables that run across portions of the development property, as indicated on the drawing.
- The existing 66kV overhead lines will remain in position, and the necessary servitudes to be registered for same.
- The existing 11kV overhead lines will be replaced with underground cables and relocated to be inside servitudes or road reserves.

Stormwater Management Plan
A Stormwater Management Plan was completed on 7 November 2025 by Zutari (Refer to **Annexure J)**. The following conclusions / recommendations were made in terms of the Stormwater Management Plan:

The design approach to be adopted for the proposed development can be summarised as follows:

- Promotion of on-site infiltration.
- Minimise concentration of stormwater.
- Maintain pre-development run-off levels as far as possible.
- Enforcement of management principles.
- Identify escape routes for major floods.
- Responsible discharge of stormwater into downstream systems.
- Allowing for the necessary attenuation where possible.

Certain aspects will require further consideration during the detail design stage, they are:

- Stormwater needs to be responsibly conveyed to the existing watercourse.
- Stormwater collected along the watercourse needs to be able to reach the existing drainage infrastructure downstream.
- The site development plan needs to adequately provide for servitudes to accommodate major flows.
- Maximisation of attenuation of the rainwater that most water can be caught.

As indicated in the report, the proposed site's stormwater will be managed responsibly and safely discharged into the surrounding drainage system, without any detrimental impacts to the environment or communities.

Traffic Impact Investigation

A Traffic Impact Investigation was completed in November 2025 by Urban Engineering (Refer to **Annexure K)**. The following conclusions / recommendations were made in terms of the Traffic Impact Investigation:

Based on the findings of this report, the following recommendations are made:

- The intersection of PW Botha Boulevard and Rand Street should remain a signalised intersection (contrary to the TIA conducted by Zutari for the Bus Depot).
- The junction of PW Botha Boulevard and Ossie Urban Street should be upgraded to a signalised intersection (contrary to the TIA conducted by Zutari for the Bus Depot).
- All other recommendations in the Zutari TIA should be adhered to.
- Intersection controls for internal roads must comply with Drawing 22-158-01.
- As indicated in Drawing 22-158-02, no driveway access should be allowed from Bulbine Street onto any neighbouring property.
- Provision should be made for UA compliant sidewalks next to all new roads. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
- Since the proposed development includes an educational facility, provision should be made for new UA compliant pedestrian sidewalks next to PW Botha Boulevard, all the way from York Street to Nelson Mandela Boulevard. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
- Provision should be made for street lighting next to all new internal Metro Grounds roads.
- Cross sections of all new Metro Ground internal roads must make provision for clearly defined (Class 1 preferred but Class 3 as a minimum) bicycle routes/lanes. Road layouts must also include safe bicycle crossing areas at all intersections.
- Geometric design of Metro Grounds internal roads must comply with the various guidelines and standards with regard to horizontal and vertical alignments.

Geotechnical Report

A Geotechnical Report was completed on 22 September 2022 by Outeniqua Geotechnical Services (Refer to **Annexure L)**. The following conclusions / recommendations were made in terms of the Geotechnical Report:

- The site was generally considered suitable for the proposed urban development, but some challenging geotechnical constraints were encountered, requiring special engineering solutions to mitigate excessive movements in structures. Some preliminary recommendations were provided for consideration by the designers, but all information should be verified on site, and further investigations may be required.

Environmental Basic Assessment Report

An Environmental Basic Assessment Report was completed and submitted in November 2025 by Zutari (Refer to **Annexure M)**. The key findings of the report are as follows:

Aquatic

- The proposed development site is located adjacent to sensitive watercourses and wetlands; therefore, mitigations measure will need to be implemented to reduce the development impacts on the watercourses. Avoiding buffer zones and the promotion of sustainable development practices will ensure the long-term integrity of these aquatic systems.
- The proposed development will risk an increase in erosion due to the clearance of vegetation.
- The development footprint has been amended to avoid the identified sensitive aquatic features.

Animals:

- The proposed development area has been heavily degraded by past environmental and anthropogenic disturbances, including invasive plants, illegal dumping, and historical waste disposal activities. These factors have resulted in the significant transformation of natural habitats, making the site unsuitable for the SCC identified by the DFFE Screening Tool and public platforms.
- The observed faunal diversity during the site visit was notably low, indicating that the area is not functioning as a significant habitat for key faunal species.
- The development of the industrial zone surrounding the site has largely contributed to the decline of the site's ecological value.

Terrestrial Biodiversity:

- The Metro Grounds development is situated within a transformed landscape, with fynbos vegetation primarily restricted to valley slopes, which is largely outside of the Metro Grounds development plan extent.
- The fynbos vegetation persisting along the valley edges, especially along the western side of the site, exhibits significant biodiversity and ecological importance, supporting a variety of indigenous plant species, including Drosera sp. nov. "cryptica", a potential species of conservation concern, and along the eastern slopes, a Muraltia was found that might be M. knysnaensis (EN). The Muraltia identification is tricky and is currently being assessed at Compton Herbarium to definitively confirm whether this is M. ericoides (LC) or M. knysnaensis (EN). Compton has commented that they are still busy with this identification (as of 17 April 2025).

Agricultural:

- The medium sensitivity rating of the site by the screening tool is because of the site's assessed agricultural production potential and current agricultural land use. It, however, disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6.

Socio-economic:

- The proposed development has raised several potential socio-economic impacts, both positive and negative. According to the socio-economic specialist, there are no major concerns or issues from a socio-economic standpoint that would hinder the development. Mitigation measures were provided.

Visual:

- The visual impact of the proposed development is rated as medium, where it is expected that visual and scenic resources of the N2 Highway would be marginally affected to some extent by the intensification of the industrial landscape along this section of the highway.
- The extent of the visual impacts will be local. The proposed landscape change would essentially be contained by the higher terrain to the north and by the built nature of the surrounding areas.

Civil Aviation:

- This infill development is located adjacent to existing industrial areas, and future above-ground structures are not expected to protrude above those in adjoining industrial areas (which are closer to the airport) or the existing overhead powerlines already present on site and in adjoining industrial areas.

Existing and proposed zoning comparisons and considerations

The development consists of various zones with different development parameters. The current zoning of "undetermined" has no development parameters. No departures are applied for. The development parameters for each zoning are as follows:

Table 3: Development parameters

Zoning	Industrial Zone II
Development parameters (Industry)	
Coverage	Coverage may not exceed 75%
Floor factor	The floor factor may not exceed 1,5
Height	The highest point of a building may not exceed 15 meters to the top of the roof.
Building lines	The street boundary building line is 0 metres, with a street centreline setback of at least 8 metres. Side and rear boundary building lines are 0 metres, provided that the Municipality may lay down side and rear building lines of up to 3 metres in the interest of public health and/or safety.
Parking and access	Parking and access must be provided in accordance with the by-law

Zoning	**Community Zone I (Education Facility)**
Development parameters (Place of Instruction)	
Coverage	Coverage may not exceed 60%
Floor factor	The floor factor may not exceed 1.2.
Height	The highest point of a building to the top of the roof may not exceed 12 metres, provided that there is no height limit for a bell tower, steeple, minaret or similar architectural feature designed to accentuate the significance of a building.
Building lines	The street building line is at least 5 meters. Side and rear building lines are at least 5 metres.
Parking and access	Parking and access must be provided in accordance with the by-law
Zoning	**Transport Zone I (Transport Use – erf to be consolidated with Bus Depot)**
Development parameters (Business Premises)	
Coverage	The maximum coverage for all buildings on a land unit is 100%
Floor factor	The maximum floor factor on the land unit is 3.
Height	The highest point of a building may not exceed 15 metres to the top of the roof.
Building lines	The street building line is 0 metres. Side and rear building lines are 0 metres up to a height of 8.5 metres and 4.5 metres for the remainder of the building provided that the Municipality may lay down more restrictive common building lines in the interest of public health and safety or in order to enforce any other law or right.
Parking and access	Parking and access must be provided in accordance with the by-law

The need and desirability of the proposal

The need and desirability for the proposed development have been considered in terms of the following factors:

No.	Evaluation checklist	Yes	No	N/A
1	Will the natural environment and/or open space systems be negatively affected?		X	
2	Will the application result in trees/indigenous vegetation being removed on-site or in the road reserve?		X	
3	Does the application have any negative impact on heritage resources?		X	
4	Will the character of the surrounding area be negatively affected?		X	
5	Will the architectural character of the streetscape be negatively affected?		X	
6	Will there be any negative impact on vehicle traffic and pedestrian safety?		X	
7	Will there be a negative impact on traffic movement/vehicle sight distances?		X	
8	Are there adequate on-site parking/loading facilities provided?	X		
9	Is there adequate vehicle access/egress to the property?	X		
10	Will the application result in overshadowing onto neighbours' properties?		X	
11	Will the neighbours' amenity to privacy/enjoyment of their property/views/sunlight be negatively affected?		X	
12	Will the proposal have a negative impact on scenic vistas or intrude on the skyline?		X	
13	Will the intended land use have a negative impact on adjoining uses?		X	
14	Will the land use pose a potential danger to life or property in terms of fire risks, air pollution or smells or compromise a person's right to a safe and secure environment?		X	
15	Will the application result in a nuisance, noise nuisance, and disturbance to neighbours?		X	
16	Will there be a negative impact on property values?		X	
17	Will adequate open space and/or recreational space be provided (for residential developments)?			X
18	Will approval of the application set a precedent?		X	

Assessment of objections / comments

Herewith the municipal planner's assessment of the objections / comments:

Table 4: Assessment of objections/comments

Western Cape Department of Education - *(Objection)*
• The objection is noted. It is acknowledged that there is a shortage of schools currently in George. • However, there are multiple vacant school sites available for development in possession of the department, which are not being developed even though there is a shortage of schools. • The Department notes that the MSDF states that educational facilities should be provided in activity corridors and nodes. The proposed development does make provision for educational facilities. It is not specified in the MSDF that educational land needs to be for public schools, especially secondary schools. In terms of the proposal, it is regarded as aligned with the MSDF. • The specific type of educational facility is earmarked for a skills development tertiary type of place of instruction (school) that is related to economic activity in the area. • A secondary school in an industrial area is not reconcilable with the context of the area. The only residential development nearby is the completed Metro Grounds BNG housing development, which not of sufficient size to justify the development of another secondary school in the area. • There is also no further residential development planned in residential areas on the opposite side of the N2 to justify the development of a new secondary school site in the position proposed by the Department of Education. The Provincial Education Department's main pressure points are in the George East / Kraaibosch areas, Thembalethu and Pacaltsdorp where unused school sites already exist.
GIPTN (GO George) – *(Comment)*
• The comments are noted and will be provided as the bus depot is for the Go George Facility.
CapeNature – (Comment)
• Noted.

PART O: SUMMARY OF EVALUATION

GENERAL

Overview and proposed development

The George Municipality proposes an industrial development on a portion of the Remainder of Erf 464, George. The project is referred to as the Metro Grounds Industrial Development. The site is within the urban development boundary and identified for catalytic socio-economic development in the MSDF.

Figure 10: Extract of proposed subdivision and zoning plan

Locality:

The site is located at the intersection of PW Botha Boulevard and Ossie Urban Street, roughly halfway between Nelson Mandela Boulevard and York Street, adjacent to an existing substation and the proposed future Go George bus depot.

MSDF and LSDF:

The Metro Grounds Industrial Development is identified in the MSDF as a catalytic project to drive industrial growth, including diverse industrial opportunities and the proposed relocation of the Go George Bus Depot. Policy B3 prioritises the expansion of industrial areas, with Metro Grounds and Gwayang earmarked for implementation and release.

The Rand Street extension is a key supporting infrastructure priority, with improved access integration emphasised. The Thembalethu LSDF further supports this by proposing a link road connecting Thembalethu to the industrial area via Nqwenesha Street, enhancing accessibility.

The spatial interventions, concepts, and principles underpinning the proposed Metro Grounds Industrial Development align with the NDP objectives to broaden the economic base of the town of George by supplying suitable property that complements existing land uses.

The Metro Grounds Industrial Development is identified within and aligned with the MSDF and LSDF, adhering to the spatial planning objectives and guidelines of the George Municipality.

Specialist Studies:

- Infrastructure capacity is generally sufficient, subject to confirmation from relevant municipal departments and minor additional studies.
- No bulk electrical services required; existing 66kV lines remain, while 11kV lines will be relocated underground within servitudes / road reserves. -
- Stormwater design focuses on on-site management, maintaining natural run-off, and safe discharge with no negative environmental impacts.
- Upgrades to key intersections and provision for sidewalks, cycling infrastructure, and street lighting are required.
- Site is suitable for development, but some constraints require specialised engineering solutions and further geotechnical investigation.
- Environmental (BAR) Assessment completed, with findings supporting the development subject to environmental management measures.

Desirability:

The proposed development, situated in a predominantly industrial area, will not result in any negative impact on the surrounding developments or character of the area. The proposed Metro Grounds Industrial Development will not have a significant adverse impact on surrounding neighbours' rights and amenity in terms of privacy, views or sunlight. Architectural Guidelines will be required as a condition of approval to ensure that the development is harmoniously designed and fitting with the surrounding area. The project will boost economic activity and job creation, which will strengthen socio-economic conditions.

Conclusion

Thus, on the balance of all considerations in terms of Section 65 of the Land Use Planning By-law for George Municipality, 2023, and objection received, the proposed development is found to be desirable and may therefore be **SUPPORTED.**

PART P: RECOMMENDATION

That, notwithstanding the objection received, the following applications applicable to Remainder Erf 464, George:

1. Subdivision in terms of section 15(2)(d) of the Land Use Planning By-law for George Municipality, 2023, of Remainder Erf 464, George, to create Portion A of approximately 16.54 hectares and a Remainder;

2. Rezoning in terms of Section 15(2)(a) of the Land Use Planning By-law for George Municipality, 2023, of Portion A of Remainder Erf 464, George, from "Undetermined Zone" to a "Subdivisional Area" comprising the following:

   a) x8 Industrial Zone II Erven;
   b) x1 Community Zone I Erf;
   c) x1 Transport Zone I Erf;
   d) x1 Open Space Zone II Erf;
   e) x1 Transport Zone II Erf;

3. Subdivision, in terms of section 15(2)(d) of the Land Use Planning By-law for George Municipality, 2023, of the Subdivisional Area on Portion A (a portion of Remainder Erf 464, George) into 12 portions comprising the following:

a) x8 Industrial Zone II Erven;
b) x1 Community Zone I Erf;
c) x1 Transport Zone I Erf;
d) x1 Open Space Zone II Erf;
e) x1 Transport Zone II Erf;

REASONS FOR DECISION:

1. The Metro Grounds Industrial Development is identified within and aligned with the George Municipal Spatial Development Framework, 2023 and the George South-East Local Spatial Development Framework, 2015, adhering to the spatial planning objectives and guidelines of the George Municipality.
2. The Metro Grounds Industrial Development is identified as a catalytic project and implementation action item in the George Municipal Spatial Development Framework, 2023.
3. The proposed development is in line with the Land Use Planning By-law for George Municipality, 2023 and the George Integrated Zoning Scheme By-law, 2023.
4. The development will be subject to the conditions of the Environmental Authorisation, with appropriate measures for environmental oversight in place to ensure responsible development that safeguards the natural environment and riparian zones.
5. The proposed development will enhance economic activity through job creation and strengthen socio-economic conditions, with the industrial development and educational component serving as a key economic driver.
6. The proposed Metro Grounds Industrial Development will not result in any negative impact on the surrounding developments or character of the area.
7. The proposed Metro Grounds Industrial Development will not have a significant adverse impact on surrounding neighbours' rights and amenity in terms of privacy, views or sunlight.

Subject to the following conditions imposed in terms of Section 66 of the said Planning By-Law:

CONDITIONS OF THE DIRECTORATE: PLANNING AND DEVELOPMENT:

1. That in terms of the provisions of the Land Use Planning By-law for George Municipality, 2023, the approval will lapse if not implemented within a period of five (5) years from the date of approval.
2. This approval shall be taken to cover only the Subdivision and Rezoning as applied for and indicated on Drawing No. 0001 Rev I dated 13 May 2026 drawn by Zutari and attached as "**Annexure A**" which bears Council's stamp and will not be construed as to depart from any other Council requirements or legal provisions.
3. Architectural guidelines for the development must be submitted to the Municipality for approval. These guidelines must be incorporated as a condition in the title deed of all the subdivided portions forming part of the development.
4. All building plans for the development must be submitted to the George Municipality's Aesthetics Committee to verify compliance with the approved architectural guidelines prior to approval.
5. A site development plan (SDP) for the proposed development (or per each phase) must be submitted to the satisfaction of the Directorate: Planning and Development, in accordance with the provisions of Section 23 of the George Integrated Zoning Scheme By-Law, 2023, applicable land use descriptions, the conditions of approval, and architectural guidelines, prior to submission of building plans.
6. A separate landscaping plan to be submitted with the SDP to the satisfaction of the Directorate for consideration and approval. The plan must indicate all hard and soft landscaping elements to be incorporated into the development, including the indigenous vegetation and trees that will be planted, walking and cycling trails, play apparatus, benches, retaining walls, berms, etc. within the development. At least 1 x 200L new indigenous tree should be planted for every four parking bays. These trees should be evenly spaced within the development and not grouped in one area. The Open Space Area must be utilised for additional tree planting and landscaping to enhance the visual amenity, ecological function, and overall entrance character of the development. Consider beautification of the streetscape.
7. The SDP must consider and address any applicable conditions as set out in approvals granted in terms of any other legislation, including the Environmental Authorisation (EA). These requirements must be indicated and submitted with the SDP.
8. The owner must appoint an Environmental Control Officer (ECO) to oversee compliance with the EA and any other environmental aspects including the implementation and management of the landscaping plans. The ECO must confirm in writing that the respective SDP for the development complies with all environmental requirements.

9. Necessary servitudes must be registered where applicable as part of the General Plans / Surveyor-General Diagrams.
10. The subdivision approval will only be regarded as implemented on the submission of the approved General Plans / Surveyor-General Diagrams by the Surveyor General, as well as the registration of Portion A in terms of the Deeds Registries Act.
11. The approval for each phase will be deemed implemented on the registration of the General Plan at the Surveyor-General, as well as the registration of the General Plan in terms of the Deeds Registries Act and the transfer of at least one subdivided portion within that phase.

Town Planning Notes:

a) Stormwater management needs to be addressed to the satisfaction of the Civil Engineering Department on the Site Development Plan.
b) Provision for the removal of solid waste must be addressed in conjunction with the Directorate Community Services.
c) The developer must adhere to the requirements of all relevant Acts, as well as all conditions stipulated by any other authority whose approval is required and obtained for this proposed development.
d) The signage is subject to the George Municipality Outdoor Advertising Management and Control By-Law and approval must be obtained.
e) A building plan must be submitted for approval in accordance with the National Building Regulations.
f) The applicant is to comply with the National Forestry Act, Act No 84 of 1998, should it be required.

CONDITIONS OF THE DIRECTORATE: CIVIL ENGINEERING SERVICES

12. The conditions imposed by the Directorate Civil Engineering Services are attached as **'Annexure B1'** dated 21 February 2026 and must be adhered to.
13. As stipulated in the attached conditions imposed by the Directorate Civil Engineering Services, the amount of Development Charges (DCs) to be paid by the developer are calculated in terms of the George Municipality Land Use Planning By-Law (as amended) and the approved DC Guidelines. With reference thereto, with regards to the proposed development, the developer will be required to make development contribution as indicated below.
14. The amounts of the development contributions are reflected on the attached calculation sheet dated 21 February 2026 and are as follows:

Roads	R 3 730 706,85 - (Excluding VAT)
Sewer	R 17 637 080,40 - (Excluding VAT)
Water	R 22 777 512,16 - (Excluding VAT)
Total	**R 44 145 299,41 – (Excluding VAT)**

15. The total amount of the development charges of **R 44 145 299,41 (Excluding VAT)** will be paid prior to the first transfer of a land unit pursuant to the application or upon the approval of building plans, whichever occurs first, unless otherwise provided in an engineering services agreement or, in the case of a phased development, in these or any other relevant conditions of approval.
16. Any amendments or additions to the proposed development, which are not contained within the calculation sheet attached, which may lead to an increase in the proportional contribution to municipal public expenditure, will result in the recalculation of the development charges and the amendment of these conditions of approval or the imposition of other relevant conditions of approval.

CONDITIONS OF THE DIRECTORATE: ELECTRO-TECHNICAL ENGINEERING SERVICES

17. The conditions imposed by the Directorate Electro-Technical Engineering Services are attached as **'Annexure B2'** dated 7 May 2026 and must be adhered to.
18. As stipulated in the attached conditions imposed by the Directorate Electro-Technical Services, the amount of Development Charges (DCs) to be paid by the developer is calculated in terms of the George Municipality Land Use Planning By-Law (as amended) and the approved DC Guidelines. With reference hereto, with regards to the proposed development, the developer will be required to make development contribution as indicated below.
19. The amount of the development contribution is reflected on the attached calculation sheet dated 7 May 2026 and is as follows:

Electricity	R 4 839 564,05 (Excluding VAT)
Total	**R 4 839 564,05 (Excluding VAT)**

20. The total amount of the development charges of **R 4 839 564,05 (Excluding VAT)** will be paid prior to the first transfer of a land unit pursuant to the application or upon the approval of building plans, whichever occurs first,

unless otherwise provided in an engineering services agreement or, in the case of a phased development, in these or any other relevant conditions of approval.

21. Any amendments or additions to the proposed development, which is not contained within the calculation sheet attached, which may lead to an increase in the proportional contribution to municipal public expenditure, will result in the recalculation of the development charges and the amendment of these conditions of approval or the imposition of other relevant conditions of approval.

PART Q: ANNEXURES

Annexure A	Subdivision & Zoning Plan
Annexure B1 & B2	CES & ETS development contributions and conditions
Annexure C	Application Memorandum
Annexure D	Pre-Application
Annexure E	Title Deed
Annexure F	SG Diagram
Annexure G	Comments & Objections with Response
Annexure H	Engineering Services Report
Annexure I	Electrical Services Report
Annexure J	Stormwater Management Plan
Annexure K	Traffic Impact Assessment
Annexure L	Geotechnical Report
Annexure M	Basic Assessment Report

.

13 MAY 2026

R.H. JANSE VAN RENSBURG (SACPLAN NO. A/2925/2020) **DATE**
SENIOR TOWN PLANNER

RECOMMENDED ~~/NOT RECOMMENDED~~

13 MAY 2026

N. SWANEPOEL (SACPLAN NO. A/2237/2015) **DATE**
SENIOR TOWN PLANNER

RECOMMENDED /~~NOT RECOMMENDED~~

19 May 2026

C. PETERSEN (SACPLAN NO. B/8336/2016) **DATE**
SENIOR MANAGER: TOWN PLANNING

APPLICATION FOR REZONING AND SUBDIVISION APPLICABLE TO REMAINDER ERF 464, GEORGE (R.H. JANSE VAN RENSBURG)

PAJA

NO	PROCESS CHECK	YES	NO	N/A
1.	Has this application been assessed/ evaluated by a registered town planner as required in terms of section 65(g) of the by-law?			x
2.	Was the report submitted by the town planner a fair and objective reflection of the relevant information available and have all relevant information been attached to the report?	x		
3.	Did the town planner exercise due diligence in evaluating the application? is the report balanced (does not show any unfair prejudice) and were the conclusions reached reasonable and rationally linked to the relevant information available?	x		
4.	Was the town planner empowered in terms of the Municipality's system of delegations to evaluate the application?	x		
5.	Was the decision-maker empowered in terms of the Municipality's system of delegations to decide on the application?	x		
6.	Was adequate information available for the decision-maker to make a fair, reasonable and objective decision on the application?	x		
7.	If not, can it be demonstrated that the necessary attempts were made to obtain this information before the decision was taken?			x
8.	Was all the available information which impacts on the application made available to the decision-maker?	x		
9.	Was all relevant information taken into account when making the decision?	x		
10.	Was all irrelevant information noted in the town planner's report and reasons given as to why it should be disregarded when making the decision stated in the report?			x
11.	Was the town planner's evaluation, to the best of the decision maker's knowledge, potentially influenced by an error of law?		x	
12.	Is the decision taken logical, clear, concise, and fair?	x		
13.	Can the decision be justified – i.e. rationally and reasonably linked to the information provided (critical information available) and relevant facts contained in the report?	x		
14.	Were written reasons given for the decision taken?	x		
15.	Can these reasons be reasonably and rationally linked to the relevant facts and the decision taken?	x		
16.	Were conditions of approval imposed with the decision?	x		
17.	Can these conditions be lawfully imposed as contemplated by Section 66 of the By-law?	x		
18.	Are these conditions fair and can they be reasonably and rationally linked to the development proposal submitted, the relevant facts contained in the town planner's report, the decision taken and the reasons for such decision?	x		

~~APPROVED/ REFUSED/ REFER BACK TO APPLICANT~~/ **REFER TO TRIBUNAL**

D. POWER (SACPLAN NO. A/1973/2014)
DEPUTY DIRECTOR: DEVELOPMENT AND ENVIRONMENTAL PLANNING

21 MAY 2026
DATE

ANNEXURE A

Education Facility
Industry
Transport
Open Space
Public Street
Total Area
Line of No Access
N
ZUTARI
IMPACT. ENGINEERED.
PRELIMINARY
NOT FOR CONSTRUCTION
METROGROUNDS
INDUSTRIAL DEVELOPMENT
Zoning Drawing

ANNEXURE B1

Annexure B

GEORGE DC CALCULATION MODEL	Version 1.00	31 August 2021
For Internal information use only (Not to publish)		

Erf number *	464 (Metro Ground Mixed use)
Allotment area *	George
Water & Sewer System *	George System
Road network *	George
Developer/Owner *	George Municipality
Erf Size (ha) *	430,83
Date (YYYY/MM/DD) *	2026-02-21
Current Financial Year	2025/2026
Collaborator Application Reference	4022632

Application: **Rezoning & Subdivision**

Service applicable	Description
Roads	Service available, access via New road network of PW Botha (Subject to the Road master plan & access approval)
Sewer	Service available (Subject to the Sewer Master Plan, WWTW treatment & network capacity)
Water	Service available (Subject to the Water Master Plan,WTW treatment & network capacity)

Conditions

General conditions

1 The amount of Development Charges (DCs) to be paid by the developer are calculated in terms of the George Municipality Land Use Planning By-Law (as amended) and the approved DC Guidelines. With reference to clause above, with regards to the proposed development, the developer will be required to make development contribution, as follows:

2 The amounts of the development charges are reflected on the attached calculation sheet dated 21/02/2026 and are as follows:

Roads:	R	3 730 706,85	Excluding VAT (Refer to attached DC calulation sheet)
Sewer:	R	17 637 080,40	Excluding VAT (Refer to attached DC calulation sheet)
Water:	R	22 777 512,16	Excluding VAT (Refer to attached DC calulation sheet)
Total	R	44 145 299,41	Total Excluding VAT

3 The total amount of the development charges of R44 145 299,41 shall be paid prior to the first transfer of a land unit pursuant to the application or upon the approval of building plans, whichever occurs first, unless otherwise provided in an engineering services agreement or, in the case of a phased development, in these or any other relevant conditions of approval.

4 Any amendments or additions to the proposed development which is not contained within the calculation sheet as dated 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 charges and the amendment of these conditions of approval or the imposition of other relevant conditions of approval

Note: The Development Charges indicated above are based on the information available to the respective engineering departments at the time of approval. It is advised that the owners consult with these departments prior to submission of the subdivision plan to ascertain what information they require to provide a more accurate calculation.

5 As provided in section 66(5B)(b) of the Planning By-Law (as amended), using the date of approval as the base month the amount of R44 145 299,41 shall be adjusted in line with the consumer price index published by Statistic South Africa up to the date when payment is made in terms of paragraph 3 above.

6 Development charges are to be paid to the Municipality in cash or by electronic funds transfer or such other method of payment as may be accepted by the Municipality at the time when payment is made.

7 All services -internal, link and relocation of or upgrades to existing - are to be designed by a registered consulting engineer in accordance with Council specifications. This may include bulk services outside the development area but that must be upgraded to specifically cater for the development. All drawings and plans are to be submitted to the applicable department, or any other relevant authority, (hard copy and electronically) for approval prior to any construction work taking place. All work is to be carried out by a suitable qualified/registered contractor under the supervision of the consulting engineer who is to provide the relevant authority with a certificate of completion, and as-built plans in electronic format. All costs will be for the developer. No transfers will be approved before all the municipal services have been satisfactorily installed and as-builts submitted electronically as well as the surveyor's plan.

8 Any, and all, costs directly related to the development remain the developers' responsibility.

9 Only one connection permitted per registered erf (water and sewer connections). Condition 7 applies.

10 Any services from the development that must be accommodated across another erf must be negotiated between the developer and the owner of the relevant erf. Any costs resulting from the accommodation of such services or the incorporation of these services into the network of another development are to be determined by the developer and the owner of the other erf. (condition 7 applicable)

ANNEXURE B1 (continue)

11 Any service from another erf that must be accommodated across the development or incorporated into the services of the development: all negotiations will be between the owner/developer of the relevant erf and the developer. Costs for the accommodation of these services or the upgrade of the developments services to incorporate such services are to be determined by the developers/owners concerned. (condition 7 applicable)

12 Any existing municipal or private service damaged during the development will be repaired at the developers cost and to the satisfaction of the George Municipality. (condition 7 applicable)

14 Should it be required, a services agreement is to be drawn up between the developer and the George Municipality, by an attorney acceptable to the Municipal Manager. All expenses will be for the developer.

15 Note, the developer is to adhere to the requirements of the Environmental Authorisation (EA). The onus is on the developer to provide the Dir: CES with the necessary proof of compliance with the EA.

16 Suitable servitudes must be registered for any municipal service not positioned within the normal building lines.

17 Note, the applicant is to comply with the National Forestry Act, Act No 84 of 1998, should it be required.

18 Note, provisions for the removal of solid waste is to be addressed in conjunction with the Dir: Environmental Services.

19 Note, the developer is to adhere to the requirements of all relevant Acts, as well as all conditions stipulated by any other authority whose approval is required and obtained for this proposed development.

20 Transfers, building plan approvals and occupation certificates may be withheld if any sums of money owing to the George Municipality are not paid in full, or if any services have not been completed to the satisfaction of the Dir: CES & ETS, or any condition of any authority has not been satisfactorily complied with.

21 The Developer is responsible to obtain the necessary approval / way leaves from third parties which include, but is not limited to the George Municipality, Telkom & Fibre optic service provider.

22 No construction activity may take place until all approvals, including way leave approval, are in place, all drawings and material have been approved by the Technical Directorates.

23 Municipal water is provided for potable use only. No irrigation water will be provided.

24 The development, in its entirety or in phases, is subject to confirmation by the Dir. CES of the availability of Water and Sanitation bulk 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 this capacity from the Dir. CES. If the Developer does not adhere to the program the Dir. CES will be entitled to revise the availability of such bulk capacity

25 No municipal road network is currently available. Should a municipal network in future be extended to this area, the owner will be compelled, at own cost, to link to the road network. A Development Charge for roads will then become payable in accordance with the approved DC Guidelines at the time of connection.

26 Public and private roads are to be clearly indicated on all layout plans submitted. The road reserves must be clearly indicated on all plans submitted for approval. The cadastral layout can only be approved if the road reserves have been included on plans and approved by CES.

27 If required, the developer is to have a Traffic Impact Assessment (TIA) conducted by a registered traffic engineer. The terms of reference of the TIA are to be finalised with the Dir. CES together with any other approving authority, and who must also approve the TIA. All recommendations stipulated in the TIA report and as approved by the Dir. CES and/or relevant authority are to be implemented by the developer. All costs involved will be for the developer.

28 Maintenance and/or upgrading of all private / servitude roads are the responsibility of all the owners who make use thereof.

29 The discharge of surface stormwater is to be addressed by the developer. Condition 7 applies. All related costs are for the developer. The developer is to consult with the Dir: CES to ensure that stormwater planning is done on line with the available stormwater master plans.

30 Internal parking requirements (ie within the development area), position of accesses, provision for pedestrians and non-motorised transport, and other issues related to traffic must be addressed and all measures indicated on plans and drawings submitted for approval.

31 Adequate parking with a hardened surface must be provided on the premises of the proposed development.

32 No private parking will be allowed in the road reserve. The developer will be required at own cost to install preventative measures to insure compliance.

33 The approval of the layout of the development and accesses is subject to the George Roads Master Plan and approved by the Dir: CES. A site development plan is to be submitted to the Dir: CES, or any other relevant authority for approval prior to any construction work taking place.

34 The developer may be required to construct certain roads in lieu of a financial contribution towards the George Master Plan roads . All roads required for access to the development will have to be fully completed prior to the approval of any transfers/rates clearances. The developer's financial contribution towards the roads in the George Master Plan will be determined in accordance with the applicable financial cost sharing model.

35 Permission for access onto municipal, provincial or national roads must be obtained from the relevant authorities.

36 The municipality, or contractors representing George Municipality to have unrestricted access to the exiting municipal infrastructure pump stations. Developer to indicated proposed access on the development's Site Development Plan (SPD) for approval.

37 Minimum required off-street parking provided, must be provided in terms of the George Integrated Zoning Scheme 2023 parking requirements and vehicles must readily leave the site without reversing across the sidewalk. Alternative Parking may be supplied.

38 Site access to conform to the George Integrated Zoning Scheme 2023.
Access to the development is permitted only through the existing municipal road. Direct access from York Street is not allowed.

ANNEXURE B1 (continue)

Ricus Fivaz
Manager (CES): Land development
Civil Engineering Services

21 Feb 26
Date

ANNEXURE B2

CES Development Charges Calculator — Version 3.02 (Mar 2026)

GEORGE — THE CITY FOR ALL RESIDENTS

GM 2025 Development Charges policy | GM 2025 Integrated Zoning Scheme By-law | GM 2024/25 Tariffs | Civil Engineering Service | Electro-Technical Service

Erf number *	464 (Metro Ground Mixed use)
Allotment area *	George
Water & Sewer System *	George System
Road network *	George
Developer/Owner *	George Municipality
Erf Size (ha) *	450,83
Date (YYYY/MM/DD) *	2026-02-21
Current Financial Year	2025/2026
Collaborator Application Reference	4032632

Code	Land Use	Unit	Total Exiting Rigth			Total New Right		
INDUSTRIAL			m2 Erf	FAR	m² GLA	m² Erf	FAR	m² GLA
	Heavy industry - Large (> 5 000m² GLA)	m2 GLA				55600,00	1,00	55600,00
INSTITUTIONAL			m2 Erf	FAR	m² GLA	m² Erf	FAR	m² GLA
		m² GLA				53400,00	1,00	53400,00

Is the development located within Public Transport (PT1) zone? Please select: **Yes**

Calculation of bulk engineering services component of Development Charge

Service	Units	Additional Demand	Unit Cost	Amount	VAT	Total
	trips/day	660,25	R 5 367,92	R 3 544 171,50	R 531 625,73	R 4 075 797,23
	trips/day	34,75	R 5 367,92	R 186 535,34	R 27 980,30	R 214 515,64
	kl/day	319,86	R 55 140,00	R 17 637 080,40	R 2 645 562,06	R 20 282 642,46
	kl/day	506,29	R 44 980,00	R 22 777 512,16	R 3 416 626,82	R 26 194 138,98
Total bulk engineering services component of Development Charge payable				**R 44 145 299,41**	**R 6 621 794,91**	**R 50 767 094,31**

Link engineering services component of Development Charge
Total Development Charge Payable

City of George

Calculated (CES): JM Fivaz

Signature : _____

Date : February 21, 2026

NOTES : 1. In relation to the increase pursuant to section 66(5B)(b) of the Planning By-Law (as amended) in line with the consumer price index published by Statistic South Africa) using the date of approval as the base month

2. Pleaside note the calulation above only surfse as a pro-forma calulation. Once confirmation of the calulation is revised can a VAT invoice be requested from the Municipal Finacial department. In this regard you can contact Werner Joubert on email at wcjoubert@george.gov.za or telefone on 044 801 1333

Departmental Notes:

For the internal use of Finance only

Service	Financial codolidus number	Total
Roads	2022070304897	R 4 075 797,23
Public Transport		R 214 515,64
Sewerage	2022070304897	R 20 282 642,46
Water	2022070304898	R 26 194 138,98
		R 50 767 094,31

ANNEXURE B2 (continue)

GEORGE ELECTRICITY DC CALCULATION MODEL			Version 1.00	2025/06/18	
For Internal information use only (Not to publish)					

Erf Number *	464
Allotment area *	George
Elec DCs Area/Region *	George Network
Elec Link Network *	HV/MV
Elec Development Type *	Normal
Developer/Owner *	0
Erf Size (ha) *	0
Date (YYYY/MM/DD) *	07 05 2026
Current Financial Year	2025/2026
Collaborator Application Reference	4022632

Application: Development Charges

Comments: 0

Service applicable	Description
Electricity	Service available (Subject to the Electrical master plan approval)

	Conditions
	General conditions
1	The amount of Development Charges (DCs) to be paid by the developer are calculated in terms of the George Municipality Land Use Planning By-Law (as amended) and the approved DC Guidelines. With reference to cluase above, with regards to the proposed development,the developer will be required to make development contribution, as follows:
2	The amounts of the development contributions are reflected on the attached calculation sheet dated 07/05/2026 and are as follows: Electricity: R 4 839 564,05 Excluding VAT
3	The total amount of the development charges of R4 839 564, Excluding VAT shall be paid prior to the first transfer of a land unit pursuant to the application or upon the approval of building plans, whichever occurs first, unless otherwise provided in an engineering services agreement or, in the case of a phased development, in these or any other relevant conditions of approval.
4	Any amendments or additions to the approved development parameters which might lead to an increase in the proportional contribution to municipal public expenditure will result in the recalculation of the development charges and the amendment of these conditions of approval or the imposition of other relevant conditions of approval.
5	As provided in section 66(5B)(b) of the Planning By-Law (as amended), using the date of approval as the base month the amount of R4 839 564, Exclusiing VAT shall be adjusted in line with the consumer price index published by Statistic South Africa up to the date when payment is made in terms of paragraph 3 above.
6	Development charges are to be paid to the Municipality in cash or by electronic funds transfer or such other method of payment as may be accepted by the Municipality at the time when payment is made.
7	All services -internal, link and relocation of or upgrades to existing - are to be designed by a registered consulting engineer in accordance with
8	Any, and all, costs directly related to the development remain the developers' responsibility.
9	Only one connection permitted per registered erf (Electrical, water and sewer connections). Condition 7 applies.
10	The developer is to adhere to the requirements of all relevant Acts, as well as all conditions stipulated by any other authority whose approval is required and obtained for this proposed development.
11	Transfers, building plan approvals and occupation certificates may be withheld if any sums of money owing to the George Municipality are not paid in full, or if any services have not been completed to the satisfaction of the Dir: CES & ETS, or any condition of any authority has not been satisfactorily complied with.
12	The Developer is responsible to obtain the necessary approval / way leaves from third parties which include, but is not limited to the George Municipality, Telkom & Fibre optic service provider.
13	No construction activity may take place until all approvals,including way leave approval, are in place, all drawings and material have been approved by the Technical Directorates.
	Electro Technical
14	In all cases,where individual customer apply for a supply capacity exceeding that provided for in the calculation of DCs and for the developer paid, will be subject to additional DCs based on the rates applicable at the time.
15	Owner to ensure compliance with Regulation XA of SANS 10400 (building plans).
16	Owner to ensure compliance with Regulation XA of SANS 10142 (wiring) and any other applicable national standards.
17	The developer and/or an owner of an erf shall see to it that no Small Scale Embedded Generation (SSEG) are installed on an erf, any portion of an erf or the development, without prior approval from the ETS. Should any SSEG be installed within any part of the development the Electrotechnical Services will within their discretion either implement applicable penalties and/or disconnect the relevant point of supply.
18	Where DCs have been applied for a particular section of the network, but the developer is requested to install and fund a part of the section of network, such work will be credited against DCs calculated.
19	Installation of ripple relays are compulsory for all geysers with electrical elements.

ANNEXURE B2 (continue)

20	All municipal supply points must be subject to standard DC charges. These charges to be included in the project costs of the project.
21	The installed bulk supply for each erf will have to adhere to the minimum load requirements for light industrial ADMD kVA values as per NRS 069.

M Gatyeni

Singed on behalf of Dept: ETS

07 May 26

ANNEXURE B2 (continue)

Development Charges Calculator — Version 1.00 — 2025/06/18

Erf Number	464
Allotment area	George
Elec DCs Area/Region	George Network
Elec Link Network	HV/MV
Elec Development Type	Normal
Developer/Owner	0
Erf Size (ha)	0
Date (YYYY/MM/DD)	2026-05-07
Current Financial Year	2025/2026
Collaborator Application Reference	4022632

Code	Land Use	Unit	Total Existing Right			Total New Right		
					Units			Units
RESIDENTIAL								
	Single Res > 1000m² Erf (Upmarket)	unit			1			
OTHERS					kVA			kVA
	Others. No further diversity applied. (as applied by consultant)	Actual kVA (ADMD)						1875

Is the development located within Public Transport (PT1) zone? Please select: **Yes**

Calculation of bulk engineering services component of Development Charge

Service	Units	Existing demand (ADMD)	New demand (ADMD)	Unit Cost	Amount	VAT	Total
Electricity	kVA	5,78	1875,00	R 2 589,08	R 4 839 564,05	R 725 934,61	R 5 565 498,66
Total bulk engineering services component of Development Charge payable					**R 4 839 564,05**	**R 725 934,61**	**R 5 565 498,66**

Link engineering services component of Development Charge

Total Development Charge Payable

City of George

Calculated (ETS): **M Gatyeni**

Signature :

Date : **May 7, 2026**

NOTE : In relation to the increase pursuant to section 66(5B)(b) of the Planning By-Law (as amended) in line with the consumer price index published by Statistic South Africa) using the date of approval as the base month

Notes:

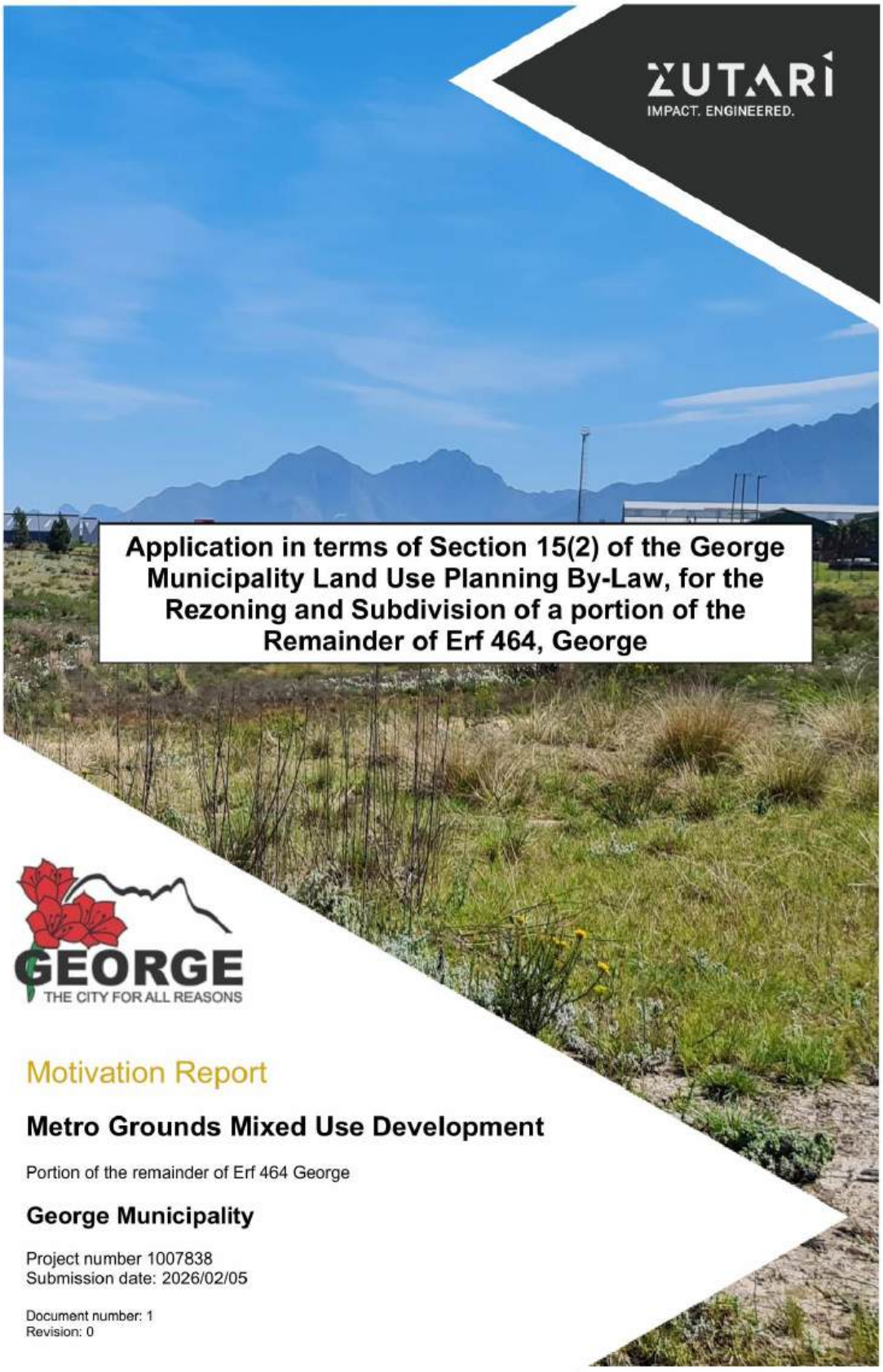
Departmental Notes:

For the internal use of Finance only

Service	Financial code/Key number	Total
Electricity	20160623 021336	R 5 565 498,66
		R 5 565 498,66

ANNEXURE C

Annexure C



ANNEXURE C (continue)

Document control record

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Document Control						
Project name	Metro Grounds Mixed Use Development					
Document number	1		**Project number**		1007838	
Client	George Municipality					
Client contact	L Groenewald		**Client reference**			
Rev	**Date**	**Revision details/status**	**Author**	**Reviewer**	**Verifier** (if required)	**Approver**
0	2025/03/25	Final Draft	Nondumiso Buthelezi	Rudolf Schröder	Rudolf Schröder	Rudolf Schröder
1	2026/02/05	Revised application – amended layout & environmental application	Nondumiso Buthelezi	Rudolf Schröder	Rudolf Schröder	Rudolf Schröder
Current revision	**1**					

Approval			
Author signature		Approver signature	Rudolf Schroder Digitally signed by Rudolf Schroder DN: cn=Rudolf Schroder, ou=South Africa, email=Rudolf.Schroder@zutari.com Date: 2026.02.05 15:32:14 +02'00'
Name	Nondumiso Buthelezi	Name	Rudolf Schroder
Title	Candidate Planner	Title	Professional Planner

ANNEXURE C (continue)

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ANNEXURE C (continue)

METRO GROUNDS MIXED USE INDUSTRIAL DEVELOPMENT

1 INTRODUCTION AND BACKGROUND

1.1 Project Introduction

The George Municipality (GM) proposes a mixed-use industrial development on a portion of the Remainder of Erf 464, George. The project is referred to as the Metro Grounds Mixed-Use Industrial Development.

The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate a mixed-use development. The intent of the industrial development component is to accommodate industry erven, appropriate to the site context and facilitating small and medium enterprise development. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility, such as a vocational training establishment. The proposed development gains access from PW Botha Boulevard and recent updates to the layout plan shows a connection with the future Rand Street extension for an additional access point. There is also a portion of this layout that is earmarked for the expansion of the Go-George Bus Depot site that is planned adjacent to this proposed development. The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development. The site is within the urban development boundary and identified for catalytic socio-economic development in the George Spatial Development Framework, 2023. The site is flanked on two of the three sites by the Skaapkop river. The current zoning of the subject area is "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw, 2023.

The application is submitted in terms of section 15(2) of the George Municipality Land Use Planning By-law, 2023, to obtain development rights for the proposed development on a Portion of the Remainder of Erf 464 George.

1.2 Purpose of Memorandum

(i) To gather all relevant information regarding the proposed rezoning and subdivision proposal into one document;

(ii) To analyse all relevant information regarding the site and informants to the design of the proposed development; and

(iii) To motivate the need and desirability of the proposed **Metro Grounds Mixed Use Development**, in terms of the George Municipality Land Use Planning By-laws, 2023, in order to enable the relevant governing bodies to make an informed decision.

1.3 Application

An application is hereby submitted for the following:

a) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.

b) **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a

"Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan (Annexure F) attached for more detail.

c) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
- 8 Industrial Zone II properties
- 1 Community Zone I property
- 1 Transport Zone I property
- 1 Open Space Zone II property
- 1 Transport Zone II property

in accordance with the attached subdivision plan (Annexure F) in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

1.4 Pre-Application Consultation

In terms of **Section 37** of the George Municipality Land Use Planning By-laws, 2023:

(1) The Municipality may require an owner who intends to submit an application or his or her agent to meet with the authorised employee and, where applicable, with employees of other relevant organs of state for a pre-application consultation before he or she submits an application to the Municipality in order to determine the information and documents that must be submitted with the application.

(2) The Municipality may issue guidelines regarding—

(a) applications that require a pre-application consultation;
(b) the nature of the information and documents that must be submitted with an application;
(c) the attendance of employees from the Municipality or other organs of state at a pre-application consultation; and
(d) the procedures at a pre-application consultation.

(3) The Municipality must keep minutes of the proceedings of a pre-application consultation.

In terms of this application and the development proposal contained herein, a pre-application was submitted to the George Municipality's town planning department on the 02 December 2024, and a pre-application consultation meeting was held on 4 December 2024. The minutes of the pre-application consultation is attached as **Annexure G**.

1.5 Information Required in terms of Section 38 of the By-Law

In terms of Section 38 of George Municipality Land Use Planning By-laws, 2023, an application must be accompanied by the following information and documents:

ANNEXURE C (continue)

Table 1: Information required in terms of Section 38 of the By-Law

Information Required	Location	Included in the Application	
		Yes	No
Application form, completed and signed by applicant	Annexure A	X	
Power of Attorney & Proof that the person is authorised to act on behalf of the Client (Zutari's appointment letter)	Annexure B	X	
Proof of Registered Ownership (Title Deed)	Annexure C	X	
Bondholder's Consent	Not Applicable		X
Written motivation for the application based on the criteria referred to in Section 65		X	
Copy of the Surveyor-General's diagram	Annexure D	X	
Locality Plan	Annexure E	X	
Subdivisional Layout Plan	Annexure F	X	
Proof of Payment of Application Fees	Not Applicable		X
Conveyancer's Certificate indicating that the application is not restricted by any condition contained in the title deed.	Not Applicable		X
Minutes of pre-application consultation	Annexure G	X	

In addition to the mandatory requirements listed above, this application is supported by the following additional documents:

- Traffic impact assessment report – Annexure M
- Civil Engineering Services Report – Annexure K
- Electrical Engineering Services Report – Annexure L
- Stormwater Management Plan – Annexure J
- Geotechnical Investigation – Annexure I
- Draft Environmental Basic Assessment Report – Annexure O

1.6 Applicant Detail

George Municipality is the lawful owner of the properties as stated on the registered title deed of portion of the Remainder of ERF 464 George. Attached please find a copy of the Title Deed, confirming the property ownership **(Annexure C).**

The George municipality appointed Zutari (Pty) Ltd to submit this land use planning application on their behalf. Zutari (Pty) Ltd, in their capacity as consultant for the George Municipality, was authorised by the Municipality to sign any and all relevant documentation which may be necessary for the proposed planning application on behalf of the Municipality. The appointment letter signed by the Municipality, appointed Zutari (Pty) Ltd. as the lawful agent to prepare and compile the documentation required for the change in land use rights of the Metro Grounds Mixed Use Development. Attached please find a copy of the signed appointment letter **(Annexure B).**

ANNEXURE C (continue)

Table 2: Applicant details

Applicant, full name and title	Zutari (Pty) Ltd. Reg No. 1977/003711/07
Contact Person of Authorised Professional Planner	Rudolf Schröder
SACPLAN Registration number:	A/151/2009 (See registration certificate attached as Annexure H)
Street Address	Suite 201 2nd Floor Bloemhof Building 65 York Street George 6529
Telephone Number	+27 44 805 5400 / +27 83 390 6963
Email Address	rudolf.schroder@zutari.com

See SACPLAN registration certificate attached as **Annexure H**.

2 PROPERTY PARTICULARS

2.1 Property Description, Registered Owner and Title Deed

The portion of land to be subdivided is part of the Remainder of Erf 464 George, which is a large property located across large parts of George:

Table 3: Property descriptions

	Property description	Extent	Registered owner	Title deed number
1	Remainder of Erf 464, George	The total extent of the Remainder of Erf 464 George is not available. The portion of the erf that is proposed for measures approximately 16.54 hectares.	George Municipality	GEQ15-15/1922

The Remainder of Erf 464, George consists of a larger portion of land including road reserves spread across George. Please see Title Deed attached as Annexure C for confirmation of property ownership and the extent.

ANNEXURE C (continue)

Figure 1: The Remainder of Erf 464 George

2.2 Locality

The proposed Metro Grounds Mixed Use development (also known as the "site") is located on a portion of the Remainder of Erf 464 George, in the George Industrial area east of York Street and north of the N2. The site is located at the intersection of PW Botha Boulevard and Ossie Urban Street roughly halfway between Nelson Mandela Boulevard and York Street, adjacent to an existing substation and the proposed future Go George bus depot.

Also see the Locality Plan attached as **Annexure E.**

ANNEXURE C (continue)

Figure 2: The Greater George Area (Source: George Municipality, 2022)

Figure 3: Project location

2.3 Extent

The total extent of the Remainder of Erf 464 George is not available. The portion of the erf that is proposed for development measures approximately 16.54 hectares.

ANNEXURE C (continue)

2.4 Jurisdiction

The Site of Application is within the jurisdiction of the George Municipality, Western Cape Province, South Africa, in the Garden Route District area.

2.5 Restrictive Title Conditions

There are no conditions in the title deeds of the property that are deemed as being restrictive to the proposed development.

Please refer to the attached copy of the Title Deed for the site of application (**Annexure C**).

2.6 Surveyor General Diagrams and Servitudes

The Remainder of Erf 464 George is considered to be the commonage on which George was established. The SG diagrams of the property therefore illustrate a large property (including most of George) with a number of deduction plans as various subdivisions took place as the town developed over the years. The **Surveyor General diagrams** for the property are attached as **Annexure D.**

2.7 Mortgage Bond

There are no mortgage bonds registered against the properties.

2.8 Applicable Zoning Scheme and Current Zoning

The development site is currently zoned "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw, 2023.

In terms of the George Integrated Zoning Scheme By-Law, 2023, the objective of Undetermined Use Zones is to enable the Municipality to defer a decision regarding a specific land use and development management provisions until the circumstances affecting the land unit have been properly investigated; or until the owner of the land makes an application for rezoning; or a zoning determination is made by the Municipality. The objective of this zoning is furthermore to create a zone to which land could revert back to when rights under current zonings, other than Single Residential Zone I, were not exercised, especially in cases where changes in the planning context occurred since the current zoning was granted.

In terms of the George Integrated Zoning Scheme By-Law, 2023, no primary uses, or consent uses are listed under "Undetermined Use Zone".

ANNEXURE C (continue)

Figure 4: Current zoning - Undetermined Use Zone

The current zoning does not accommodate the proposed development. A land use planning application is therefore submitted to secure the development rights for the proposed development.

2.9 Land Use

Figure 5 below illustrates the land use of the site and its surroundings. The site is a greenfield site located between areas of industry and low-density, low-income residential.

Figure 5: Existing Land Use

ANNEXURE C (continue)

2.10 Topography

The site is situated on a piece of land between two rivers. The highest point is centrally located, gradually sloping down in all directions for most of the site, until the western, eastern and southern edges where the slope suddenly increases with slopes up to 25%. The red polygon on the slope map below indicates the study area.

The topography of the site is generally characterised by a prominent ridge/spur that runs in a southeast direction from the site entrance along PW Botha Boulevard. The ridgeline was bound on the west and east by tributaries of the Schaapkop River. The terrain on site sloped gently along the crest of the ridge, increasing to moderate towards the site boundaries.

All areas with slopes greater than 25% have been excluded from the development footprint. The development footprint also became subsequently smaller as environmental sensitivities were confirmed.

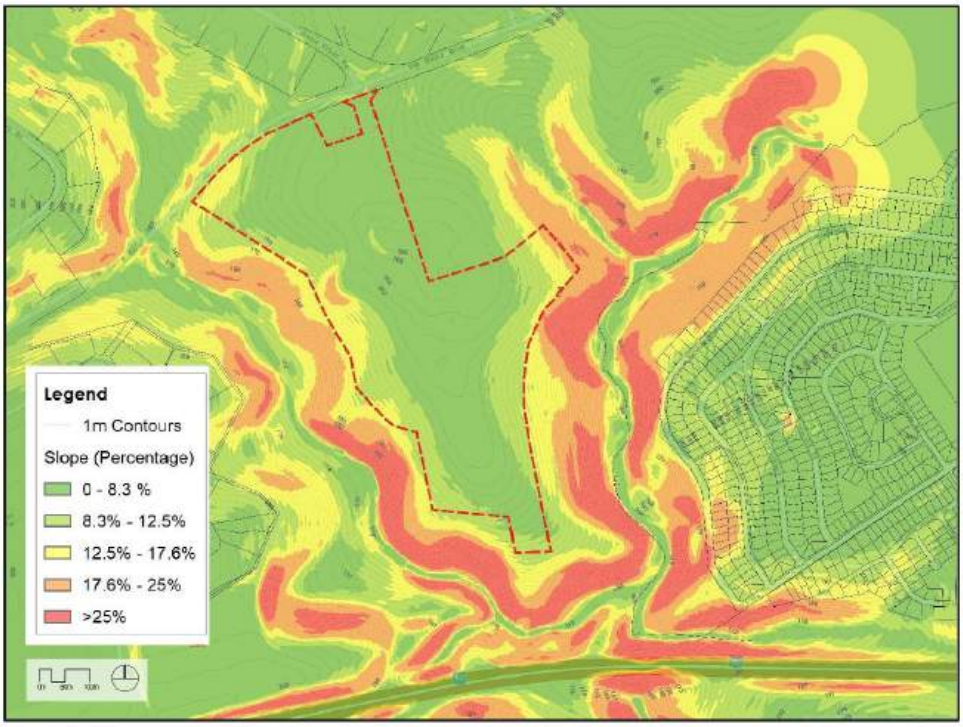


Figure 6: Site Elevation – Slope Map

ANNEXURE C (continue)

3 PROPOSED DEVELOPMENT VISION AND CONCEPT

3.1 Urban Design Framework

3.1.1 Development Vision and Principles

The vision of the Metro Grounds mixed use development is to achieve a high-quality industrial development that caters for a range of users, integrating light industry and education.

Building on the principles of SPLUMA, three guiding principles have framed the design of the development framework. These are:

- **Diverse:** Providing a range of development opportunities
- **Connected**: Providing an integrated street network that provides access to internal development parcels as well as connecting to the existing and proposed street network
- **Safe and secure:** Ensure a safe and secure development through good management and safety through surveillance

DIVERSE

CONNECTED

SAFE & SECURE

3.1.2 Key Informants

The following key site informants unpacked during the analysis phase provide spatial guidance to where development can and cannot occur and the limitations to it. These include:

- Existing electrical servitude that is located along the northern and western edges of the site where no development can occur.
- Steep slopes, which have limited the developable area located along the western, southern and eastern edges of the site associated with river valleys and sensitive environmental areas.
- Existing street network within limited accessibility and a requirement to provide movement access the site from the proposed Rand Street extension and PW Botha Boulevard
- Site access is limited to one point along FW Botha Boulevard and a small area along the Rand Street extension.

ANNEXURE C (continue)

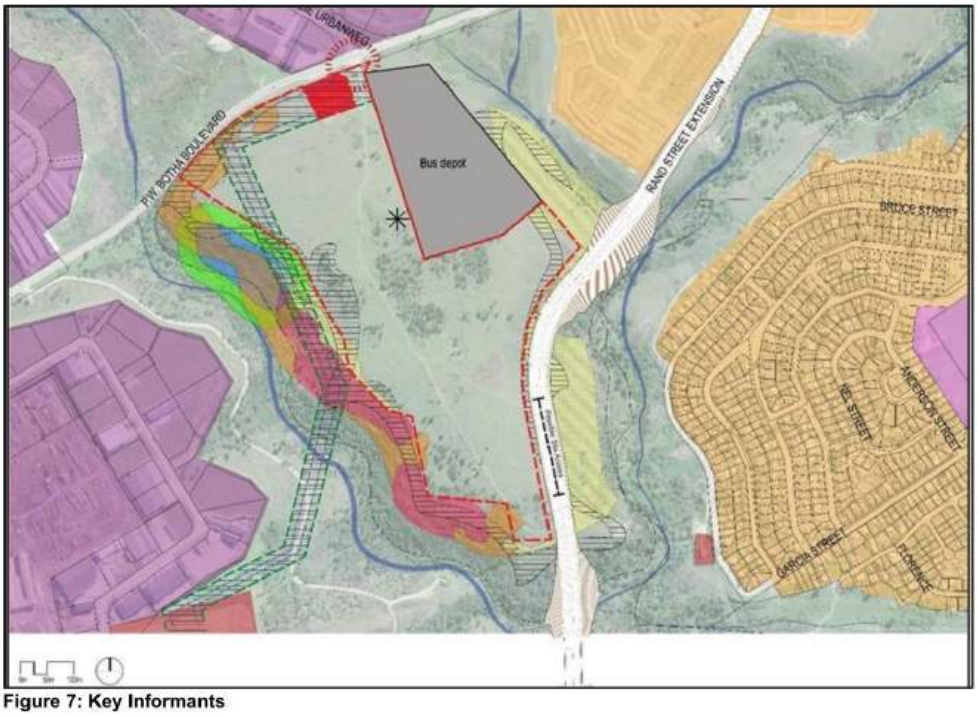


Figure 7: Key Informants

3.1.3 Development Framework

The development framework, guided by the design principles as well as the key spatial informants is illustrated in Figure 8. It is structured around a central, landscaped boulevard, which creates a connection between the proposed Rand Street Extension and PW Botha Boulevard. A range of development parcels provides industrial opportunities for a range of users. A tertiary education facility is located along PW Botha Boulevard with direct access from the central boulevard.

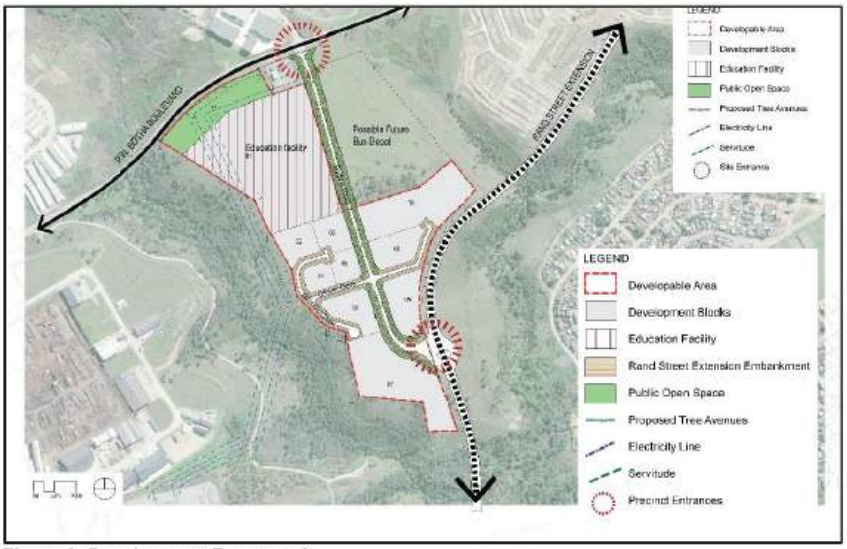


Figure 8: Development Framework

Refer to **Annexure N** for further details regarding the Metro Grounds Mixed Use Development Urban Design Guidelines.

3.1.3.1 Access and Movement

The Metro Grounds Street network is illustrated in Figure 9 below. It shows a hierarchy of streets differing in width from 30m to 22m. The site's primary access is off PW Botha in the north. Direct access from and connection to the Rand Street Extension can occur once the road has been constructed, but in the interim, this central boulevard (Bulbine Street) terminates in the south with a circle. This will not impact the development's functioning as the street network can accommodate the required movement, providing access to all development parcels without the through-route.

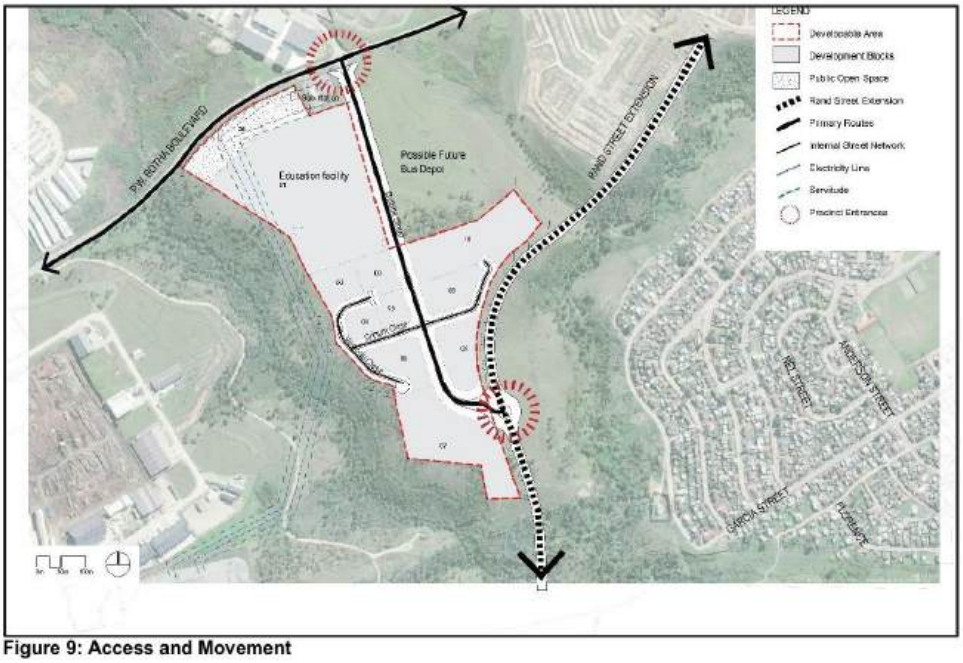


Figure 9: Access and Movement

3.2 Shaping Elements and Technical Studies

A number of environmental specialist studies have been undertaken to confirm environmental sensitivities identified on site during the feasibility stage of the project. These environmental studies further shaped and informed the layout design of the proposed development and culminated in the final layout that formed the basis of this land use planning application. A number of technical studies have also been undertaken based on the layout plan of the proposed development. These include civil engineering investigations, electrical engineering investigations, stormwater management as well as a traffic impact assessment. The main findings of these studies are summarised in the section below. For more detail, find the reports attached as annexures to this application.

3.2.1 Environmental Sensitivities

The environmental sensitivities identified on site during the feasibility stage of the project have been verified through a range of specialist investigations. The Environmental Authorisation (EA) must be sought in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and Environmental Impact Assessment (EIA) Regulations 2014 (as amended) via the Basic Assessment

ANNEXURE C (continue)

process. The specialist reports are attached to the Draft Basic Assessment application. The Draft Basic Assessment Report is currently circulated for comments where-after it will be submitted to DEADP for consideration. See the Draft Environmental Basic Assessment Report attached to this application as **Annexure O**.

3.2.1.1 Aquatic Biodiversity Site Sensitivity Verification and Impact Assessment.

Confluent Environmental Pty (Ltd) was appointed by Zutari to conduct an aquatic specialist assessment for the proposed Metro Mixed-Use Industrial Development on Erf RE/464, George, Western Cape. The Department of Forestry, Fisheries, and the Environment (DFFE) Screening Tool identified the site as having a "Very High" aquatic biodiversity sensitivity due to the close proximity to an aquatic Critical Biodiversity Area (CBA1) and its location within the Outeniqua Strategic Water Source Area (SWSA). Despite the sensitivity of the aquatic ecosystems, the field assessments revealed that historical and ongoing impacts, including, erosion, and urban runoff, have largely modified the ecological states of these aquatic ecosystems. The site visit confirmed the presence of most of the mapped watercourses, with the addition of two wetlands and the absence of wetland features associated with HGM1.

The watercourses and wetlands have been demarcated and buffers proposed which have been incorporated into the layout design.

Figure 10 - Mapped Watercourses and Wetlands with Proposed Buffers

3.2.1.2 Terrestrial Animal Species Specialist Assessment: Site Sensitivity Verification Report and Compliance Statement

The site sensitivity verification conducted on RE/Erf 464 has confirmed that the area has been heavily degraded due to past environmental and anthropogenic disturbances, including invasive plants, illegal dumping, and historical waste disposal activities. These factors have resulted in the significant transformation of natural habitats, making the site unsuitable for the SCC identified by the DFFE Screening Tool and public platforms. Although the DFFE Screening Tool initially indicated a HIGH sensitivity rating due to potential habitat for SCC to occur, the site inspection revealed a LOW sensitivity.

A botanical assessment was undertaken by Confluent Environmental (Pty) Ltd, who identified some areas to the east along the river corridor where more sensitive vegetation has been found on the steeper slopes, and some wetlands areas. These areas are mapped below and the High Sensitivity areas excluded from the development footprint.

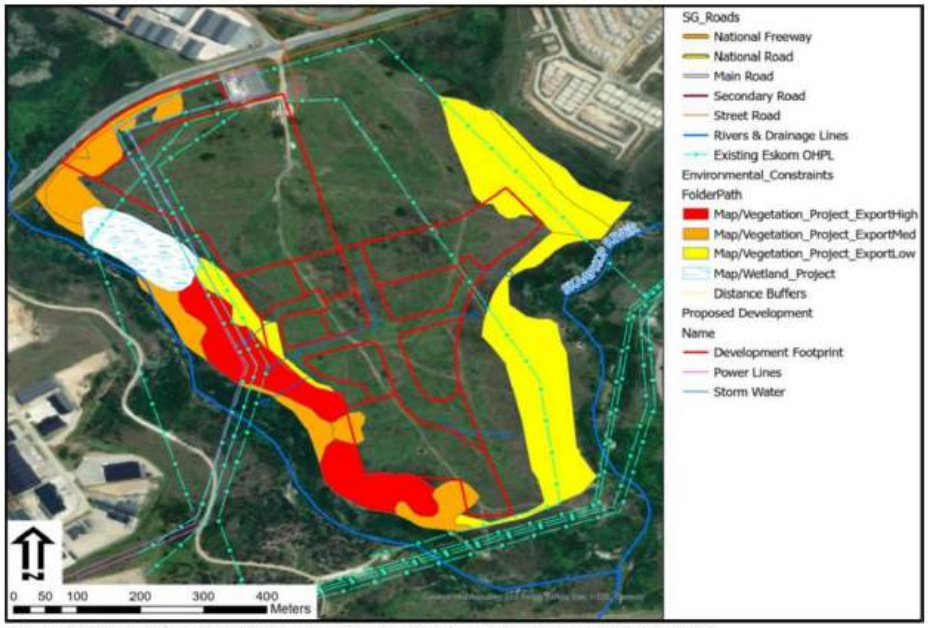


Figure 11. Vegetation Sensitivity Mapping by Confluent Environmental (Pty) Ltd.

3.2.1.3 Terrestrial Biodiversity

The site assessment confirms that the Metro Grounds development is situated within a transformed landscape, with fynbos vegetation primarily restricted to valley slopes, which is largely outside of the Metro Grounds development plan extent. A framework was developed from the site assessment which identified that majority of the vegetation on site could be classified as into transformed fields, while the remaining vegetation around the periphery was mainly classified as fynbos.

The transformed grassy fields have very little ecological value. However, the fynbos vegetation exhibits significant biodiversity and ecological importance, supporting a variety of indigenous plant species along the eastern slopes. The transformed nature of the site means fire-dependent fynbos dynamics are disrupted, reducing the ability of fire-adapted species to regenerate. This current impact is difficult to mitigate, as fire management is highly unlikely to occur in this area.

Mitigation measures have been recommended by the Terrestrial Biodiversity Specialist as listed below:

- Implement an invasive alien plant control plan along the valley edges to the valley bottom prior to the commencement of vegetation clearance or construction.
- Development here should prioritize avoiding impacts on the sensitive fynbos and riparian areas by incorporating large buffers around valley edges
- Demarcate no-go high sensitivity areas, especially around valley slopes where fynbos persists.
- Minimize soil disturbance and establish defined walking paths to prevent soil compaction during clearing.
- Implement dust suppression techniques and ensure proper waste disposal on-site.

3.2.1.4 Landscape and Visual Impact Assessment

The Visual Assessment is in support of the proposed development and included motivation for the support and some mitigating measures to be followed:

- High Positive for local planning within existing semi-industrial landscape context that has a High Visual Absorption Capacity.
- The development is suitably set back from sensitive vegetation.
- The 200m (avg.) buffer from the development to the receptors, would allow for some reduction in visual exposure to the proposed landscape change.
- Likely low sensitivity to landscape change from local residential receptors where the light-industrial area could afford employment opportunities.
- Economic benefits/ skills from the industrial/ education developments.
- Due to the risks related to potential land invasion from limited management of the property in the No-Go Option, this scenario is not preferred. The Preferred development option is the landscape and visual preference with mitigation.
- Mitigations have been provided regarding tree plantings, as well as a recommendation to review the southern erven to allow for a more positive/ linear frontage onto the N2 Highway.
- The single erven could appear to jut forward and increase visual intrusion as seen from the lower lying N2 Highway receptors. This southern erven is also directly adjacent to the existing Municipal Powerline Corridor, and it could be prudent to accommodate space for future powerlines taking into consideration that the area to the south of the corridor depict steep slopes. This possible erven re-alignment should be subject to review pending the further evaluation at the Site Development Planning stage.

Figure 12: Tree planting mitigation map (15m spacing/ 4m from Erf as per existing George Industria/ Fichat Street example).

3.2.1.5 Agriculture

Through the Environmental Basic assessment, it has been confirmed that the site is identified as having no current and future agricultural production potential. This is due to its location being transformed by expanding urbanisation, and that the land use planning in the spatial development framework has designated the site for non-agricultural use.

Given the above, the occupation of the proposed development is deemed to have no agricultural negative impact now and in future, therefore the site is assessed as acceptable.

3.2.1.6 Archaeological/Heritage statement

No cultural or historically significant elements have been identified. In response to the Notification of Intent to Develop, Heritage Western Cape responded that:

> "*You are hereby notified that, since there is no reason to believe that the proposed development of an industrial area on Erf 464 Portion Remainder, Metrogrounds Industrial Development, George will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay*".

3.2.1.7 Civil Aviation

The very high, high and medium sensitivity ratings identified by the DFFE screening tool are a function of the project's proximity to the following aviation installations related to the Airports Company South Africa (ACSA) George Airport:

- George ACSA Airport
- FAGG Heli-square Helistop at George Airport
- Titan Offshore Helistop

The proposed Metro Grounds development does not pose significant risks to civil aviation as the development will not introduce any obstacles taller than those already present on site and in adjoining industrial areas. As a result, no further investigations are deemed necessary.

3.2.1.8 Layout informed by environmental sensitivities

The environmentally sensitive areas identified on site have been marked out and formed an integral role in the design of the layout plan. The identified areas have been avoided as far as possible. See the image below with the environmental sensitivities mapped in relation to the proposed layout / development footprint:

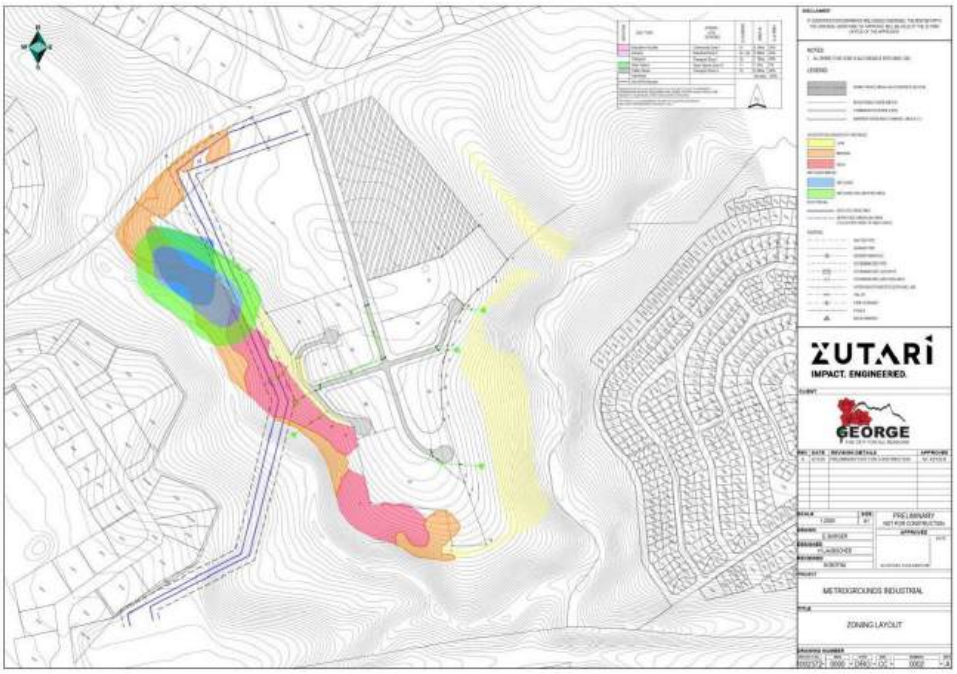


Figure 13: Environmental Sensitivities

3.2.2 Geotechnical Report

A geotechnical investigation was conducted for the Metro Grounds mixed use development by Outeniqua Geotechnical services in September 2022. The methodology for the geotechnical investigations included a walk-over survey as well as a subsurface investigation which consisted of twenty test pits which were excavated in order to investigate the geology and geotechnical nature of the site, including soil types, moisture levels, consistency etc. An analysis of the information was conducted to determine geotechnical parameters and recommendations were formulated based on the available data.

The site was broadly mapped out according to the dominant geotechnical constraints that were identified during investigation, see figure below.

ANNEXURE C (continue)

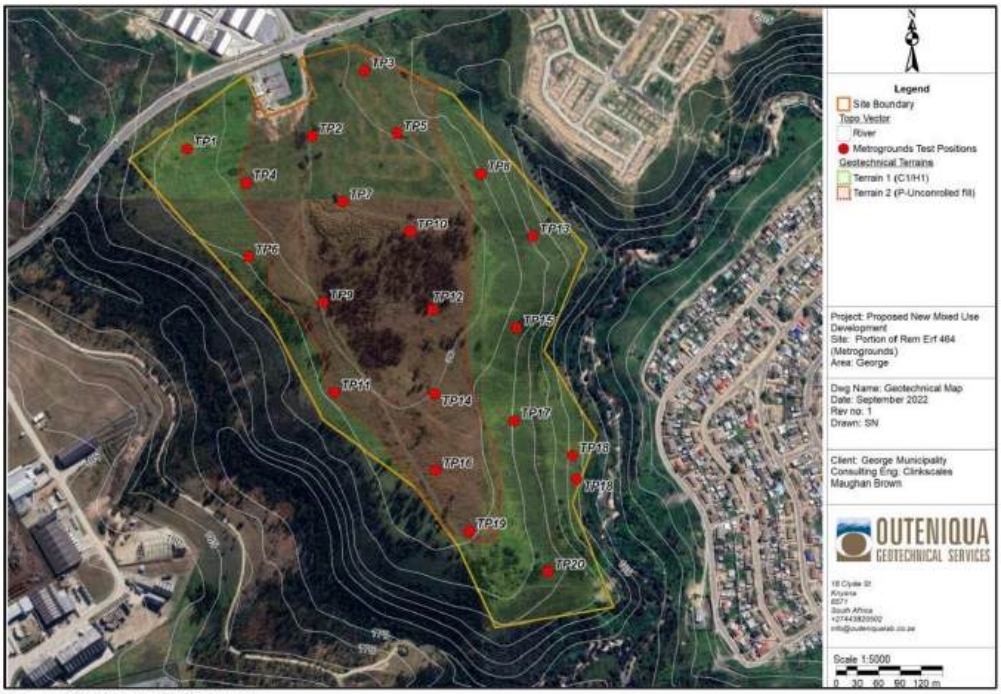


Figure 14: Geotechnical map

The test pits undertaken as part of this investigation indicated that the site consisted of areas underlain by natural (insitu) soil and areas underlain by deposits of uncontrolled fill (dumped soil). The natural (insitu) profile generally consisted of one or more horizons of colluvium (transported soil), which were underlain by a paedogenic horizon of ferricrete nodules (chemical deposit), which was underlain by residual granitic soil composed of clayey sand and/or sandy clay, derived from the insitu weathering of the underlying granite.

No free groundwater seepage was encountered in test pits but very moist soil conditions were noted on the lower slops near drainage line. Seasonal seepage was also expected in the upper 1.5, in the profile during wet seasons which could potentially affect excavations and construction of foundations, requiring dewatering and some improvements.

The site of development has been generally considered suitable for the proposed development; however, some challenging geotechnical constraints were encountered, requiring special engineering solutions to mitigate excessive movements in structures. Some preliminary recommendations were provided for consideration by the designers, but all information should be verified on site and further investigations may be required. See more details of the recommendations made in the attached Geotechnical report as **Annexure I**

3.2.3 Stormwater management

A stormwater management report has been prepared with the purpose of analysing the catchment area in order to determine the 1–5-year flow rate, determine the sizes of stormwater infrastructure within the proposed development, determine the effect of external stormwater runoff, and to make recommendations regarding the runoff.

The stormwater system forms an integral part of the urban planning layout. The system rests on three legs, the minor, major and emergency systems. The minor storms are catered for in the pipe system, while major storms are routed through a linked system of roads and public open space through

attenuation techniques. The emergency system is designed to recognise failure of the minor and major systems or in the event of malfunction of the minor system by providing continuous overland flow routes to minimize flooding of residential areas.

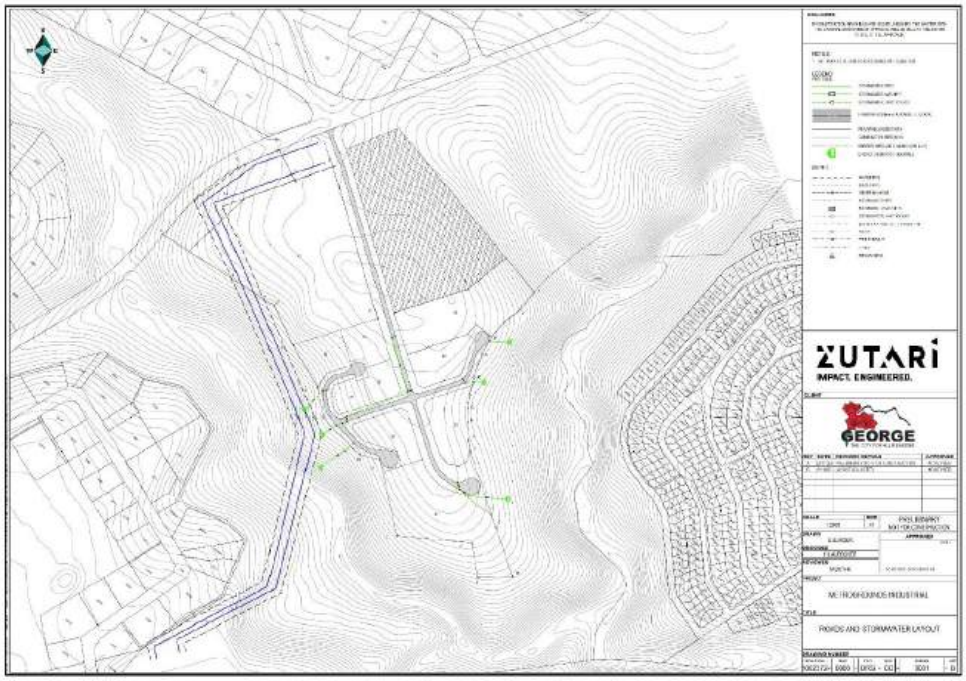


Figure 15: Proposed stormwater management at the site (green)

The watercourses are the current catchment source point of the proposed site of application. The internal stormwater will be designed in such a manner that it follows the natural topography of the site, and the outflow will be dispersed via energy dissipating outlets towards the drainage paths.

The stormwater surface run-off water will be managed through the following management techniques during construction.

- Temporary cut-off channels and berm;
- Routing of run-off towards the existing watercourse and current drainage routes;
- Erosion protection by means of gabions, Reno mattress, Geofabric and/or any combination thereof;
- Compliance with a site-specific Environmental Management Plan;
- Provison for dealing with water, in accordance with SABS 1200, will be stipulated in the Project Specification and Contract Document. Of specfic importance will be the following clauses:

  i. Clause 5.5 in SABS 1200 A;
  ii. Clause 5.3 in SABS 1200 AA;
  iii. Clause 5.1.3 in SABS 1200 D; and
  iv. Clause 5.1.2 in SABS 1200 DB

The design approach to be adopted to the site of development are summaries below;

- Promotion of on-site infiltration
- Minimise concentration of stormwater
- Maintain pre-development run-off levels as far as possible
- Enforcement of management principles
- Identify major escape routes for major floods
- Responsible discharge of stormwater into downstream system; and
- Allowing for the necessary attenuation where possible.

The listed aspects will require further consideration during the detail desing stage;

- Stormwater needs to be responsibly conveyed to the existing watercourse
- Stormwater collected along the watercourse needs to be able to reach the existing drainage infrastructure downstream.
- The site development plan needs to be adequately provide fore servitude to accommodate major flows;
- Maximisation of attenuatiuon of the rainwater that most water can be catched.

The proposed site's stormwater will be managed in a responsible manner and be safely discharged into the surrounding drainage system, without any detrimental impacts to the environment or communities.

The application of the stormwater management plan will lead to minimum impact of stormwater from new development on receiving watercourses and prevention of further degradation of receiving waters by stormwater drainage from existing development, as well as in the long term the reversal of current undesirable stormwater impacts.

3.2.4 Engineering and Bulk services

An Engineering services investigations has been undertaken for the proposed development. The purpose of the investigations is to inform the application of the existing and proposed engineering services required for the proposed development as well as to address the engineering services capacity requirements.

From the information available, it appears that there is sufficient existing capacity within the infrastructure service to support the proposed development. Confirmation from the George Municipality's engineering services departments with the following have been requested, as part of due process:

- Confirmation whether the existing water and sanitation infrastructure and distribution networks will have sufficient capacity to accommodate the development.
- Confirmation on the type of fire hydrants and coupling type,
- Confirmation on the type of water meter to be allowed for,
- Confirmation on the surfacing of internal roads,
- Confirmation on the solid waste removal and land fill capacity.

Refer to the Services Report attached as **Annexure K** for more details

ANNEXURE C (continue)

3.2.4.1 Water supply

Based on "The Neighbourhood Planning and Design Guide", the proposed Metro Grounds mixed use development is classified as a Business/Commercial/Industrial type development with an expected peak demand of 8.66l/s being designed for.

According to the Water system Master Plan, dated June 2020, the existing reservoirs have enough capacity existing at the Water Treatment Plants to accommodate the proposed development without bulk supply upgrades. The available capacity will need to be verified with GLS to confirm this. A water reticulation system exists within close proximity to which the proposed development could connect. The proposed development should however have its own bulk water meter constructed to facilitate water consumption measurements.

The old and new water treatment works are currently operating under constraint; however, both treatment works are planned for capacity upgrades. Once the capacity upgrades are commissioned, the treatment works will have sufficient capacity to accommodate the proposed development. Even will only be released once capacity is available.

The demand for fire flow is to be addressed as part of the internal network design. This aspect will require assessments by the GLS in terms of the larger network capacity.

3.2.4.2 Sewage system

The proposed development is located within the existing Outeniqua Wastewater Treatment Works Main Outfall drainage area; therefore, affluent generated from the site will drain directly towards the existing infrastructure and join the Schaapkop Pumpstation.

According to the Sewer Master Plan for the Municipal area, sufficient capacity exists at the Sewage Treatment Plant within the existing system. Detailed consideration regarding expected discharge will be given once more information regarding the types of industries that will be operating within the development becomes available.

A wastewater reticulation system exists within, or adjacent, the boundaries of the proposed development. It is proposed that the development will drain to the Outeniqua Wastewater Treatment Works where it will be treated. Since the available information is slightly outdated, GLS will have to be requested to confirm that the Schaapkop Pumpstation and bulk pipelines have sufficient capacity.

3.2.4.3 Storm water

The site has a steep gradient, increasing towards natural drainage lines, however there is no existing stormwater infrastructure in place in close proximity to the proposed development. The upstream runoff and stormwater runoff from the development will have to be conveyed through an underground system and an overland flow system. Refer to Par. 3.2.4.

3.2.4.4 Solid waste

Refuse removal will be dealt with once a weak as is applicable to the current residential and business/industrial areas within the George Municipal area. The volumes of solid waste generated by the proposed development will be calculated once more information becomes available.

The George Municipality Community services department will be required to confirm if the existing solid waste site will have capacity to accommodate the additional solid waste generated by the development.

3.2.4.5 Flood lines

The site of the proposed development is not directly affected by any flood lines. The civil engineering services department at the George Municipality, indicated that flood lines have been delineated for the Rand Street extension and are currently under review. The intension is that the impact of this development on the flood lines, if any, should be considered as part of the study.

3.2.5 Electrical Engineering Investigation

The electric supply Authority for the site of development is the George Municipality, and therefore their Electricity Department was consulted on matters related to the electrical services.

Based on the information currently available, the peak kVA demand of the proposed development has been estimated at 1875kVA, with an estimated capacity requirement of 1875kVA. It is in process of confirmation that this capacity is available at the identified point of connection. The proposed development is situated adjacent to the existing Tamsui 66/11kV Substation, and the firm transformer capacity at this substation is 20 000kVA. Based on the maximum demand readings taken by the Municipality at this substation the maximum load at present is approximately 15 000kVA, which indicates that some spare capacity will be available.

The identified point of connection for the development is at the existing 11kV busbars inside the Tamsui Substation Switch room. The proposed connection will include the supply and installation of two 11kV feeder circuit breakers inside the existing switching station building to supply to the development, and 185mm² Cu x 3 core 11kV underground ring cable from the abovementioned circuit breakers supplying the internal network. See detailed electrical services report attached as **Annexure L**.

3.2.6 Traffic Impact Assessment

A detailed Traffic Impact Assessment has been undertaken to examine and advise on the proposed internal road network for the Metro Grounds mixed use development. The assessment identifies any necessary road network improvements that might be needed. See detailed report attached as **Annexure M.**

Access

The site of application is located at the intersection of Ossie Urban Street and PW Botha Boulevard, this intersection will act as the main access point for the proposed development, see image below.

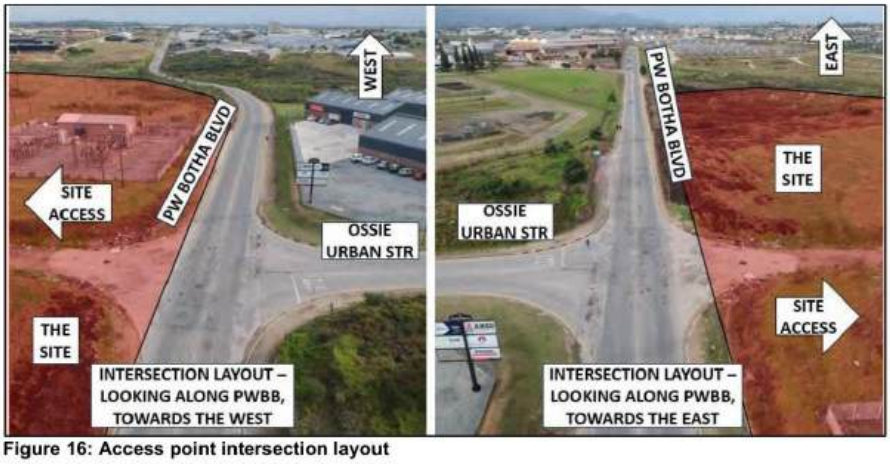


Figure 16: Access point intersection layout

ANNEXURE C (continue)

The layout makes provision for two main intersections. The first situated at the current junction of PW Botha Boulevard and Ossie Urban Street, and the second, at the future intersection with the proposed Rand Street extension. Based on the intended function of the internal roads, they can be classified as indicated in Figure 16 below.

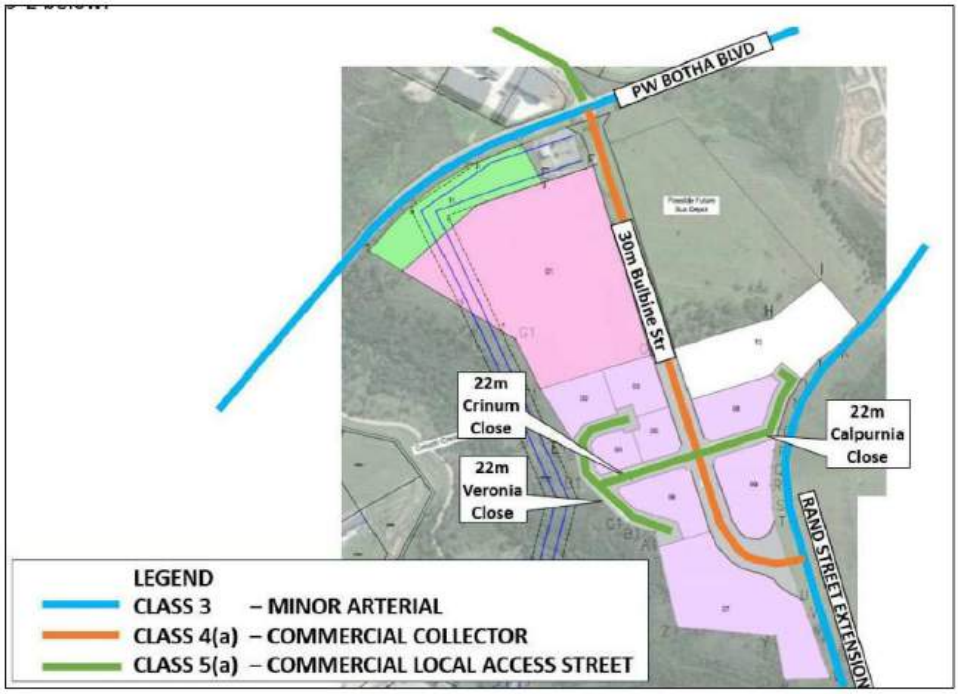


Figure 17: Proposed internal road classification

Intersection spacing

With regards to intersection spacing, the guidelines published in the WCG Road Access Guidelines 2020, have been applied. It is possible to provide the following:

1. Upgrade the existing PW Botha Boulevard/Ossie Urban Intersection into a signal controlled, full intersection.
2. Provide direct access into both the bus depot and education site via a signal controlled full intersection. This intersection must be situated 270m from the existing PW Botha Boulevard/Ossie Urban Intersection.
3. Unsignalised full Intersections on the two intersections with the minor (Class 5) roads.
4. Provide a signal-controlled intersection at the junction of Rand Road Extension and the future Metro Grounds Main Road.

This proposed layout has been indicated schematically in figure below.

ANNEXURE C (continue)

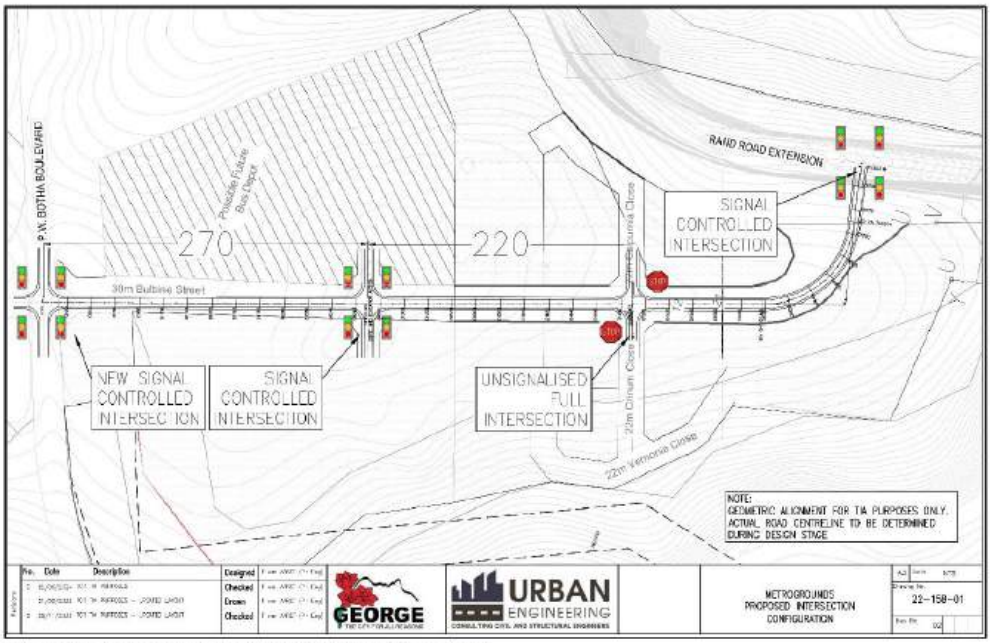


Figure 18: Proposed internal Road Intersection control

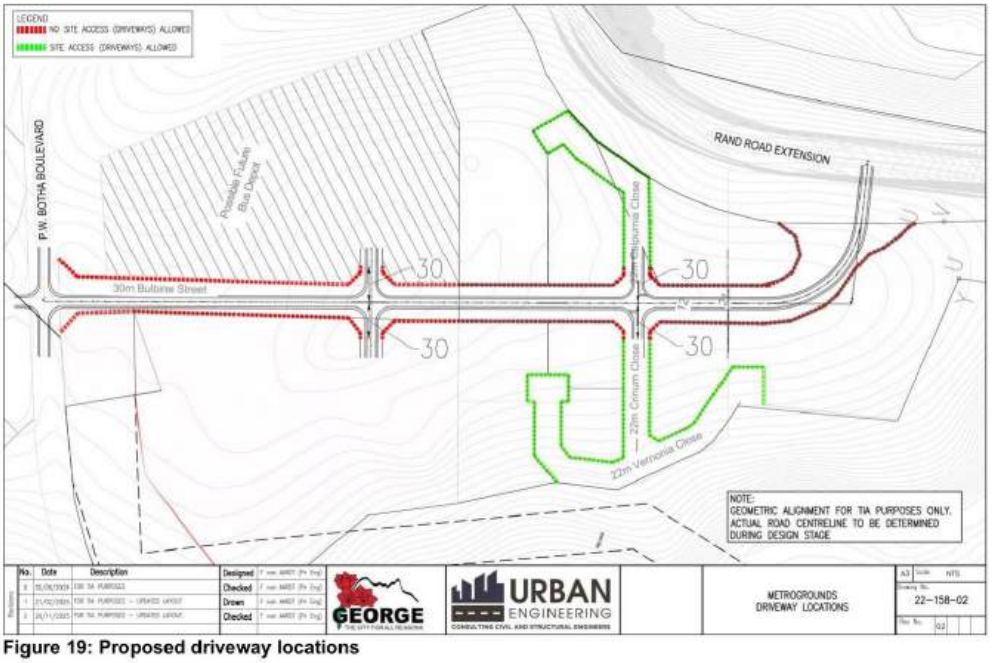


Figure 19: Proposed driveway locations

Since the proposed signal-controlled intersection at the junction of Rand Road Extension and the future Metro Grounds Main Road can only be implemented after both roads have been constructed, an interim solution is to provide a temporary turning circle at the end of Metro Grounds Main Road.

ANNEXURE C (continue)

Parking

The George integrated zoning scheme By-law, 2023 should be used to determine the parking requirements for the various land uses. The current zoning scheme By-law does not make provision for on-street parking, parking should be provided on the property for which parking is required.

The following parking layout requirements apply unless otherwise stated in the George Municipal zoning scheme By-law, 2023.

a) Parking layout configurations, minimum dimensions and ramps to a parking area must be in accordance with this zoning scheme or an approved site development plan;

b) A standard 90-degree parking bay for a motor vehicle shall measure at least 2,5 metres in

c) width and 5.0 metres in length with 7.5 metres manoeuvring space or otherwise determined by the Municipality;

d) The layout of any parking area must ensure that vehicles can readily leave the site without reversing across the sidewalk, unless otherwise approved by the Municipality;

e) A tandem bay accommodating two motor vehicles is regarded as one bay for the purposes of this zoning scheme, where a tandem bay is regarded as two bays;

f) visitor parking bays must be clearly demarcated, readily visible and accessible to visitors, and preferably grouped together;

g) Parking areas must be used for the parking of vehicles which are lawfully allowed on them, and any activity which causes an obstruction for vehicular traffic or pedestrian use of the sidewalk is prohibited;

h) parking areas must be constructed and maintained in a state suitable for the parking and movement of vehicles;

i) control of access to and reservation of parking bays and / or areas is not permitted unless written approval has been obtained from the Municipality; either through an approved site development plan or other written approval; and despite paragraphs (a) to (h), the Municipality may lay down more restrictive requirements related to parking, site access or motor vehicle carriageway crossing, if it considers this to be necessary from a pedestrian or traffic safety point of view.

Recommendations

Based on the findings of the TIA report, the following recommendations are made:

1. The intersection of PW Botha Blvd/Rand Street should remain a signalised intersection.
2. The junction of PW Botha Blvd & Ossie Urban Str should be upgraded to a signalised intersection.
3. Intersection controls for internal roads must comply to Drawing 22-158-01
4. As indicated in Drawing 22-158-02 no driveway access should be allowed from Bulbine Street onto any neighbouring property.
5. Provision should be made for UA compliant sidewalks next to all new roads. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
6. Since the proposed Metro Grounds Development includes an educational facility, provision should be made for new UA compliant pedestrian sidewalks next to PW Botha Boulevard, all the way from York Street to Nelson Mandela Boulevard. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
7. Provision should be made for street lighting next to all new internal Metro Grounds roads.

8. Cross sections of all new Metro Ground internal roads must make provision for clearly defined (Class 1 preferred but Class 3 as a minimum) bicycle routes/lanes. Road layouts must also include safe bicycle crossing areas at all intersections.
9. Geometric design of Metro Grounds internal roads must comply to the various guidelines and standards with regards to horizontal and vertical alignments.

4 APPLICATION PARTICULARS

The previous sections of this report provided an overview of the site context and the various components of the site analysis undertaken to date, as well as an outline of the proposed development. Furthermore, previous sections of this report detailed the results of the various technical studies undertaken in support of the proposed development and the shaping elements considered during the layout design of the proposed development. However, in order to clarify the exact details of the application, this section will reiterate specifically what is being applied for in this application to secure the development rights for the proposed Metro Grounds Mixed Use Development.

This land use planning application is submitted to apply for the **subdivision** of the Remainder of Erf 464 George to create the site planned for development and then to apply for the **rezoning** of the site to a subdivisional area and then for the **re-subdivision** of the site according to the subdivisional layout plan.

The application is submitted in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023, for the following:

a) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.

b) **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone I properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property, see subdivisional layout plan (Annexure F) attached for more detail.

c) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan (Annexure F) in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

4.1 Proposed Subdivision

An application is submitted in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws for the subdivision of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure

A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures 16.54 hectares in extent.

4.2 Proposed Rezoning

An application is submitted in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 for the rezoning of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone I properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property, see subdivisional layout plan (Annexure F) attached for more detail.

4.3 Proposed Subdivision (re-subdivision)

An application is submitted in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:

- 8 Industrial Zone II properties
- 1 Community Zone I property
- 1 Transport Zone I property
- 1 Open Space Zone II property
- 1 Transport Zone II property

in accordance with the attached subdivision plan (Annexure F) in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

4.4 Proposed Land uses

The main objective is to obtain town planning (Land Use Planning Rights) and development rights for the proposed development. The proposed development of the portion of the Remainder of Erf 464 George, will consist of the following projected land uses:

NOTATION	ERF TYPE	ZONING (STB. SCHEME)	Erf NUMBER	AREA ha	% of AREA
	Education Facility	Community Zone I	01	5.34ha	30%
	Industry	Industrial Zone II	02 - 09	5.56ha	43%
	Transport	Transport Zone I	10	1.76ha	43%
	Open Space	Open Space Zone II	11	1.3ha	7%
	Public Street	Transport Zone II	12	2.58ha	20%
	Total Area			16.54ha	100%

The proposed layout plan to subdivide the Metro grounds development area into the mentioned land uses is shown on the subdivisional layout plan attached as Annexure F.

ANNEXURE C (continue)

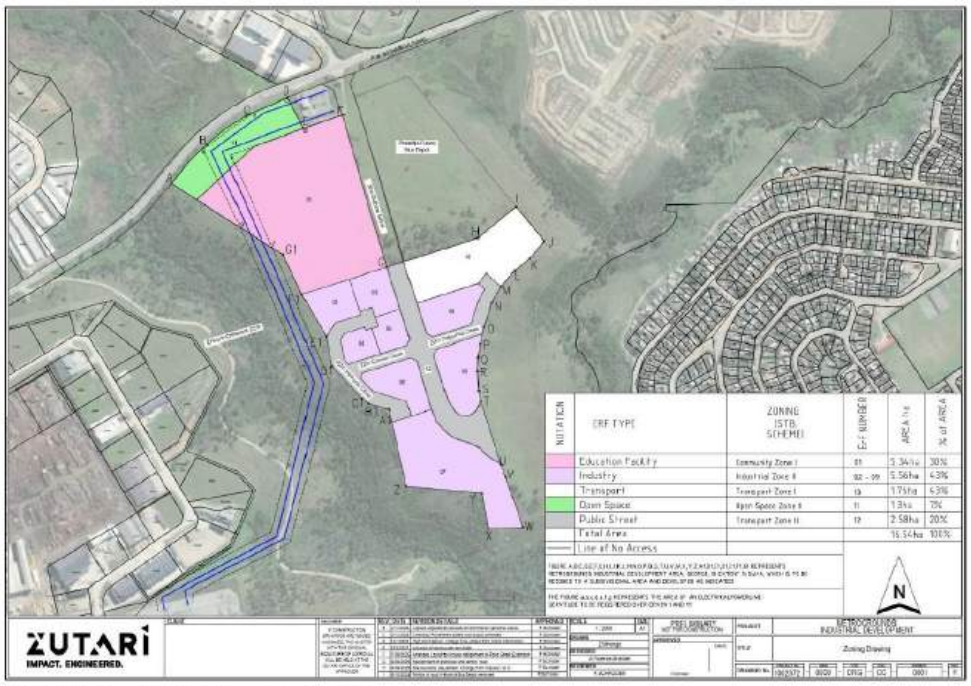


Figure 20: Proposed land uses and areas

Industry Land use description (as per George Integrated Zoning Scheme By-Law, 2023):

"industry" means a property used as a factory and in which an article or part of such article is made, manufactured, produced, built, assembled, compiled, printed, ornamented, processed, treated, adapted, repaired, renovated, rebuilt, altered, painted (including spray painting), polished, finished, cleaned, dyed, washed, broken up, disassembled, sorted, packed, chilled, frozen or stored in cold storage; including offices, caretaker's quarters, factory shop or other uses which are subservient and ancillary to the use of the property as a factory; and—

(a) includes—

(i) animal care centre;

(ii) an industrial hive;

(iii) builder's yard;

(iv) data centre;

(v) funeral parlour;

(vi) motor vehicle dealership;

(vii) service station;

(viii) transport usage;

(ix) self-storage facility;

(x) rooftop base telecommunication station;

ANNEXURE C (continue)

(xi) freestanding base telecommunication station;

(xii) warehouse and agricultural industry;

(xiii) recycling centre; and

(xiv) renewable energy structure;

(b) does not include a noxious trade, scrap yard or risk activity

The Community Zone I Erf earmarked for a tertiary educational facility has the following land use description accommodated within the zoning applied for:

Place of instruction Land Use Description:

"place of instruction" means—

(a) a place for education or training at pre-school, school or post-school levels, including—

(i) crèche;

(ii) nursery school;

(iii) primary school;

(iv) secondary school;

(v) college;

(vi) university; or

(vii) research institute; and

(viii) place of instruction in physical exercise and sport where the main objective is instruction

rather than participation of the public as competitors or spectators;

(ix) and the following ancillary uses—

(aa) a boarding hostel;

(bb) administrative offices;

(cc) cafeteria;

(dd) convenience shop limited to total floor space of 100m²

(ee) laboratories;

(ff) occasional use for religious gatherings, craft markets and events;

(gg) place of assembly;

(hh) place of worship;

(ii) private road;

(jj) private open space;

(kk) sports and recreation centre; and

(II) staff accommodation.

(b) a civic facility for the promotion of knowledge to the community, including-

(aa) a public library;

(bb) public art gallery; and

(cc) museum;

(c) but does not include a reformatory or a conference facility.

In the proposed development the use of the educational site will be limited to a secondary/tertiary facility, and such requirement will be included in the zoning approval conditions. An Africa Skills Artisan Development facility is situated approximately 1km west of the site. The site, located within an industrial context, is not considered suitable for primary school purposes.

The Transport Zone I erf (proposed erf 10) on the layout plan will be consolidated with the bus depot site and be implemented as part of the bus depot development.

4.5 Applicable zoning parameters

The following table provides the proposed development parameters associated with the proposed zonings for the various land uses included in the proposed development. These are standard as per the George Integrated Zoning Scheme By-Law, 2023:

Table 14 Development/Zoning parameters

Zoning	**Industrial Zone II**
Development parameters (Industry)	
Coverage	Coverage may not exceed 75%
Floor factor	The floor factor may not exceed 1,5
Height	The highest point of a building may not exceed 15 meters to the top of the roof.
Building lines	The street boundary building line is 0 metres, with a street centreline setback of at least 8 metres. Side and rear boundary building lines are 0 metres, provided that the Municipality may lay down side and rear building lines of up to 3 metres in the interest of public health and/or safety.
Parking and access	Parking and access must be provided in accordance with the by-law

Zoning	**Community Zone I** **(Education Facility)**
Development parameters (Place of Instruction)	
Coverage	Coverage may not exceed 60%
Floor factor	The floor factor may not exceed 1.2.
Height	The highest point of a building to the top of the roof may not exceed 12 metres, provided that there is no height limit for a bell tower, steeple, minaret or similar architectural feature designed to accentuate the significance of a building.
Building lines	The street building line is at least 5 meters. Side and rear building lines are at least 5 metres.
Parking and access	Parking and access must be provided in accordance with the by-law

ANNEXURE C (continue)

Zoning	**Transport Zone I** **(Transport Use – erf to be consolidated with Bus Depot)**
Development parameters (Business Premises)	
Coverage	The maximum coverage for all buildings on a land unit is 100%
Floor factor	The maximum floor factor on the land unit is 3.
Height	The highest point of a building may not exceed 15 metres to the top of the roof.
Building lines	The street building line is 0 metres. Side and rear building lines are 0 metres up to a height of 8.5 metres and 4.5 metres for the remainder of the building provided that the Municipality may lay down more restrictive common building lines in the interest of public health and safety or in order to enforce any other law or right.
Parking and access	Parking and access must be provided in accordance with the by-law

4.6 Proposed phasing implementation phasing

It is envisioned that the development implementation (construction) will be executed in three main phases. The first Phase will entail developing the Bus depot site and associated access. The second phase will be the development of the education facility. The remainder of the development which includes the industrial uses can then be developed as a third phase:

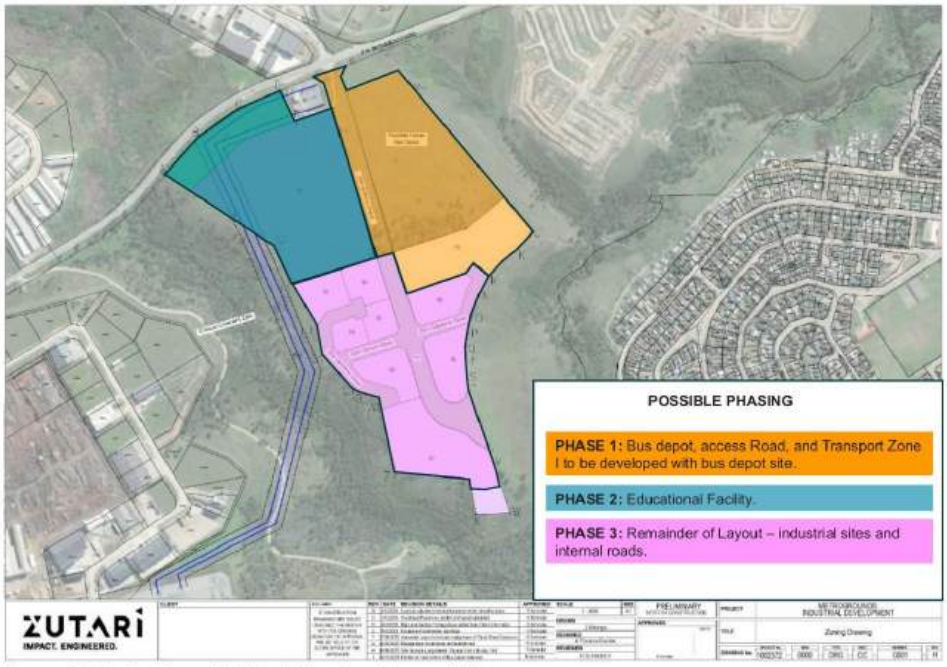


Figure 21: Metro Grounds Mixed Use Development Phases

ANNEXURE C (continue)

4.7 Proposed Servitudes to be registered

The proposed layout plan to subdivide the Metro grounds development area into the mentioned land uses attached as Annexure F, includes a number of servitudes to be registered as further described below.

SERVITUDE AFFECTING ERVEN 1 & 11

There are existing 66Kv powerlines traversing Erf 1 and Erf 11. A 22 metre wide servitude (11 metre on either side of the centre line of the powerline) is to be registered along the powerlines in favour of Eskom. The total area affected by the servitude affecting Erf 1 and Erf 11 is depicted by figure a,b,c,d,e,f,g:

THE FIGURE a,b,c,d,e,f,g REPRESENTS THE AREA OF AN ELECTRICALPOWERLINE SERVITUDE TO BE REGISTERED OVER ERVEN 1 AND 11

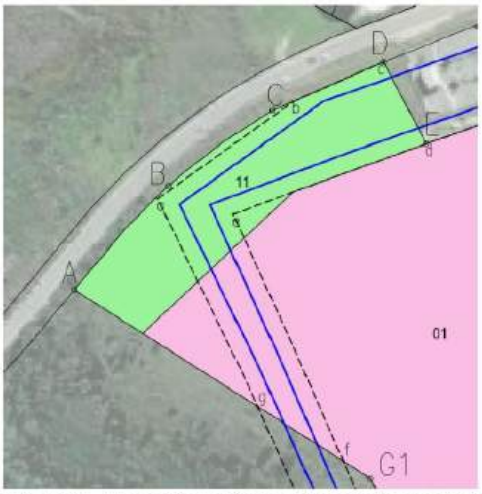


Figure 22 - Area of powerline servitude to be registered along 66kv powerlines

5 MOTIVATION

5.1 Land Development Principles

The proposal is consistent with existing Policy and Planning Frameworks and adheres to the principles of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) (SPLUMA). This application complies with the following General Principles for development as stated in Chapter 2 of the Spatial Planning and Land Use Management Act, 2013 (Act No 16 of 2013):

- Section 7 (b): The principle of spatial sustainability, whereby spatial planning and land use management systems must:
  - (vi) promote land development in locations that are sustainable and limit urban sprawl; and
  - (vii) result in communities that are viable;
- Section 7 (c): The principle of efficiency whereby:

- land development optimises the use of existing resources and infrastructure.

The proposal also sets out to meet the land development principles referred to in Section 42 of the Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA) and Chapter VI of the Western Cape Land Use Planning Act (Act 3 of 2014) (LUPA):

- Spatial justice
- Spatial sustainability
- Efficiency
- Spatial resilience
- Good administration

5.1.1 Spatial Justice

The principle of spatial justice relates to redressing the past development imbalances to improve access to, and use, of land. The goal of the proposed Metro Grounds mixed use development is to improve the use of land by providing access to educational facilities and employment opportunities within close proximity to existing communities and new communities under development within the industrial area. The provision of educational facilities and employment opportunities is intended to service people of different economic statuses to bring about community and social cohesion.

5.1.2 Spatial Sustainability

The principle of spatial sustainability relates to land use management systems that promote land development that is within the fiscal, institutional and administrative means of South Africa, must protect prime and unique agricultural land, and must comply with environmental laws and limit urban sprawl. The land identified for the proposed development is ideally located within the urban edge of the municipality and has been identified by the MSDF as development that that will facilitate economic development that is inclusive and foster economic growth. This contributes to both spatial sustainability and spatial resilience.

5.1.3 Efficiency

The principle of efficiency relates to the optimal use of existing resources and infrastructure. The development of the study area will capitalise on the existing infrastructure. The development will also yield the least impact on the environmental resources of the area, and the layout of the Metro Grounds mixed use development has been designed to avoid and protect environmental sensitive areas as far as possible, and open areas from being invaded and degraded.

5.1.4 Spatial Resilience

The principle of spatial resilience relates to the flexibility of spatial policies and land use management systems. The design of the Metro Grounds mixed use development is to allow for street blocks to be divided in different ways to accommodate varying approaches to land use, building typology and density. This flexible block approach creates room to accommodate changing needs over time.

5.1.5 Good Administration

The principle of good governance relates to all spheres of government ensuring an integrated approach to land use and land development. The proposed development supports the principle of good administration as it is aligned to the overall strategic spatial development of the municipal area.

5.2 Need for Industrial land

Various National, Provincial and District Frameworks and Policies support industrial development, including reference to the National Industrial Policy Action Plan, the New Growth Path (Job Drivers), the Provincial One Cape 2040 Vision and the Growth for Jobs Strategy, the Garden Route Growth and Development Strategy, the Joint District and Metro Approach.

The George Integrated Development Plan 2022-2027 and the George Municipal Spatial Development Framework (2023) (MSDF) notes that a significant uptake in industrial land has been detected in the period 2019 to 2023, which points to demand for land for such use. And that well-located (close to the workforce, accessible, within fabric context) areas available for the expansion of industrial use is limited.

The adopted MSDF refer specifically to the Metro Grounds Industrial area as being and infill development to support economic opportunity, in line with the IDP Strategic Objective to Develop and Grow George.

The need to provide industrial land is noted in the George Integrated Economic Growth Strategy, 2025 (GIEGS) and in the Integrated Development Plan, 2024. The GIEGS refer to supply-side measures involving actions by the municipality to enable economic growth by enhancing infrastructure, amongst other factors. Specific note is made of ensuring "a sustainable supply of well-positioned commercial and industrial land to develop a quality-built environment..." Although the role of developing industrial land should be a private, market-related function, the Municipality aims to facilitate such use, given the catalytic impact of industrial development and the lack of private initiative in land preparation. The release of land should attract investment and support for business growth and/or crate economic opportunity.

The GIEGS highlights a very strong growth potential in the Manufacturing Sector. This outlook is supported in the Municipal Economic Review and Outlook (GRD) 2024-25 (WC DEA&DP) (MERO) stating, "at a sectoral level, the Western Cape economy is diversified, with significant contributions from manufacturing and growth-enhancing services" ..." the (George) municipal area has witnessed significant growth in sectors such as ... small-scale manufacturing, reflecting the region's ability to adapt to changing economic conditions".

The job-creation impact of industrial/manufacturing sector is also noted in the MERO: "

Despite the overall growth in employment, the economic recovery has faced challenges. In 2020, the downturn caused by the pandemic led to a reduction in GDPR and slower economic growth in the subsequent years. Yet, certain sectors, such as finance, business services, wholesale and retail trade, and manufacturing, have been key drivers of employment growth in the years since".

Also refer to Par. 5.5.

5.3 Need for an Educational facility

Various National, Provincial and District Frameworks and Policies support skills development, including reference in the National Development Plan (2030), the Medium-Term Strategic Framework 2019 – 2024 (MTSF), the Industrial Policy Action Plan, Provincial Growth for Jobs Strategy the Garden Route Growth and Development Strategy, the Joint District and Metro Approach, the Skills Mecca Initiative.

With respect to skills development the George Integrated Development Plan (IDP 2022-2027 (2nd Review) emphasizes the importance to facilitate the implementation of Education and Infrastructure Facilities, stating that "education and skills development play a vital role in shaping the future socioeconomic landscape of the municipal area. They empower the population and significantly impact the local economy's development and its human resource capacity".

The GIEGS notes that access to a well-educated, skilled and trained workforce in George to meet the technical and managerial needs of businesses is challenging. "The region struggles to provide a sufficient number of skilled professionals, which hampers the ability of companies to find qualified employees locally". A specific focus of the GIEGS is to support education and skills development by facilitating investment in education and vocational training programmes to enhance the skills of the local workforce. Partnerships with local schools, colleges, and universities to align educational programmes with the needs of the local economy, ensuring graduates acquire the skills required by employers is proposed. The project aims to make land available for lease or sale to facilitate a skills development facility.

Also refer to Par. 5.5.

5.4 Desirability

In Chapter 5, Section 65 of the Land Use Planning By-Law for George Municipality, 2023, the desirability of the proposed utilisation of land and any guidelines issued by the Provincial Minister regarding the desirability of proposed land uses must be considered when the municipality considers an application. Assessment criteria include aspects such as socio-economic impact; compatibility with surrounding uses; impact on engineering services; impact on safety, health and wellbeing of the surrounding community; impact on heritage; impact on the biophysical environment; traffic impacts, parking, access and other transport related considerations; and whether the imposition of conditions can mitigate an adverse impact of the proposed use or development of land.

These criteria are motivated below.

5.4.1 Socio-economic impact

In the development proposed layout plan it is shown that a variety of land uses are planned for on the site with the proposal focussing on industrial and educational development that would result in much needed economic opportunities and access to educational facilities.

The proposed development embraces economic opportunities by creating an environment that is conducive to and encourages economic growth.

The socio-economic impact assessment conducted as part of the environmental authorisation process concludes that the proposed project will have several potential socioeconomic impacts, both positive and negative. According to the report, there are no major concerns or issues from a socioeconomic standpoint that would hinder the development of the Proposed Project. The net positive impacts associated with the construction of the Proposed Project are expected to outweigh the net negative effects. The Project is also envisaged to have a positive stimulus on the local economy and employment creation, leading to the economy's diversification and a small reduction in the unemployment rate.

The Proposed Project should therefore be considered for development subject to the application of the proposed mitigation measures to minimise any potential negative impacts.

5.4.2 Compatibility with surrounding development

The proposed development is in line with the existing land uses within the George industrial area, the Metro Grounds mixed use development will compliment and add value to the area by providing

additional opportunities for economic growth. The community will as a result realize an increased sense of security and human well-being, and the development will also contribute to the character of the area.

The proposed industrial use, albeit light industry, is buffered from residential use (Metro Grounds Residential subsidy housing project and Borcherds) by "green lungs" and the anticipated use of the educational erf is similar to the Africa Skills Facility along PW Botha Boulevard.

5.4.3 Traffic, parking and access impacts

A Traffic Impact Assessment (TIA) and detailed traffic modelling were conducted and formed an integral part of the layout planning and design of the proposed development. The studies conducted evaluated the proposed internal road network, highlighting planning aspects to ensure functionality, connectivity and access. The studies concluded that the proposed development is feasible with a number of access management interventions that will be required. Refer to section 5.4.6 of this report for more information in this regard.

5.4.4 Impact on engineering services

The proposed Metro Grounds mixed use development aims to achieve a feasible inclusionary development approach that provides for the integration of:

- Quality sustainable infrastructure according to municipal standards;
- Quality built environment;
- Economic opportunities;
- Provision of educational facilities;
- Delivered in one seamless development process.

The civil and electrical engineering investigations details the planned infrastructure associated with the proposed development. The proposed development is within the urban edge and will connect to existing infrastructure in the vicinity of the site. The impact on engineering services is therefore minimal. The designs of all infrastructure will be approved by the municipality prior to construction and will be certified by professional engineers after construction.

Based on the information provided in the preceding sub-sections, the desirability of the proposed Metro Grounds mixed use development is clearly demonstrated.

5.5 Strategic National, Provincial and Local Planning Frameworks and Policies

Further to the need for industrial- and educational facilities expressed in guiding policies and frameworks, noted in Par. 5.3, the following strategic context is applicable:

5.5.1 National Policy Context

5.5.1.1 The National Development Plan 2030

The National Development Plan (NDP) 2030 was developed by the National Planning Commission (NPC) in the office of the President in 2012. The objectives stated within the NDP include the need for

a strong and efficient planning system, integrated across the various spheres of government. The NDP sets out an integrated strategy for accelerating growth, eliminating poverty and reducing inequality, by 2030. It further provides a new focus for planning authorities to embrace several other policies of the government, developed since 1994. Accordingly, the NDP places spatial transformation as the key challenge and objective within South Africa and is seen as the foundation, and enabler, of economic growth and development.

Chapter 8 of the NDP 2030 deals with "Transforming Human Settlements", where specific provision is made for spatial planning, and which includes issues of importance for the review of a Spatial Development Framework (SDF). The NDP states that "planning in South Africa will be guided by normative principles to create spaces that are liveable, equitable, sustainable, resilient and efficient, and support economic opportunities and social cohesion". These principles for spatial development are premised on spatial justice, spatial sustainability, spatial resilience, spatial quality and spatial efficiency. These principles are regulated in Chapter 2 of the Spatial Planning and Land Use Management Act (SPLUMA): Development Principles Sections 7(a), (b), (c), (d) and (e).

Furthermore, the NDP proposes that: "These principles need to be incorporated into operational principles that provide guidance on":

- Integrating rural and urban areas;
- Accommodating social diversity within the built environment;
- Creating more dense settlements without raising the cost of land and housing for the poor;
- Integrating transportation systems and land use;
- Broadening the economic base of towns and cities through the supply of reliable infrastructure, suitable land and property, connectivity, skills and logistics;
- Building community involvement and partnerships;
- Supporting the development of vibrant, diverse, safe, green and valued places; and
- Ensuring that governance arrangements and leadership deliver equitable and efficient decision-making."

The spatial interventions, concepts and principles underpinning the proposed Metro Grounds mixed use development is therefore aligned with the NDP objectives to broaden the economic base of the town of George through the supply of suitable property that compliments existing land uses.

5.5.1.2 Spatial Planning and Land Use Management Act

The Spatial Planning and Land Use Management Act (2013) (SPLUMA) is a law assented to by the President of the Republic of South Africa on 5 August 2013. SPLUMA replaced the Development Facilitation Act (DFA) and the Land Use Planning Ordinance, 15 of 1986 (LUPO), and came into effect on 1 July 2015. SPLUMA is a framework act for all spatial planning and land use management legislation in South Africa. It seeks to promote consistency and uniformity in spatial planning and management related procedures and decision-making. Other objectives include addressing historical spatial imbalances and integrating the principles of sustainable development into land use and planning regulatory tools and legislative instruments. SPLUMA requires national, provincial and municipal

spheres of government to prepare SDFs that establish a clear vision that must be developed through a thorough inventory analysis based on national spatial principles and local long-term development goals and plans. SPLUMA was developed to legislate a single and integrated planning system for South Africa. Furthermore, SPLUMA provides a framework for spatial planning and land use management and, as such, it can be used as a tool to aid the spatial transformation of our rural and urban areas.

As it pertains to urban planning, SPLUMA provides for two pillars of planning, namely spatial forward planning and land use management, or land development administration. SPLUMA provides general development principles in Chapter 2, subsection 7(a)-(e) of the Act, that applies to spatial planning and land use management, including:

- Spatial justice: Past spatial, and other, development imbalances must be redressed through improved access to, and use of, land.
- Spatial sustainability: Spatial planning and land-use management systems must promote land development that is within the fiscal, institutional and administrative means of South Africa, protect prime and unique agricultural land, comply with environmental laws and limit urban sprawl.
- Efficiency: Land development should optimise the use of existing resources and infrastructure, and decision-making procedures must be designed to minimise negative financial, social, economic or environmental impact.
- Spatial resilience: Flexibility in spatial plans, policies and land-use management systems are accommodated to ensure sustainable livelihoods in communities that are most likely to suffer the impacts of economic and environmental shocks.
- Good administration: All spheres of government are to ensure an integrated approach to land-use and land development, that is guided by spatial planning and land-use management systems. All governmental departments are to provide sector inputs, comply with any other requirements and follow a transparent public process.

Figure 23: SLUMA principles

Sustainable principles, regulations and practices have been incorporated into the proposed development. The spatial interventions conform to these normative principles to ensure sustainable development and the promotion of natural, human, social and physical capital within the immediate area.

5.5.1.3 National Environmental Management Act

The National Environmental Management Act (Act.107 of 1998) (NEMA) provides for cooperative environmental governance by establishing principles for decision-making on matters affecting the environment. It also provides for certain aspects of administration and environmental management law enforcement to be undertaken by institutions that can promote cooperative governance and procedures for co-ordinating environmental functions exercised by organs of government.

NEMA is crucial in matters of environmental sustainability, resilience to climate change and the sustainable use of natural resources, as these are key to the current and future socio-economic well-being of residents within a municipal area. To this end, it is crucial that NEMA principles, in conjunction with the development principles set out in SPLUMA, are applied. Both NEMA and SPLUMA provide for an integrated and coordinated approach towards managing land use and development processes. This approach is based on co-operative governance and foresees the utilisation of spatial planning and environmental management instruments, such as SDFs and EMFs, to align the requirements of allowing development, while ensuring that biodiversity, as well as other sensitive natural elements, are protected.

By promoting development within the urban edge, NEMA principles are considered and a spatial strategy that is environmentally sustainable, and which creates a balance between development and the protection of natural resources are presented. The proposed layout for the Metro Grounds mixed use development has been designed to strategically protect environmentally sensitive natural elements as far as possible, this keeps in line with the NEMA principles.

5.5.1.4 Integrated Urban Development Framework

The Integrated Urban Development Framework (IUDF) is the government's policy position, coordinated by the Department of Co-operative Governance and Traditional Affairs (COGTA), to guide the future growth and management of urban areas. The IUDF responds to the post-2015 Sustainable Development Goals (SDGs), particularly Goal 11, which focuses on making cities and human settlements inclusive, safe, resilient and sustainable.

An important outcome of the IUDF is that of spatial transformation. The policy levers that have been identified are crucial for maximising the potential of urban areas, by integrating and aligning investments in a way that improves the urban form. The IUDF adopted a Transport-Oriented Development (TOD) approach to urban design, where all development policies promote higher-density urban development along mass transit corridors. This approach should promote investment in human settlements and other key economic infrastructure, further enabling mobility and accessibility to social and economic opportunities.

To reach its vision, the IUDF identifies four strategic goals (defined below) which will aid in achieving the transformative vision of restructured urban spaces, and compact, connected cities and towns:

- Spatial integration: To forge new spatial forms in a settlement, transport, social and economic areas.
- Inclusion and access: To ensure people have access to social and economic services, opportunities and choices.
- Growth: To harness urban dynamism for inclusive, sustainable economic growth and development.

- Governance: To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

The proposed development will contribute towards inclusive and sustainable economic growth which promotes economic opportunities and choices, this keeps in line with the principle of inclusion and access as well as growth.

5.5.2 Provincial Policy Context

5.5.2.1 Western Cape Provincial Spatial Development Framework (PSDF)

The Provincial Spatial Development Framework (PSDF) provides a shared spatial development vision for both the public and private sectors and serves as the guide to all sectoral considerations concerning space and place in the Western Cape. The PSDF serves to guide the location and form of public investment and seeks to influence other investment decisions, by establishing a coherent and logical framework for spatial investment. The PSDF furthermore provides the spatial development policy framework through which the various provincial strategic goals will drive economic growth, improve natural resource management and resource use efficiencies, and develop more sustainable and integrated settlements.

The Provincial spatial agenda can be summarised as follows:

- Growing the Western Cape economy, in partnership with the private sector, non-governmental and community-based organisations;
- Using infrastructure investment as the primary lever to bring about the required urban and rural spatial transitions; and
- Improving oversight of the sustainable use of the Western Cape's spatial assets.

The PSDF includes four spatial themes, namely resources, space economy, settlement and spatial governance. The policies and strategies that flow from these themes focus on strategic investment in the space economy, settlement restructuring and the protection of the Province's natural and cultural resource base.

ANNEXURE C (continue)

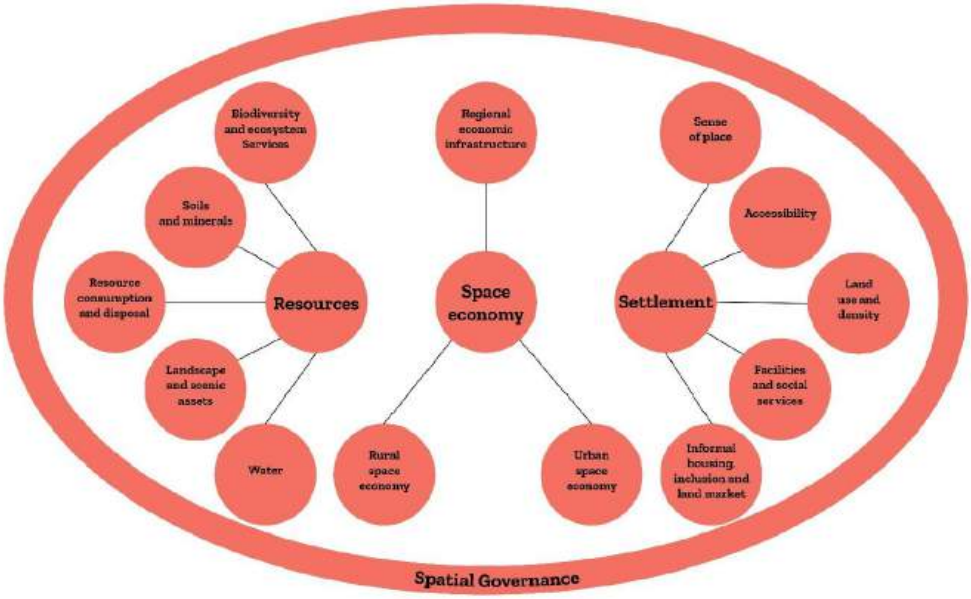


Figure 24: PSDF themes

The PSDF is an important spatial planning and land use management tool. It graphically portrays the Western Cape at a provincial level. The spatial planning principles and strategies underpinning the proposed development of the Metro Grounds mixed use development site aligns with the PSDF, contributing towards growing the Western Cape economy and using infrastructure investment as the primary lever to bring about the required urban spatial transitions.

5.5.2.2 Western Cape Land Use Planning Act

The purpose of the Western Cape Land Use Planning Act (Act 3 of 14) (LUPA) is to consolidate legislation in the Western Cape Province that relates to spatial planning and to coordinate public investment. It is strongly aligned with SPLUMA and governs spatial planning and land use management in the Western Cape.

5.5.2.3 OneCape 2040

OneCape 2040 is a vision for the Western Cape which envisages a transition towards a more inclusive, integrated and resilient economic future for the Western Cape region: "A highly-skilled, innovation-driven, resource-efficient, connected, high opportunity and collaborative society". The spatial vision that OneCape 2040 foresees, is: "creating a resilient, inclusive and competitive Western Cape with higher rates of employment, producing growing incomes, greater equality and an improved quality of life". This vision seeks to set a common direction to guide planning and action and to promote a common commitment to, and accountability of sustained long-term progress. To this end, the six transitions have been identified, as summarised in the table below.

Table 4: The role of local government in achieving the OneCape 2040 vision

Educated Cape	**Every person will be appropriately educated for an opportunity.** Recognised centres of ecological, creative, science and social innovation excellence.
Enterprising Cape	Anyone who wants to be economically active can work. The entrepreneurial destinations of choice.
Connecting Cape	Welcoming, inclusive and integrated communities. Global meeting place and connector.
Living Cape	Healthy, liveable, accessible, high opportunity neighbourhoods and towns. Ranked as one of the greatest places to live in the world.
Green Cape	Functioning ecosystems working for and with communities. Leader and innovator in Green Economy.
Leading Change	Collaboration. Innovation mechanisms. Supportive roles.

Source: Western Cape Government OneCape 2040 presentation

OneCape 2040 has a strong focus on inclusive, integration and the creation of job opportunities, as well as opportunities to appropriate education for all. The proposed Metro Grounds mixed use development is therefore aligned with the principle of provide an integrated development that will stimulate job creation and access to educational facilities.

5.5.3 District policy context

5.5.3.1 Garden Route Spatial development framework.

The Garden Route Spatial Development Framework (2017) identifies several spatial drivers of change that need to be translated into the Garden Route District policy. For the Garden Route to reach its full potential, six central issues were identified that need to be addressed based on the policy review and synthesis. These issues relate to

- Regional resource capacity constraints
- Regional competitive advantage
- Sprawling low-density settlements
- Constrainted regional accessibility
- Erosion of biodiversity and cultural landscapes; and
- Sustainability of agriculture and rural settlements.

ANNEXURE C (continue)

In line with the Garden Route District Vison and Mission adopted in the 2017 IDP, the SDF focused on four spatial drivers of change. These spatial drivers underpinning a development approach, are:

- The **Economy is the Environment**; A sustainable environment is an economy posiitioned for growth;
- **Regional Accessibility for Inclusive and Equitable Growth;**
- **Coordinated Growth Management for Financial Sustainability**; and
- **Effective, Transversal Institutional Integration**.

The spatial drivers underpinning the development approach for the proposed Metro Grounds mixed use development are aligned with the four spatial drivers of change identified in the Garden Route SDF.

5.5.3.2 Garden Route Integrated Development Plan 2024-2025

The Graden Route District Municipality adopted its vision for the 2022-2027 term of office and highlighted key aspects that should drive the administration for effective implementation of projects and programmes adopted by Council for the term of office.

"Garden Route the leading, enabling, and inclusive district, characterised by equitable, sustainable development, high quality of life and equal opportunities for all"
The IDP is the fundamental part of the planning nucleus in the Garden Route District and it's anchored on 7 strategic objectives which define the growth path of the District over the period. These strategic objectives guide and informs all the planning activities in the municipality;

- Growing an inclusive District Economy
- Coordinate bulk infrastructure Service Delivery
- Promote Environmental Sustainability and Public Safety
- Building a Skilled Workforce and Communities
- Ensuring Financial Viability
- Good Governance
- Promoting Healthy and Socially stable Communities

ANNEXURE C (continue)

The proposed Metro Grounds mixed use development is aligned with the strategic objectives of the Garden Route Integrated Development Plan 2024-2025.

5.5.3.3 Garden Route Integrated Human Settlement (HIS) Strategic Plan

The Garden Route District Municipality (GRDM) has formulated principles and guidelines that will play a more meaningful strategic programme coordination role in the Human Settlement environment that best echoes with the proposed Government's strategic interventions related to service delivery.

The Integrated Human Settlement strategic plan advocates for the provision of efficient and equitable services in line with the principles listed below. For the long-term integration and sustainability, the following principles will be undertaken in the GRDM:

- **Equity:** All applicants applying for an affordable housing opportunity must have an equal opportunity for related services;
- **Transparency:** create necessary understanding and confidence by allowing all approved policies and procedures to be readily avaiable to allow anyone to scrutinise them.
- **Pragmatic and functionality:** this plan as well as its related policies and procedures, will at all times be practical and less costly.
- **Social Cohesion**
- **Long Term Integration.**

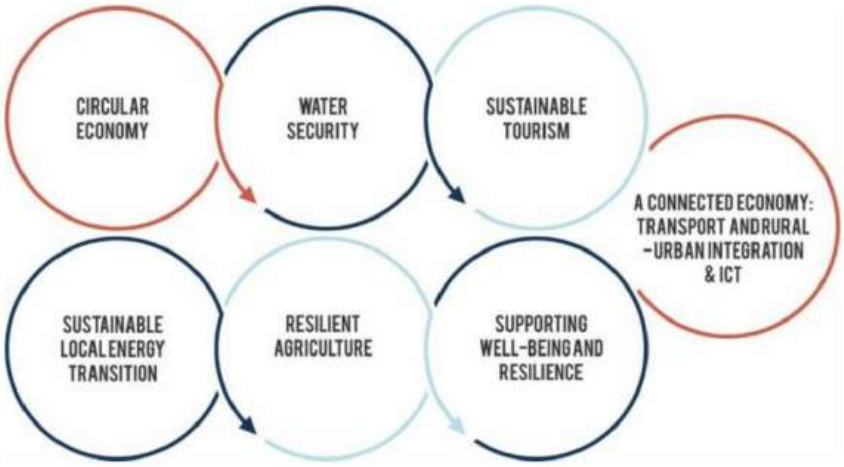
5.5.3.4 Garden Route Growth and Development Strategy (GDS)

The Garden Route Growth and Development Strategy (GDS) provides a framework for growth and development planning in the Garden Route District for 2020-2040. The Garden Route Region adopted a long-term approach to the development that is sensitive to the requirements of the region and its people. Furthermore, the adopted strategic priorities for the region intend to drive local growth and development.

ANNEXURE C (continue)

There are seven (7) key strategic priorities that were adopted as listed below. These priorities have been identified based on a long-term vision for the Graden Route, as well as on the existing work, strengths, and potential of the region. Each one is also aligned to existing policies and strategies. This strategy draws on the significant work that went into Southern Cape Regional Spatial Implementation Framework (RSIF)

- Circular Economy.
- Water Security.
- Sustainable tourism.
- A connected economy.
- Supporting well-being and resilience.
- Resilient agriculture.
- Sustainable local energy transition.



The proposed Metro Grounds mixed use development is aligned with the strategic divers and vision as outlined in the Garden Route Growth and Development Strategy (GDS).

5.5.4 Municipal Policy Context

5.5.4.1 Integrated Development Plan (IDP)

The IDP is an instrument of both local mobilisation and intersectoral and intergovernmental coordination and covers the extent of the local agenda. It must be viewed as the convergence of all planning, budgeting and investment in the George municipal area and must incorporate and illustrate national,

provincial and district policy directives. The plan also seeks to integrate and balance the economic, ecological and social pillars of sustainability without compromising effective service delivery. The George municipality vision is to be **"A city for a sustainable future"**.

The focus of the George Municipality's Integrated Development Plan (IDP) for the term of council (2022) is to pave a way for socio-economic, infrastructural and institutional development for the next five years.

The 2022 IDP seeks to attain inter alia:

- Continue to elevate the IDP as the principal plan through which an integrated response to the current realities of George is coordinated.
- Enhance the quality of ward based plans (targeted development)
- Economice development strategy to serve as a key for socio-eceominc transformation
- Long term infrastructure planning to promote growth.

Figure 25: Vision, Mission and Values of the George Municipality (IDP)

The proposal to develop the Metro Grounds mixed use development site will support the municipality's Strategic goal 1 to develop and grow George.

5.5.4.2 Municipal Spatial Development Framework (MSDF)

The Municipal Spatial Development Framework 2023, for the period May 2023 to May 2027, guides spatial growth and development in George. The MSDF provides clarity in respect of the manner in which land-use, development, and investment will be supported to build a spatial form which facilitates the vision and strategic objectives of the Municipality.

ANNEXURE C (continue)

Building on the George Municipality's IDP vision of "**A city for a sustainable future**" the supporting Spatial Planning Vision to guide the George MSDF remains to "**Develop George as a resilient regional development anchor of excellence for prosperity, inclusive-and smart growth**".

The MSDF (or SDF) informs land development and service provision decisions made by the municipal departments and decision makers in other tiers of government but does not confer, or take away, land use rights. The purpose of the George Municipal Development Framework (MSDF), as set out in the Spatial Planning & Land Use Management Act (2013) (SPLUMA), is to:

- Interpret and represent the spatial development vision of the municipality.
- Guide planning and devlopment decisions across all sectors of government and specifically the municipality and provincial government in its spatial planning and land use management decisions.
- Contribute to a coherent, planned approach to spatial development across the spheres of government.
- Provide clear and accessible information to the public and private sector and provide direction for investment purposes.
- Include previously disadvantaged areas, rural areas, informal settlements, slums and landholdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social, and environmenatl objectives of the relevant sphere.
- Address historic spatial imbalances in development
- Identify the long-term risks of spatial patterns of growth and devlopment and the policies and strategies necessary to mitigate those risks.
- Provide direction for strategic developments, infrastructure investment, promote efficient, sustainable, and planned investiments by all sectors and indicate priority areas for investment inland development.
- Promote a rational and predictable land development environment to create trust and stimulate investment.
- Assist in integrating, coordinating, aligning, and expressing development policies and plans emanating from the various sectors of the spheres of government as they apply within the municipal area, specifically as it relates to environmenatl management, and
- Outline specific arrangements for prioritising, mobilising, sequencing, and implementing public and private infrastructural and land development investment in the priority spatial structuring areas identified. (SLUMA, 2013).

The land development and service provision of the Metro Grounds mixed use development is informed by the Municipal Spatial Development Framework.

ANNEXURE C (continue)

5.5.4.3 George South East Local Spatial Development Framework, 2015

The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development, as illustrated below:

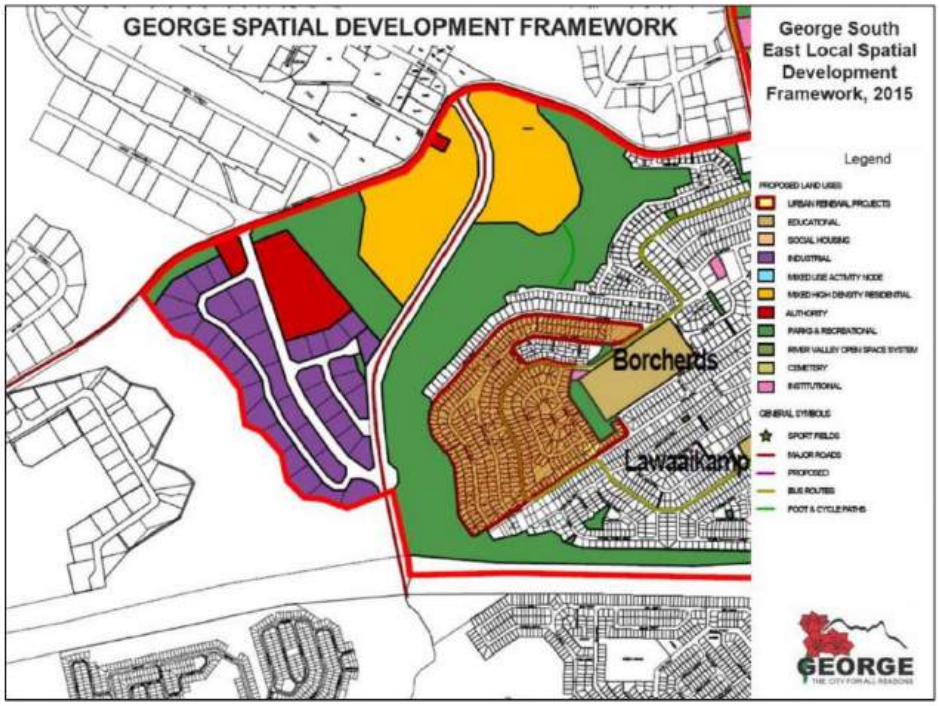


Figure 26: Extract of the George Southeast Local Development Framework.

The proposed Metro Grounds mixed use development is fully aligned with the developmental objectives of the area as outlined in the George South-East Local Spatial Development Framework, 2015.

5.5.4.4 Local Economic Development strategy

In the context of the George Municipality Economic Development Strategy released April 2012, the purpose of the municipality is to deliver an enabling environment that is as conducive and business friendly as is possible within the law and national regulations and to make every effort to eliminate structural barriers to investment, business retention and growth.

In the context of economic growth and development and given South Africa's history it is not viable option to leave business development and investment decisions to the market alone. For this reason, it is imperative that the George Municipality intervenes strategically in the development arena.

- Improve functionality or markets;
- Facilitating catalytic projects, that level the playing field for entrepreneurial activity,

- Facilitating growth in sectors of strategic priority,
- Manage mechanisms that organise buying and selling, channel the flow of information but all the same time do not distort the market by creating unfair competition.

The proposed Metro Grounds mixed use development is one of the strategic interventions pursued by the George municipality to intervene in the development arena by providing economic opportunities through the expansion of the existing George industrial area. This intervention keeps in line with the Local Economic Development strategy.

5.5.4.5 George Integrated Zoning Scheme By-Law

The George integrated Zoning Scheme By-Law, 2023 was adopted by the Municipal Council in terms of Section 12 of the local Government Municipal Systems Act, 2000 (Act 32 of 2000) on 28 September 2023 and promulgated in terms of Section 13 of said Act on 6 October 2023. The integrated Zoning scheme By-Law provides detailed land-use planning information, indicating for which purpose properties may be used as well as the regulatory process(es) to follow for development applications.

The proposed development is planned in strict accordance with the prescripts of the George integrated Municipal Zoning Scheme By-Law, 2023

6 PUBLIC PARTICIPATION

The public participation process to be followed for the application will be in accordance with the George Municipality Land Use Planning By-law, 2023.

The prescribed period which must be allowed for the submission of inputs and comments on an application is 30 days for interested and affected parties, and 60 days for any organ of state.

A comprehensive comments and response report will be compiled and submitted to the Municipality following the conclusion of the public participation process.

7 CONCLUSION AND RECOMMENDATIONS

The development proposal for the Metro Grounds Mixed Use Development is consistent with the Municipality's policies and promotes considered infill development. The Urban Design Framework and development concept remains broad and flexible with regards to the anticipated and permitted land uses, to allow for maximum flexibility in the future development of the site. The Metro Grounds Mixed Use Development Subdivisional Layout Plan is informed by the specialist investigations and studies conducted during the planning of the project and will facilitate the future development of the site.

The proposal promotes the development principles prescribed in national, provincial and municipal planning legislation. The proposed development is desirable and will further promote the Municipality's developmental objectives regarding economic growth.

ANNEXURE C (continue)

The following should be taken into account when considering the proposed rezoning and subdivision of the Metro Grounds mixed use development for approval:

- The site of application is located within the urban edge of the municipality, and therefore will be able to utilise exsisting infrastructute with minimal negative impact
- The proposed land uses will compliment and add value to the existing adjacent land uses, which will create a possitive impact on the surrounding area.
- The proposed development will yeild significate benefits in terms of economic growth, and provision of educational facilities and will thus contribute to the sustainable development model of the municipality.
- The proposed development is planned and in line with the required specialist input and accompanying reports.

It is therefore recommended that this application be approved.

We thank you for your consideration of the proposed application and look forward to your response.

Rudolf Schröder Pr. Pln A/151/2009
Professional Planner
PP Zutari (Pty) Ltd

Rudolf Schroder
Digitally signed by Rudolf Schroder
DN: cn=Rudolf Schroder, ou=South Africa, email=Rudolf.Schroder@zutari.com
Date: 2026.02.05 15:32:47 +02'00'

Signature

5 February 2026

Date

ANNEXURE C (continue)

ANNEXURES

ANNEXURE A	-	APPLICATION FORM
ANNEXURE B	-	SPECIAL POWER OF ATTORNEY - ZUTARI APPOINTMENT LETTER & COUNCIL RESOLUTION
ANNEXURE C	-	TITLE DEED
ANNEXURE D	-	SG DIAGRAM
ANNEXURE E	-	LOCALITY PLAN
ANNEXURE F	-	SUBDIVISIONAL LAYOUT PLAN
ANNEXURE G	-	MINUTES OF PRE-APPLICATION MEETING
ANNEXURE H	-	SACPLAN REGISTRATION CERTIFICATE
ANNEXURE I	-	GEOTECHNICAL REPORT
ANNEXURE J	-	STORMWATER MANAGEMENT REPORT
ANNEXURE K	-	CIVIL ENGINEERING SERVICES REPORT
ANNEXURE L	-	ELECTRICAL ENGINEERING SERVICES REPORT
ANNEXURE M	-	TRAFFIC IMPACT ASSESSMENT REPORT
ANNEXURE N	-	METRO GROUNDS URBAN DESIGN FRAMEWORK
ANNEXURE O	-	DRAFT ENVIRONMENTAL BASIC ASSESSMENT REPORT

ANNEXURE C (continue)

In diversity there is beauty
and there is strength.

MAYA ANGELOU

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T +27 44 805 5400
E Rudolf.schroder@zutari.com

GEORGE
THE CITY FOR ALL REASONS

ZUTARI
IMPACT. ENGINEERED.

ANNEXURE D

Annexure D

Planning and Development
E-mail: town.planning.application@george.gov.za
Tel: +27 (0)44 801 9477

LAND USE PLANNING PRE-APPLICATION CONSULTATION FORM

PLEASE NOTE:

Pre-application consultation is an advisory session and is required prior to submission of an application for rezoning, consent use, temporary departure and subdivision. It does not in any way pre-empt the outcome of any future application which may be submitted to the Municipality.

PART A: PARTICULARS

Reference number: **Collab Ref. No.: 3505358**

Purpose of consultation: **Preapplication consultation for the proposed Metro Grounds development at the intersection of PW Botha Boulevard and Ossie Urban Street roughly halfway between Nelson Mandela Boulevard and York Street in the George Industrial area, George.**

Brief proposal: **To create a industrial development's intent is to accommodate light industry erven, appropriate to the site context and facilitating small- and medium enterprise development.**

Property(ies) description: **Remainder of Erf 464, George**

Date: **04 December 2024**

Attendees:

	Name & Surname	Organisation	Contact Number	E-mail
Official	Naudica Swanepoel	George Municipality	044 801 9477	kjmukhovha@george.gov.za
Pre-applicant	Rudolf Schröder	Zutari	083 390 6963	Rudolf.Schroder@zutari.com

ANNEXURE D (continue)

Documentation provided for discussion:

(Include document reference, document/plan dates and plan numbers where possible and attach to this form)

Pre-planning motivation report, Subdivisional layout plan, SG diagrams, Title deed, and locality map.

Has pre-application been undertaken for a Land Development application with the Department of Environmental Affairs & Development Planning (DEA&DP)?

(If so, please provide a copy of the minutes)

YES | NO

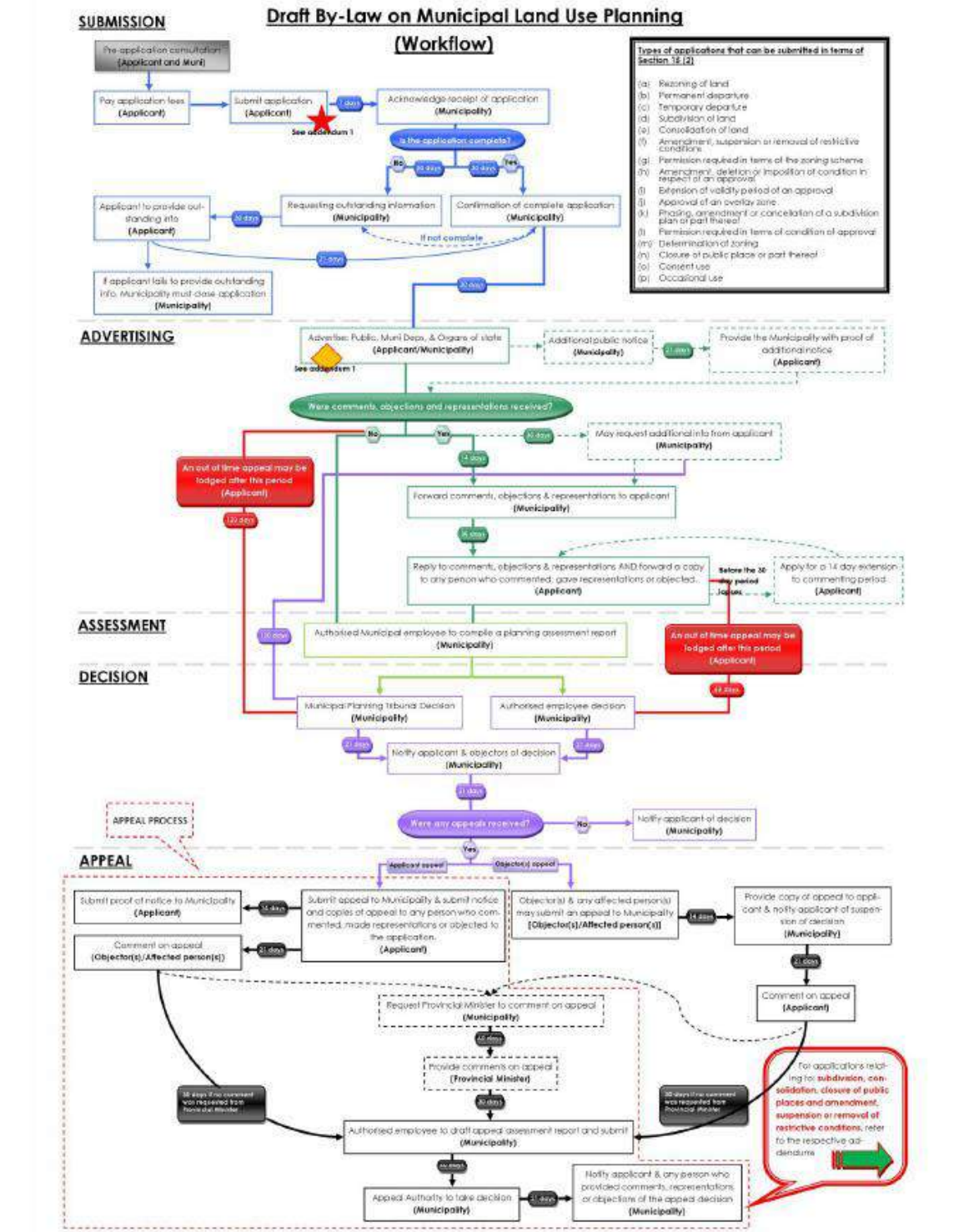
Comprehensive overview of proposal:

The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate an industrial development. The industrial development's intent is to accommodate light industry erven, appropriate to the site context and facilitating small- and medium enterprise development. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility. The proposed development does not require the future Rand Street extension for access or to make it functional. The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development. The site is flanked on two of the three sites by the Skaapkop river. The current zoning of the subject area is "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw,2023. The main objective of the project is to build on the previous work and studies already conducted and to finalise and submit the required development rights applications (town planning application, environmental authorisation, General Plan approval). The intension is to submit an application in terms of section(15)(2) of the George Municipal Land Use Planning By Law, 2023 for the rezoning and subdivision of the Remainder of Erf 464, George in order to allow for the proposed Metro Grounds development as per the attached Subdivisional layout plan. See attached pre-application motivation report for more detail.

ANNEXURE D (continue)

PART B: APPLICATION PROCESS

(WILL FULLY APPLY ONLY ONCE LUPA REGULATIONS ARE IN FORCE)



ANNEXURE D (continue)

PART C: QUESTIONNAIRES

SECTION A:
DETERMINATION OF APPLICATION TYPES, PRESCRIBED NOTICE AND ADVERTISEMENT PROCEDURES

Tick if relevant		What land use planning applications are required?	Application fees payable
X	**2(a)**	**a rezoning of land;**	**R**
	2(b)	a permanent departure from the development parameters of the zoning scheme;	R
	2(c)	a departure granted on a temporary basis to utilise land for a purpose not permitted in terms of the primary rights of the zoning applicable to the land;	R
X	**2(d)**	**a subdivision of land that is not exempted in terms of section 24, including the registration of a servitude or lease agreement;**	**R**
	2(e)	a consolidation of land that is not exempted in terms of section 24;	R
	2(f)	a removal, suspension or amendment of restrictive conditions in respect of a land unit;	R
	2(g)	a permission required in terms of the zoning scheme;	R
	2(h)	an amendment, deletion or imposition of conditions in respect of an existing approval;	R
	2(i)	an extension of the validity period of an approval;	R
	2(j)	an approval of an overlay zone as contemplated in the zoning scheme;	R
	2(k)	an amendment or cancellation of an approved subdivision plan or part thereof, including a general plan or diagram;	R
	2(l)	a permission required in terms of a condition of approval;	R
	2(m)	A determination of a zoning;	R
	2(n)	A closure of a public place or part thereof;	R
	2(o)	a consent use contemplated in the zoning scheme;	R
	2(p)	an occasional use of land;	R
	2(q)	to disestablish a home owner's association;	R
	2(r)	to rectify a failure by a home owner's association to meet its obligations in respect of the control over or maintenance of services;	R
	2(s)	a permission required for the reconstruction of an existing building that constitutes a non-conforming use that is destroyed or damaged to the extent that it is necessary to demolish a substantial part of the building	R
Tick if relevant		**What prescribed notice and advertisement procedures will be required?**	**Advertising fees payable**
Y	N	Serving of notices (i.e. registered letters etc.)	R
Y	N	Publication of notices (i.e. Provincial Gazette, Local Newspaper(s) etc.)	R
Y	N	Additional publication of notices (i.e. Site notice, public meeting, local radio,	R

ANNEXURE D (continue)

		website, letters of consent etc.)	
Y	N	Placing of final notice (i.e. Provincial Gazette etc.)	R
		TOTAL APPLICATION FEE* (VAT excluded):	R

PLEASE NOTE: * *Application fees are estimated on the information discussed and are subject to change with submission of the formal application and/or yearly application fee increase.*

SECTION B:

PROVISIONS IN TERMS OF THE RELEVANT PLANNING LEGISLATION / POLICIES / GUIDELINES

QUESTIONS REGARDING PLANNING POLICY CONTEXT	YES	NO	TO BE DETERMINED	COMMENT
Is any Municipal Integrated Development Plan (IDP)/Spatial Development Framework (SDF) and/or any other Municipal policies/guidelines applicable? If yes, is the proposal in line with the aforementioned documentation/plans?			X	**Motivate George Municipal Spatial Development Framework and LSDF**
Any applicable restrictive condition(s) prohibiting the proposal? If yes, is/are the condition(s) in favour of a third party(ies)? [List condition numbers and third party(ies)]			X	**Conveyancer certificate required to confirm**
Any other Municipal by-law that may be relevant to application? (If yes, specify)		X		
Zoning Scheme Regulation considerations: Which zoning scheme regulations apply to this site? **George Integrated Zoning Scheme Bylaw, 2023** What is the current zoning of the property? **Undetermined Use Zone** What is the proposed zoning of the property? **Subdivisional area zone** Does the proposal fall within the provisions/parameters of the zoning scheme? **TBD** Are additional applications required to deviate from the zoning scheme? (if yes, specify) **No**				

ANNEXURE D (continue)

QUESTIONS REGARDING OTHER PLANNING CONSIDERATIONS	YES	NO	TO BE DETERMINED	COMMENT
Is the proposal in line with the Provincial Spatial Development Framework (PSDF) and/or any other Provincial bylaws/policies/guidelines/documents?			X	**Motivate PSDF**
Are any regional/district spatial plans relevant? If yes, is the proposal in line with the document/plans?		X		

SECTION C:

CONSENT / COMMENT REQUIRED FROM OTHER ORGANS OF STATE

OUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
Is/was the property(ies) utilised for agricultural purposes?		X		Western Cape Provincial Department of Agriculture
Will the proposal require approval in terms of Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)?		X		National Department of Agriculture
Will the proposal trigger a listed activity in terms of National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)?			X	Western Cape Provincial Department of Environmental Affairs & Development Planning (DEA&DP)
Will the proposal require authorisation in terms of ~~Specific Environmental Management Act(s) (SEMA)? (National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (NEM:PAA) / National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEM:BA) / National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) (NEM:AQA) / National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008) (NEM:ICM) / National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM:WA)~~ (strikethrough irrelevant)			X	
Will the proposal require authorisation in terms of the National Water Act, 1998 (Act 36 of 1998)?			X	National Department of Water & Sanitation (DWS)
Will the proposal trigger a listed activity in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?			X	South African Heritage Resources Agency (SAHRA) & Heritage Western

ANNEXURE D (continue)

QUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
				Cape (HWC)
Will the proposal have an impact on any National or Provincial roads?		X		National Department of Transport / South Africa National Roads Agency Ltd. (SANRAL) & Western Cape Provincial Department of Transport and Public Works (DTPW)
Will the proposal trigger a listed activity in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations		X		National Department of Labour (DL)
Will the proposal affect any Eskom owned land and/or servitudes?		X		Eskom
Will the proposal affect any Telkom owned land and/or servitudes?		X		Telkom
Will the proposal affect any Transnet owned land and/or servitudes?		X		Transnet
Is the property subject to a land / restitution claims?		X		National Department of Rural Development & Land Reform
Will the proposal require comments from SANParks and/or CapeNature?		X		SANParks / CapeNature
Will the proposal require comments from DEFF?		X		Department of Environment, Forestry and Fishery
Is the property subject to any existing mineral rights?		X		National Department of Mineral Resources
Does the proposal lead to densification to such an extent that the number of schools, healthcare facilities, libraries, safety services, etc. In the area may be impacted on? (strikethrough irrelevant)		X		Western Cape Provincial Departments of Cultural Affairs & Sport (DCAS), Education, Social Development, Health and Community Safety

SECTION D:

SERVICE REQUIREMENTS

DOES THE PROPOSAL REQUIRE THE FOLLOWING ADDITIONAL INFRASTRUCTURE / SERVICES?	YES	NO	TO BE DETERMINED	OBTAIN COMMENT FROM: (list internal department)

ANNEXURE D (continue)

Electricity supply:			X	Directorate: Electro-technical Services
Water supply:			X	Directorate: Civil Engineering Services
Sewerage and waste water:			X	Directorate: Civil Engineering Services
Stormwater:			X	Directorate: Civil Engineering Services
Road network:			X	Directorate: Civil Engineering Services
Telecommunication services:			X	
Other services required? Please specify.			X	
Development charges:			X	

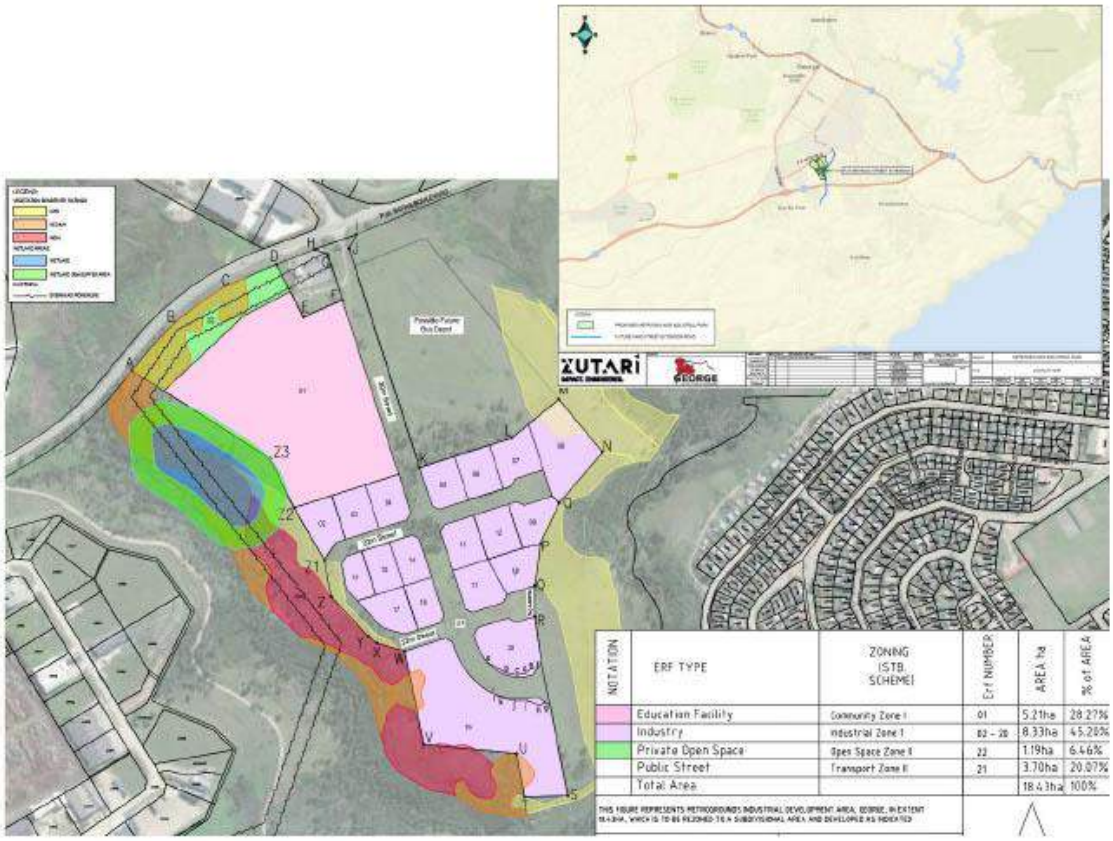
PART D: COPIES OF PLANS / DOCUMENTS TO BE SUBMITTED AS PART OF THE APPLICATION

COMPULSORY INFORMATION REQUIRED:						
Y	N	Power of Attorney / Owner's consent if applicant is not owner (if applicable)		**Y**	N	S.G. noting sheet extract / Erf diagram / General Plan
Y	N	Motivation report / letter		**Y**	N	Full copy of the Title Deed
Y	N	Locality Plan		**Y**	N	Site Layout Plan
Y	N	Proof of payment of fees		Y	**N**	Bondholder's consent
MINIMUM AND ADDITIONAL REQUIREMENTS:						
Y	N	Site Development Plan		**Y**	N	Conveyancer's Certificate
Y	N	Land Use Plan		**Y**	N	Proposed Zoning plan
Y	N	Phasing Plan		Y	**N**	Consolidation Plan
Y	**N**	Abutting owner's consent		**Y**	N	Landscaping / Tree Plan
Y	N	Proposed Subdivision Plan (including street names and numbers)		Y	**N**	Copy of original approval letter
Y	N	Services Report or indication of all municipal services / registered servitudes		Y	**N**	Home Owners' Association consent
Y	N	Copy of Environmental Impact Assessment (EIA) / ~~Heritage Impact Assessment (HIA) /~~ **Traffic Impact Assessment (TIA)** / ~~Traffic Impact Statement (TIS) /~~ ~~Major Hazard Impact Assessment (MHIA) /~~ ~~Environmental Authorisation (EA) /~~ ~~Record of Decision (ROD)~~ (strikethrough irrelevant)		Y	**N**	1 : 50 / 1:100 Flood line determination (plan / report)
Y	N	Other (specify)		Y	N	Required number of documentation copies

ANNEXURE D (continue)

PART E: DISCUSSION

- The proposal was submitted with proposed locality plan and subdivision plan as indicated below and discussed at the pre-application meeting held on 4 December 2024.



Town Planning

- The motivation to include indication of how the proposal is in line with the spatial policies and objective of the area. Please include motivation in terms of SPLUMA, LUPA, MSDF and LSDF.
- It is acknowledged that the applicant has already commenced with relevant studies, which should form part of the application.

Note

- The Directorates: CES and ETS did not attend the meeting, please consult with relevant officials from the two directorates for their formal comments prior to submitting the application.

PART F: SUMMARY / WAY FORWARD

You may proceed to submit the application that addresses the above issues.

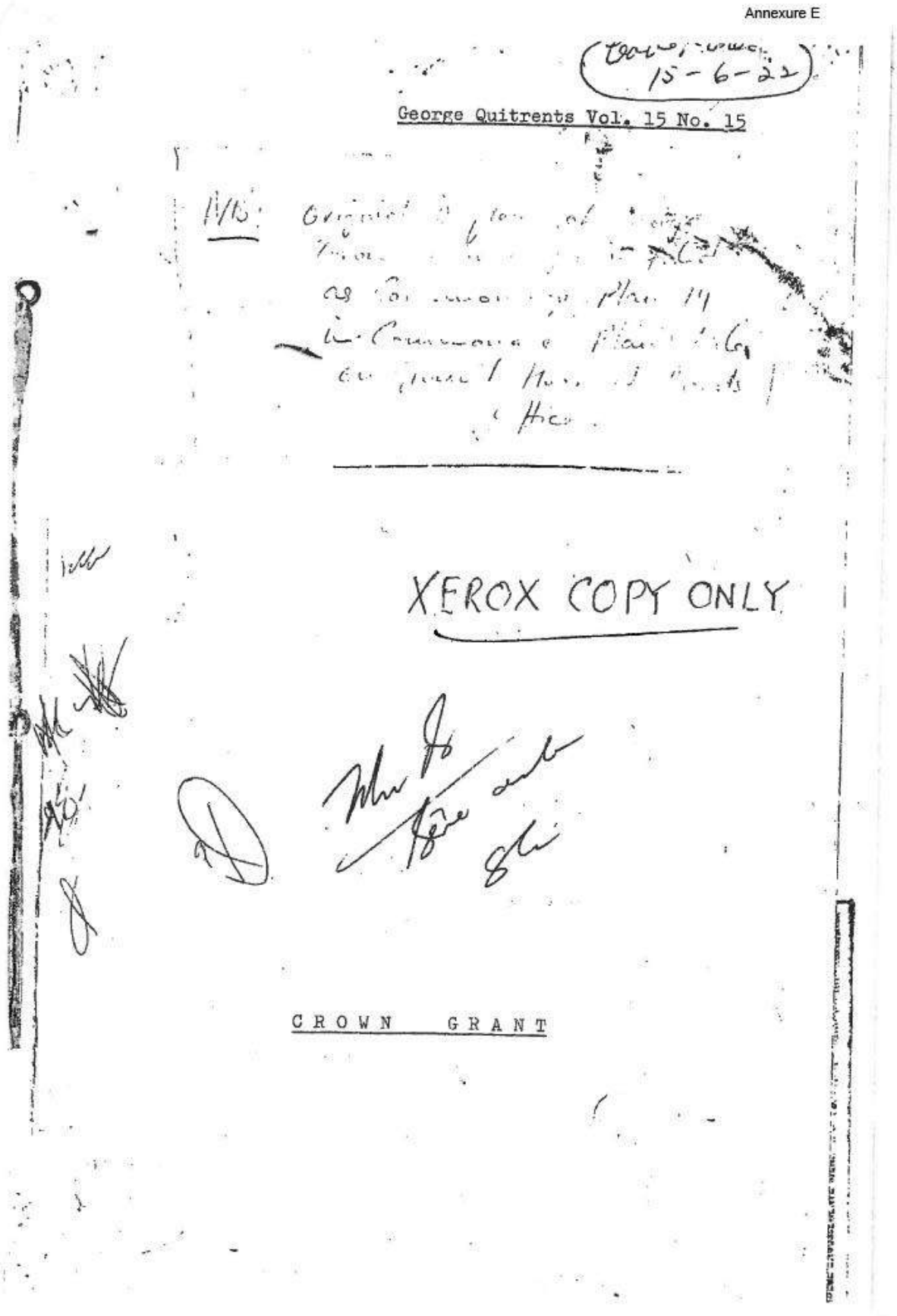
OFFICIAL: KHULISO MUKHOVHA (TOWN PLANNER / CASE OFFICER)

ANNEXURE D (continue)

OFFICIAL: NAUDICA SWANEPOEL	**PRE-APPLICANT: RUDOLF SCHRÖDER**
SIGNED:	**SIGNED:**
DATE: 11 DECEMBER 2024	**DATE: 4 DECEMBER 202**

** Please note that the above comments are subject to the documents and information available to us at the time of the pre-application meeting and we reserve our rights to elaborate on this matter further and/or request more information/documents should it be deemed necessary.*

ANNEXURE E



Annexure E

15-6-22

George Quitrents Vol. 15 No. 15

XEROX COPY ONLY

CROWN GRANT

ANNEXURE E (continue)

CROWN GRANT

Grant under Section 10,
Act No. 15, 1887.

IN THE NAME AND ON BEHALF OF HIS MAJESTY GEORGE THE FIFTH, BY THE GRACE OF GOD OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, AND OF THE BRITISH DOMINIONS BEYOND THE SEAS KING, DEFENDER OF THE FAITH, EMPEROR OF INDIA:

WHEREAS under and by virtue of the provisions contained in Section 10 of the Act No. 15 of 1887 of the Cape of Good Hope, entitled an "Act for regulating the manner in which the Crown Lands of the Colony shall be disposed of", grants or reserves of Crown Lands within the limits of a Municipality may be made by the Governor-General for the benefit of the inhabitants of the Municipality:

AND WHEREAS the grant in favour of the COUNCIL OF THE MUNICIPALITY OF GEORGE of a certain piece of land situate in the DIVISION OF GEORGE, Province of the Cape of Good Hope, has been duly authorised:

NOW, THEREFORE, THESE PRESENTS WITNESS that there is here-

ANNEXURE E (continue)

TY OF GEORGE the said piece of land named THE GEORGE TOWN COMMONAGE, measuring Three thousand Seven hundred and eighty-nine morgen two hundred and thirteen square roods, one hundred and thirteen square feet (3789 Mor: 213 Sq. Rds: 113 Sq.Ft) situated as aforesaid and represented and described in the diagram hereunto annexed, framed by Surveyor R.E. Dumbleton, dated August, 1919, with full power and authority henceforth to possess the same in perpetuity, subject to the following conditions:-

(1) That the Governor-General shall have the right at all times of taking such portions of the land so granted as may be needed for public purposes only (which shall not include land required for Forestry purposes) without paying compensation, provided, however, that in the event of any land being required for such public purposes on which improvements shall have been effected, then, in that case payment of compensation shall be made for such land in such sum of money as may be mutually agreed upon by the parties concerned, or failing such agreement, as may be awarded by three appraisers, one to be appointed by each side, and a third to be chosen by the two others before proceeding to act, or any two of them shall award:

(2) That all existing roads and thoroughfares shall remain free and uninterrupted, and that the Government or other competent authority shall have the right when necessary at any time to make further roads over the land in question:

(3) That all rights to minerals, mineral products, mineral oils, and precious stones, precious or base metals on or under the land hereby granted are expressly reserved to the Crown, together with the right of access to any mines or works undertaken for mining or prospecting purposes by any person duly authorised in that behalf. The land is subject to such further rights as the public or the Government now may or may hereafter have or be entitled to obtain under or by virtue of any law relating to the prospecting, digging, mining, or exploitation of minerals, mineral products, mineral oils, precious stones, precious or base metals on or under the land hereby granted, which rights shall not be impaired or in any way affected by the

ANNEXURE E (continue)

(5)

connection with the establishment and maintenance of a rifle range, including the right of building and maintaining the necessary butts, fire points, excavations, shelters, sheds, huts, and other structures, of effecting and maintaining the necessary clearings upon the said range, and of fencing such parts of range as may be necessary, provided that the whole area to be fenced shall not exceed 100 by 150 yards:

(5) In the event of the Municipality undertaking planting operations on the Commonage, a clear space of ground, in no part less than 50 yards in width must always be left between the boundary of any Government Forests or Plantations and the external rows of trees of the Municipal Plantations in order that such clearing and burning of vegetation may be carried out as may be considered necessary for the protection of the Government Forests or Plantations and the Government shall have the right, free of compensation, to carry out such clearing and burning operations as may be considered necessary:

The Government shall further have the right, free of compensation, to make such roads on the commonage as may be reasonably necessary for the working of any Crown Forests or Railway Plantations as adjoin the commonage, provided that the location of such roads shall be determined by full agreement between both parties and failing such agreement by arbitration in manner as provided for in Clause 1 of the conditions annexed to this Deed of Grant. All such roads to be maintained by the Government, and the public of George to have the right to the reasonable use of such roads:

THUS DONE and signed by the Secretary for Lands at CAPE TOWN on the 15th day of June 1922, duly authorised thereto in that behalf by the Governor-General, in terms of the Crown Land Disposal (Execution of Deeds) Act, 1911.

J. Somerville

SECRETARY FOR LANDS.

ANNEXURE E (continue)

IN TERMS of the Executive Council Minute No. 77 of the 11th January 1939, and filed as No. 3/1939 the Condition lettered (1) appearing herein, has been cancelled and the following

"That the Governor-General shall have the right at all times of resuming for public purposes (which shall not include land required for Forestry purposes), such portion or portions of the land hereby granted as may not have been alienated by the Town Council.

In the event of resumption as aforesaid no compensation shall be payable by the Government except in respect of substantial improvements of a permanent nature erected or made on the land resumed whether by the Town Council or by any other person or body acting under the express authority of the said Council"

substituted therefor.

Deeds Registry
CAPE TOWN
9 MAR 1939

W.R. Bezuidenhout
for REGISTRAR OF DEEDS.

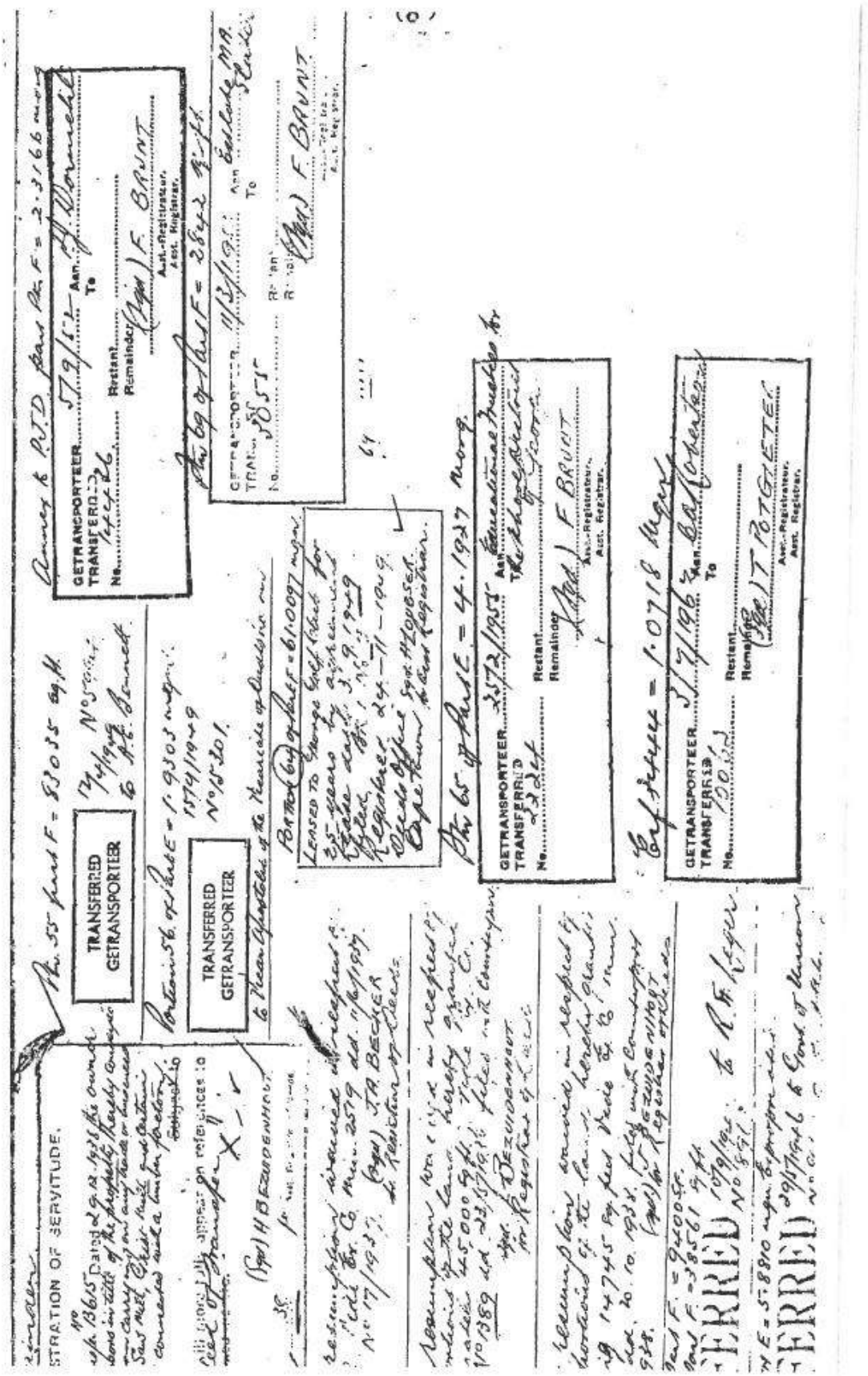
further endorsements see ... Page 5

ANNEXURE E (continue)

ANNEXURE E (continue)

ANNEXURE E (continue)

ANNEXURE E (continue)



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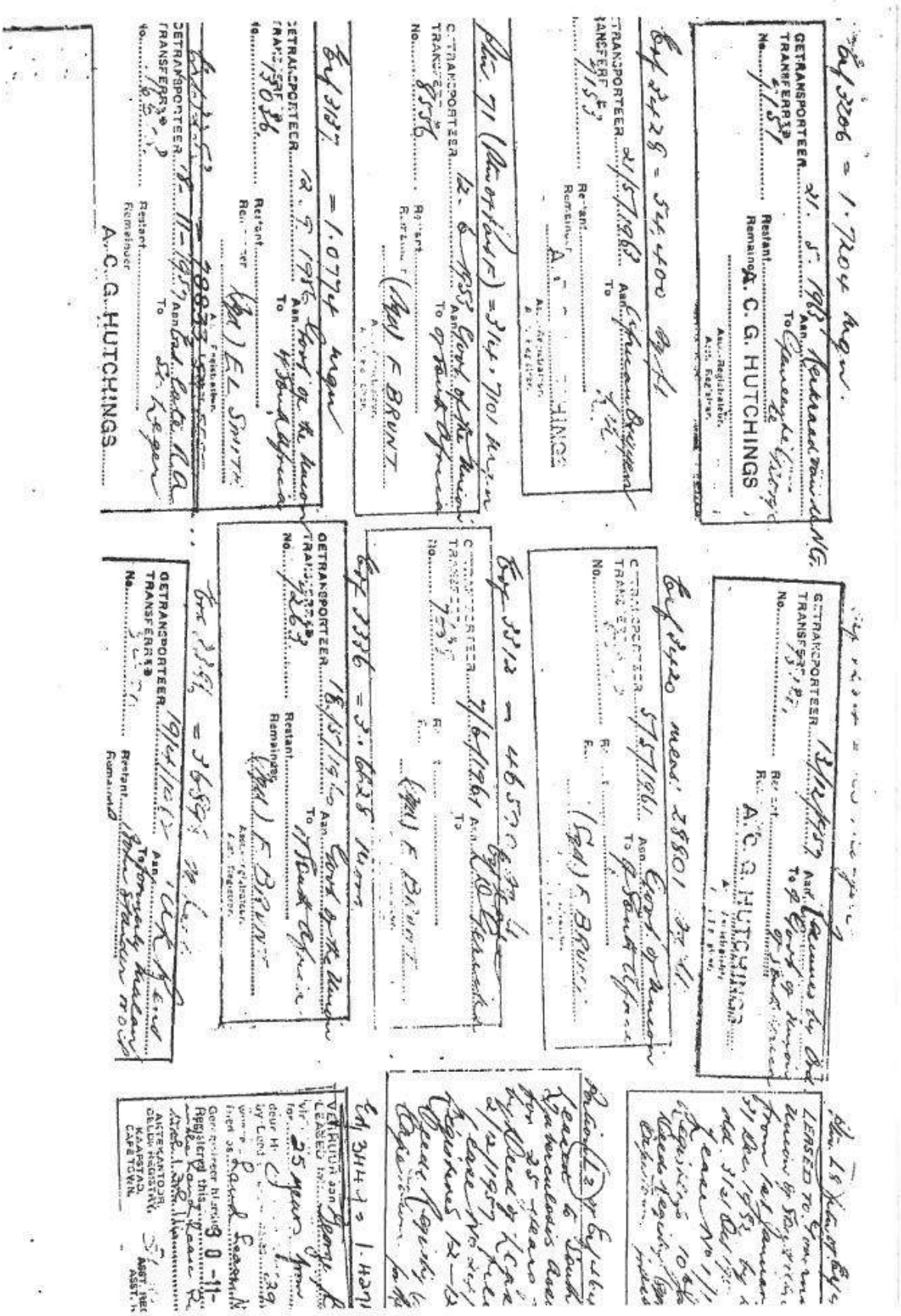

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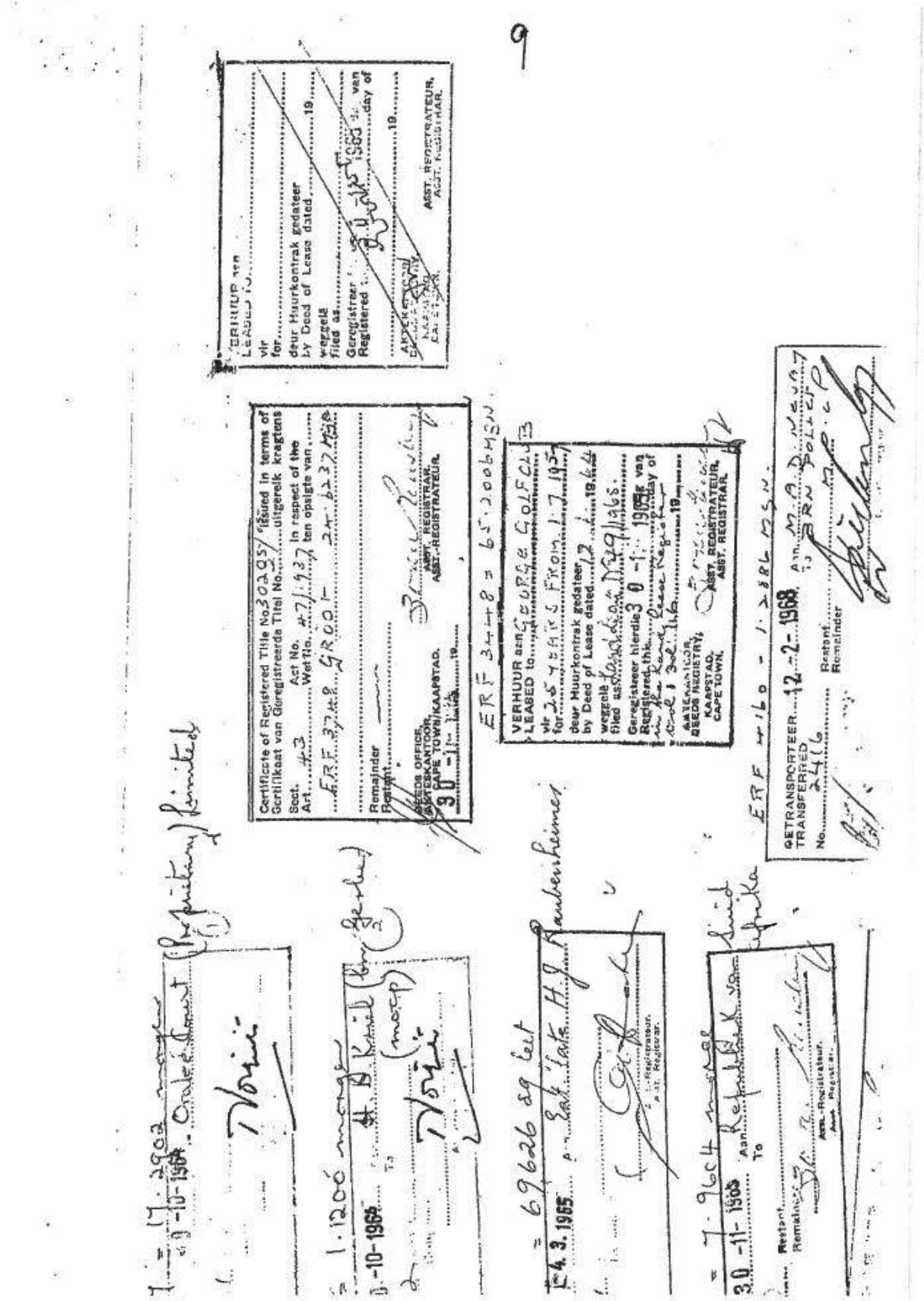

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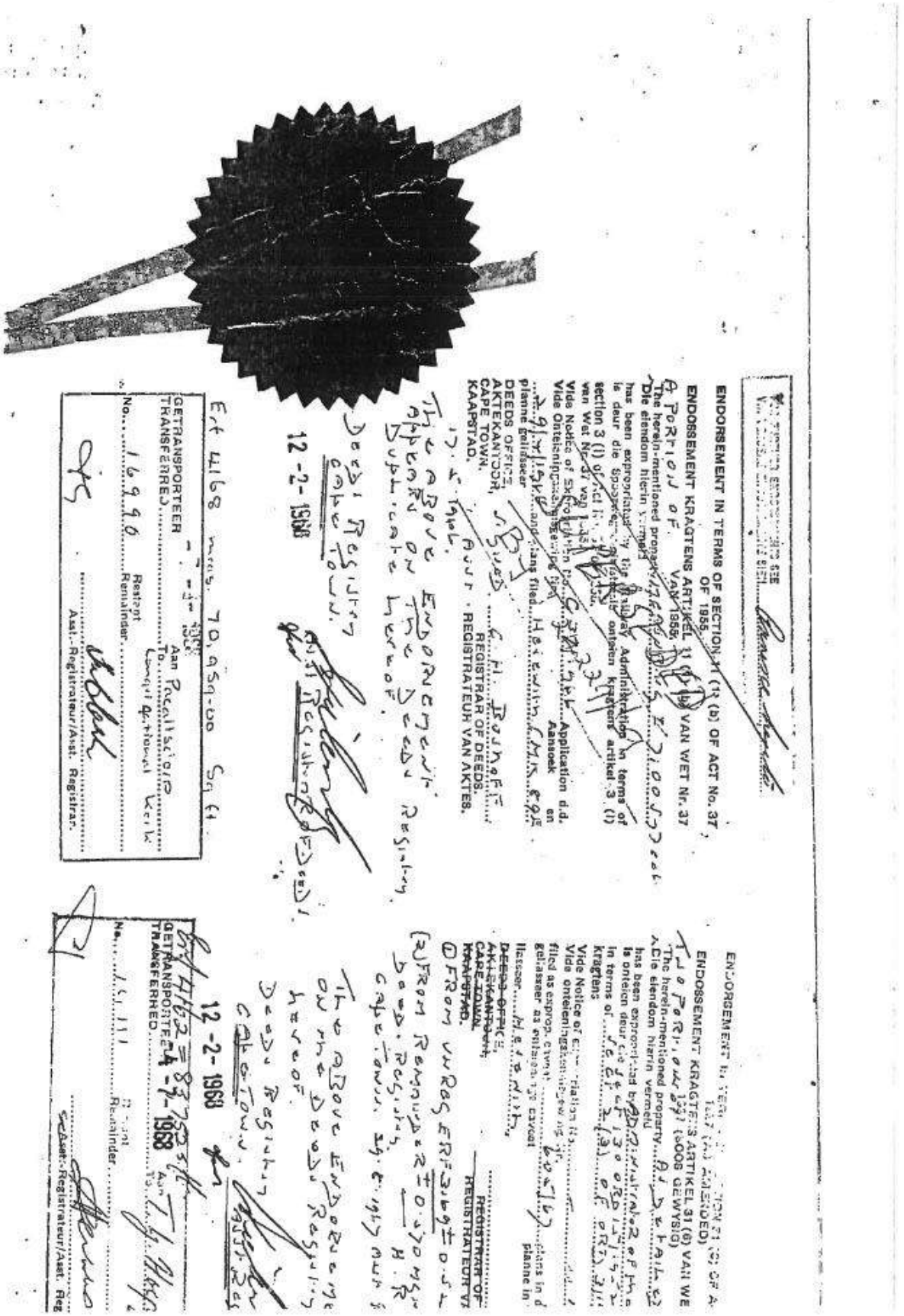

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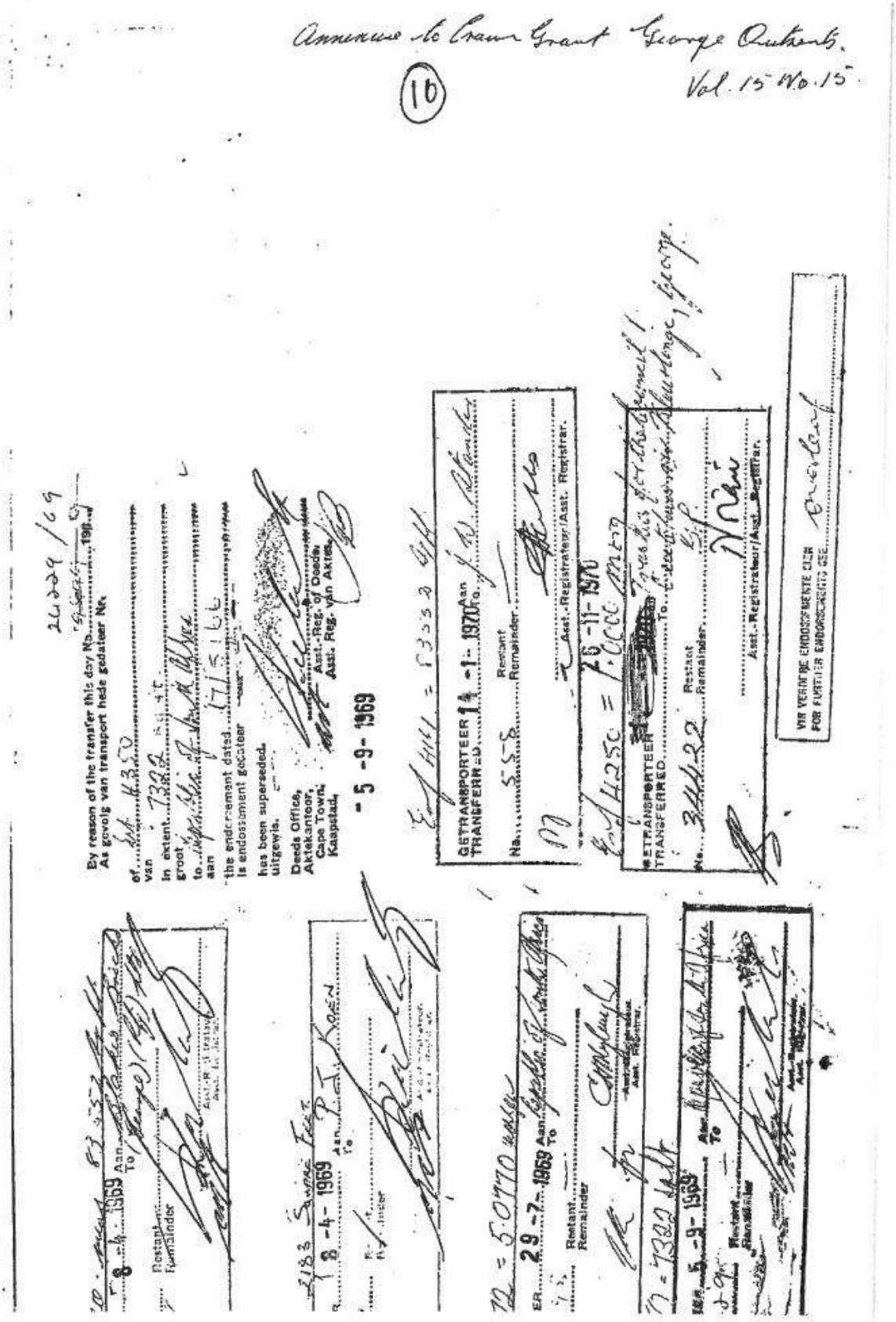

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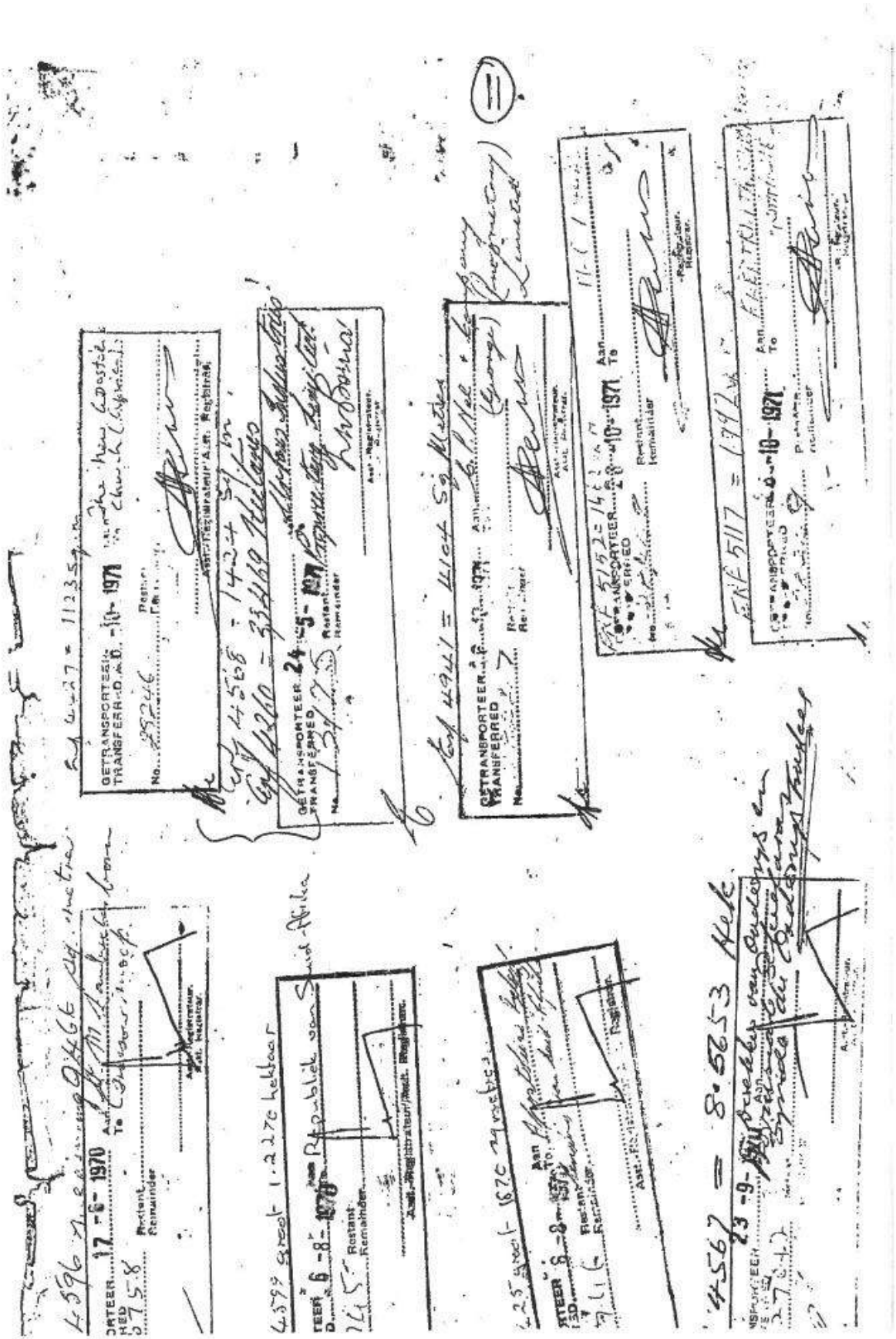

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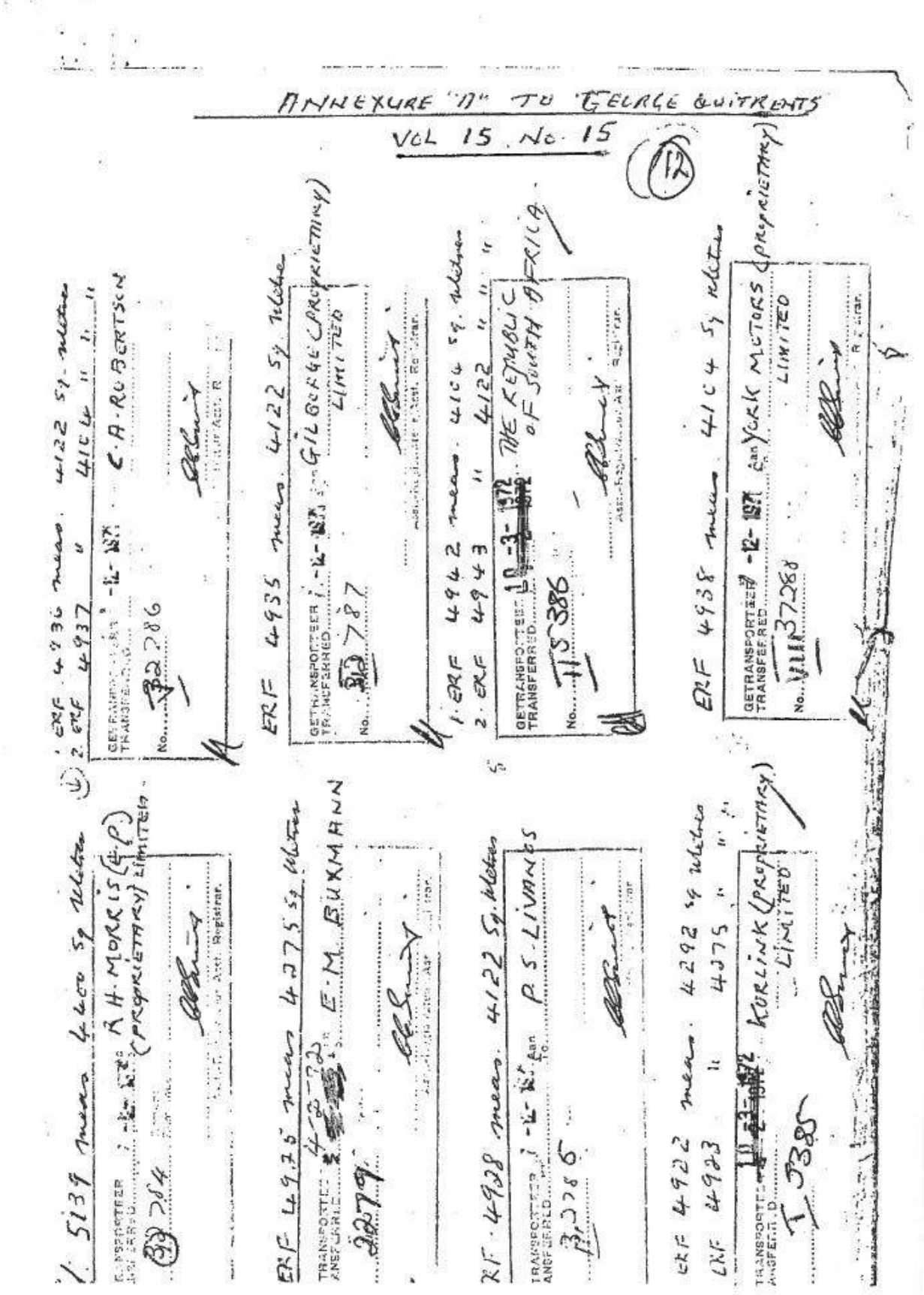

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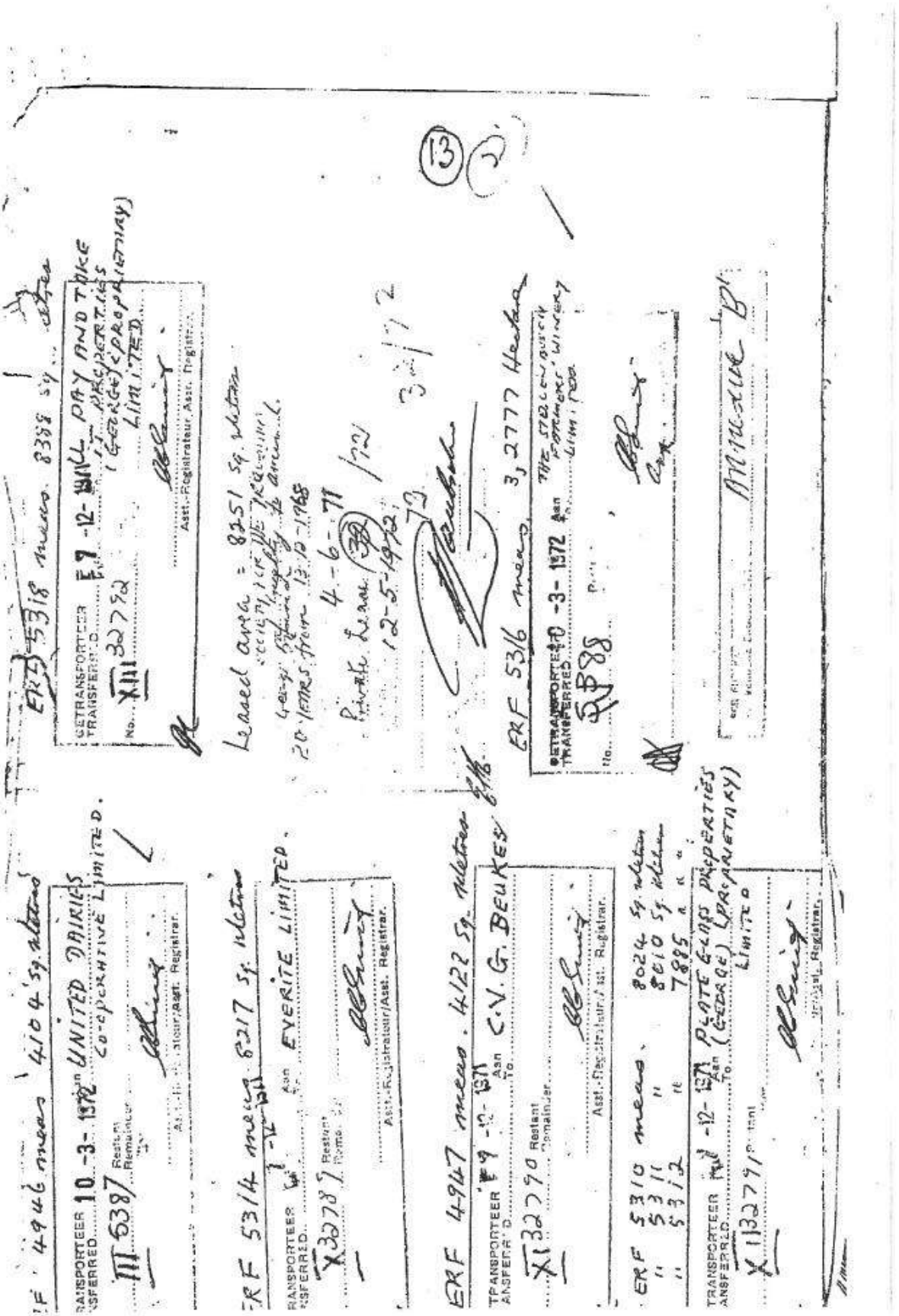

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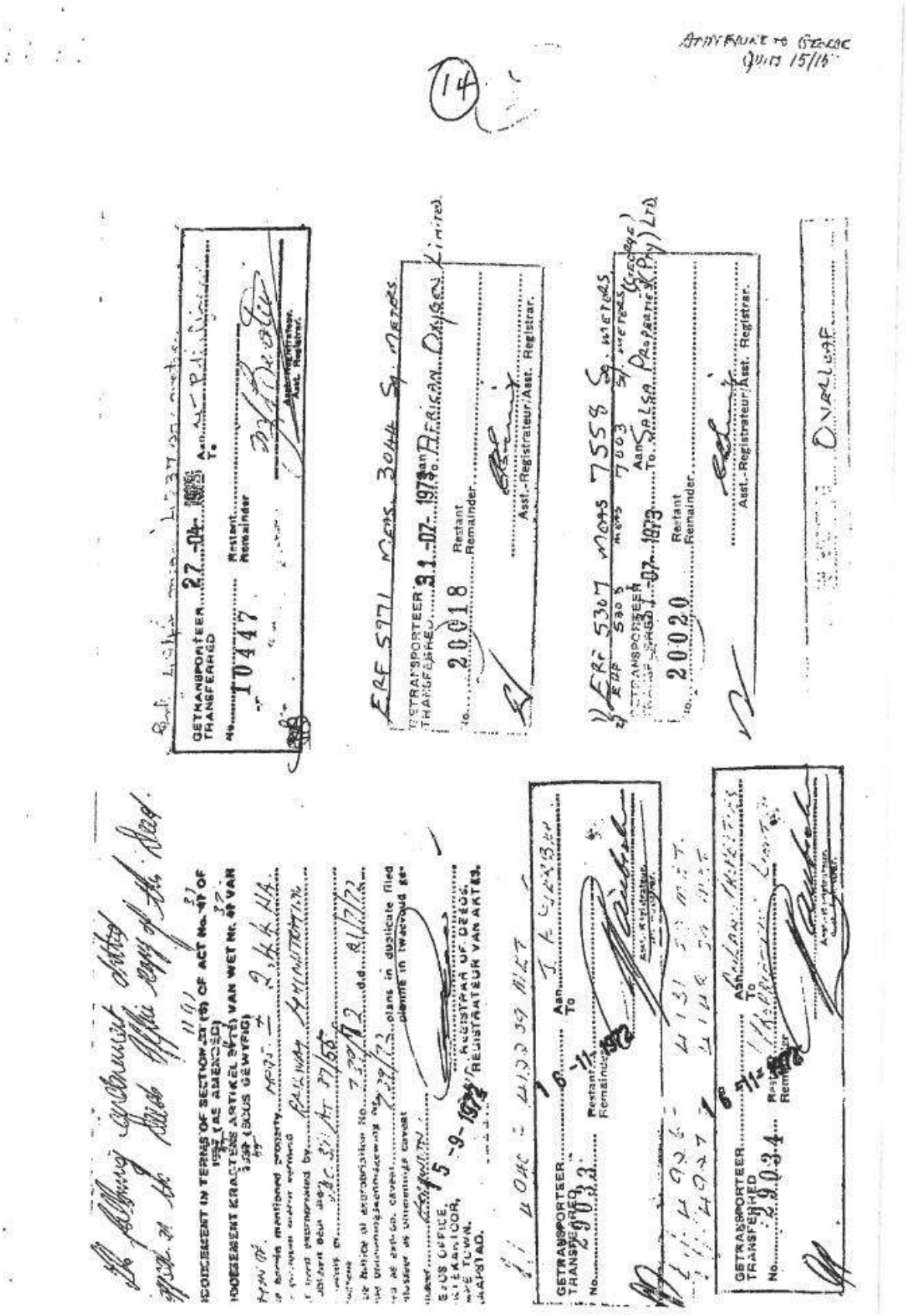

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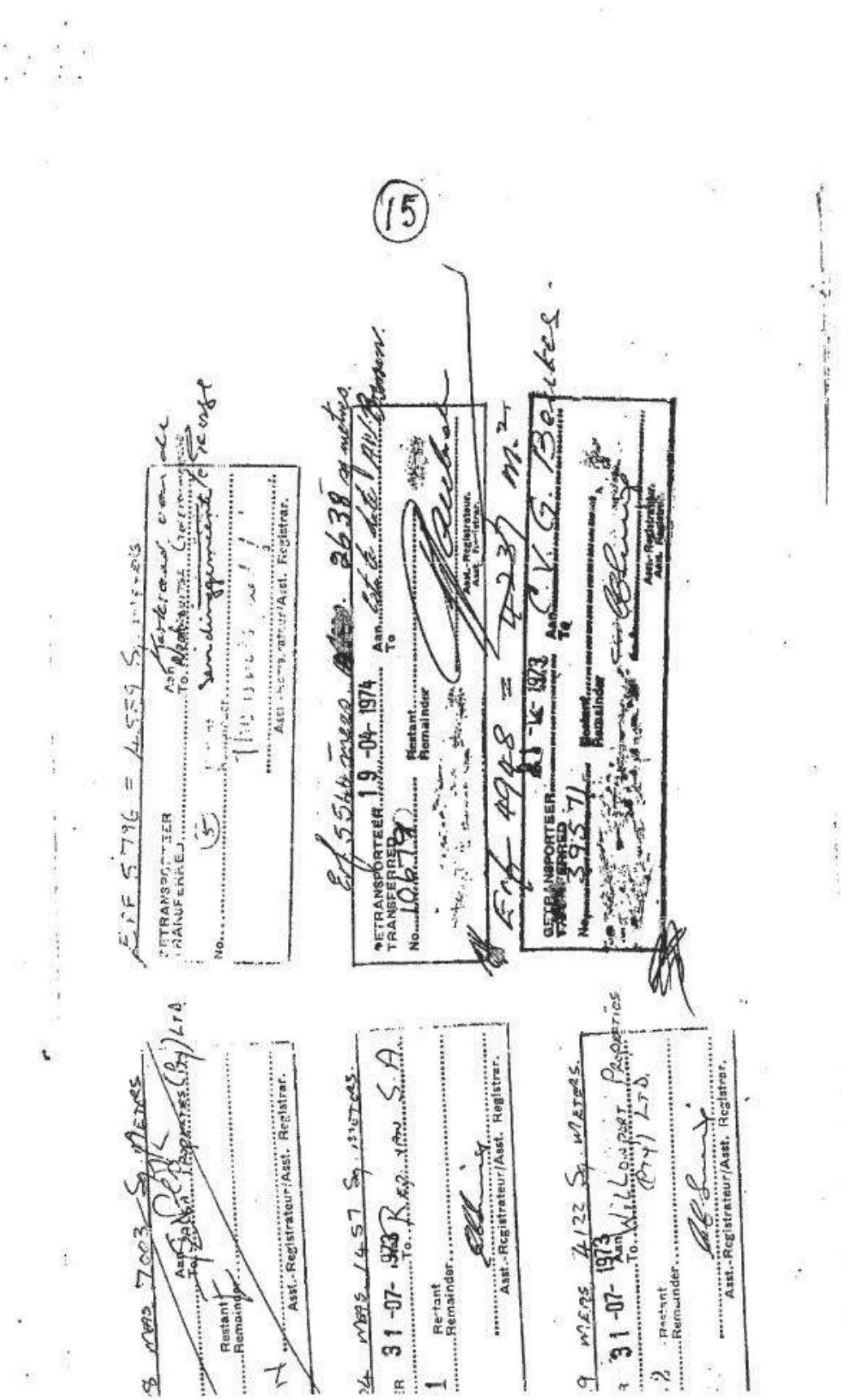

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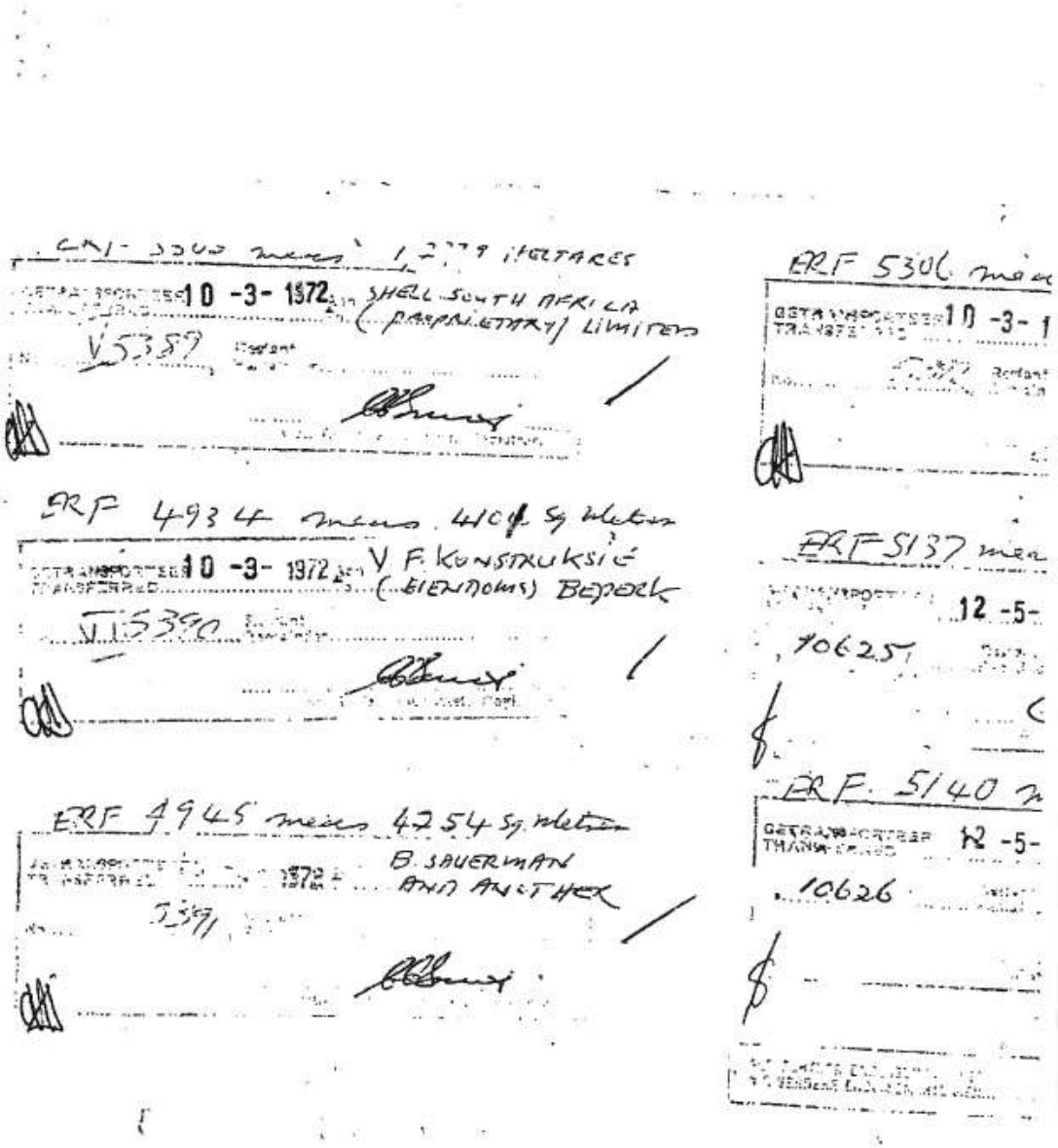

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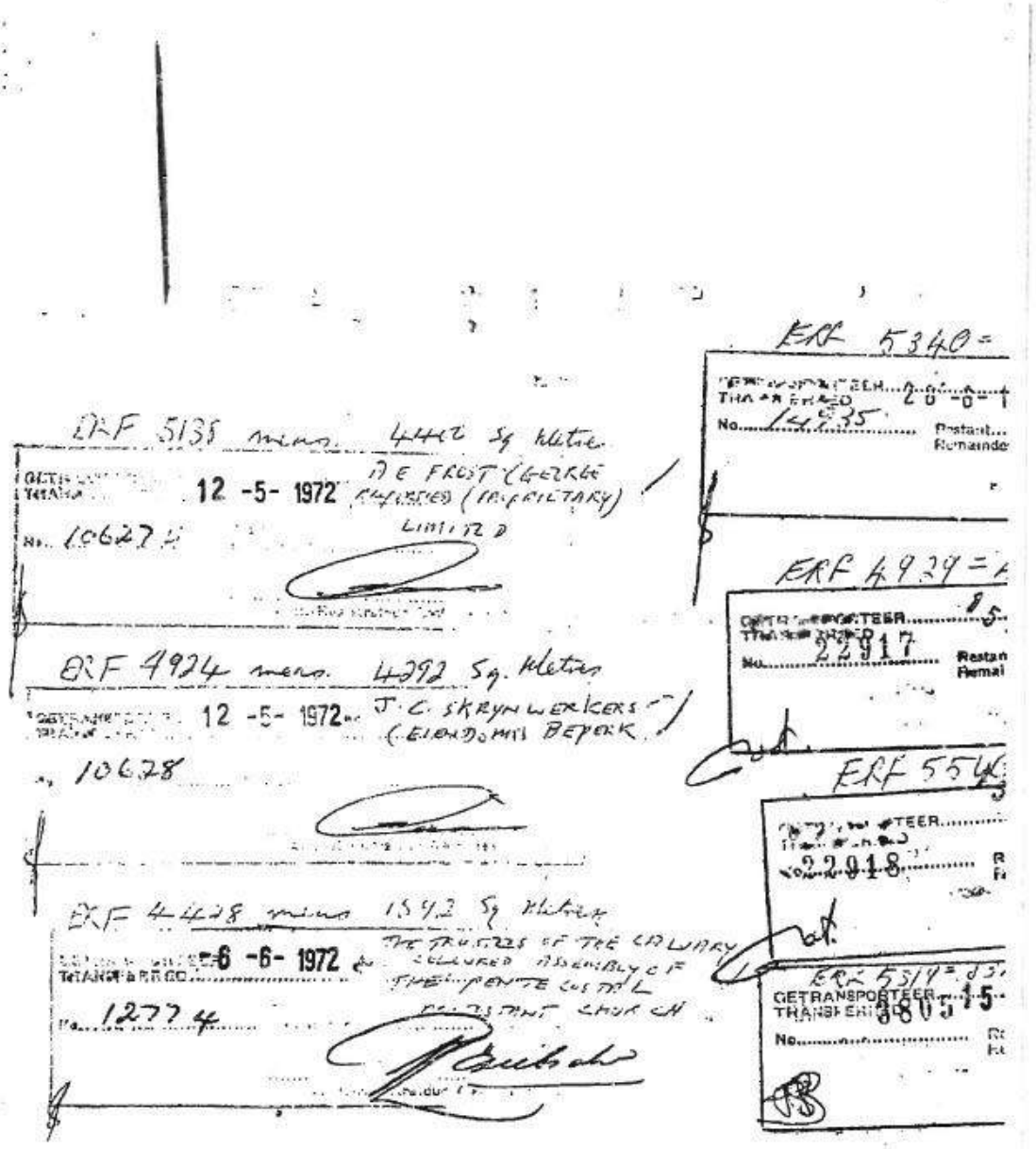

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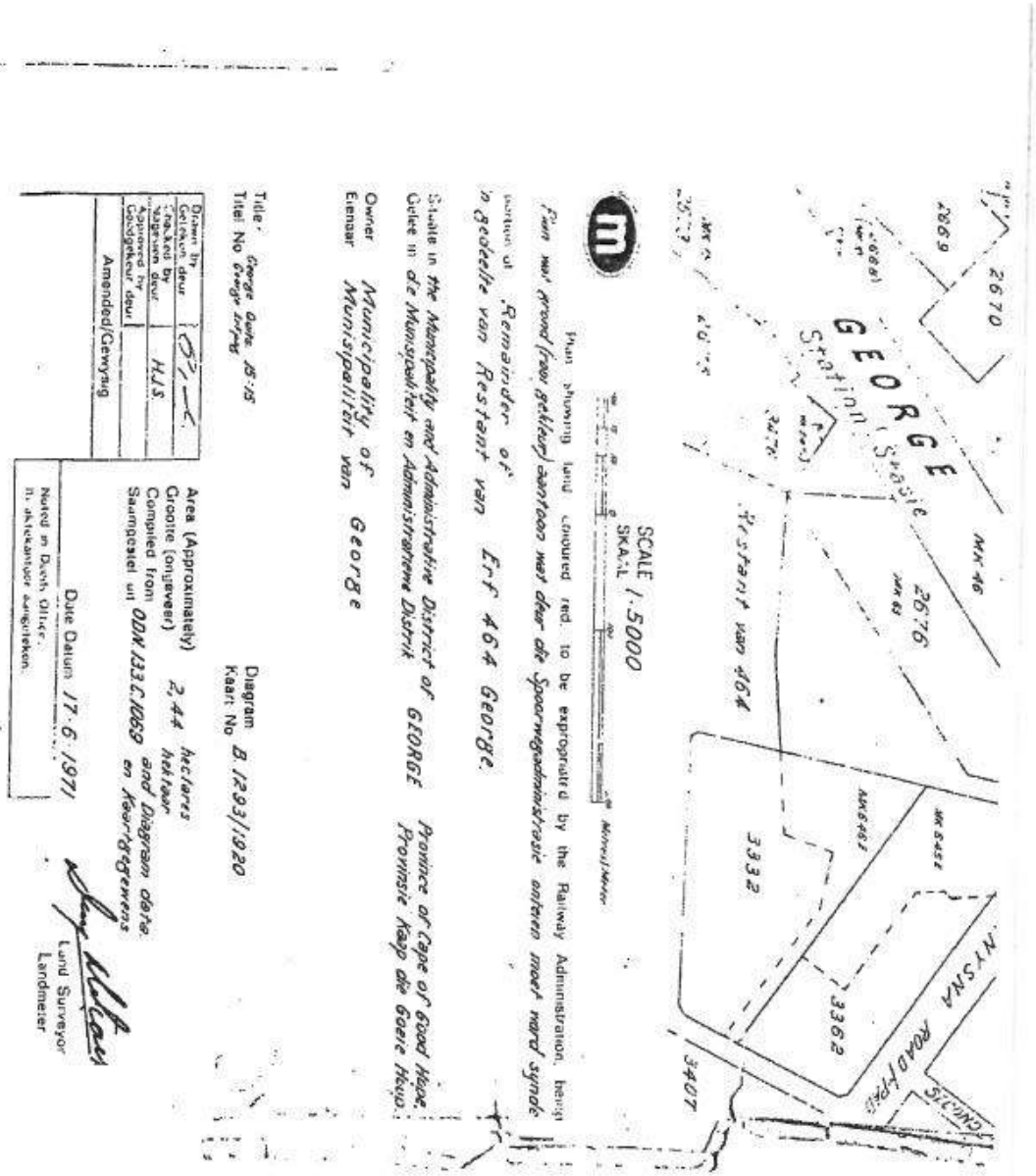

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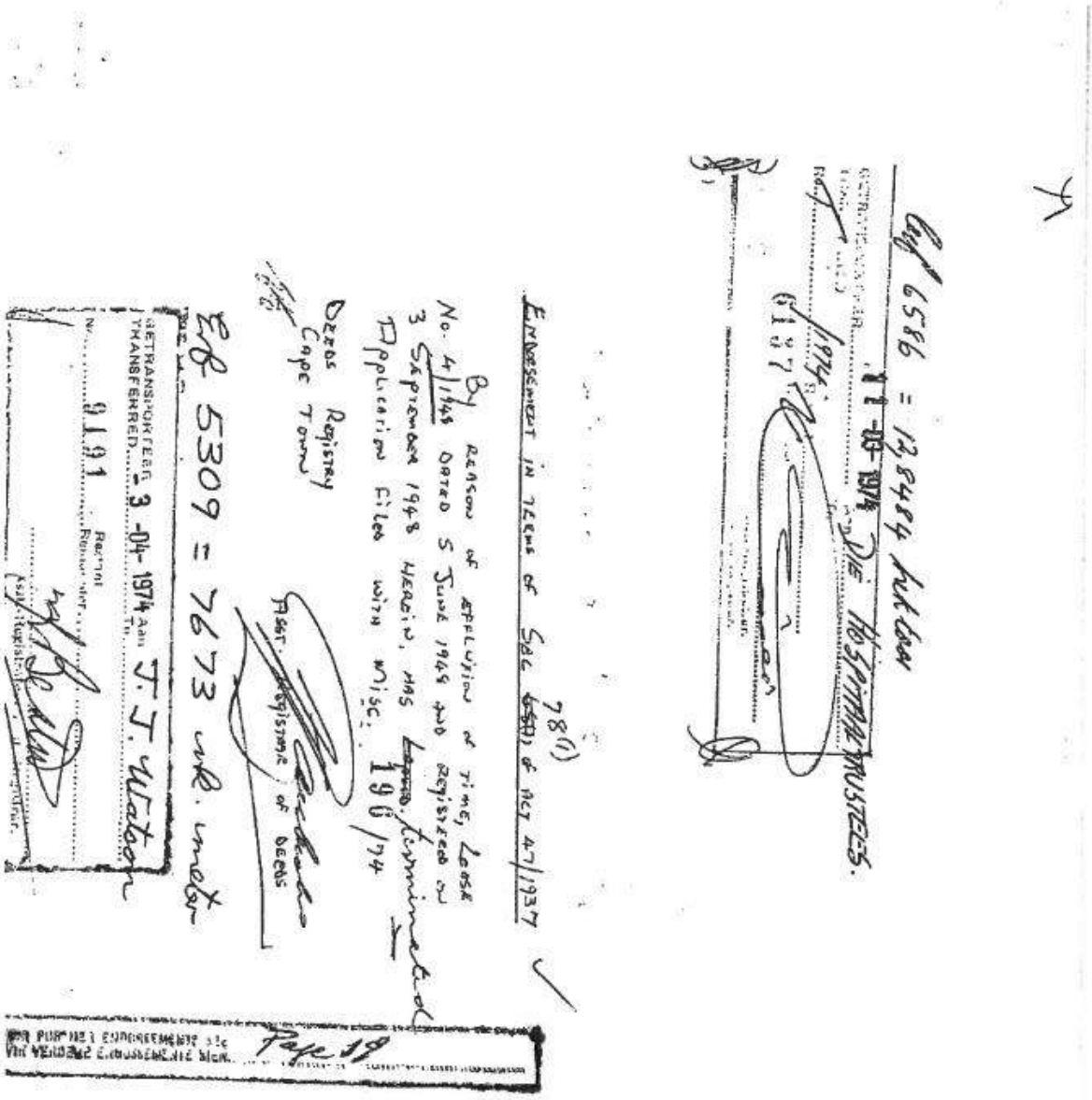

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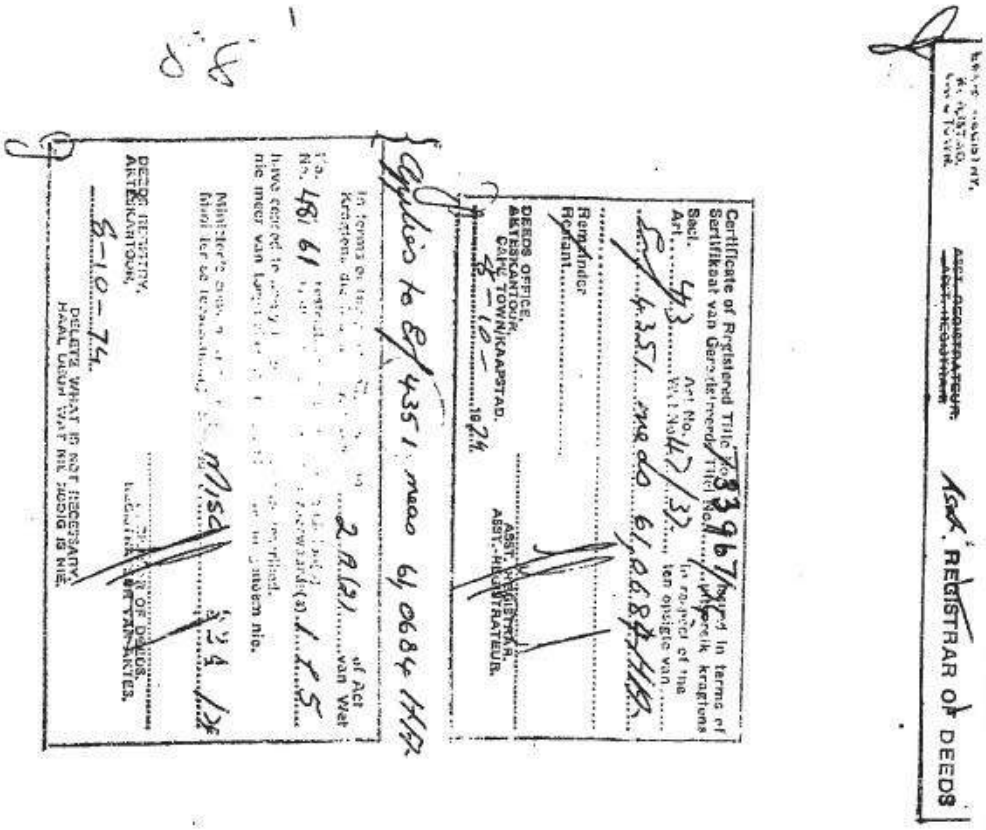

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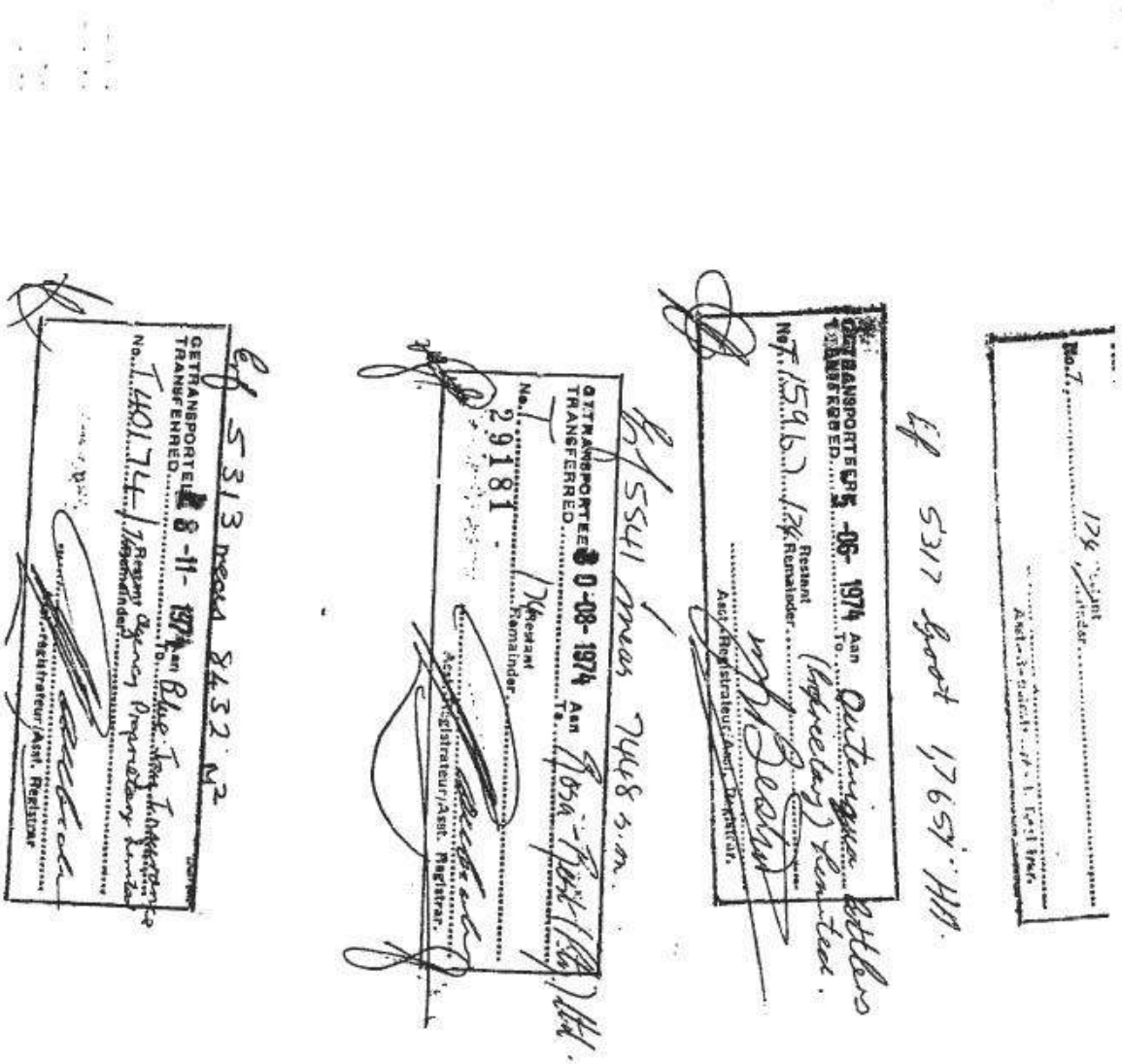

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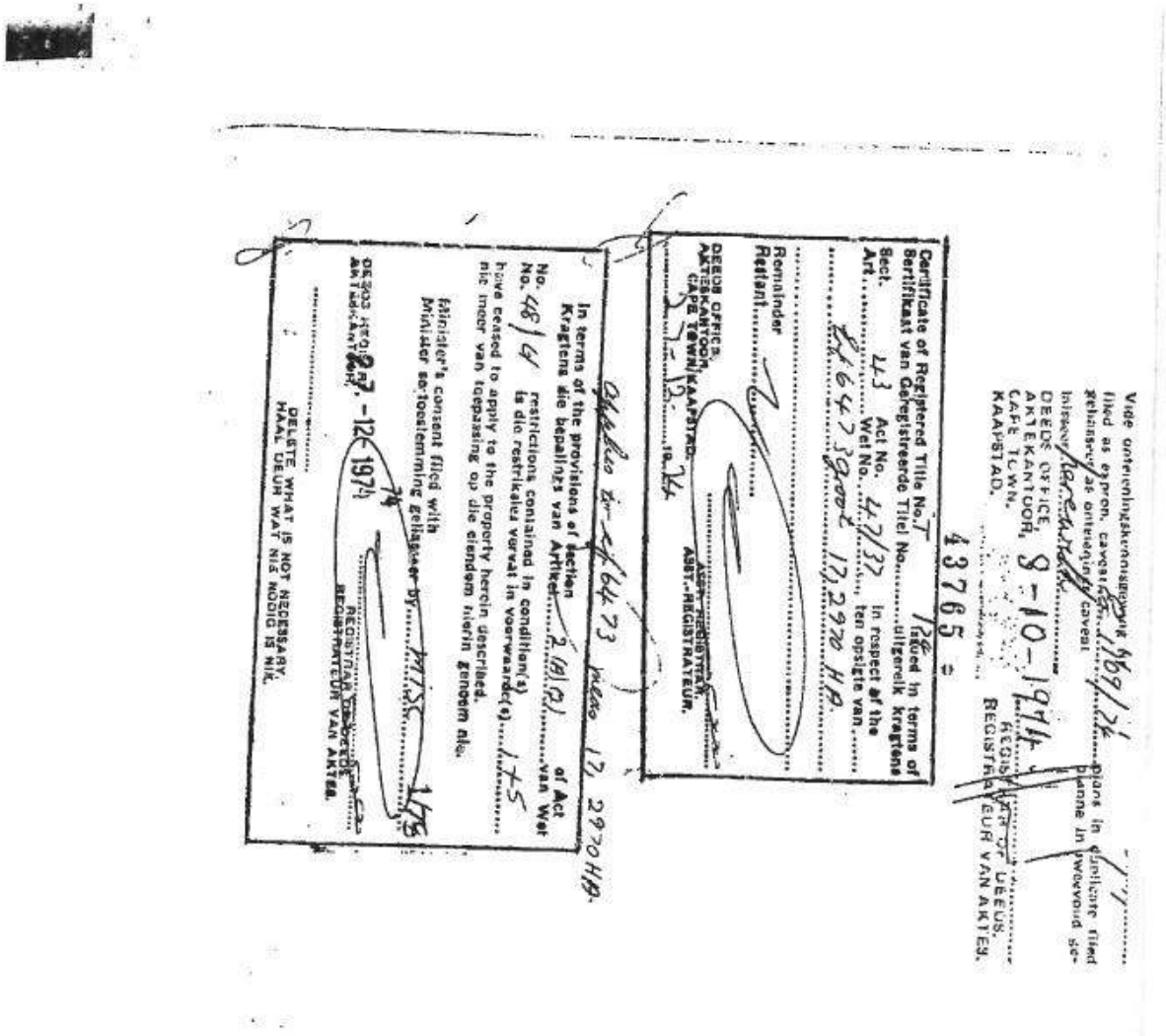


Vide aanteekeningskennisgewing 169/24 plans in duplicate filed as eprem. caveat/ gekanselleer as onderhewig aan caveat

Interest

DEEDS OFFICE, ARTSEKANTOOR, CAPE TOWN. KAAPSTAD.

8-10-1974

REGISTRAR OF DEEDS. REGISTRATEUR VAN AKTES.

43765

Certificate of Registered Title No. T Issued in terms of Sertifikaat van Geregistreerde Titel No. uitgereik kragtens Sect. 43 Act No. 47/37 In respect of the Art. Wet No. ten opsigte van

Erf 6473 Knysna 17.2.2970 HP

Remainder Restant

DEEDS OFFICE, ARTSEKANTOOR, CAPE TOWN/KAAPSTAD. 19.74

REGISTRAR/ASST.-REGISTRATEUR.

Subdivision of Erf 6473 Knysna 17.2.2970 HP

In terms of the provisions of Section Kragtens die bepalings van Artikel 2.(3)(a) of Act No. 48/49 restrictions contained in condition(s) is die restriksies vervat in voorwaarde(s) have ceased to apply to the property herein described. nie meer van toepassing op die eiendom hierin genoem nie.

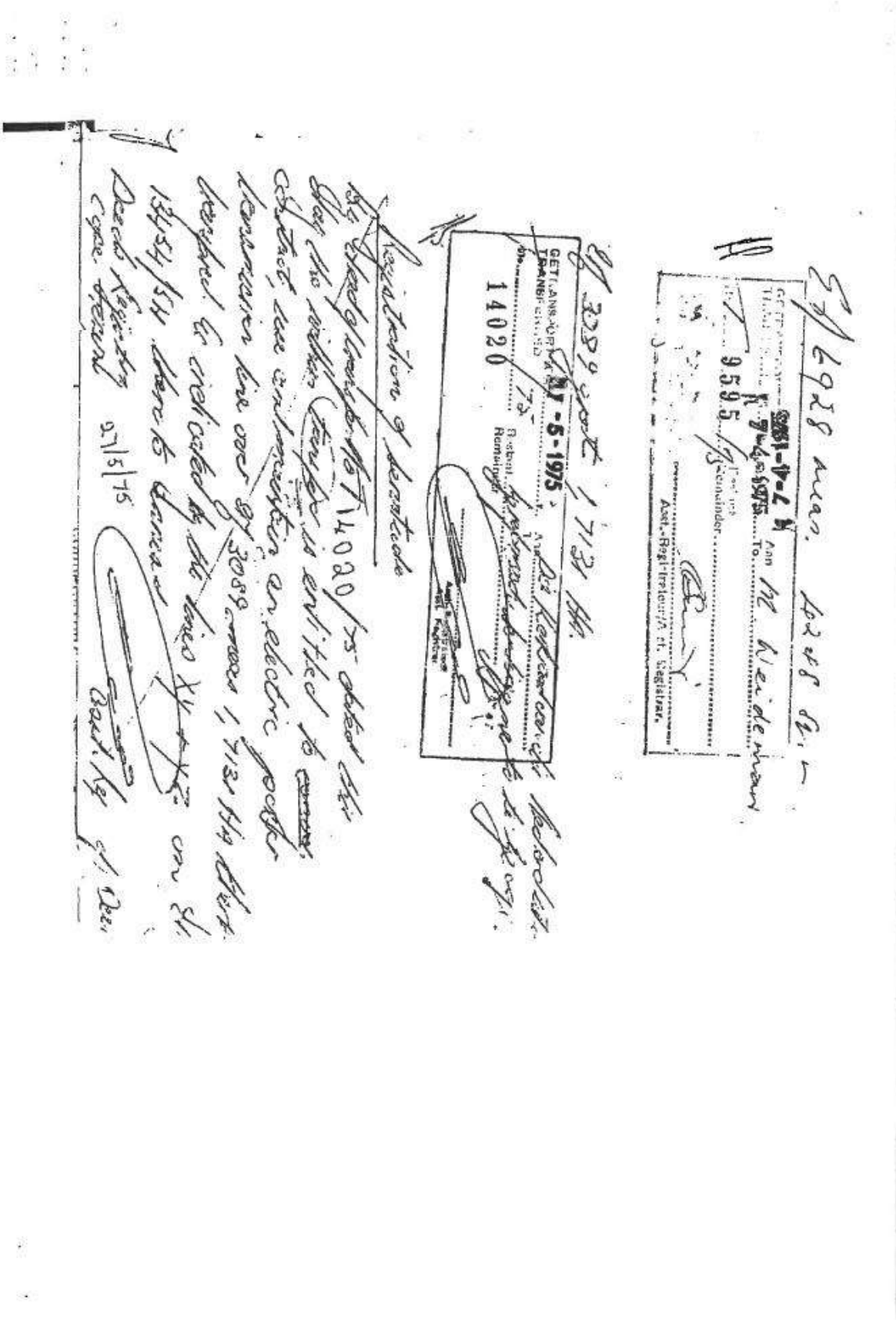
Minister's consent filed with Minister se toestemming geliasseer by

DEEDS OFFICE/ARTSEKANTOOR 27. -12 1974

REGISTRAR/REGISTRATEUR

DELETE WHAT IS NOT NECESSARY. HAAL DEUR WAT NIE NODIG IS NIE.

ANNEXURE E (continue)



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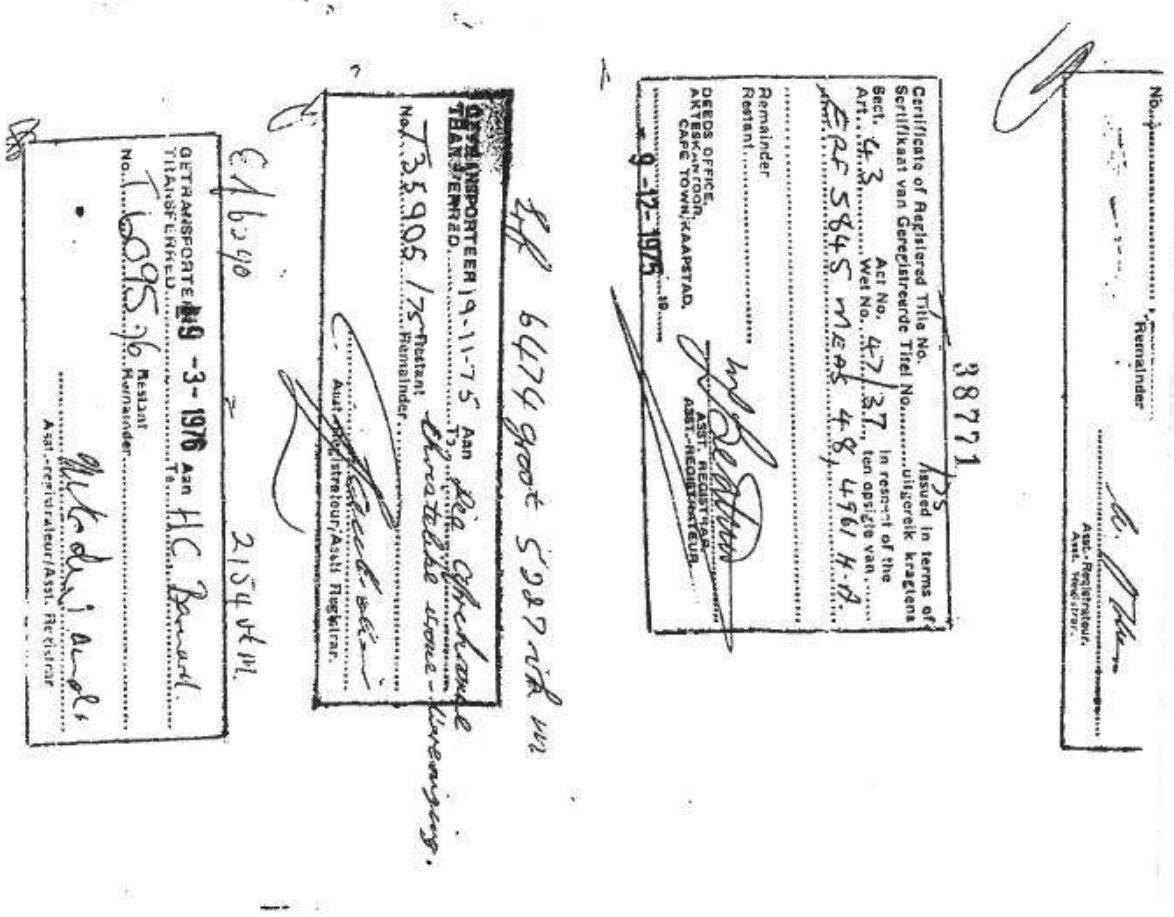

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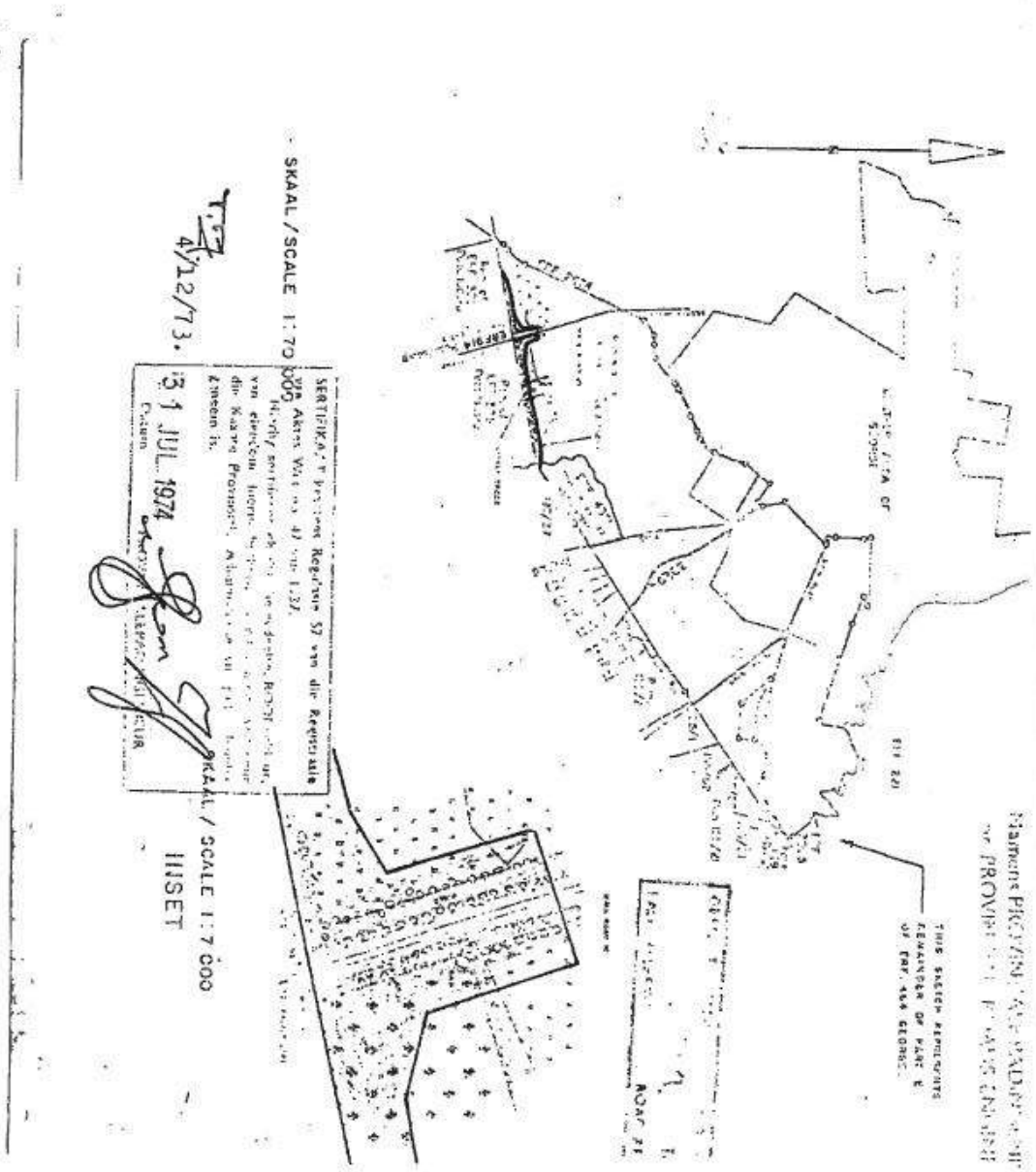


ANNEXURE E (continue)

ANNEXURE E (continue)

In so far as it affects Erf 7419 George, have been cancelled.
Consent filed as BC 10680. 1977
Deeds Registry
Cape Town
Assistant-Registrar of Deeds.

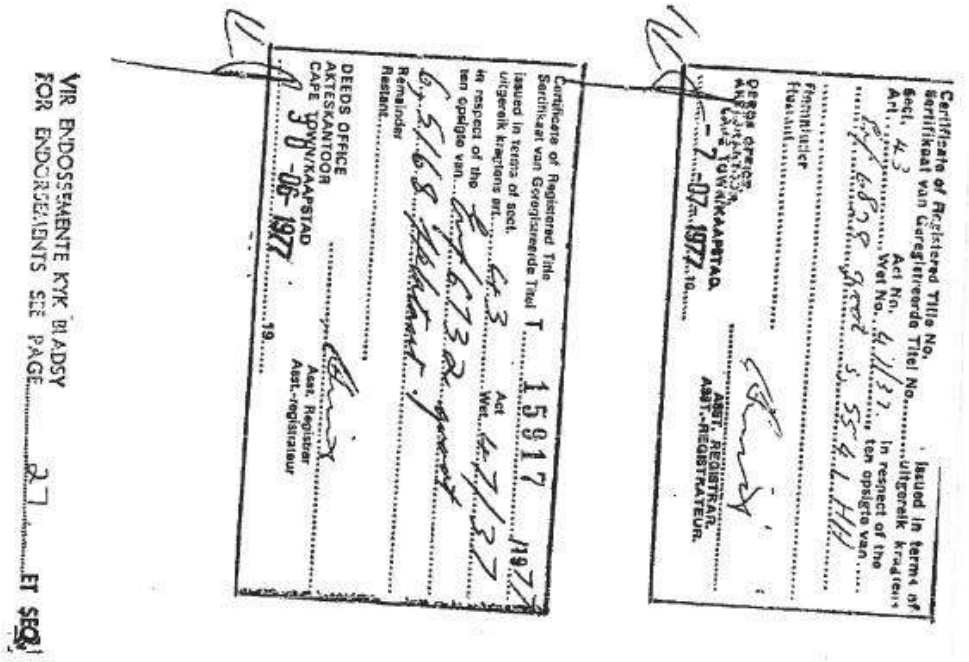
Registration of Servitude/Registrasie van Serwituut

The within described land is subject to a servitude with regard to the diversion of water in terms of an Order of the Water Court District No. ... dated ... as will more fully appear on reference to the copy of said Order annexed hereto/ Die binnegemelde grond is onderhewig aan 'n serwituut met betrekking tot die verdeling van water ingevolge 'n Bevel van die Waterhof Waterhof Distrik No. ... gedateer ... soos meer volledig sal blyk uit gemelde bevel, waarvan afskrif hiervan geheg is.

Deeds Registry/Aktekantoor,
Cape Town/Kaapstad.
... 19...
for REGISTRAR/namens REGISTRATEUR.

VIR ENDOSSEMENTE KYK BLADSY
FOR ENDORSEMENTS SEE PAGE ... ET 559

ANNEXURE E (continue)



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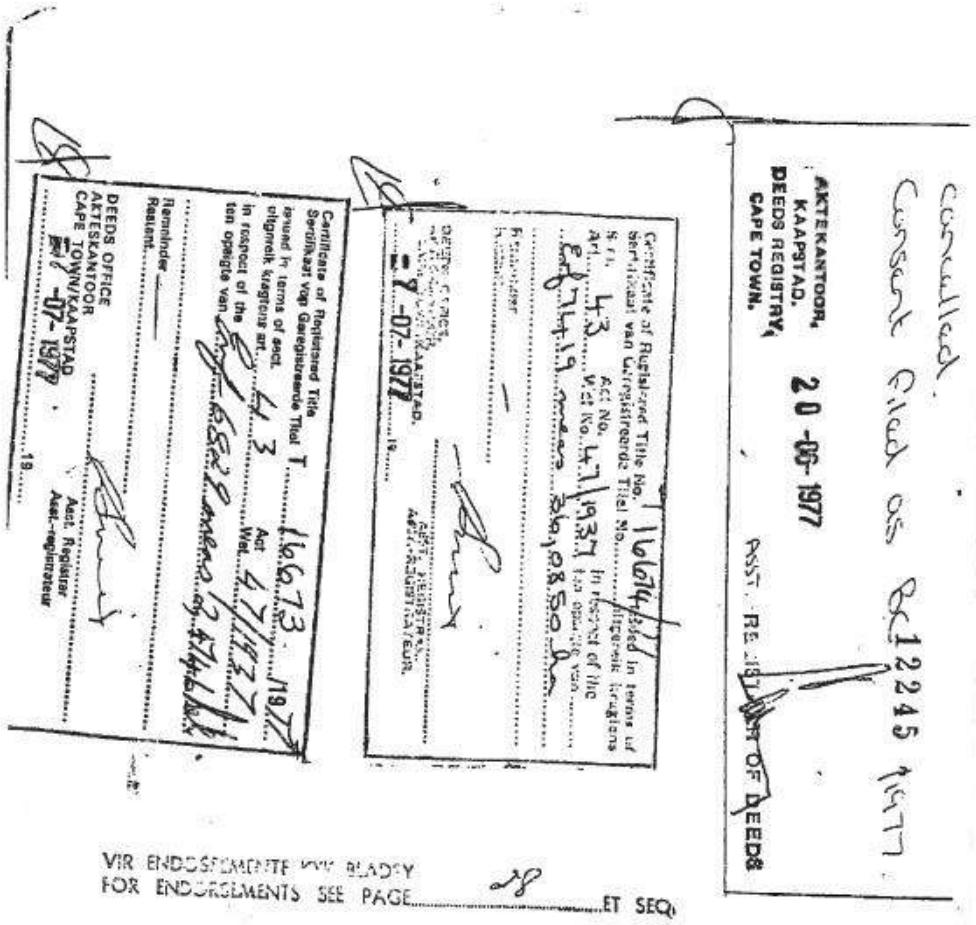
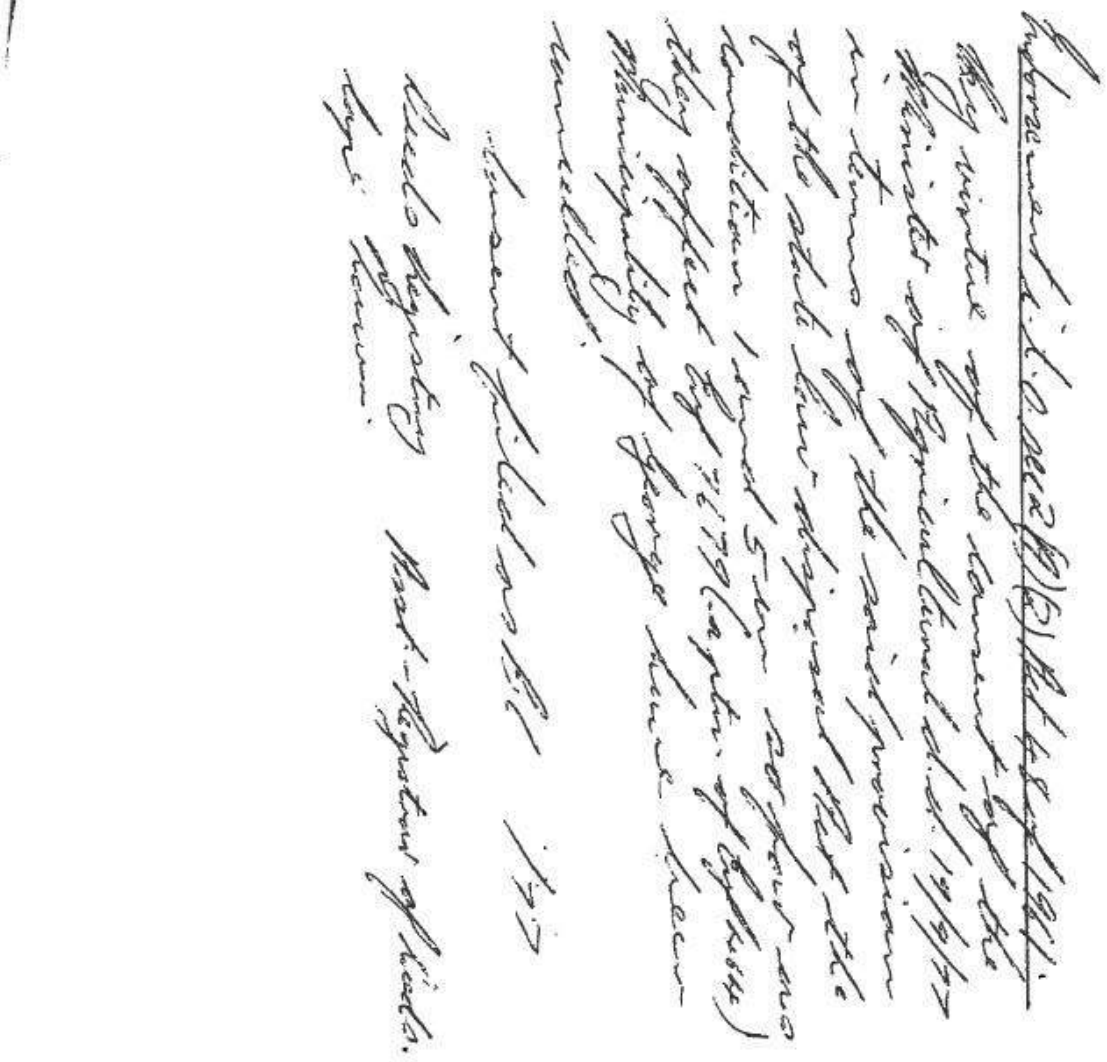


ANNEXURE E (continue)

ANNEXURE E (continue)

ANNEXURE E (continue)



ANNEXURE E (continue)

11/04/1/7/1/7/4

Meneer

OPHEFFING VAN DIE STAAT SE HERNEMINGSREG TEN OPSIGTE VAN DIE RESTANT VAN DIE MEENTGROND (ERF 464) GEORGE : U 10/6/4

Die ontvangs van u skrywe van 20 April 1988 tesame met u tjek vir die bedrag van R¼6 245,00 word hiermee erken. Ingevolge sertifikaat van is, is die grootte van die restant van die meentgrond (Erf 464) 1803,1227 hektaar soos op 11 Maart 1988 waarby Erf 13387, gedeelte van Erf 464, groot 10,2000 hektaar, wat vir die doeleindes van die Outeniqua proefplaas herneem is maar nog in naam van die Staat geregistreer staan te word, ingesluit is. Die restant van die meentgrond ten opsigte waarvan die Staat se hernemingsreg gevolglik rojeer moet word beloop dus 1792,9227 hektaar en bereken teen R5,00 per hektaar of gedeelte daarvan is die vergoedingsbedrag slegs R8965,00. 'n Skatkisorder vir R7280,00 te veel betaal gaan derhalwe hiermee saam.

Die nodige toestemming vir die opheffing van die Staat se hernemingsreg oor die restant van die meentgrond is ook aangeheg.

Die uwe

DIREKTEUR-GENERAAL
OPENBARE WERKE EN GRONDSAKE

MUNISIPALITEIT GEORGE
ONTVANG
25 MAY 1988
ONT ERF/EN
ANTWOORD

1

ANNEXURE E (continue)

1. Stem hiermee toe kragtens artikel 2A(1) van die Wet op die Beskikking oor Staatsgrond, 1961 (Wet 48 van 1961), tot die rojering van voorwaardes 1 en 5 soos vervat in grondbrief gedateer 15 Junie 1922 (George Erfpagte volume 15 no 15) ten opsigte van:

   Die restant van Erf 464 George, geleë in die munisipaliteit en administratiewe distrik George, groot as sodanig 1803,1227 hektaar met die uitsluiting van Erf 13387 gedeelte van Erf 464 George geleë in die munisipaliteit en administratiewe distrik van George, groot 10,2000 hektaar soos voorgestel en omskryf op kaart L G 516/87 wat nog geregistreer staan te word.

2. Magtig hierby die Registrateur van Aktes, Kaapstad kragtens artikel 2A(2) van voornoemde Wet om die rojering op die titelbewys aan te teken.

ALDUS GEDOEN en GETEKEN te PRETORIA op hierdie 20ste dag van Mei 1988.

.....

p.p. MINISTER VAN MANNEKRAG EN VAN OPENBARE WERKE EN GRONDSAKE
(Volmag : Item C.4(i) van Bylae 2)

REGISTRATEUR VAN AKTES
KAAPSTAD

ANNEXURE E (continue)

Geagte Meneer

MUNISIPALE TITELAKTES

Jare gelede is reëlings met die Akteskantoor getref om 'n toonbank lêer Nr.662 oop te maak ten opsigte van sekere van die Munisipaliteit se titelaktes.

Die doel van 'n toonbank lêer is dat dit nie nodig is om die Munisipaliteit se titelakte met elke transport van 'n stuk grond daaruit met daardie transport in te dien nie maar daar word net verwys na die toonbank lêer. Op dié manier word transporte van die Munisipale titelakte bespoedig.

Die Akteskantoor het egter nou besluit om alle toonbank lêers te sluit en ons stuur u hiermee die betrokke toonbank lê Nr 662 wat die volgende inhoud het:-

1. Gesertifiseerde afskrif van George Erfpagte Nr 15; — (1)
2. Transportakte Nr 6712/1941;
3. Transportakte Nr T1005/1938.

Geliewe veilige ontvangs te erken op die aangehegte afskrif van hierdie skrywe.

Die uwe
RAUBENHEIMERS ING

Per:

TIM BYRNE

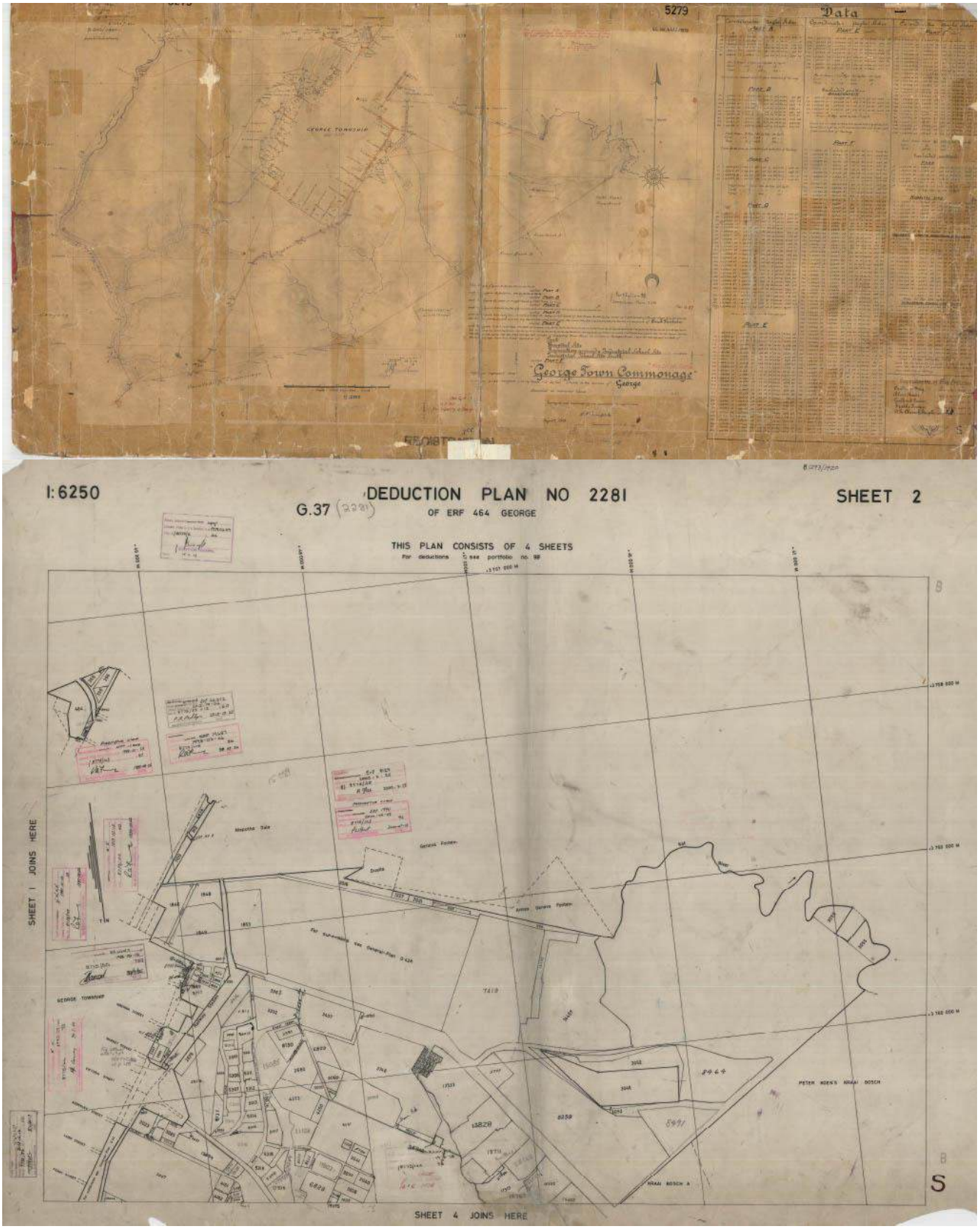
Geslig • Established 1907
Raubenheimers Ing / Inc • Reg No 93/01742/21

Direkteure / Directors T S Byrne • T J Nel BA B Iur • W M Luttig B Comm LLB •
C G Pienaar B Iur LLB LLM • R Engelbrecht BA LLB
Konsultant / Consultant J N Raubenheimer BA LLB

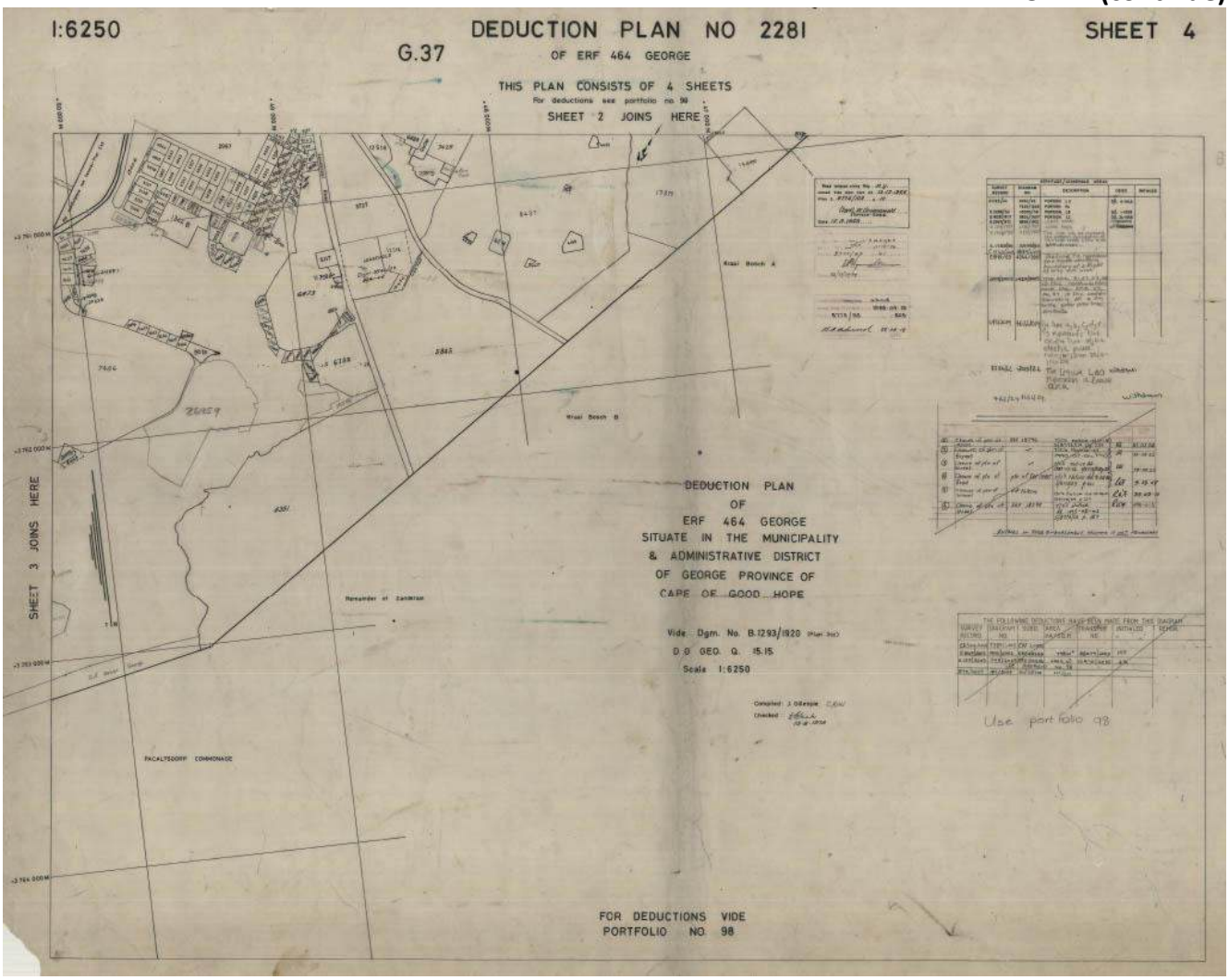
Cathedralstraat 60 Cathedral Street
Posbus • PO Box 21 George 6530
Docex 1 George
Suid-Afrika / South Africa

☎ (044) 873 2043
FAX (044) 874 4516
Na ure • After hours 082 490 2966/7
Internet http://www.george.co.za/rb
e-Mail raubenheimers@pixie.co.za

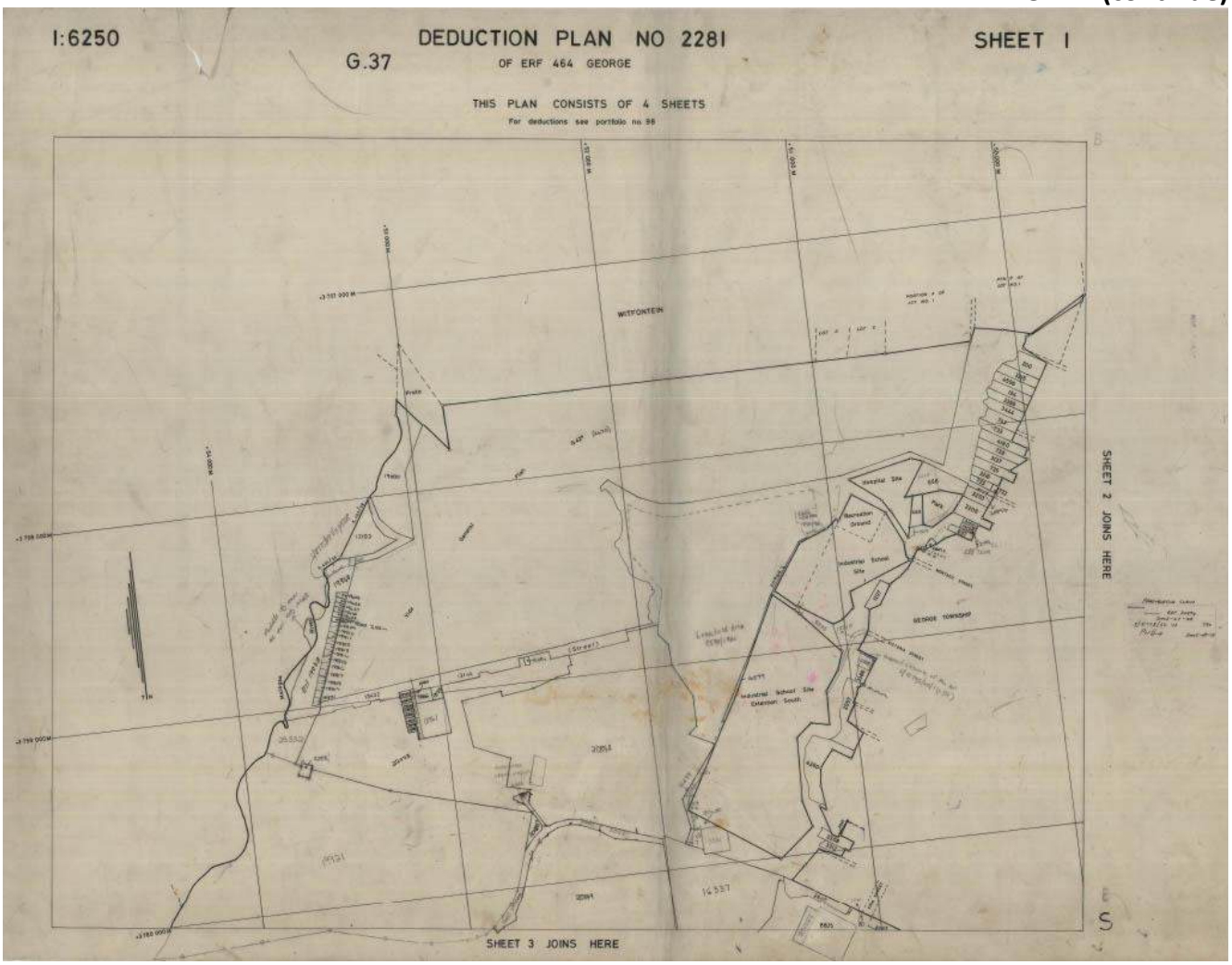
ANNEXURE F


5279
Data
George Town Commonage
George
1:6250
G.37 (2281)
DEDUCTION PLAN NO 2281
OF ERF 464 GEORGE
SHEET 2
THIS PLAN CONSISTS OF 4 SHEETS
SHEET 1 JOINS HERE
SHEET 4 JOINS HERE
S

ANNEXURE F (continue)



ANNEXURE F (continue)



ANNEXURE F (continue)

ANNEXURE G

Annexure G

ZUTARI

Public Participation Report

METRO GROUNDS MIXED-USE DEVELOPMENT, GEORGE.

Application in terms of Section 15(2) of the George Municipality Land Use Planning By-Law, for the Rezoning and Subdivision of a portion of the Remainder of Erf 464 George.

GEORGE MUNICIPALITY

Submission date: 2026/04/30

Document number: 1

Revision: 0

Document number 1, Revision number 0, Date 2

ANNEXURE G (continue)

Document control record

Document prepared by:

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Document Control						
Project name	Metro Mixed-use Development					
Document number	1		**Project number**		1007838	
Client	George Municipaliy					
Client contact	Henko Lourens		**Client reference**			
Rev	**Date**	**Revision details/status**	**Author**	**Reviewer**	**Verifier** (if required)	**Approver**
0	2026/04/30	PP Report	Nondumiso Buthelezi	Rudolf Schröder	Rudolf Schröder	Rudolf Schröder
Current revision	**0**					

Approval			
Author signature		Approver signature	CRSchröder
Name	Nondumiso Buthelezi	Name	Rudolf Schröder
Title	Professional Planner	Title	Professional Planner

ANNEXURE G (continue)

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Figure 12: Email from Corlize Bester

Figure 13: Notice advertised on the Municipal Facebook page

Figure 14: Email sent requesting comments from external departments and ward cllr

Figure 15: Email sent requesting comments from external departments (WC Department Education)

Figure 16: Public Notice as published in the George Herold on 19 February 2026

Figure 17: List of surrounding property owners

Figure 18: Example of email sent to affected property owners

Figure 19: Delivery proof of registered letters – sample

Figure 20: Example of letter sent requesting comments from surrounding owners.

Tables

Table 1: Details of Ward Councillor and external departments

Table 2: List of affected property owners

ANNEXURE G (continue)

1 PROJECT CONTEXT AND INTRODUCTION

Zutari prepared a land use planning application on behalf of the George Municipality for the required land use management application(s), namely the rezoning and subdivision of a Portion of the Remainder of Erf 464 George, in order to secure the appropriate development rights for the proposed mixed-use development referred to as the Metro Grounds Mixed-Use Industrial Development, George.

The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate a mixed-use industrial development. The intent of the industrial development component is to accommodate industry erven, appropriate to the site context and facilitating small and medium enterprise development. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility, such as a vocational training establishment. There is also a portion of this layout that is earmarked for the expansion of the Go-George Bus Depot site that is planned adjacent to this proposed development

A subdivision and rezoning application has been submitted to amend the zoning to an applicable zoning, namely "subdivisional area" in order to make allowance for the land uses as depicted on the subdivisional layout plan. The land use planning application was submitted in terms of section 15(2) of the George Municipality Land Use Planning By-law, 2023, to obtain approval for the rezoning and subdivision of a portion of the Remainder of Erf 464 George, first on 26 March 2025 and again on 5 February 2026.

The land use planning application was uploaded and submitted on the Collaborator portal on 26 March 2025. A response was received from the municipality stating that the land use planning application will need to be resubmitted with the environmental report attached as an annexure. There were additional amendments required to the layout plan which also entailed an update of the land use planning application and a resubmission. The amendments to the layout plan have been requested to respond to the request by the Go-George Bus Depot to change the erven adjacent to the bus depot and to respond to the re-alignment of the Rand Street extension.

The revised and updated land use planning application has been submitted after the updated draft Basic Assessment Report was received. The application was submitted on 5 February 2026. The section 38 compliance letter was issued on 9 February 2026. The public participation process commenced with the notice published in the George Herald on Thursday 19 February 2026. The closing date for comments from the public was 20 March 2026.

This report provides details of the public participation that has been conducted on the application.

2 PRE-APPLICATION

In terms of Section 37 of the George Municipality Land Use Planning By-laws, 2023 A pre-application consultation is required. In terms of this application and the development proposal contained herein, a pre-application was submitted to the George Municipality's town planning department on the 02 December 2024, and a pre-application consultation meeting was held on 4 December 2024. The minutes of the pre-application consultation is attached as Annexure E.

The Land Use Planning application was formally submitted to the Municipality's Planning Department on 5 February 2026.

ANNEXURE G (continue)

3 APPLICATION PARTICULARS

A land use planning application was submitted seeking the municipality's approval for the following land use rights in terms of the provisions of the **George Municipality Land Use Planning By-laws, 2023** for a Portion of the Remainder of Erf 464 George, namely:

a) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.

b) **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan (Annexure F) attached for more detail.

c) **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan (Annexure F) in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

4 SECTION 38 COMPLIANCE

After the submission of the application, a Section 38 Compliance letter has been issued which confirms that the submitted application is deemed to be complete:

"The above-mentioned application submitted dated 2025-08-29 is deemed complete in terms of Section 38 of the Land Use Planning By-law for George Municipality, 2023."

ANNEXURE G (continue)

GEORGE
THE CITY FOR ALL REASONS

Enquiries: Primrose Nako
email: pnako@george.gov.za
Human Settlements, Planning and Development
Town Planning
044 801 9416/ 9171/ 9473

PORTAL APPLICATION REFERENCE: 4541283
INTERNAL REFERENCE: 4022632

DATE: 2026-02-09

APPLICANT NAME: Rudolf Schroder
EMAIL ADDRESS: rudolf.schroder@gmail.com

In terms of the Protection of Personal Information Act (POPIA) all correspondence will be communicated directly and only to the applicant as stated above. No information will be given to any third party and/or landowner (if the landowner is not the applicant).

COMPLIANCE LETTER (SECTION 38 OF LUP BY-LAW, 2023)
APPLICATION IN TERMS OF SECTIONS 15(2)(a) & (d) OF THE LAND USE PLANNING BY-LAW, 2023 FOR REZONING AND SUBDIVISION ON A PORTION OF REMAINDER ERF 464, GEORGE (METRO GROUND MIXED USE DEVELOPMENT)

PROPERTY: ERF/PORTION 464/
A mixed-use industrial development on a portion of the Remainder of Erf 464, George.

The above-mentioned application submitted dated **2026-02-05** is deemed complete in terms of Section 38 of the Land Use Planning By-law for George Municipality, 2023. Application for:

- **Subdivision**
- **Rezoning**
- **Subdivision**

Once payment is done, email the proof of payment to **Camilla Coeries** - Ccoeries@george.gov.za or **Werner Joubert** WCJOUBERT@george.gov.za . An acknowledgement email will be sent to the applicant to confirm receipt of payment.

Once acknowledgement of receipt has been received, the applicant may advertise the application in accordance with the Public Participation Instruction available on the municipality's website. Please upload the proof of Public Participation document on the Land Use Portal as Supporting Documents on the current Application 4541283.

All enquiries follow ups and documentation submissions need to be directed to the relevant *case officer* **Primrose Nako** email: pnako@george.gov.za.

The relevant Town Planner **Khuliso Mukhovha**, should be copied in the e-mail: kimukhovha@george.gov.za as well as the relevant Senior Town Planners, **Naudica Swanepoel** (even erf numbers) nswanepoel@george.gov.za or **Ilane Huyser** (uneven erf numbers) ihuyser@george.gov.za.

The applicant shall also obtain comments from the following external departments and interested, and affected parties as indicated below.

71 York Street, George | PO Box 19, George, 6530 044 801 9111 www.george.gov.za

Figure 1: Section 38 Compliance Letter

See the Section 38 Compliance Letter attached to this report as **Annexure A**.

ANNEXURE G (continue)

5 STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION

The application has been subjected to a thorough public participation process in terms of the provisions for public participation process received from the Municipality, which entailed the following:

1. **Site notices** to be placed on the frontage of the Erven concerned.
2. Provide notice and full application documents to Corliz Bester for **placement on the Municipal Website and Facebook**
3. Obtain comments from **External Departments and Interested and Affected parties**.
4. Publishing a **notice in the local newspaper** circulated in that area.
5. Obtain consent from or serve notice to **surrounding property owners**.

More details regarding each of these are provided in the section below:

5.1 Site Notice

One site notice was erected on site as illustrated in the figure below:

Figure 2: Site Notice Location

The photos below were taken from the site notice erected on site on 19 February 2026. The initial photos were taken when the site notice was erected on 19 February 2026, and then an additional close up photo was taken on 3 March 2026 to ensure the wording of the notice is legible on the photo:

ANNEXURE G (continue)

Figure 3: Photos taken on 19 Feb 2026

ANNEXURE G (continue)

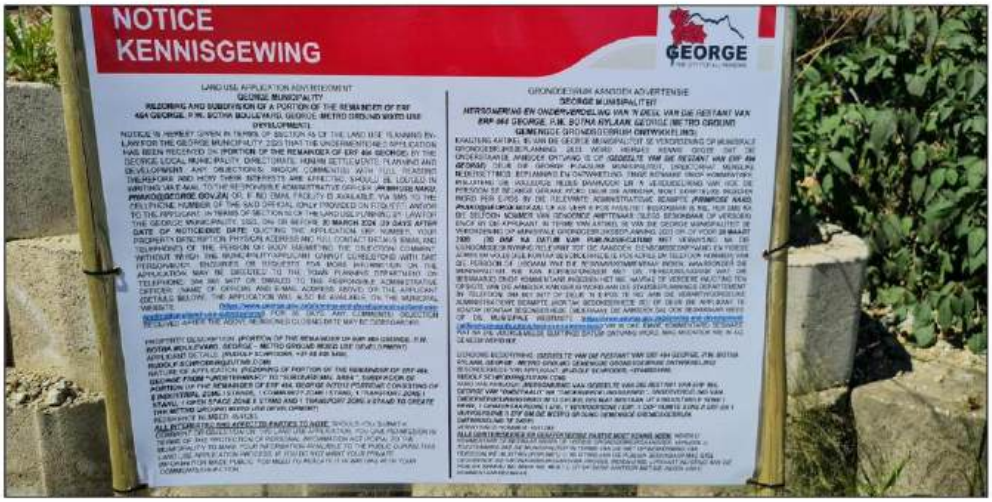


Figure 4: Site Notice

Figure 5: Site Notice

ANNEXURE G (continue)

Figure 6: Site Notice

Figure 7: Site Notice

ANNEXURE G (continue)

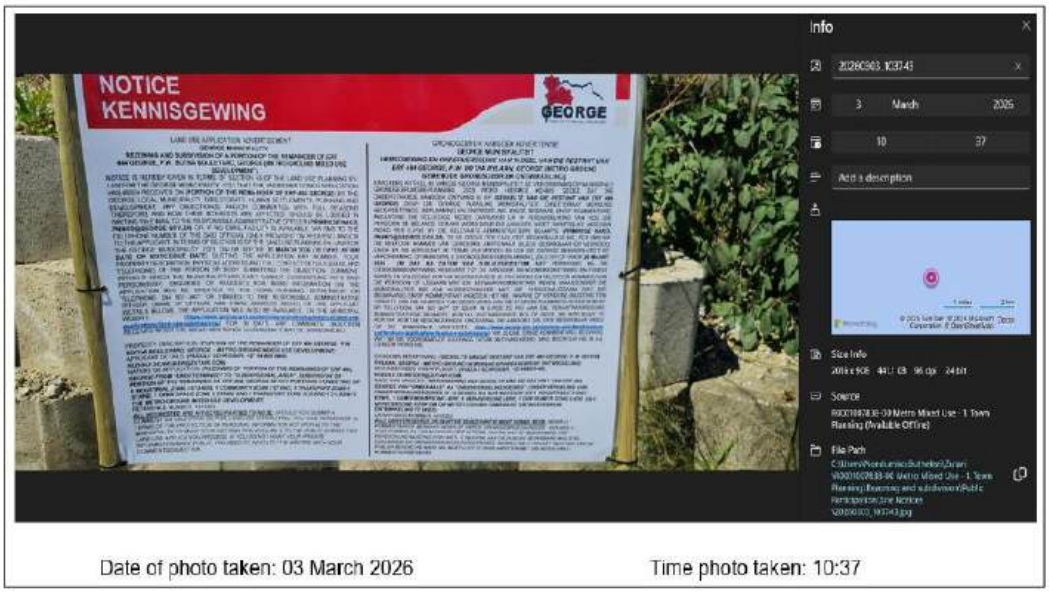


Figure 8: Date and time stamp of site notice picture

Figure 9: Date and time stamp of site notice picture

ANNEXURE G (continue)

Figure 10: Date and time stamp of site notice picture

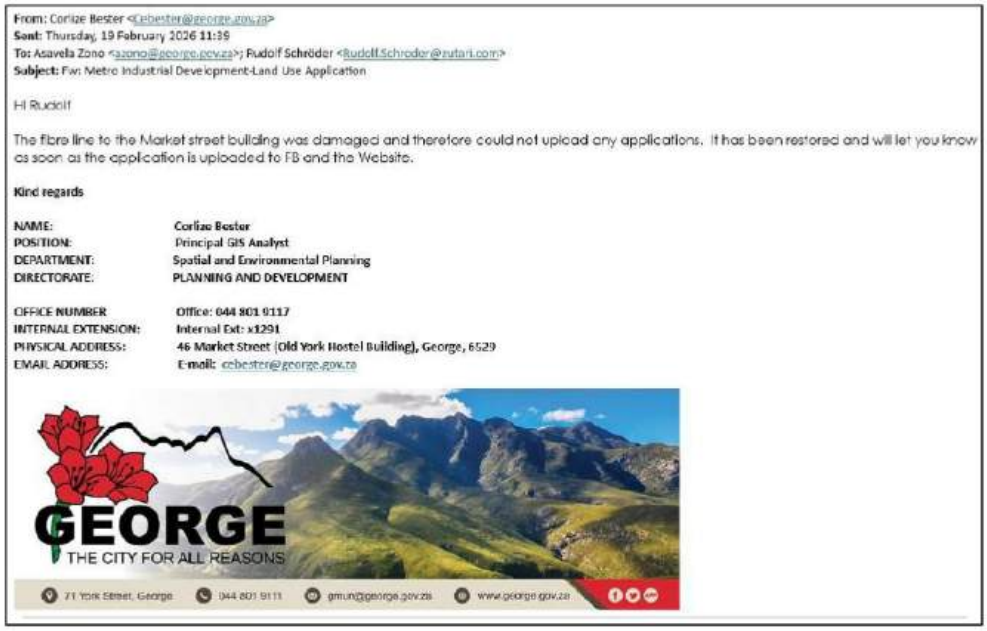
Figure 11: Date and time stamp of site notice picture

ANNEXURE G (continue)

5.2 Placement on the Municipal Website and Facebook page

Notice of the proposed subdivision and rezoning was placed on the Municipal Website and Municipal Facebook page.

See the screenshot below of email from Corlize Bester confirming that the notices will be uploaded on the Municipal website and Facebook page.



From: Corlize Bester <cebester@george.gov.za>
Sent: Thursday, 19 February 2026 11:39
To: Asavela Zono <azono@george.gov.za>; Rudolf Schröder <Rudolf.Schroder@rutari.com>
Subject: Fw: Metro Industrial Development-Land Use Application

Hi Rudolf

The fibre line to the Market street building was damaged and therefore could not upload any applications. It has been restored and will let you know as soon as the application is uploaded to FB and the Website.

Kind regards

NAME:	Corlize Bester
POSITION:	Principal GIS Analyst
DEPARTMENT:	Spatial and Environmental Planning
DIRECTORATE:	PLANNING AND DEVELOPMENT
OFFICE NUMBER	Office: 044 801 9117
INTERNAL EXTENSION:	Internal Ext: x1291
PHYSICAL ADDRESS:	46 Market Street (Old York Hostel Building), George, 6529
EMAIL ADDRESS:	E-mail: cebester@george.gov.za

Figure 12: Email from Corlize Bester

The screen shot below is of the notice advertised on the George Municipality Facebook page.

ANNEXURE G (continue)

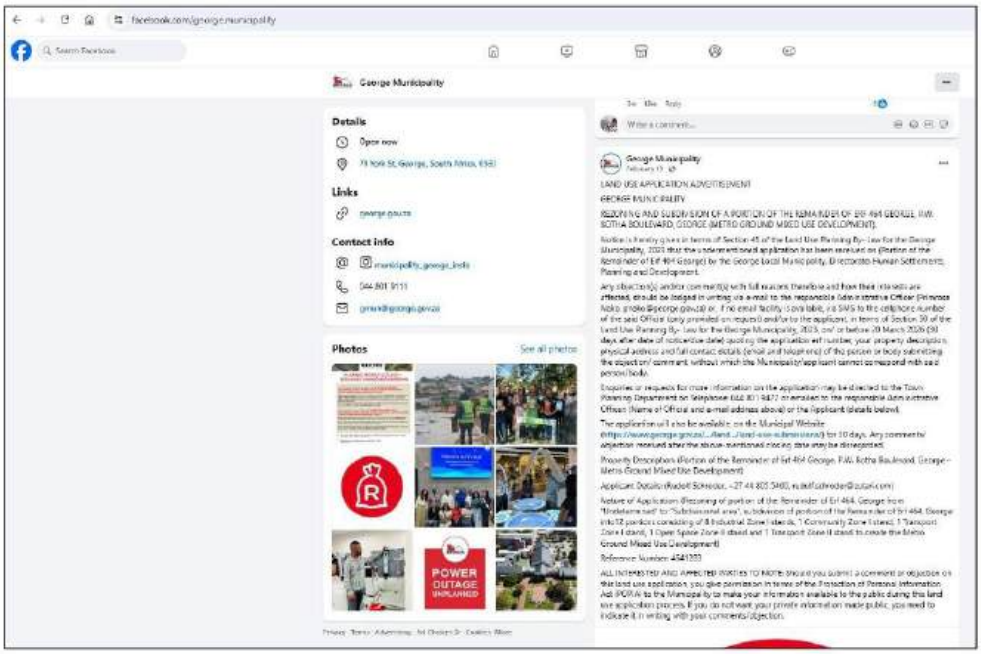


Figure 13: Notice advertised on the Municipal Facebook page

ANNEXURE G (continue)

5.3 Ward Councillor & External Departments

Comments from the following Ward Councillor and external departments have been requested, details of which are listed in the table below:

Table 1: Details of Ward Councillor and external departments

NAME & POSTAL ADDRESS	NAME & EMAIL ADDRESS
WARD COUNCILLOR	EXTERNAL DEPARTMENTS
Executive Deputy Mayor, EPWP Oversight, Ward 23 Councillor bjohnson@george.gov.za 044 801 9111	Department of Environmental Affairs and Development Planning – Environmental affairs DEADPEIAAdmin.George@westerncape.gov.za
	Department of Environmental Affairs and Development Planning – Planning and Development deadp.planning-george@westerncape.gov.za
	Attention: Megan Simons Cape Nature msimons@capenature.co.za
	Department of Agriculture, Forestry & Fishery (DAFF) MelanieKo@daff.gov.za
	Department of Transport and Public works vanessa.stoffels@westerncape.gov.za
	Western Cape Department of Education Florence.Rhoxo@westerncape.gov.za cleopatra.vanrensburg@westerncape.gov.za wesley.vorsatz@westerncape.gov.za
	Western Cape Department of Agriculture (Elsenburg) cor.vanderwalt@westerncape.co.za
	Heritage Western Cape ceoheritage@westerncape.gov.za
	GIPTN Unit Manager (Go George) morne.lakay@gogeorge.org.za rene.casanova@gogeorge.org.za derek.jacobs@zutari.com

5.3.1 Request for comments – External Departments:

The below image illustrates the request for comments sent to the external departments and ward councillor.

ANNEXURE G (continue)

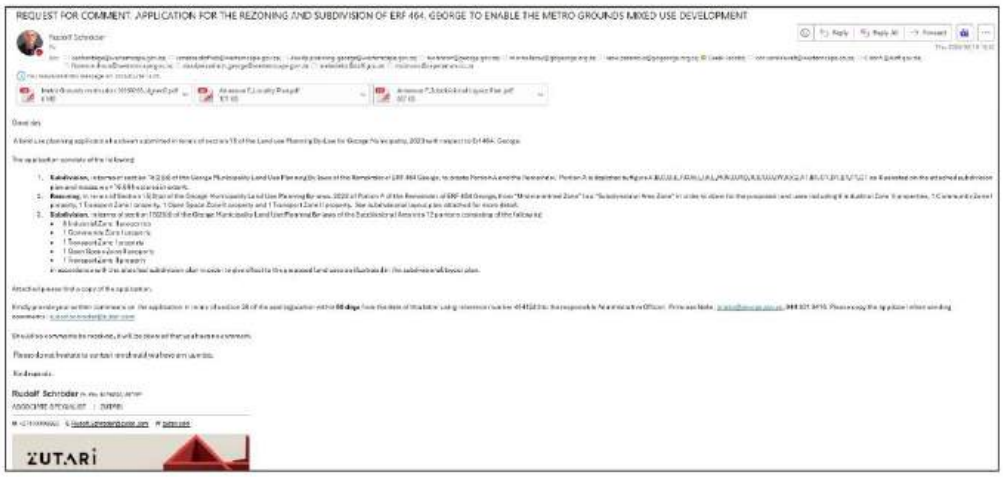


Figure 14: Email sent requesting comments from external departments and ward cllr

A second email was sent to the Western Cape Department of Education:

Figure 15: Email sent requesting comments from external departments (WC Department Education)

See emails sent to the external departments as well as the ward councillors attached as **Annexure B.**

5.4 Public notice in the Local Newspaper (George Herald)

Notice of the application, has been published in two official languages in the local newspaper (George Herald), on **19 February 2026** as illustrated below:

ANNEXURE G (continue)

LEGAL NOTICES | MUNICIPAL NOTICES

TENDER
GMT032/24-25

TENDER NOTICE: CANCELLATION

Notice is hereby given to all prospective service providers / bidders / tenderers that the following tender has been cancelled:

TENDER NUMBER: TENDER NUMBER: GMT032/24-25: TENDER FOR THE UPGRADING OF SCHAAPKOP 132/66KV SUBSTATION IN GEORGE

Tenderers may address all queries or enquiries related to the tender to Mr. Daniel Greeff at (044) 801 9221 or via email to the following address dgreeff@george.gov.za

MR G LOUW
MUNICIPAL MANAGER
GEORGE MUNICIPALITY
GEORGE
6530

NOTICE
KENNISGEWING

Figure 16: Public Notice as published in the George Herold on 19 February 2026

The closing date for comments according to the notice was **20 March 2026.**

5.5 Notice to surrounding property owners.

The table below provides details regarding all the affected property owners that were notified of the proposed development. A total of 34 surrounding property owners were notified, see details of property owners in tables below:

ANNEXURE G (continue)

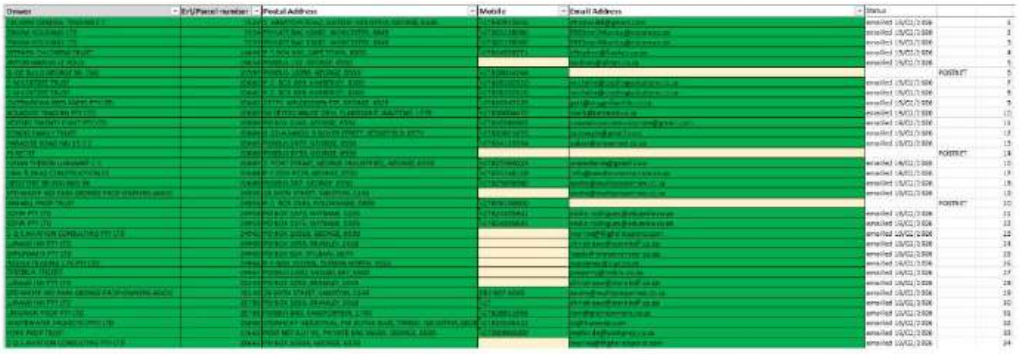


Figure 17: List of surrounding property owners**AFFECTED PARTIES – SURROUNDING OWNERS**

NO.	NAME & POSTAL/EMAIL ADDRESS	NO.	NAME & POSTAL/EMAIL ADDRESS
1	Erf 7534 CACARRE GENERAL TRADING C C 1 ABBATOIR ROAD, GEORGE INDUSTRIA, GEORGE, 6536 Email: shiqiwu88@gmail.com Tel: +27840915926	18	Erf 20689 GEELSTERT BELEGGINGS BK POSBUS 367, GEORGE, 6530 Email: andre@multiproperties.co.za Tel: +27825658560
2	Erf 7554 ESKOM HOLDINGS LTD PRIVATE BAG X3087, WORCESTER, 6849 Email: ERESmallMunics@eskom.co.za Tel: +27603238060	19	Erf 24955 STEINHOFF IND PARK GEORGE PROP OWNERS ASSOC 28 SIXTH STREET, SANDTON, 2146 Email: andre@multiproperties.co.za
3	Erf 7555 ESKOM HOLDINGS LTD PRIVATE BAG X3087, WORCESTER, 6849 Email: ERESmallMunics@eskom.co.za Tel: +27603238060	20	Erf 24956 BANNELL PROP TRUST P.O. BOX 2584, POLOKWANE, 0699 Tel: +27878136600
4	Erf 13486 GEORGE MUNICIPALITY	21	Erf 24958 EDFIN PTY LTD PO BOX 1376, WITBANK, 1035 Email: eddie.rodrigues@eduardo.co.za Tel: +27824305841

ANNEXURE G (continue)

AFFECTED PARTIES – SURROUNDING OWNERS			
NO.	**NAME & POSTAL/EMAIL ADDRESS**	**NO.**	**NAME & POSTAL/EMAIL ADDRESS**
5	Erf 14846 STEPHEN CHILDRENS TRUST P O BOX 636, CAPE TOWN, 8000 Email: eStephen@fowkes.co.za Tel: +27824578771	22	Erf 24959 EDFIN PTY LTD PO BOX 1376, WITBANK, 1035 Email: eddie.rodrigues@eduardo.co.za Tel: +27824305841
6	Erf 19654 ANTON MARIUS LE ROUX POSBUS 132, GEORGE, 6530 Email: andries@alrtpt.co.za	23	Erf 24962 D Q S AVIATION CONSULTING PTY LTD PO BOX 10326, GEORGE, 6530 Email: marina@thghelicopters.com
7	Erf 20597 SLIDE BUILD GEORGE BK (3A) POSBUS 10086, GEORGE, 6530 Tel: +27828014744	24	Erf 24965 LURAND INV PTY LTD PO BOX 1955, BRAMLEY, 2018 Email: christinaw@steinhoff.co.za
8	Erf 20680 D M COETZEE TRUST P.O. BOX 669, KIMBERLEY, 8300 Email: michelle@coolingsolutions.co.za Tel: +27828202920	25	Erf 24965 EXPLINAMIX PTY LTD PO BOX 924, STILBAAI, 6674 Email: loads@jmeyervervoer.co.za
9	Erf 20681 D M COETZEE TRUST P.O. BOX 669, KIMBERLEY, 8300 Email: michelle@coolingsolutions.co.za Tel: +27828202920	26	Erf 24966 ADZAM TRADING 176 PTY LTD P O BOX 201006, DURBAN NORTH, 4016 Email: marzenas@cipf.co.za
10	Erf 20682 OUTENIEKWA BEES KNEES PTY LTD 25772 WELGELEGEN EST, GEORGE, 6529 Email: gert@krugerfamilie.co.za Tel: +27826547235	27	Erf 24967 TREBLA TRUST POSBUS 2390, MOSSEL BAY, 6500 Email: property@trebla.co.za

ANNEXURE G (continue)

AFFECTED PARTIES – SURROUNDING OWNERS			
NO.	**NAME & POSTAL/EMAIL ADDRESS**	**NO.**	**NAME & POSTAL/EMAIL ADDRESS**
11	Erf 20683 AQUASIDE TRADING PTY LTD 64 BEYERS NAUDE DRIV, ELANDSDRIF, GAUTENG, 1739 Email: mark@netrand.co.za Tel: +27836004470	28	Erf 25243 LURAND INV PTY LTD PO BOX 1955, BRAMLEY, 2018 Email: christinaw@steinhoff.co.za
12	Erf 20684 VESTSEC TWENTY EIGHT PTY LTD PO BOX 2242, GEORGE, 6530 Email: coastalconcrete.concrete@gmail.com Tel: +27826580663	29	Erf 25243 STEINHOFF IND PARK GEORGE PROP OWNERS ASSOC 28 SIXTH STREET, SANDTON, 2146 Email: andre@multiproperties.co.za Tel: 082 927 4045
13	Erf 20684 ZONDO FAMILY TRUST 6 COLA SANDS, 9 DOVER STREET, SEDGEFIELD, 6573 Email: bcvisagie@gmail.com Tel: +27833021676	30	Erf 25783 LURAND INV PTY LTD PO BOX 1955, BRAMLEY, 2018 Email: christinaw@steinhoff.co.za
14	Erf 20685 PARADISE ROAD INV 25 C C POSBUS 2677, GEORGE, 6530 Email: sskon@wispernet.co.za Tel: +27824123334	31	Erf 25785 UNIGRAIN PROP PTY LTD POSBUS 860, RANDFONTEIN, 1760 Email: tom@graincarriers.co.za Tel: +27828911656
15	Erf 20686 PJ RETIEF POSBUS 9753, GEORGE, 6530	32	Erf 25808 WASTEWATER PROJECTS (PTY) LTD STEINHOFF INDUSTRIAL, PW BOTHA BLVD, TAMSUI INDUSTRIA, GEORGE, 6529 Email: es@hubersa.com Tel: +27829206422

ANNEXURE G (continue)

AFFECTED PARTIES – SURROUNDING OWNERS			
NO.	**NAME & POSTAL/EMAIL ADDRESS**	**NO.**	**NAME & POSTAL/EMAIL ADDRESS**
16	Erf 20687 JOHAN THERON LUGVAART C C 7 IVORY STRAAT, GEORGE INDUSTRIEEL, GEORGE, 6529 Email: wiesedanie@gmail.com Tel: +27825584624	33	Erf 27663 YORK PROP TRUST POST NET SUIT 91, PRIVATE BAG X6590, GEORGE, 6530 Email: mathilda@yorkprop.co.za
17	Erf 20688 CARL & BRAD CONSTRUCTION CC P O BOX 9579, GEORGE, 6530 Email: info@candbconstruction.co.za Tel: +27833248128	34	Erf 28660 D Q S AVIATION CONSULTING PTY LTD PO BOX 10326, GEORGE, 6530 Email: marina@thghelicopters.com

Table 2: List of affected property owners

5.5.1 Request for comments – Surrounding Property Owners:

Majority of the property owners were notified of the intention to develop via email, see an image of the email sent to affected property owners below.

ANNEXURE G (continue)

Rudolf Schröder

From: Rudolf Schröder
Sent: Thursday, 19 February 2026 13:59
Subject: REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT
Attachments: Metro Grounds motivation 20260205_signed2.pdf; Annexure E_Locality Plan.pdf; Annexure F_Subdivisional Layout Plan.pdf; Notice - Metro Grounds - 19 Feb2026.pdf; Zutari Letter_George_Metro Grounds.pdf

Good day

A land use planning application has been submitted in terms of section 15 of the Land use Planning By-Law for George Municipality, 2023 with respect to Erf 464, George.

The application consists of the following:

1. **Subdivision,** in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.
2. **Rezoning,** in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision,** in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

Attached please find a copy of the application.

As a neighbouring property owner to the site of application, you are invited to provide comments.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within **30 days** from the date of this letter, on or before **20 March 2026** using reference number 4541283 to the responsible Administrative Officer: Primrose Nako, pnako@george.gov.za, 044 801 9416. Please copy the applicant when sending comments: rudolf.schroder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Please do not hesitate to contact me should you have any queries.

Kind regards,

Rudolf Schröder *Pr. Pln, M.PMSA, MTRP*
ASSOCIATE SPECIALIST | ZUTARI

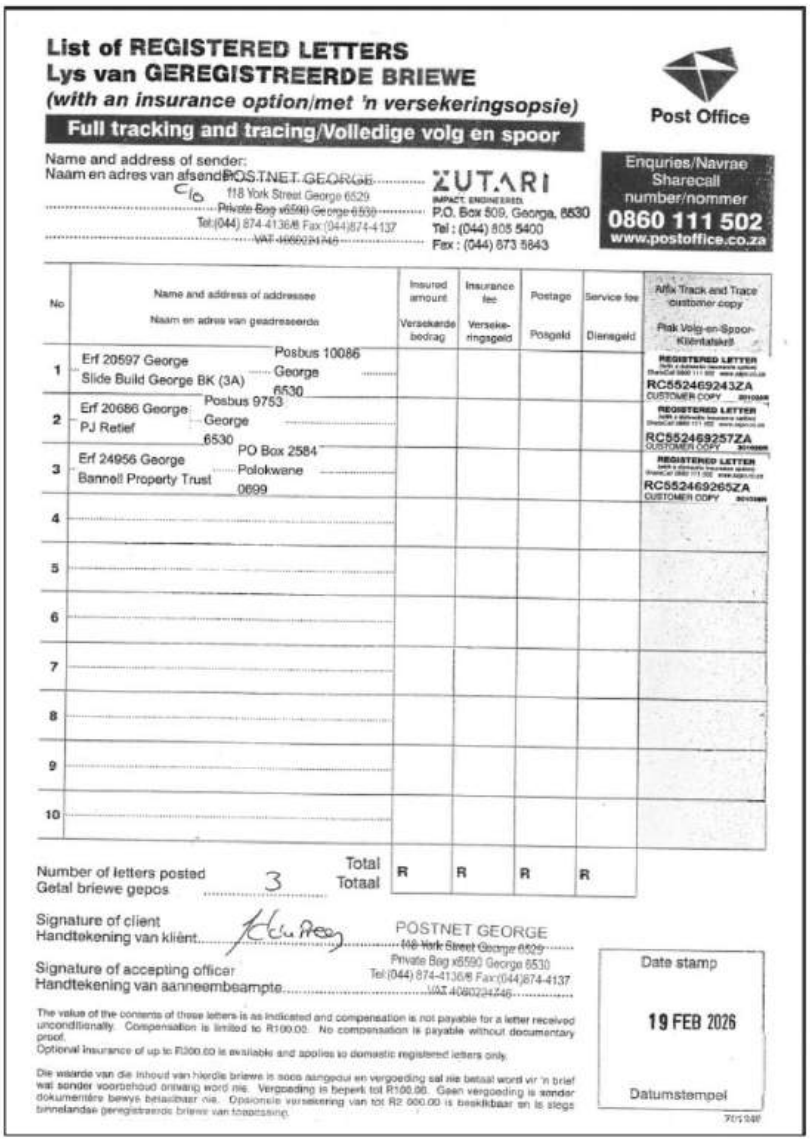
M +27833906983 E Rudolf.Schroder@zutari.com W zutari.com

1

Figure 18: Example of email sent to affected property owners

The remaining property owners were notified via registered mail, see below delivery notice as proof that the registered letters were sent.

ANNEXURE G (continue)



List of REGISTERED LETTERS
Lys van GEREGISTREERDE BRIEWE
(with an insurance option/met 'n versekeringsopsie)
Full tracking and tracing/Volledige volg en spoor

Post Office

Name and address of sender:
Naam en adres van afsender: POSTNET GEORGE
c/o 118 York Street George 6529
Private Bag x6590 George 6530
Tel:(044) 874-4136/8 Fax:(044)874-4137
VAT 4080234746

ZUTARI
IMPACT. ENGINEERED.
P.O. Box 509, George, 6530
Tel : (044) 805 5400
Fax : (044) 873 5843

Enquiries/Navrae Sharecall number/nommer
0860 111 502
www.postoffice.co.za

No	Name and address of addressee / Naam en adres van geadresseerde	Insured amount / Versekerde bedrag	Insurance fee / Versekeringsgeld	Postage / Posgeld	Service fee / Dienstgeld	Affix Track and Trace customer copy / Plak Volg-en-Spoor-Kliëntekaart
1	Erf 20597 George Slide Build George BK (3A) Posbus 10086 George 6530					REGISTERED LETTER RC552469243ZA CUSTOMER COPY
2	Erf 20686 George PJ Retief Posbus 9753 George 6530					REGISTERED LETTER RC552469257ZA CUSTOMER COPY
3	Erf 24956 George Bannell Property Trust PO Box 2584 Polokwane 0699					REGISTERED LETTER RC552469265ZA CUSTOMER COPY
4						
5						
6						
7						
8						
9						
10						
	Total / Totaal	R	R	R	R	

Number of letters posted / Getal briewe gepos: 3

Signature of client / Handtekening van kliënt:

Signature of accepting officer / Handtekening van aanneembeampte:

POSTNET GEORGE
118 York Street George 6529
Private Bag x6590 George 6530
Tel:(044) 874-4136/8 Fax:(044)874-4137
VAT 4080234746

Date stamp
19 FEB 2026
Datumstempel

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100.00. No compensation is payable without documentary proof.
Optional insurance of up to R300.00 is available and applies to domestic registered letters only.

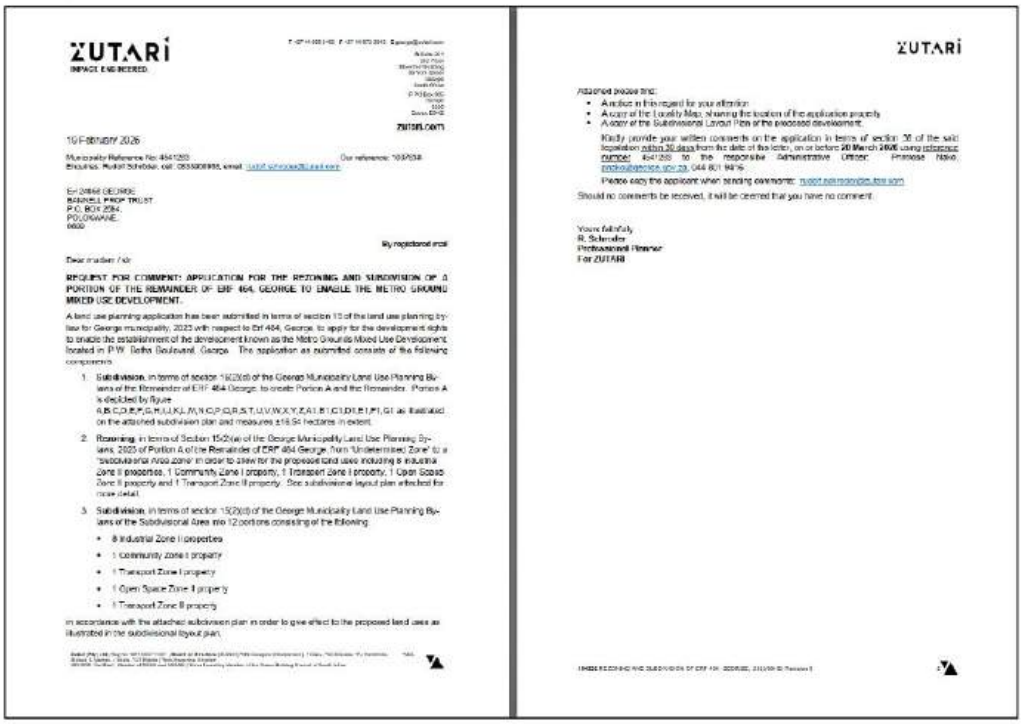
Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100.00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000.00 is beskikbaar en is slegs binnelandse geregistreerde briewe van toepassing.

Figure 19: Delivery proof of registered letters – sample

See the proof that registered letters were sent to property owners attached as **Annexure C.**

ANNEXURE G (continue)

Below is an example of the letter that was sent to the surrounding property owners via email and registered mail.



ZUTARI
IMPACT ENGINEERED

19 FEBRUARY 2026

Municipality Reference No: 4641/265 Our reference: 1937/SR
Enquiries: Rudolf Schröder, cell: 0833008995, email: rudolf.schroeder@zutari.com

Erf 24846 GEORGE
BARNELL PROP TRUST
P.O. BOX 2364
POLOKWANE
0600

By registered mail

Dear madam / sir

REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF A PORTION OF THE REMAINDER OF ERF 464, GEORGE TO ENABLE THE METRO GROUND MIXED USE DEVELOPMENT.

A land use planning application has been submitted in terms of section 15 of the land use planning by-law for George municipality, 2023 with respect to Erf 464, George, to apply for the development rights to enable the establishment of the development known as the Metro Ground's Mixed Use Development, located in P.W. Botha Boulevard, George. The application as submitted consists of the following components:

1. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D,E,F,G1 as illustrated on the attached subdivision plan and measures ±16.94 hectares in extent.
2. **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from 'Undetermined Zone' to a 'Subdivisional Area zone' in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 community zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

ZUTARI

Attached please find:
- Auction in this regard for your attention
- A copy of the Locality Map, showing the location of the application property
- A copy of the Subdivisional Layout Plan of the proposed development.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within 30 days from the date of this letter, on or before **20 March 2026** using reference number: 4641/265 to the responsible Administrative Officer: Phineas Ndou, pndou@george.gov.za, 044 801 9876.

Please copy the applicant when sending comments: rudolf.schroeder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Yours faithfully,
R. Schroder
Professional Planner
For ZUTARI

Figure 20: Example of letter sent requesting comments from surrounding owners.

6 CLOSING DATE FOR COMMENTS

According to the advert placed in the George Herald on Thursday 19 February 2026, the closing date for comments was 20 March 2026. Notifications to surrounding property owners were sent on 19 February via email and registered mail. External departments were also notified on 19 February 2026 via email. The closing date for comments was therefore 20 April 2026 for the external departments and 20 March 2026 for the public including surrounding property owners.

7 COMPLIANCE WITH PUBLIC PARTICIPATION REQUIREMENTS

In accordance with the requirements of the George Municipality Land Use Planning By-laws, 2023, the applicant hereby furnishes the Town Planning department with the following documents as proof that the public participation requirements have been met:

- Copies of the notice placed in the local newspaper (the copy reflects the original date of the newspaper; the date is not written by hand).

ANNEXURE G (continue)

- Proof of the notices sent to the surrounding property owners.
- Proof of the notices sent to the external departments and Ward Councillor.
- Proof of site notice erected in one place at one location on the site
- Proof of placement on the Municipal website and the Municipality's Facebook page

8 COMMENTS RECEIVED

On the date of writing this report no comments were received from the general public, in response to the notice, comments were received from the George Municipality internal Departments, and 3 comments were received from external departments, as detailed below.

Refer to Annexure G – Comments received, as well as the section below that address the comments received.

8.1 Comments from Internal Departments

The following comments were received from the George Municipality's internal departments

1. **ENVIRONMENTAL:** In Order, the application is supported, subject to compliance with the requirements set out in the Environmental Authorisation (if granted).
    - A detailed landscaping plan must be prepared for the Open Space Zone (Erf No. 11). The area is to be utilised for additional tree planting and landscaping to enhance the visual amenity, ecological function, and overall entrance character of the mixed-use development.
2. **CIVIL ENGINEERING:** In order, see Land use conditions attached.
3. **CIVIL ENGINEERING TRAFFIC:** In order.
4. **WASTE:** In order, to be compliant with Waste Management By-Law.
5. **ELECTRO TECHNICAL:** In order, rezoning and sub-division noted. Electricity development charges to be applicable on connection / transfer of sub-divided erven.
6. **PARKS:** In order.
7. **SPATIAL:** In order, the proposed development aligns with the intent of Council and the George MSDF's strategic planning
8. **BUILDING CONTROL:** In order. Supported subject to:
    - Building plan to be submitted in terms of section 4 of the National Building Regulations and Building Standards Act, 103 of 1977, for the development.
    - Building plans to comply with SANS 10400 and any other applicable legislation.
    - No construction may be commenced until such time as a building plan has been approved.
    - The property may only be used for the intended purpose once a Certificate of Occupation has been issued. Further comments will be provided on submission of building plans.
    - Additional building plan application fees, calculated in terms of the approved tariffs, will be applicable should structures already be commenced with or completed without the approval of the Local Authority.

ANNEXURE G (continue)

Response to comments:

All comments from the George Municipality's internal departments have been noted, no comments received impact the land use planning application. No responses to the comments were required.

8.2 Comments from External Departments

Comments from the GIPTN (Go George)

The GIPTN Unit responded noting no objection to the proposed application for rezoning and subdivision subject to the following: Bulbine Street can accommodate large buses for possible future use, including indented bays on either side. This is especially important due to the fact that access into the proposed future bus depot would likely be off Bulbine Street.

Response to comments:

No response to the GIPTN Unit was required.

Comments from the Western Cape Education Department

The Western Cape Department of Education (WCED) noted its objection to the application on the basis that it is the third land use application in relation to Erf 464, George (Metrogrounds) that does not make provision for educational facilities. The WCED requires a minimum of 2.5 hectares being set aside for a secondary school facility within the portion designated for educational purposes.

Response to comments:

The George Municipality is proposing an educational property that measures roughly 5.34ha in size as part of the Metrogrounds development. Also noted with regards to educational facilities currently available in George, there are about 8 school sites available that measure roughly 25ha in size. There is also the Olympia School site that is under development with about 34ha of vacant land.

In previous discussions the potential development of an education site on the property directly opposite the Gwayang Development area has been considered. The George Municipality is also considering the possibility of a school site on the future riding club development. A previous development concept for the Garden Route Dam site also included educational facilities of around 13.66ha in size.

The concern raised about the lack of educational facilities in George is noted. However, sufficient space is available for the development of schools in George, and future planning by the George Municipality includes consideration of additional school sites.

The provision of a tertiary educational facility on the Metrogrounds development is in direct response to a demand for such a facility identified by the municipality.

Comments from Cape Nature

Comments from CapeNature only pertain to the biodiversity related impacts and not to the overall desirability of the application. CapeNature has previously submitted comments on the Draft Basic Assessment Report (dBAR) for the proposed Metro Grounds Mixed-Use Development. CapeNature confirms that the comments in respect to the current application remain unchanged and are application to the current application. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

ANNEXURE G (continue)

Response to comments:

Comments are being addressed as part of the Environmental Authorisation Application. No comments received impacting on the land use planning application.

9 CONCLUSION

The objective of this Public Participation Report is to outline the public participation and Stakeholder engagement process that was followed, following the submission for the land use planning application in terms of provisions of the George Municipality Land Use Planning By-law, 2023 to obtain approval for the rezoning and subdivision of a portion of the Remainder of Erf 464 George to create the proposed Metro Grounds Mixed-use development.

The public participation process followed was in strict compliance with the specifications of the George Municipality Land Use Planning By-law, 2023.

This Public Participation report details the outcomes of the public participation process. Two comments have been received, however none of the comments received hinders the development from proceeding or requires any amendments to the layout plan or proposed land uses.

By my signature below I certify the accuracy of the information above.

Rudolf Schröder Pr. Pln A/151/2009
Professional Planner
PP Zutari (Pty) Ltd

CRSchröder — Signature

30 April 2026 — Date

ANNEXURE G (continue)

ANNEXURES

Annexure A – Letter received from George Municipality with PPP instructions (section 38 Compliance Letter).

Annexure B – Emails sent to the external departments and ward councillor

Annexure C – Proof of Registered letters sent.

Annexure D – Proof of emails sent to SURROUNDING PROPERTY OWNERS.

Annexure E – minutes of the pre-application consultation

Annexure F – subdivisional layout plan

Annexure G – Comments received.

ANNEXURE G (continue)

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Document Prepared by:

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Bloemhof Building
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George

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6530

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E george@zutari.com

ZUTARI

zutari.com

ANNEXURE G (continue)

ANNEXURE A – LETTER RECEIVED FROM GEORGE MUNICIPALITY WITH PPP INSTRUCTIONS (SECTION 38 COMPLIANCE LETTER)

ANNEXURE G (continue)

GEORGE
THE CITY FOR ALL REASONS

Enquiries: Primrose Nako
email: pnako@george.gov.za
Human Settlements, Planning and Development
Town Planning
044 801 9416/ 9171/ 9473

PORTAL APPLICATION REFERENCE: 4541283
INTERNAL REFERENCE: 4022632

DATE: 2026-02-09

APPLICANT NAME: Rudolf Schroder
EMAIL ADDRESS: rudolf.schroder@gmail.com

In terms of the Protection of Personal Information Act (POPIA) all correspondence will be communicated directly and only to the applicant as stated above. No information will be given to any third party and/or landowner (if the landowner is not the applicant).

COMPLIANCE LETTER (SECTION 38 OF LUP BY-LAW, 2023)
APPLICATION IN TERMS OF SECTIONS 15(2)(a) & (d) OF THE LAND USE PLANNING BY-LAW, 2023 FOR REZONING AND SUBDIVISION ON A PORTION OF REMAINDER ERF 464, GEORGE (METRO GROUND MIXED USE DEVELOPMENT)

PROPERTY: ERF/PORTION 464/
A mixed-use industrial development on a portion of the Remainder of Erf 464, George.

The above-mentioned application submitted dated **2026-02-05** is deemed complete in terms of Section 38 of the Land Use Planning By-law for George Municipality, 2023. Application for:

- **Subdivision**
- **Rezoning**
- **Subdivision**

Once payment is done, email the proof of payment to **Camilla Coeries** - Ccoeries@george.gov.za or **Werner Joubert** WCJOUBERT@george.gov.za . An acknowledgement email will be sent to the applicant to confirm receipt of payment.

Once acknowledgement of receipt has been received, the applicant may advertise the application in accordance with the Public Participation Instruction available on the municipality's website. Please upload the proof of Public Participation document on the Land Use Portal as Supporting Documents on the current Application 4541283.

All enquiries follow ups and documentation submissions need to be directed to the relevant *case officer* **Primrose Nako** email: pnako@george.gov.za.

The relevant Town Planner **Khuliso Mukhovha**, should be copied in the e-mail: kjmukhovha@george.gov.za as well as the relevant Senior Town Planners, **Naudica Swanepoel** (even erf numbers) nswanepoel@george.gov.za or **Ilane Huyser** (uneven erf numbers) ihuyser@george.gov.za.

The applicant shall also obtain comments from the following external departments and interested, and affected parties as indicated below.

ANNEXURE G (continue)

- ***Heritage Western Cape***
- ***Dept. Transport & Public Works (DRE)***
- ***DEA&DP – Planning and Development***
- ***Ward Councillor (30 days)***
- ***GIPTN Unit Manager***
- ***Western Cape Dept. Agriculture (Elsenburg)***
- ***Dept. Water Affairs (Western Cape)***
- ***Western Cape Dept. of Education***
- ***DEA&DP – Environmental Affairs***
- ***Dept. of Agriculture, Forestry & Fishery (DAFF)***
- ***Cape Nature***

Note: All state departments and organs of the state must be provided 60 days to comment on applications.

Please take note that all addresses/contact details provided by the Municipality is deemed to be private information and may only be utilized for public participation purposes in terms of the Land Use Planning By-Law for the George Municipality. The said address may not be used, distributed or sold to a 3rd party.

Please be advised that the Municipality may request additional information or documentation deemed necessary to consider the application in terms of Section 42 of the Land Use Planning By-law for George Municipality, 2023.

Yours faithfully

Khuliso Mukhovha
Town Planner
Human Settlements, Planning and Development

ANNEXURE G (continue)

ANNEXURE B – EMAILS SENT TO THE EXTERNAL DEPARTMENTS AND WARD COUNCILLOR

ANNEXURE G (continue)

Rudolf Schröder

From:	Rudolf Schröder
Sent:	Thursday, 19 February 2026 14:46
Subject:	REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT
Attachments:	Metro Grounds motivation 20260205_signed2.pdf; Annexure E_Locality Plan.pdf; Annexure F_Subdivisional Layout Plan.pdf

Good day

A land use planning application has been submitted in terms of section 15 of the Land use Planning By-Law for George Municipality, 2023 with respect to Erf 464, George.

The application consists of the following:

1. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.
2. **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

Attached please find a copy of the application.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within **60 days** from the date of this letter using reference number 4541283 to the responsible Administrative Officer: Primrose Nako, pnako@george.gov.za, 044 801 9416. Please copy the applicant when sending comments: rudolf.schroder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Please do not hesitate to contact me should you have any queries.

Kind regards,

Rudolf Schröder *Pr. Pln, M.PMSA, MTRP*
ASSOCIATE SPECIALIST | ZUTARI

M +27833906963 **E** Rudolf.Schroder@zutari.com **W** zutari.com

1

ANNEXURE G (continue)

DISCLAIMER

ANNEXURE G (continue)

Rudolf Schröder

From:	Rudolf Schröder
Sent:	Thursday, 19 February 2026 13:52
Subject:	REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT
Attachments:	Metro Grounds motivation 20260205_signed2.pdf; Annexure E_Locality Plan.pdf; Annexure F_Subdivisional Layout Plan.pdf

Good day

A land use planning application has been submitted in terms of section 15 of the Land use Planning By-Law for George Municipality, 2023 with respect to Erf 464, George.

The application consists of the following:

1. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.
2. **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

Attached please find a copy of the application.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within **60 days** from the date of this letter using reference number 4541283 to the responsible Administrative Officer: Primrose Nako, pnako@george.gov.za, 044 801 9416. Please copy the applicant when sending comments: rudolf.schroder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Please do not hesitate to contact me should you have any queries.

Kind regards,

Rudolf Schröder *Pr. Pln, M.PMSA, MTRP*
ASSOCIATE SPECIALIST | ZUTARI

M +27833906983 **E** Rudolf.Schroder@zutari.com **W** zutari.com

ANNEXURE G (continue)

DISCLAIMER

ANNEXURE G (continue)

ANNEXURE C – PROOF OF REGISTERED LETTERS SENT

ANNEXURE G (continue)

List of REGISTERED LETTERS
Lys van GEREGISTREERDE BRIEWE
(with an insurance option/met 'n versekeringsopsie)

Full tracking and tracing/Volledige volg en spoor

Post Office

Name and address of sender:
Naam en adres van afsender POSTNET GEORGE
C/o 118 York Street George 6529
Private Bag x6590 George 6530
Tel:(044) 874-4136/8 Fax:(044)874-4137
VAT 4080224746

ZUTARI
IMPACT. ENGINEERED.
P.O. Box 509, George, 6530
Tel : (044) 805 5400
Fax : (044) 873 5843

Enquiries/Navrae Sharecall number/nommer
0860 111 502
www.postoffice.co.za

No	Name and address of addressee / Naam en adres van geadreseerde	Insured amount / Versekerde bedrag	Insurance fee / Verseke-ringsgeld	Postage / Posgeld	Service fee / Diensgeld	Affix Track and Trace customer copy / Plak Volg-en-Spoor-Kliëntafskrif
1	Erf 20597 George Slide Build George BK (3A) Posbus 10086 George 6530					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC552469243ZA CUSTOMER COPY 301028R
2	Erf 20686 George PJ Retief Posbus 9753 George 6530					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC552469257ZA CUSTOMER COPY 301028R
3	Erf 24956 George Bannell Property Trust PO Box 2584 Polokwane 0699					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC552469265ZA CUSTOMER COPY 301028R
4						
5						
6						
7						
8						
9						
10						
	Total / Totaal	R	R	R	R	

Number of letters posted / Getal briewe gepos: 3

Signature of client / Handtekening van kliënt: [signature]

POSTNET GEORGE
118 York Street George 6529
Private Bag x6590 George 6530
Tel:(044) 874-4136/8 Fax:(044)874-4137
VAT 4080224746

Signature of accepting officer / Handtekening van aanneembeampte:

Date stamp
19 FEB 2026
Datumstempel

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100.00. No compensation is payable without documentary proof.
Optional insurance of up to R200.00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100.00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000.00 is beskikbaar en is slegs binnelandse geregistreerde briewe van toepassing.

791348

ANNEXURE G (continue)

ANNEXURE D – PROOF OF EMAILS SENT TO SURROUNDING PROPERTY OWNERS

ANNEXURE G (continue)

Rudolf Schröder

From: Rudolf Schröder
Sent: Thursday, 19 February 2026 13:59
Subject: REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT
Attachments: Metro Grounds motivation 20260205_signed2.pdf; Annexure E_Locality Plan.pdf; Annexure F_Subdivisional Layout Plan.pdf; Notice - Metro Grounds - 19 Feb2026.pdf; Zutari Letter_George_Metro Grounds.pdf

Good day

A land use planning application has been submitted in terms of section 15 of the Land use Planning By-Law for George Municipality, 2023 with respect to Erf 464, George.

The application consists of the following:

1. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.
2. **Rezoning**, in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
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   - 1 Transport Zone I property
   - 1 Open Space Zone II property
   - 1 Transport Zone II property

   in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

Attached please find a copy of the application.

As a neighbouring property owner to the site of application, you are invited to provide comments.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within **30 days** from the date of this letter, on or before **20 March 2026** using reference number 4541283 to the responsible Administrative Officer: Primrose Nako, pnako@george.gov.za, 044 801 9416. Please copy the applicant when sending comments: rudolf.schroder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Please do not hesitate to contact me should you have any queries.

Kind regards,

Rudolf Schröder *Pr. Pln, M.PMSA, MTRP*
ASSOCIATE SPECIALIST | ZUTARI

M +27833906963 **E** Rudolf.Schroder@zutari.com **W** zutari.com

1

ANNEXURE G (continue)

DISCLAIMER

ANNEXURE G (continue)

ANNEXURE E – MINUTES OF THE PRE-APPLICATION CONSULTATION

ANNEXURE G (continue)

Planning and Development
E-mail: town.planning.application@george.gov.za
Tel: +27 (0)44 801 9477

LAND USE PLANNING PRE-APPLICATION CONSULTATION FORM

PLEASE NOTE:

Pre-application consultation is an advisory session and is required prior to submission of an application for rezoning, consent use, temporary departure and subdivision. It does not in any way pre-empt the outcome of any future application which may be submitted to the Municipality.

PART A: PARTICULARS

Reference number: **Collab Ref. No.: 3505358**

Purpose of consultation: **Preapplication consultation for the proposed Metro Grounds development at the intersection of PW Botha Boulevard and Ossie Urban Street roughly halfway between Nelson Mandela Boulevard and York Street in the George Industrial area, George.**

Brief proposal: **To create a industrial development's intent is to accommodate light industry erven, appropriate to the site context and facilitating small- and medium enterprise development.**

Property(ies) description: **Remainder of Erf 464, George**

Date: **04 December 2024**

Attendees:

	Name & Surname	Organisation	Contact Number	E-mail
Official	Naudica Swanepoel	George Municipality	044 801 9477	kjmukhovha@george.gov.za
Pre-applicant	Rudolf Schröder	Zutari	083 390 6963	Rudolf.Schroder@zutari.com

ANNEXURE G (continue)

Documentation provided for discussion:

(Include document reference, document/plan dates and plan numbers where possible and attach to this form)

Pre-planning motivation report, Subdivisional layout plan, SG diagrams, Title deed, and locality map.

Has pre-application been undertaken for a Land Development application with the Department of Environmental Affairs & Development Planning (DEA&DP)?

(If so, please provide a copy of the minutes)

YES	NO
X	

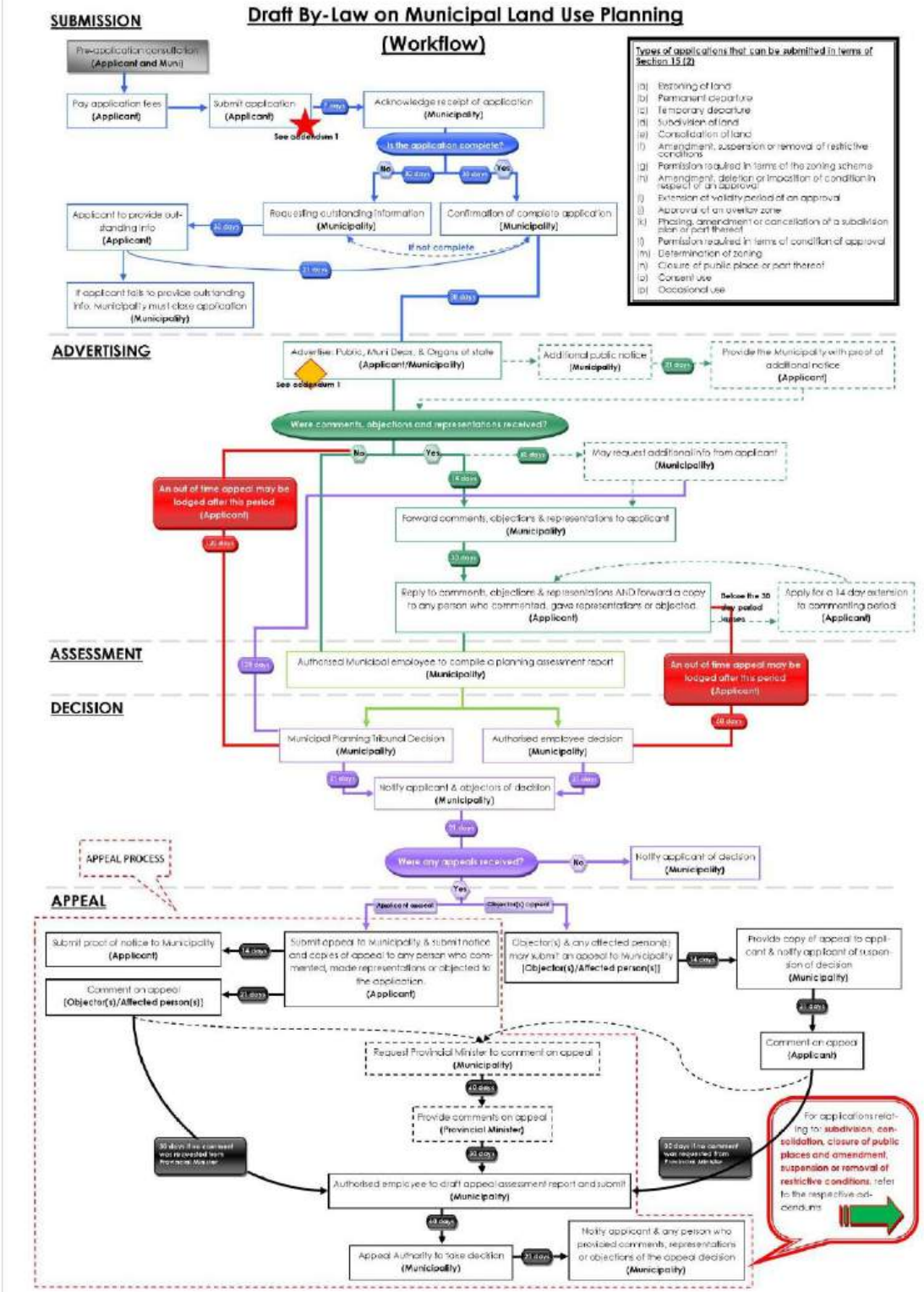
Comprehensive overview of proposal:

The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate an industrial development. The industrial development's intent is to accommodate light industry erven, appropriate to the site context and facilitating small- and medium enterprise development. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility. The proposed development does not require the future Rand Street extension for access or to make it functional. The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development. The site is flanked on two of the three sites by the Skaapkop river. The current zoning of the subject area is "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw,2023. The main objective of the project is to build on the previous work and studies already conducted and to finalise and submit the required development rights applications (town planning application, environmental authorisation, General Plan approval). The intension is to submit an application in terms of section(15)(2) of the George Municipal Land Use Planning By Law, 2023 for the rezoning and subdivision of the Remainder of Erf 464, George in order to allow for the proposed Metro Grounds development as per the attached Subdivisional layout plan. See attached pre-application motivation report for more detail.

ANNEXURE G (continue)

PART B: APPLICATION PROCESS

(WILL FULLY APPLY ONLY ONCE LUPA REGULATIONS ARE IN FORCE)



ANNEXURE G (continue)

PART C: QUESTIONNAIRES

SECTION A:
DETERMINATION OF APPLICATION TYPES, PRESCRIBED NOTICE AND ADVERTISEMENT PROCEDURES

Tick if relevant		What land use planning applications are required?	Application fees payable
X	**2(a)**	**a rezoning of land;**	**R**
	2(b)	a permanent departure from the development parameters of the zoning scheme;	R
	2(c)	a departure granted on a temporary basis to utilise land for a purpose not permitted in terms of the primary rights of the zoning applicable to the land;	R
X	**2(d)**	**a subdivision of land that is not exempted in terms of section 24, including the registration of a servitude or lease agreement;**	**R**
	2(e)	a consolidation of land that is not exempted in terms of section 24;	R
	2(f)	a removal, suspension or amendment of restrictive conditions in respect of a land unit;	R
	2(g)	a permission required in terms of the zoning scheme;	R
	2(h)	an amendment, deletion or imposition of conditions in respect of an existing approval;	R
	2(i)	an extension of the validity period of an approval;	R
	2(j)	an approval of an overlay zone as contemplated in the zoning scheme;	R
	2(k)	an amendment or cancellation of an approved subdivision plan or part thereof, including a general plan or diagram;	R
	2(l)	a permission required in terms of a condition of approval;	R
	2(m)	A determination of a zoning;	R
	2(n)	A closure of a public place or part thereof;	R
	2(o)	a consent use contemplated in the zoning scheme;	R
	2(p)	an occasional use of land;	R
	2(q)	to disestablish a home owner's association;	R
	2(r)	to rectify a failure by a home owner's association to meet its obligations in respect of the control over or maintenance of services;	R
	2(s)	a permission required for the reconstruction of an existing building that constitutes a non-conforming use that is destroyed or damaged to the extent that it is necessary to demolish a substantial part of the building	R
Tick if relevant		**What prescribed notice and advertisement procedures will be required?**	**Advertising fees payable**
Y	N	Serving of notices (i.e. registered letters etc.)	R
Y	N	Publication of notices (i.e. Provincial Gazette, Local Newspaper(s) etc.)	R
Y	N	Additional publication of notices (i.e. Site notice, public meeting, local radio,	R

ANNEXURE G (continue)

		website, letters of consent etc.)	
Y	N	Placing of final notice (i.e. Provincial Gazette etc.)	R
		TOTAL APPLICATION FEE* (VAT excluded):	R

PLEASE NOTE: * *Application fees are estimated on the information discussed and are subject to change with submission of the formal application and/or yearly application fee increase.*

SECTION B:

PROVISIONS IN TERMS OF THE RELEVANT PLANNING LEGISLATION / POLICIES / GUIDELINES

QUESTIONS REGARDING PLANNING POLICY CONTEXT	YES	NO	TO BE DETERMINED	COMMENT
Is any Municipal Integrated Development Plan (IDP)/Spatial Development Framework (SDF) and/or any other Municipal policies/guidelines applicable? If yes, is the proposal in line with the aforementioned documentation/plans?			X	**Motivate George Municipal Spatial Development Framework and LSDF**
Any applicable restrictive condition(s) prohibiting the proposal? If yes, is/are the condition(s) in favour of a third party(ies)? [List condition numbers and third party(ies)]			X	**Conveyancer certificate required to confirm**
Any other Municipal by-law that may be relevant to application? (If yes, specify)		X		
Zoning Scheme Regulation considerations: Which zoning scheme regulations apply to this site? **George Integrated Zoning Scheme Bylaw, 2023** What is the current zoning of the property? **Undetermined Use Zone** What is the proposed zoning of the property? **Subdivisional area zone** Does the proposal fall within the provisions/parameters of the zoning scheme? **TBD** Are additional applications required to deviate from the zoning scheme? (if yes, specify) **No**				

ANNEXURE G (continue)

QUESTIONS REGARDING OTHER PLANNING CONSIDERATIONS	YES	NO	TO BE DETERMINED	COMMENT
Is the proposal in line with the Provincial Spatial Development Framework (PSDF) and/or any other Provincial bylaws/policies/guidelines/documents?			X	**Motivate PSDF**
Are any regional/district spatial plans relevant? If yes, is the proposal in line with the document/plans?		X		

SECTION C:

CONSENT / COMMENT REQUIRED FROM OTHER ORGANS OF STATE

OUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
Is/was the property(ies) utilised for agricultural purposes?		X		Western Cape Provincial Department of Agriculture
Will the proposal require approval in terms of Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)?		X		National Department of Agriculture
Will the proposal trigger a listed activity in terms of National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)?			X	Western Cape Provincial Department of Environmental Affairs & Development Planning (DEA&DP)
Will the proposal require authorisation in terms of ~~Specific Environmental Management Act(s) (SEMA)? (National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (NEM:PAA) / National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEM:BA) / National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) (NEM:AQA) / National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008) (NEM:ICM) / National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM:WA)~~ (strikethrough irrelevant)			X	
Will the proposal require authorisation in terms of the National Water Act, 1998 (Act 36 of 1998)?			X	National Department of Water & Sanitation (DWS)
Will the proposal trigger a listed activity in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?			X	South African Heritage Resources Agency (SAHRA) & Heritage Western

ANNEXURE G (continue)

QUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
				Cape (HWC)
Will the proposal have an impact on any National or Provincial roads?		X		National Department of Transport / South Africa National Roads Agency Ltd. (SANRAL) & Western Cape Provincial Department of Transport and Public Works (DTPW)
Will the proposal trigger a listed activity in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations		X		National Department of Labour (DL)
Will the proposal affect any Eskom owned land and/or servitudes?		X		Eskom
Will the proposal affect any Telkom owned land and/or servitudes?		X		Telkom
Will the proposal affect any Transnet owned land and/or servitudes?		X		Transnet
Is the property subject to a land / restitution claims?		X		National Department of Rural Development & Land Reform
Will the proposal require comments from SANParks and/or CapeNature?		X		SANParks / CapeNature
Will the proposal require comments from DEFF?		X		Department of Environment, Forestry and Fishery
Is the property subject to any existing mineral rights?		X		National Department of Mineral Resources
Does the proposal lead to densification to such an extent that the number of schools, healthcare facilities, libraries, safety services, etc. In the area may be impacted on? (strikethrough irrelevant)		X		Western Cape Provincial Departments of Cultural Affairs & Sport (DCAS), Education, Social Development, Health and Community Safety

SECTION D:

SERVICE REQUIREMENTS

DOES THE PROPOSAL REQUIRE THE FOLLOWING ADDITIONAL INFRASTRUCTURE / SERVICES?	YES	NO	TO BE DETERMINED	OBTAIN COMMENT FROM: (list internal department)

ANNEXURE G (continue)

Electricity supply:			X	Directorate: Electro-technical Services
Water supply:			X	Directorate: Civil Engineering Services
Sewerage and waste water:			X	Directorate: Civil Engineering Services
Stormwater:			X	Directorate: Civil Engineering Services
Road network:			X	Directorate: Civil Engineering Services
Telecommunication services:			X	
Other services required? Please specify.			X	
Development charges:			X	

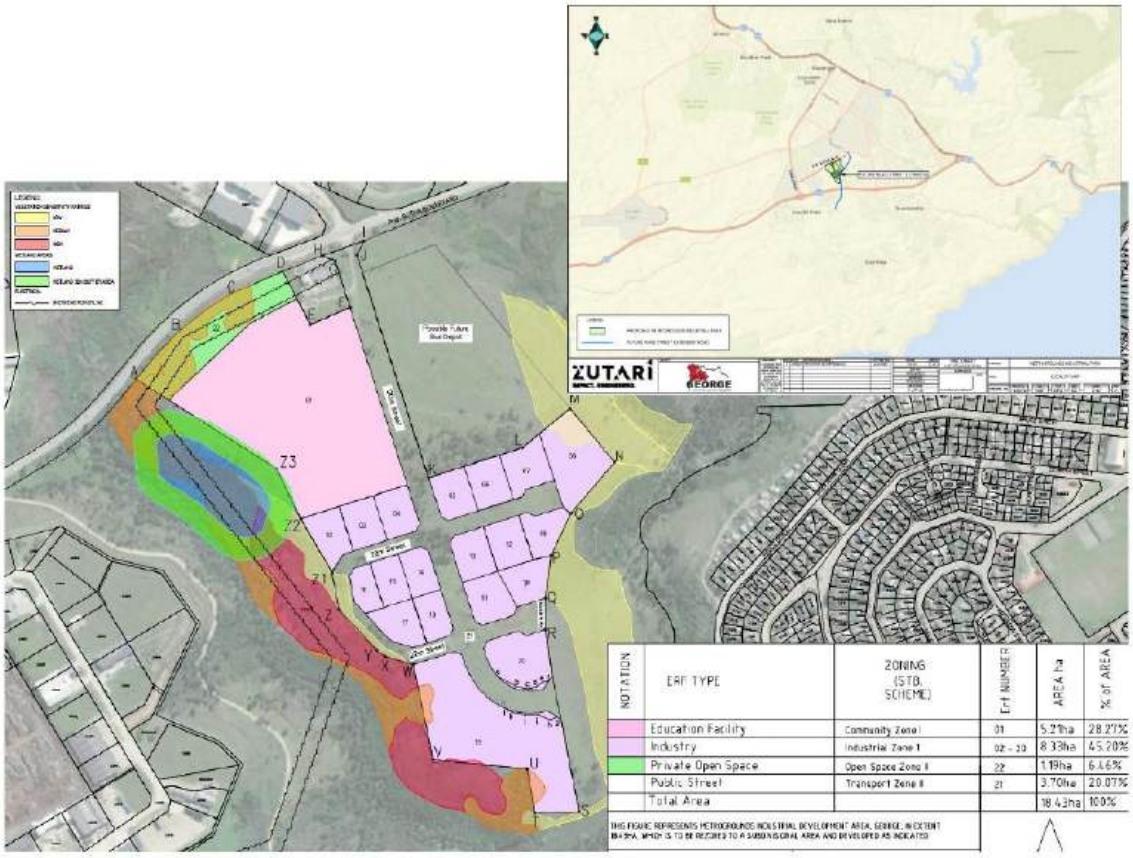
PART D: COPIES OF PLANS / DOCUMENTS TO BE SUBMITTED AS PART OF THE APPLICATION

COMPULSORY INFORMATION REQUIRED:						
Y	N	Power of Attorney / Owner's consent if applicant is not owner (if applicable)		**Y**	N	S.G. noting sheet extract / Erf diagram / General Plan
Y	N	Motivation report / letter		**Y**	N	Full copy of the Title Deed
Y	N	Locality Plan		**Y**	N	Site Layout Plan
Y	N	Proof of payment of fees		Y	**N**	Bondholder's consent
MINIMUM AND ADDITIONAL REQUIREMENTS:						
Y	N	Site Development Plan		**Y**	N	Conveyancer's Certificate
Y	N	Land Use Plan		**Y**	N	Proposed Zoning plan
Y	N	Phasing Plan		Y	**N**	Consolidation Plan
Y	**N**	Abutting owner's consent		**Y**	N	Landscaping / Tree Plan
Y	N	Proposed Subdivision Plan (including street names and numbers)		Y	**N**	Copy of original approval letter
Y	N	Services Report or indication of all municipal services / registered servitudes		Y	**N**	Home Owners' Association consent
Y	N	Copy of Environmental Impact Assessment (EIA) / ~~Heritage Impact Assessment (HIA) /~~ **Traffic Impact Assessment (TIA)** / ~~Traffic Impact Statement (TIS) / Major Hazard Impact Assessment (MHIA) / Environmental Authorisation (EA) / Record of Decision (ROD)~~ (strikethrough irrelevant)		Y	**N**	1 : 50 / 1:100 Flood line determination (plan / report)
Y	N	Other (specify)		Y	N	Required number of documentation copies

ANNEXURE G (continue)

PART E: DISCUSSION

- The proposal was submitted with proposed locality plan and subdivision plan as indicated below and discussed at the pre-application meeting held on 4 December 2024.



Town Planning

- The motivation to include indication of how the proposal is in line with the spatial policies and objective of the area. Please include motivation in terms of SPLUMA, LUPA, MSDF and LSDF.
- It is acknowledged that the applicant has already commenced with relevant studies, which should form part of the application.

Note

- The Directorates: CES and ETS did not attend the meeting, please consult with relevant officials from the two directorates for their formal comments prior to submitting the application.

PART F: SUMMARY / WAY FORWARD

You may proceed to submit the application that addresses the above issues.

OFFICIAL: KHULISO MUKHOVHA (TOWN PLANNER / CASE OFFICER)

ANNEXURE G (continue)

OFFICIAL: NAUDICA SWANEPOEL	**PRE-APPLICANT: RUDOLF SCHRÖDER**
SIGNED:	**SIGNED:**
DATE: 11 DECEMBER 2024	**DATE: 4 DECEMBER 202**

** Please note that the above comments are subject to the documents and information available to us at the time of the pre-application meeting and we reserve our rights to elaborate on this matter further and/or request more information/documents should it be deemed necessary.*

ANNEXURE G (continue)

ANNEXURE F – SUBDIVISIONAL LAYOUT PLAN

ANNEXURE G (continue)

ANNEXURE G (continue)

ANNEXURE G – COMMENTS RECEIVED

ANNEXURE G (continue)

Rudolf Schröder

From: Derek Jacobs
Sent: Tuesday, 24 February 2026 16:16
To: Rudolf Schröder
Cc: Morne Lakay; rene.casanova
Subject: RE: REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT

Good afternoon Rudolph

The GIPTN has no objection to the proposed rezoning and subdivision, subject to the following:

1. Bulbine Street can accommodate large buses for possible future use, including indented bays on either side. This is especially important due to the fact that access into the proposed future bus depot would likely be off Bulbine Street

Regards

Derek Jacobs *Project Management Professional (PMP), MSS Town Planning*
ASSOCIATE | ZUTARI

E Derek.Jacobs@zutari.com **W** zutari.com

DISCLAIMER

From: Rudolf Schröder <Rudolf.Schroder@zutari.com>
Sent: Thursday, 19 February 2026 13:52
Subject: REQUEST FOR COMMENT: APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT

Good day

A land use planning application has been submitted in terms of section 15 of the Land use Planning By-Law for George Municipality, 2023 with respect to Erf 464, George.

The application consists of the following:

1. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Remainder of ERF 464 George, to create Portion A and the Remainder. Portion A is depicted by figure A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,A1,B1,C1,D1,E1,F1,G1 as illustrated on the attached subdivision plan and measures ±16.54 hectares in extent.
2. **Rezoning,** in terms of Section 15(2)(a) of the George Municipality Land Use Planning By-laws, 2023 of Portion A of the Remainder of ERF 464 George, from "Undetermined Zone" to a "Subdivisional Area Zone" in order to allow for the proposed land uses including 8 Industrial Zone II properties, 1 Community Zone I property, 1 Transport Zone I property, 1 Open Space Zone II property and 1 Transport Zone II property. See subdivisional layout plan attached for more detail.
3. **Subdivision**, in terms of section 15(2)(d) of the George Municipality Land Use Planning By-laws of the Subdivisional Area into 12 portions consisting of the following:
   - 8 Industrial Zone II properties
   - 1 Community Zone I property
   - 1 Transport Zone I property
   - 1 Open Space Zone II property

ANNEXURE G (continue)

- 1 Transport Zone II property

in accordance with the attached subdivision plan in order to give effect to the proposed land uses as illustrated in the subdivisional layout plan.

Attached please find a copy of the application.

Kindly provide your written comments on the application in terms of section 38 of the said legislation within **60 days** from the date of this letter using reference number 4541283 to the responsible Administrative Officer: Primrose Nako, pnako@george.gov.za, 044 801 9416. Please copy the applicant when sending comments: rudolf.schroder@zutari.com

Should no comments be received, it will be deemed that you have no comment.

Please do not hesitate to contact me should you have any queries.

Kind regards,

Rudolf Schröder *Pr. Pln, M.PMSA, MTRP*
ASSOCIATE SPECIALIST | ZUTARI

M +27833906963 **E** Rudolf.Schroder@zutari.com **W** zutari.com

DISCLAIMER

ANNEXURE G (continue)

Western Cape Government

Western Cape Education Department
Samantha Lee
Directorate: Physical Resource Planning and Property Management
Samantha.lee@westerncape.gov.za | 021 828 3063

Reference: 20260302-1050
Enquiries: S Lee

Ms P Nako
George Municipality
Planning Department: Planning and Development
71 York Street,
George
6530

Email: pnako@george.gov.za;
CC: rudolf.schroder@zutari.com

Dear Ms Primrose Nako,

RESPONSE TO APPLICATION FOR THE REZONING AND SUBDIVISION OF ERF 464, GEORGE TO ENABLE THE METRO GROUNDS MIXED USE DEVELOPMENT.

The Western Cape Education Department (WCED) acknowledges the receipt of your request for comment on the subject application with case reference 4541283.

Following a thorough review of the submitted plans and supporting documentation, the WCED objects to the application on the basis that this is the third land use application in relation to Erf 464, George (Metrogrounds) that does not make provision for educational facilities. The WCED requires a minimum of 2.5 hectares being set aside for a secondary school facility within the portion designated for educational purposes.

This position is informed by the following planning and policy considerations:

1. **Alignment with the George MSDF**
   The George MSDF identifies the need to strengthen social infrastructure provision within accessible activity nodes and growth corridors. The Framework supports the integration of community facilities, including schools, within mixed-use developments to promote sustainable settlement patterns, improved accessibility, and reduced travel distances for learners. Furthermore, the MSDF highlights ongoing urban growth within the George central and surrounding areas, which necessitates forward planning for additional educational infrastructure, particularly at secondary level.

2. **Demonstrated Need for Secondary School Capacity**
   Demographic trends and projected residential growth within the broader George area indicate *increasing pressure on existing secondary schooling facilities*. The reservation of land within this

ANNEXURE G (continue)

development provides a strategic opportunity to secure appropriately located and serviced land for future public educational infrastructure in line with provincial planning objectives.

3. **Traffic Considerations**
   The Traffic Impact Assessment (TIA) supports the integration of community and institutional uses within the broader transport framework of the subject proposal. The siting of an educational facility within a mixed-use node is consistent with principles of transit-oriented development and promotes accessibility via public transport and non-motorised transport networks, thereby enhancing *learner safety and mobility*.

4. **Integrated and Planned Development Approach**
   The inclusion of an educational component within a structured mixed-use framework aligns with spatial integration principles set out in provincial and municipal planning policies.

The WCED trusts that the above comments will be taken into consideration during the assessment of the application. Should further engagement or clarification be required, the Department remains available to participate in subsequent planning processes.

I trust that you will find this in order. If you require further information, please do not hesitate to contact me directly.

Yours sincerely

G COETZEE
DIRECTOR: PHYSICAL RESOURCE PLANNING AND PROPERTY MANAGEMENT
DATE: 2026-03-05

ANNEXURE G (continue)

CONSERVATION INTELLIGENCE: LANDSCAPE EAST

physical	4th Floor, York Park Building, York Street, George, 6530
website	www.capenature.co.za
enquiries	Megan Simons
telephone	087 087 3060
email	msimons@capenature.co.za
Reference	**LE14/2/6/1/6/2/RE ERF 464_LUPA/Commercial_George Industria**
date	**29 April 2026**

Zutari,
P.O.Box 509,
George,
6529

Attention: Mr Rudolf Schröder
By email: rudolf.schroder@zutari.com

Dear Mr Rudolf Schröder

THE APPLICATION IN TERMS OF SECTION 15 (2) OF THE GEORGE MUNICIPALITY LAND USE PLANNING BY-LAW, FOR THE REZONING AND SUBDIVISION OF A PORTION OF THE REMAINDER OF ERF 464, GEORGE LOCAL MUNICIPALITY, WESTERN CAPE.

CapeNature would like to thank you for the opportunity to review the above report. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the application. CapeNature wishes to make the following comments:

CapeNature has previously submitted comments on the Draft Basic Assessment Report (dBAR) for the proposed Metro Grounds Mixed-Use Development (see attached). We confirm that our comments in respect of the current application remain unchanged and are applicable to the current application.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely,

Megan Simons
For: Manager (Conservation Intelligence)

The Western Cape Nature Conservation Board trading as **CapeNature**
Board Members: Mr Tom Blok, Ms Reyhana Gani, Dr Colin Johnson, Ms Ayanda Mvandaba, Prof Nicolaas Olivier, Ms Chwayita Shude-Mareka, Dr Razeena Omar

ANNEXURE G (continue)

Gmail

Rudolf Schröder <rudolf.schroder@gmail.com>

Collab no 4022632 Erf 464 (Metro Ground Mixed use) George (Rezoning & Departure)
1 message

Primrose Nako <Pnako@george.gov.za> Fri, Apr 17, 2026 at 3:52 PM
To: "rudolf.schroder@gmail.com" <rudolf.schroder@gmail.com>, Henko Lourens <Hlourens@george.gov.za>
Cc: Petro Botha <Pbotha@george.gov.za>

Good day Rudolf

Your application submitted 05 February 2026, and Section 38 issued 09 February 2026 has reference.

Please upload public participation as per the section 38 letter.

Please see comments from Internal Departments, please acknowledge comments and provide feedback were required.

1. ENVIRONMENTAL: In Order, the application is supported, subject to compliance with the requirements set out in the Environmental Authorisation (if granted).

A detailed landscaping plan must be prepared for the Open Space Zone (Erf No. 11). The area is to be utilised for additional tree planting and landscaping to enhance the visual amenity, ecological function, and overall entrance character of the mixed-use development.

2. CIVIL ENGINEERING: In Order, see Land use conditions attached.
3. CIVIL ENGINEERING TRAFFIC: In Order.
4. WASTE: In Order, to be compliant with Waste Management By Law.
5. ELECTRO TECHNICAL: In Order. Rezoning and sub-division noted. Electricity Development Charges to be applicable on connection / transfer of sub-divided erven.
6. PARKS: In Order.
7. SPATIAL: In Order. The proposed development aligns with the intent of Council and the George MSDF's strategic planning.
8. BUILDING CONTROL: In Order. Supported subject to:

Building plan to be submitted in terms of section 4 of the National Building Regulations and Building Standards Act, 103 of 1977, for the development.

Building plans to comply with SANS 10400 and any other applicable legislation.

No construction may be commenced until such time as a building plan has been approved.

The property may only be used for the intended purpose once a Certificate of Occupation has been issued.Further comments will be provided on submission of building plans.

Additional building plan application fees, calculated in terms of the approved tariffs, will be applicable should structures already be commenced with or completed without the approval of the Local Authority.

Kind Regards

Primrose Nako

Administrator

Planning and Development

George Municipality

Office: 044 801 9416

Internal Ext 1273

Email: pnako@george.gov.za

Office of the Director: Planning and Development

ANNEXURE G (continue)

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Collab+no+4022632+Erf+464+(Metro+Ground+Mixed+use)+George+(Rezoning+&+Departure)+(CES)+21+Feb+2026.pdf
350K

ANNEXURE H

Annexure H
ZUTARI
IMPACT. ENGINEERED.
Engineering Services Report
DEVELOPMENT OF THE METRO GROUNDS INDUSTRIAL DEVELOPMENT ON A PART OF PORTION 464
George Municipality
Submission date: 2025/11/07
Document number: 1002372-000-REP-CC-0003-2502
Revision: Rev 3

ANNEXURE H (continue)

Document control record

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Document Control						
Project name		Development of the Metro Grounds Industrial Development on a Part of Portion 464				
Document number		1002372-000-REP-CC-0003-2502	**Project number**		1002372	
Client		George Municipality				
Client contact		Mr Henko Lourens	**Client reference**		Metro Grounds	
Rev	**Date**	**Revision details/status**	**Author**	**Reviewer**	**Verifier** (if required)	**Approver**
0	2024/06/13	Draft	M van Wyk	R Schröder	N/A	M Botha
1	2024/07/29	Updated layout and inclusion of Client's comments	M van Wyk	R Schröder	N/A	M Botha
2	2025/02/24	Updated layout	M van Wyk	R Schröder	N/A	M Botha
3	2025/11/07	Updated layout	M van Wyk	R Schröder	N/A	M Botha
Current revision		**Rev 3**				

Approval			
Author signature		Approver signature	
Name	M van Wyk	Name	M Botha
Title	Senior Technologist	Title	Technical Specialist

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ANNEXURE H (continue)

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Annexures

Annexure A

Water: Existing Services Layouts

Annexure B

Sewer: Existing Services Layouts

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Stormwater: Existing Services Layouts

Annexure D

Extract from GLS Sewer Master Plan: Outeniqua drainage area 2020-06
Extract from GLS Water Master Plan: Bulk & Retic – George main zone 2020-06

Annexure E

Conceptual Development Framework Layout

ANNEXURE H (continue)

1 Introduction

1.1 Background to Report

As per Figure 1: Locality Map below, the subject portion of the Remainder of Erf 464, George has been identified as land to accommodate an industrial development, with an educational component. The project intent is to enable the release of small industrial stands to users/buyers, whilst the educational erf is to be made available to secondary- or tertiary educational uses.

This report is based on the revised Conceptual Development Framework Layout, Drawing No. 1002372-0000-DRG-CC-0001-H, dated 09 September 2025, attached as Annexure E. Ideally, the existing bulk civil infrastructure will be utilized to accommodate the proposed development, herein referred to as the Metro Grounds Industrial Development. All future reticulation will conform to George Municipal Standards.

1.2 General and Development Location

The subject area is described as part of the Remainder of Erf 464, George and is indicated on the map below. The current zoning of the area in question is "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw, 2017. Previously rights were approved for a bus-depot to be located to the east of the subject property. Note however that the implementation of the bus-depot is not included in this project.

Figure 1 : Locality Map

ANNEXURE H (continue)

The projected land use for the proposed development is as follows:

Land Use Description/ Erf Type	Zoning (STB. Scheme)	Area (ha)	% of Area
Education Facility	Community Zone I	5.34	32.29%
Light Industrial	Industrial Zone I	5.56	33.62%
Transport	Transport Zone I	1.76	10.64%
Private Open Space	Open Space Zone II	1.30	7.86%
Public Street	Transport Zone II	2.58	15.60%
Total		**16.54**	**100%**

For the sake of completeness, the erf described as "Transport Zone I" is included in the table above. The intention is to consolidate this erf with the area earmarked for the possible future Bus Depot, and any required services will be planned for as part of the Bus Depot, which is excluded in this report.

2 Bulk Water Supply System

2.1 Proposed Water Demand for the Development

Our calculations are based on "The Neighbourhood Planning and Design Guide".

Existing network capacity in the vicinity of the site is subject to the confirmation by George Municipality. GLS Consulting (GLS) were appointed by George Municipality to compose a Water Master Plan for the Municipal area and to determine the effect of any form of developments in the Municipal area on the Water Master Plan. If required, this and other reports will be submitted to GLS to determine whether the existing water network system has enough capacity to accommodate the proposed housing development.

Bulk water distribution lines with diameter > 200mm and <= 250mm are positioned on the Northern border of the Metro Grounds Site, i.e. along P.W. Botha Boulevard.

According to Table J.2 – J.4 for Calculating the Annual Average Daily Demand (AADD) from "The Neighbourhood Planning and Design Guide", the following calculations were done to determine the AADD for the various Land Uses:

The water use for the applicable areas of the proposed development is as follows:

Description / Land Use	Calculations	AADD
Education Facility	5.34 x 1ha x 20kℓ/ha/day	106.80 kℓ/day
Light Industrial	5.56 x 1ha x 13kℓ/ha/day	72.28 ℓ/day
Private Open Space	1.3 x 12kℓ/ha	15.60 ℓ/day
Public Street	-	-
TOTAL AADD		**194.68 kℓ/day**

This development is classified as mainly a Business/Commercial/ Industrial type of development, according to Table J.9. From the design codes, we expect to design for a peak demand of 8.66 ℓ/s.

Total Peak Hour Demand = [(194.68 kℓ/d x 3.30)] / (60 x 60 x 24)
= 7.44 ℓ/s

Fire flow:

Such a development would fall into the moderate risk 1 – industrial, business, high-rise flats ≥ four storeys category according to Table J.17 – J.18 and as such, the following would apply:

- 50 ℓ/second total fire flow;
- 25 ℓ/second minimum flow at one hydrant;
- 15 m pressure at fire node;
- 5 m pressure at the rest of the system; and
- 4-hour design fire flow.

With the supply spread over a wide area, according to the available GLS Water Master Plan, dated June 2020, the existing reservoirs have enough storage capacity and capacity for fire flow conditions to accommodate this development.

According to the Water Master Plan for the Municipal area, enough capacity exists at the Water Treatment Plants.

A water reticulation system exists within close proximity to which the proposed development could connect (see enclosed GLS Water Master plan, dated June 2020). A system of reservoirs, water pump stations and water mains deliver potable water to developed areas.

2.2 Proposed Services

As per the Water System Master plan dated June 2020 provided by GLS Consulting for George Municipality, the existing system has enough capacity to accommodate the proposed development without bulk supply upgrades as seen in GLS Figure: Master Plan: Bulk & Retic – George Main Zone (Existing Water System Layout), dated June 2020, attached to this report as Annexure D. The available capacity will have to be verified with GLS to confirm the current situation in this regard.

The proposed development can connect to the existing 200mm - 250mm diameter Bulk water distribution line positioned on the Northern border of the Metro Grounds Site, i.e. along P.W. Botha Boulevard. The proposed development should however have their own bulk water meter constructed in order to measure actual water use. See attached Annexure A indicating existing services.

Capacity upgrades have recently been completed and commissioned at both the Old and New Water Treatment Works, ensuring they now have sufficient capacity to accommodate the proposed development.

6.2 REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

The demand for fire flow will be addressed as part of the internal network design. This aspect will also require assessment by GLS in terms of the larger network capacity.

A water reticulation system exists within the adjacent neighbourhoods to which the proposed development could connect (see enclosed GLS Water Master plan). A system of reservoirs, water pump stations and water mains deliver potable water to developed areas surrounding the proposed development.

3 Bulk Sewage System

3.1 Wastewater Treatment Works

The proposed development is located within the existing Outeniqua Wastewater Treatment Works Main Outfall drainage area. Thus, effluent generated from the site will drain directly towards the existing Outeniqua Wastewater Treatment Works (WWTW) and joins the Schaapkop Pumpstation, as indicated on GLS's Existing Sewer System Layout (dated June 2020) attached as Annexure D.

Wastewater generated from the proposed development will gravitate into the existing system and be conveyed by means of gravity sewer lines into the existing systems to the Outeniqua Wastewater Treatment Works, where it will be treated.

According to the Sewer Master Plan for the Municipal area, sufficient capacity exists at the Sewage Treatment Plant within the existing system. Once more details are known on the type of industries that will be operating from the properties earmarked for industrial use, detailed consideration will have to be given to these properties in terms of their expected discharge. Additionally, adherence to the relevant bylaws must be ensured to prevent the Wastewater Treatment Works from failing to meet license requirements.

3.2 Wastewater Reticulation System

A wastewater reticulation system exists within the boundaries of the proposed development. It is proposed that the development will drain to the Outeniqua Wastewater Treatment Works where it will be treated as can be seen on GLS Sewer Master plan (June 2020). Since the available information is slightly dated, GLS will have to be requested to confirm through an ad-hoc study that the Schaapkop Pumpstation and bulk pipelines have sufficient capacity.

ANNEXURE H (continue)

3.3 Wastewater Flow Demand

Calculations are based on "The Neighbourhood Planning and Design Guide".

3.3.1 According to Table K4 from "The Neighbourhood Planning and Design Guide", for Calculating the expected average daily wastewater flow for the different land use categories is as follows:

Description / Land Use	AADD	Sewer ration (% AADD)	kℓ/day
Education Facility	106.80 kℓ/day	65%	69.42
Light Industrial	72.28 ℓ/day	80%	57.82
Private Open Space	15.60 ℓ/day	N/A	-
Public Street	N/A	N/A	-
TOTAL ADWF (kℓ/d)			**127.24**

Based on the above, the Average Dry Weather Flow (ADWF) for the units would therefore be:

Q = 69.42 + 57.82
Q = 127,240.00 ℓ/d
ADWF = 127.24 kℓ/d

3.3.2 The proposed development is classified as Business/ Commercial, with a component of light Industrial and various public facilities, according to Table K8. The average Peak Factor to be used is 2,5.

This would lead to an expected Peak Dry Weather Flow (PDWF) as follows:
Q = 127.24 x 2.5
= 318.10 kℓ/d
PDWF = 3.68 ℓ/s

If an infiltration rate of 30% is used for the ingress of stormwater into the system, the Peak Wet Weather Flow (PWWF) is calculated as follows:

Q = 3.68 x 1.30
PWWF = 4.79 ℓ/s

3.4 Proposed Services

The proposed development falls within the Outeniqua Wastewater Treatment Works' (WWTW) drainage area and will drain to the WWTW through the existing gravity sewer network where it will be treated.

It is proposed that the development will drain to the existing Schaapkop Pump Station indicated on remainder of erf 13486. From this point all wastewater generated will be pumped

to the Outeniqua Wastewater Treatment Plant where it will be treated as can be seen on GLS Sewer Master plan with reference 2020-06.

Confirmation will be required by George Municipality, through an ad-hoc study by GLS, whether the existing Schaapkop Pump Station will have sufficient capacity to accommodate the additional wastewater generated by the development.

See attached Annexure B indicating existing services in the vicinity of the site.

4 Stormwater

The site has a fairly steep slope gradient, increasing towards natural drainage lines. There is no existing stormwater infrastructure near the proposed development. The upstream runoff and generated stormwater runoff from the proposed development will have to be conveyed by means of both an underground system as well as an overland flow system. Details regarding the proposed stormwater infrastructure, is described in the Stormwater Management Plan.

See attached Annexure C indicating existing services in the vicinity of the site.

5 Access Roads

Access to the proposed development is currently obtained from the existing intersection of PW Botha Boulevard and Ossie Urban Street and the access road to the existing electrical sub-station. Details regarding access have been investigated and discussed in a Traffic Impact Study conducted by Urban Engineering (Report Number 22-158_TIA, Revision (1), dated February 2025).

6 Solid Waste

Refuse removal will be dealt with once a week as applicable to all the current residential and business/ industrial areas within the George Municipal area.

The type of waste categories generated by the industrial, business and commercial waste is currently unknown and the volumes of solid waste generated by the proposed development will therefore be calculated once more details are available. Solid waste is generally based on an estimated 1.29 kg/person/day.

Discussions with the George Municipality's Community Services Department will be required to confirm whether the existing solid waste site will be able to accommodate the additional solid waste generated by the development.

7 Floodlines

This proposed development is not directly affected by any Floodline. Feedback from the George Municipality's Civil Engineering Services Department, indicated that floodlines have been delineated for the Rand Street extension and are currently being reviewed. The intention is that the impact of this development on the flood lines should be considered as part of the study.

8 Standard of Engineering Services to be provided

Levels of services are as follows:

8.1 Sewer

- Pipe diameter: UPVC Class 34, SANS 791, minimum 160mm diameter solid wall for main lines and 110mm solid wall for individual unit connections where required.
- Prefabricated Fibre cement shafts or concrete manhole rings to be used for manholes.
- Concrete to be protected against biogenic corrosion, especially where industrial effluent is discharged to the sewer system. Options that will be considered for biogenic corrosion includes HDPE-lined manholes and/or chambers including the soffit of the lid, or cementitious products (such as SewperCoat®), a calcium aluminate mortar solution for protecting or rehabilitating wastewater from H_2S biogenic corrosion.

8.2 Water

- UPVC Class 9/12 pipes depending on residual pressure.
- Each erf will be serviced with a 20mm diameter connection and a Kamstrip Ultrasonic Smart water meter in a plastic meter box or similar approved meter by the Technical Services Directorate. (To be confirmed with the Operational Department).
- Provision is made for fire hydrants according to design guidelines.
- All fire hydrants shall be 65 mm diameter (internal)
- All fire hydrant outlet shall be of bayonet coupling type. (To be confirmed with the Fire Department).
- All valves shall be AVK type valves – left hand/closing or similar approved.
- Provision is made for a bulk water meter at the connection point.

8.3 Roads and stormwater

- The access road width will be 6.0m minimum.
- Class 3 and Class 4 roads will have an asphalt surfacing.
- Subgrade, sub-base and base materials will be imported.
- Sub-surface drainage, where applicable, will be installed.
- The underground piped stormwater drainage system will be minimum 450mm diameter.
- Combination kerbs, CK5 will be provided on the low side of all roads to drain stormwater towards catch pits;
- Mountable kerb, MK10 will be provided on the higher side of the roads;
- Barrier kerbs, BK2 and Channel, C1 will be installed around bell mouths. Bellmouth radiuses will be a minimum of 6m.
- All stormwater drains will be provided with a sand trap of at least 500mm.
- Low water drifts to be utilised at natural watercourses to accommodate overland flow.

ANNEXURE H (continue)

8.4 Design Criteria and Standards

8.4.1 Design criteria

The following documents will serve as a base for the detail design criteria and standards:

- The Neighbourhood Planning and Design Guide ("Red Book"); and
- City of Cape Town Management of Urban Stormwater Impacts Policy – Version 1.1, 2009.
- George Municipality Minimum Standards for The Design of Civil Engineering infrastructure.

8.4.2 Construction specifications

All materials and workmanship shall comply with the specifications as set out in the South African National Standards for Civil Engineering (SANS).

8.4.3 Roads

The road system forms an integral part of the local area plan.

8.4.3.1 Design Criteria

The design criterion for roads is as follows:

- Design life – 20 years.
- Subgrade CBR – 15 to 20.
- Subbase CBR – 45minimum (processed crushed stone)
- Base course CBR – 80minimum (processed crushed stone)
- Surfacing – 80mm interlocking concrete paving/ Cape Seal (To be confirmed with the Roads and Stormwater Department).
- Minimum road grade – 0.5 % Longitudinal
- Minimum Crossfall – 2.00 %

8.4.4 Stormwater

The following references will be used as a basis for the design of the stormwater network:

Standards and Guidelines for Roads and Stormwater of the City of Cape Town (Version 3, February 2022)

The storm water system forms an integral part of the road and urban planning layout. The system rests on three legs, the minor system, the major system and an emergency system. The minor storms are catered for in the pipe system while the major storms are routed through a linked system of roads and public open spaces using attenuation techniques. The emergency system recognizes failure of the minor and major system by storms greater than provided for in major system or in the event of malfunction of the minor system by providing continuous overland flow routes to minimize flooding of residential areas.

ANNEXURE H (continue)

8.4.4.1 Minimum design criteria for stormwater system

The data to be used for the design of the system is as follows:

- Minor system : 5-year return period conveyed in an underground pipe system. Preferably the overland flow shall not exceed a depth of 200m.
- Major system : 50-year return period. The difference between the 2 year and 50 year to be conveyed in the road prism with a flow depth not exceeding 150mm within the road reserve width.
- The minimum gradients for pipelines are designed to give a minimum velocity of 0.7m per second with the pipe flowing full.
- The maximum velocity shall be 3.5m per second.
- Major stormwater overflows are to be provided to convey the excess storm water from the streets into designated public open spaces.
- Stormwater flow velocities in roadways will be kept as low as possible and related to the surface finish to prevent scour and erosion.
- Roads will be graded to ensure free and continuous flow to the main stormwater system and to prevent localized ponding at intersections.

8.4.4.2 Pipelines/Culverts

- Storm water pipes are generally 50D, 75D or 100D as required by the loading and installation conditions.
- Pipes are generally laid on Class C bedding.
- The minimum cover on pipes will be 0.80m.
- The minimum pipe diameter will be 450mm for longitudinal runs and catch pit connections.
- Box culverts will be class 75S, 100S or 150S depending on the span.

8.4.5 Sewers

The sewer drainage system forms an integral part of the sewage system. The drainage for the site is towards the Outeniqua Wastewater Treatment Works through the existing gravity sewer network within the development, as described in Item 3.

8.4.5.1 Minimum design criteria

- A conventional waterborne sewerage system is provided with a single connection. The main sewer line will be constructed within open areas on the site, topography dependent.
- Design parameters : Average daily flow – As calculated
  : Peak factor – As calculated
  : Extraneous flow – 30 %
  : Minimum velocity – 0.7m per second
- Minimum cover to pipes : 0.80m
- Minimum pipe size : 110mm diameter for unit connections
  : 160mm diameter for sewer mains
- Minimum gradients : 110mm diameter unit connection @ 1:150 (main lines)
  : Main lines at 80% capacity as follows:

ANNEXURE H (continue)

No. of Units	Grade
Less than 6	1:80
6 to 10	1:100
11 to 80	1:120
81 to 110	1:150
111 to 130	1:180
More than 130	1:200

- Maximum manhole spacing of 80m.

8.4.5.2 *Pipelines*

- Pipeline material for pipe sizes up to 160mm diameter. UPVC Class 34 complying with SABS.
- Pipes are generally laid on Class C bedding.

8.4.5.3 *Manholes*

- Dolomitic aggregate and low alkali sulphate resistant cement to SABS 471 shall be used for all concrete, mortar or screed.
- Manhole cover to be central over main pipe on downstream side.
- Manhole covers and frames to be polymer concrete.
- Concrete to be protected against biogenic corrosion, especially where industrial effluent is discharged to the sewer system. Options that will be considered for biogenic corrosion includes HDPE-lined manholes and/or chambers including the soffit of the lid, or cementitious products (such as SewperCoat®).

8.4.6 Water

The water reticulation network forms an integral part of the water distribution system.

8.4.6.1 *Minimum design criteria*

- The Neighbourhood Planning & Design Guide: Section J – Water Supply (Red Book 2019)
- George Municipality Civil Engineering Services: Civil Engineering Standards & Requirements for Services (Updated January 2009)

- Peak factors for the development calculated in accordance with the "The Neighbourhood Planning and Design Guide: Section J – Water Supply (Red Book 2019)
- Minimum pressures for the network are calculated for the fire flows of 15ℓ per second and peak demand at the point of lowest pressure under peak flow conditions.
- Minimum cover to pipe to be 0.8m.
- Minimum house connection size to be 25mm diameter HDPE.
- Minimum pipe size to be 75mm diameter uPVC.

8.4.6.2 *Pipeline materials*

- uPVC Class 16 heavy duty pipes complying to SABS 966
- Erf connection – HDPE Class 16 type 5 complying to SABS 533

ANNEXURE H (continue)

8.4.6.3 Isolating Valves

- Valves to be placed such that a maximum of 4 valves need to be closed to isolate a section of pipeline.
- Valves to be spaced so that the length of main included in an isolated section does not exceed 600m.
- All valves to be installed at splays where applicable and not within the road surface.
- All valves shall be in accordance with SABS 1200 / SABS 664/1974 and approved by the relevant department head.
- Valves shall be clockwise opening / left hand closing.
- Direction of opening to be clearly marked on the valve body or spindle cap.
- All valves shall be heavy duty, class 16.
- All valves shall have non rising spindles.
- All valves shall be fitted with cast iron cap, secured with retaining bolts.
- All valve belltobies shall be polymer concrete as per AV Moulding, concrete, recycled plastic or cast iron depending on area and relevant condition.
- Only valves supplied with minimum thickness of 225 micron Copon EP 2300 epoxy paint allied to all internal surfaces after it has been thoroughly cleaned by grit blasting to SA ½ finished in compliance with the requirements of SIS 05 90 00 or valves with similar approved coatings, will be accepted.
- Isolating valves shall be placed in brick chambers.

8.4.6.4 Fire hydrants

- Fire hydrants are to be spaced at a maximum of 120 m.
- All fire hydrant types shall be in accordance with SABS 1200, comply with the local Fire Department standard regulations, and approved by the relevant department head.
- All fire Hydrants shall be 65 mm diameter (Internal).
- Outlets shall be London round thread with loose cap and securing chain.
- Hydrant spindles shall be provided with cast iron caps, secured with retaining bolts.
- Hydrants shall be clockwise opening / left hand closing.
- Hydrant covers shall be polymer concrete as per AV Moulding, concrete recycled plastic or cast iron depending on area and relevant conditions.
- All hydrants shall be supplied installed complete with flanged CI extension piece complete with cadmium plated nuts and bots to ensure depth not greater than 400mm.

8.4.6.5 House connections

- House connections shall be installed as indicated on drawing no CES/W3 as part of new developments.
- SABS approved Ball Cocks, Gate valves or Ferrules shall be installed on the main water pipe.
- All cast iron saddles to be wrapped with Denso tape.
- Marker posts shall not be installed as house connections will be swopped from the old reticulation to the new reticulation.

8.4.6.6 Fittings and specials

- Fittings and specials shall be manufactured from SS304L pipe with SS316L flanges with either a FBE coating or two-pack epoxy inside and out for corrosive soil conditions.
- uPVC fittings and specials shall be class 16, fitted with spigot and socket rubber ring joints and shall comply with the relevant requirements of SABS 966.
- Only stainless-steel bolts and nuts to be used on all underground saddles, flanges, short collar couplings, etc.
- All bolts and flanges shall be denso wrapped for corrosion protection.
- All pipe fittings (Valves, Hydrants and scour valve, beds) shall have thrust blocks.
- 90° bends will be avoided as far as possible and a combination of two 45° degree bends will be utilised.

8.4.6.7 Road Crossing and Reinstatement

Road crossings for the main reticulation as well as house connections will be constructed by means of conventional trench excavation. Road crossings will be reinstated with the following layerworks:

- 40 mm Continuously Graded Asphalt
- 150 mm G2 base compacted to 98% MOD AASHTO.
- Subbase in 150 mm layers from top of bedding to underside of base consisting of G5 material compacted to 95% MOD AASHTO.

Directional drilling and/or moling will be considered for the installation of long house connections beneath the road surface as well as the main reticulation. This is proposed to reduce damage to the existing asphalt road surfacing but will be dependent on the prevailing ground conditions.

9 Conclusion

From the information available, it appears that sufficient capacity exists within the existing infrastructure services to support the proposed development.

However, confirmation will be required by George Municipality, for the following:

- Ad-hoc studies by GLS to confirm whether the existing water and sanitation infrastructure and distribution networks will have sufficient capacity to accommodate the development;
- Confirmation from the Fire Department on the type of fire hydrants and coupling type;
- Confirmation from the Water Services Operational Department on the type of water meter to be allowed for;
- Confirmation from the Roads and Stormwater Department on the surfacing of internal roads; and
- Confirmation from the Directorate: Community Services in terms of solid waste removal and land fill capacity.

We trust that sufficient detail has been provided to enable you to decide regarding the way forward. However, should any additional information be required, or if you wish to discuss this recommendation with us, please do not hesitate to contact us.

ANNEXURE H (continue)

Annexure A

Water: Existing Services Layouts

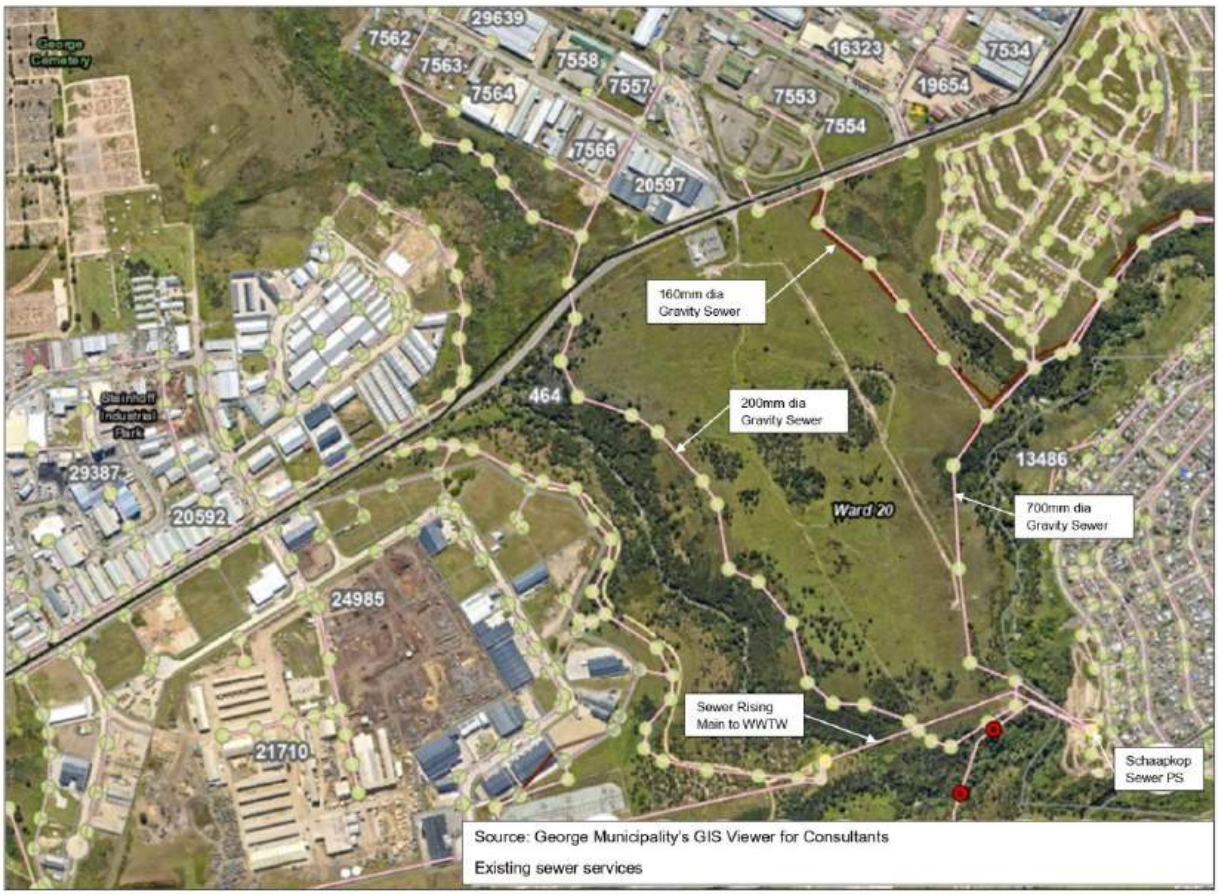
ANNEXURE H (continue)

ANNEXURE H (continue)

Annexure B

Sewer: Existing Services Layouts

ANNEXURE H (continue)



ANNEXURE H (continue)

Annexure C

Stormwater: Existing Services Layouts

ANNEXURE H (continue)

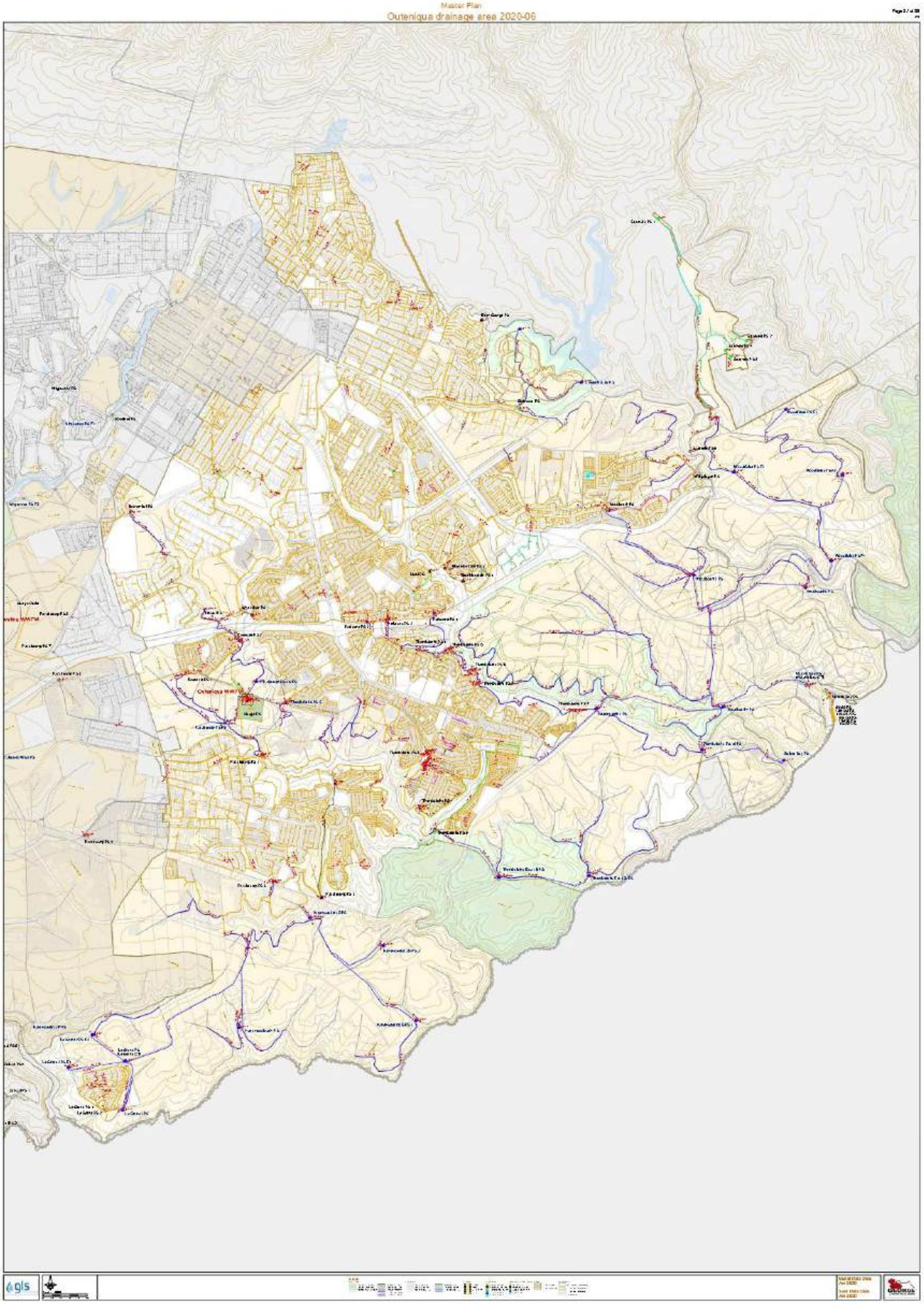
ANNEXURE H (continue)

Annexure D

Extract from GLS Sewer Master Plan

Extract from GLS Water Master Plan

ANNEXURE H (continue)



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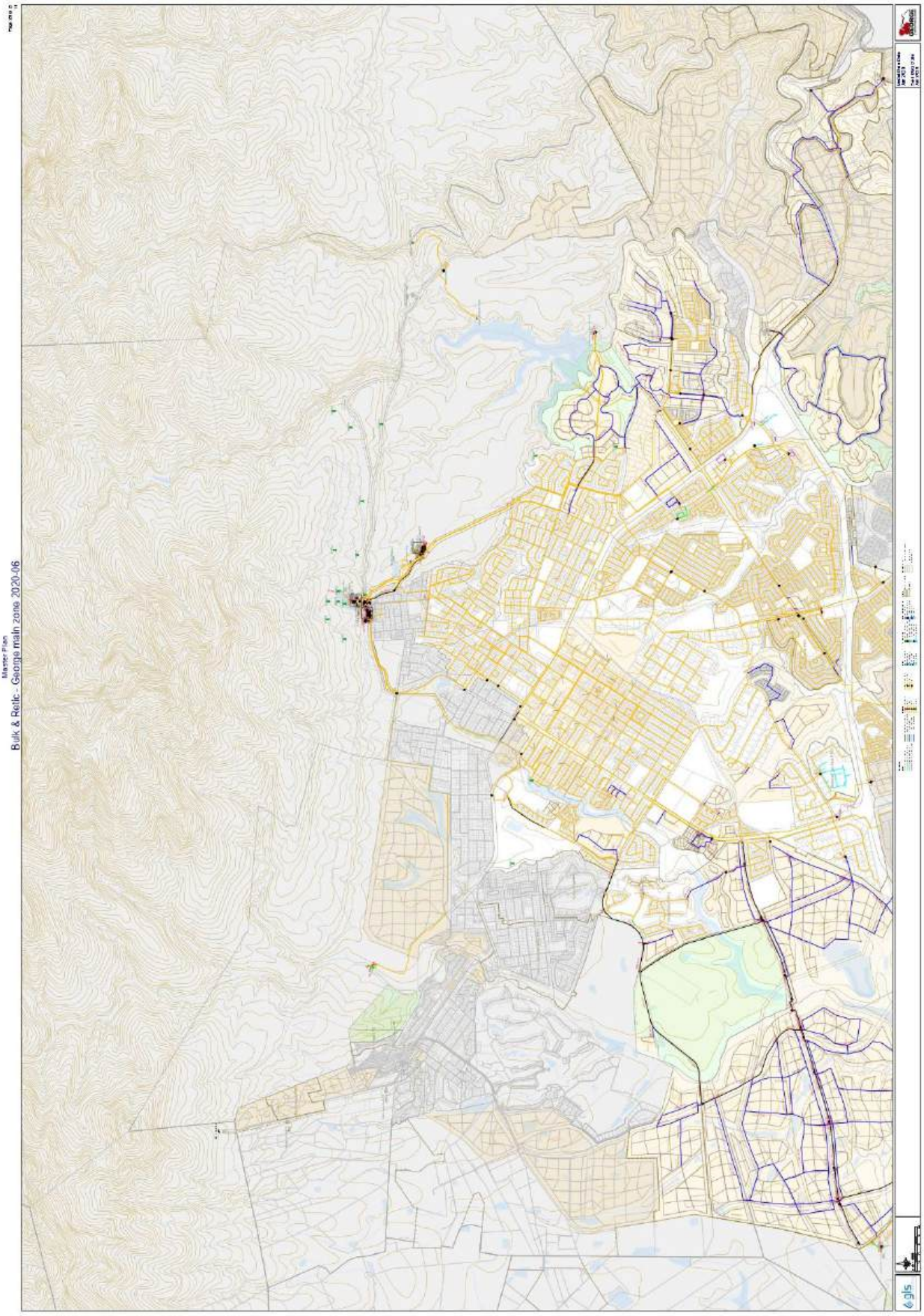

ANNEXURE H (continue)

Annexure E

Conceptual Development Framework Layout

ANNEXURE H (continue)

ANNEXURE H (continue)

In diversity there is beauty and there is strength.

MAYA ANGELOU

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Revisio

ANNEXURE I

Annexure I

ZUTARI (Pty) Ltd.

ELECTRICAL SERVICES REPORT

FOR

PROPOSED METROGROUNDS INDUSTRIAL DEVELOPMENT ON PORTION OF REMAINDER ERF 464, GEORGE

REPORT NO: G/19519/R1

Dated: 24 February 2025

Prepared by:
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cmb
CLINKSCALES MAUGHAN-BROWN
CONSULTING MECHANICAL

ANNEXURE I (continue)

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ANNEXURE I (continue)

1.0 INTRODUCTION

This report has been prepared by Clinkscales Maughan-Brown (CMB) at their George office, who have been appointed by Messrs Zutari (Pty) Ltd, as the Electrical Consultants for this project. The purpose of this report is to provide the necessary information on the proposed electrical services within this Development and the connection to the existing municipal network in the area in order to obtain all the necessary statutory approvals.

2.0 LOCATION

The property to be developed is a portion of the Remainder of Erf 464 situated between PW Botha Boulevard and the N2 National Road in George, as indicated on Drawing No. 19519/E/01 which is attached as Annexure A. The proposed development consists of an education facility erf (5.21ha) and 19 light industrial erven (8.33ha in total). This will be an open development with public street access to all erven.

3.0 SUPPLY AUTHORITY

The Supply Authority for the area is George Municipality, and therefore their Electricity Department was consulted on matters related to the electrical services.

4.0 BASIS OF REPORT

The report is based on the following:

(i) Site development Drawing No. 1002372 Rev D prepared by Messrs Zutari.
(ii) Information obtained from Mr. Danie Greeff from George Municipality's Electricity Department, during meeting held on 5 February 2025.
(iii) General information received from the Client and other members of the professional team.

5.0 DEMAND

Based on the information currently available, the peak kVA demand of the Development has been estimated at 1875kVA, as detailed in Annexure B.

The following objectives will be set to reduce the impact on the municipal network and national grid:

- Comply with SANS 10400.
- Energy efficient light fittings, air conditioning, mechanical ventilation, refrigeration and water heating installations, electric motors, etc.
- Use of energy efficient appliances.
- Building and plant load management systems to reduce power consumption.
- Installation of Photo Voltaic (PV) and other Small Scale Embedded Generators (SSEG), where it can be economically justified. These installations must be registered with and approved by George Municipality's Electricity Department.

6.0 AVAILABILITY OF CAPACITY

The capacity required is estimated at 1875kVA. It is assumed that this capacity is available at the identified point of connection.

The proposed development is situated immediately adjacent to the existing Tamsui 66/11kV Substation. The firm transformer capacity at this substation is 20 000kVA. Based on the maximum demand readings taken by the Municipality at this substation the maximum load at present is approximately 15 000kVA, which indicates that some spare capacity should be available.

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ANNEXURE I (continue)

As part of the environmental approval process, a letter of confirmation on the availability of capacity is normally required from the Supply Authority.

7.0 POINT OF CONNECTION

The identified point of connection for the development is at the existing 11kV busbars inside the Tamsui Substation Switchroom.

The proposed connection will include the supply and installation of the following, as indicated on the drawing:

- Two 11kV feeder circuit breakers inside the existing switching station building to supply the development.
- 185mm² Cu x 3 core 11kV underground ring cable from the abovementioned circuit breakers supplying the internal network.

8.0 BULK AND LINK SERVICES

It is envisaged that the Developer will not be required to provide any bulk or link services.

9.0 INTERNAL SERVICES

It is proposed that the Municipality take-over the entire electrical network on completion thereof. The Municipality will become the owner and be responsible for operating and maintaining same. For this reason, the installation would have to comply with their technical requirements and supply conditions.

The Point of Supply for each of the erven could be at MV (11000V) or low voltage (LV) depending on the size of the supply to the erf. It is envisaged that the majority of the erven will be supplied at LV and that the consumption will be metered inside LV distribution kiosks located in the road reserve. For supplies greater than 500kVA an 11kV ring main unit and bulk metering unit will be provided on the erf boundary to supply the erf. Each consumer will have to enter into a separate supply agreement with the Municipality.

All cables and electrical equipment upstream from the metering point will be installed in servitudes, road reserves and open spaces and will be accessible to the Municipality at all times.

Streetlights will be provided along public roads in accordance with the municipal standards.

There are two existing 66kV municipal overhead lines and three existing 11kV overhead lines / underground cables that runs across portions of the development property, as indicated on the drawing. The existing 66kV overhead lines will remain in position and the necessary servitudes be registered for same. The existing 11kV overhead lines will be replaced with underground cables and relocated to be inside servitudes or road reserves.

10.0 TECHNICAL PARTICULARS

All drawings and specifications of the proposed network must comply with the Municipality's technical requirements and must be submitted to them for official approval before any construction can commence.

The 11kV switchgear to be installed inside the existing 11kV switchroom at Tamsui Substation will be the metal-enclosed, indoor, type to match the existing.

The 11kV cable type will be the paper insulated, lead covered with three stranded aluminium conductors, Table 17.

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ANNEXURE I (continue)

The distribution substations will be the fully enclosed miniature type housing a 11kV ring main unit of the ABB, Lucy Aegis+ or similar type, 11kV/420V transformer and low voltage (LV) distribution equipment and street lighting control equipment.

The Low Voltage (LV) network will be underground cables and ground mounted distribution kiosks. The LV cable type will be PVC insulated, PVC bedded, galvanised steel wire armoured 600/1000V with four copper or aluminium conductors. The LV distribution kiosks will be polyethylene type with doors both front and back.

The LV bulk kWh/kVA consumption meters will be the Landis & Gyr type and must have the ability to be remotely read from the electrical department's offices.

Space provision only will be made in kiosks. Meters will installed by the Builder's Electrician when the buildings are constructed.

Underground service cables will be installed from the kiosks up to 1 meter inside each individual erf boundary, except for those erven situated immediately adjacent to the metering kiosk or the miniature substations. At this point a 1 meter coil of cable will be buried below ground level and marked for future extension and connection by the Builder's Electrician.

The building's internal electrical installation and earthing will be the responsibility of the Builder's Electrician. The earthing system will be the TN-C-S system in terms of SANS 10292:2013 Edition 2.

Public road streetlights will be the municipal standard luminaire mounted on a galvanised steel pole.

The internal network will be designed so that any internal faults do not cause nuisance tripping of the upstream municipal network.

No switching of supplies or work in close proximity of existing cables / overhead lines will be carried out without prior arrangement with the Municipality's electrical department. The Electrical Contractor will also be required to liaise with the Municipality's civil department and communication service provider/s to ensure that no damage is caused to existing underground piped services during construction.

11.0 ENVIRONMENTAL REQUIREMENTS

All work will comply in all respects with the relevant environmental management requirements.

12.0 PROGRAMME

It is expected that construction of services will commence soon after all the necessary approvals have been received and the feasibility has been accepted.

It is expected that the total peak demand of the development will be reached over a period of between 1 and 10 years.

13.0 CAPITAL COSTS

(i) The Developer will be responsible for the supply, installation and commissioning of the complete internal network and connecting to the existing network as described above.

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ANNEXURE I (continue)

(ii) The Developer will be responsible for the relocation of the existing 11kV overhead lines and underground cables as described above.

(iii) The Developer will be responsible for payment of the standard municipal development charges towards bulk electrical infrastructure. The level at which the Development connects in the shared network, and thus its contribution to shared networks, must be taken as HV/MV. Based on provisional calculations done the 2024/25 charges, the estimated DC amount is 1875kVA x R3 738 per kVA = R7 008 750, excl. VAT.

All work will be done under the direction of the Developer's Electrical Consultant, i.e. Messrs Clinkscales Maughan-Brown, and by an Electrical Contractor to be approved by the Developer and the Municipality.

14.0 CONCLUSION

We trust that this information is sufficient to obtain the necessary statutory approvals for the development.

Please contact the writer should more information be required.

In order to speed-up the process, we will also forward a copy of this report directly to the Municipality's electrical department, for their approval and any further comments they may have.

R.L. Steenekamp Pr Eng Pr CPM
CLINKSCALES MAUGHAN-BROWN

.....	.....	.....
Approved by Developer	*Name*	*Date*
.....	Danie Greeff	27 Feb 2025
Approved by George Municipality Electrical Department	*Name*	*Date*

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ANNEXURE I (continue)

ANNEXURE A

Drawing No: 19519/E/01 – Plan Layout of Proposed Main Electrical Supply.

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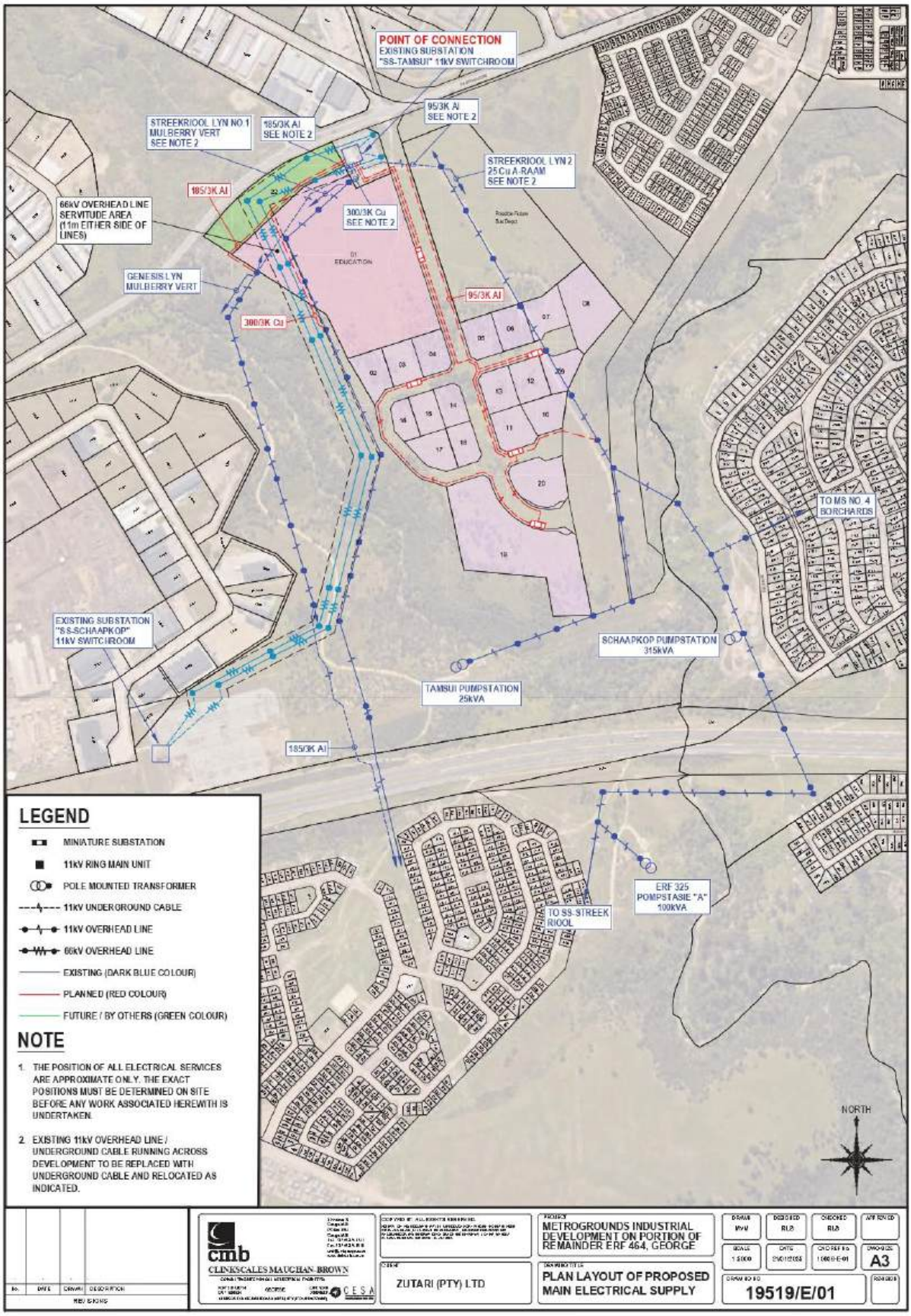
ANNEXURE I (continue)



ANNEXURE I (continue)

8

ANNEXURE B

Electrical Load Estimate

Erf No.	Zoning	Unit	Number / Size	ADMD kVA per unit	Coverage *	kVA at Transformer LV busbar	Network factor **	ADMD kVA impact on shared network
	EXISTING RIGHTS							
RE 464	Undetermined Use Zone	Unit	-	0.00	1.00	0	1.00	0
						0		0
	PROPOSED RIGHTS							
RE 464	Community Zone I (Education Facility)	m²	52 100	0.04	0.60	1250	0.50	625
RE 464	Industrial Zone I (Light Industrial)	m²	83 300	0.04	0.75	2499	0.50	1 250
						3749		1 875
	New capacity					3 749		1 875

* Coverage is used in calculation instead of FAR due to typical development in area and network circumstances.
** Diversity between various loads downstream from the Point of Connection to calculate the development contributions.

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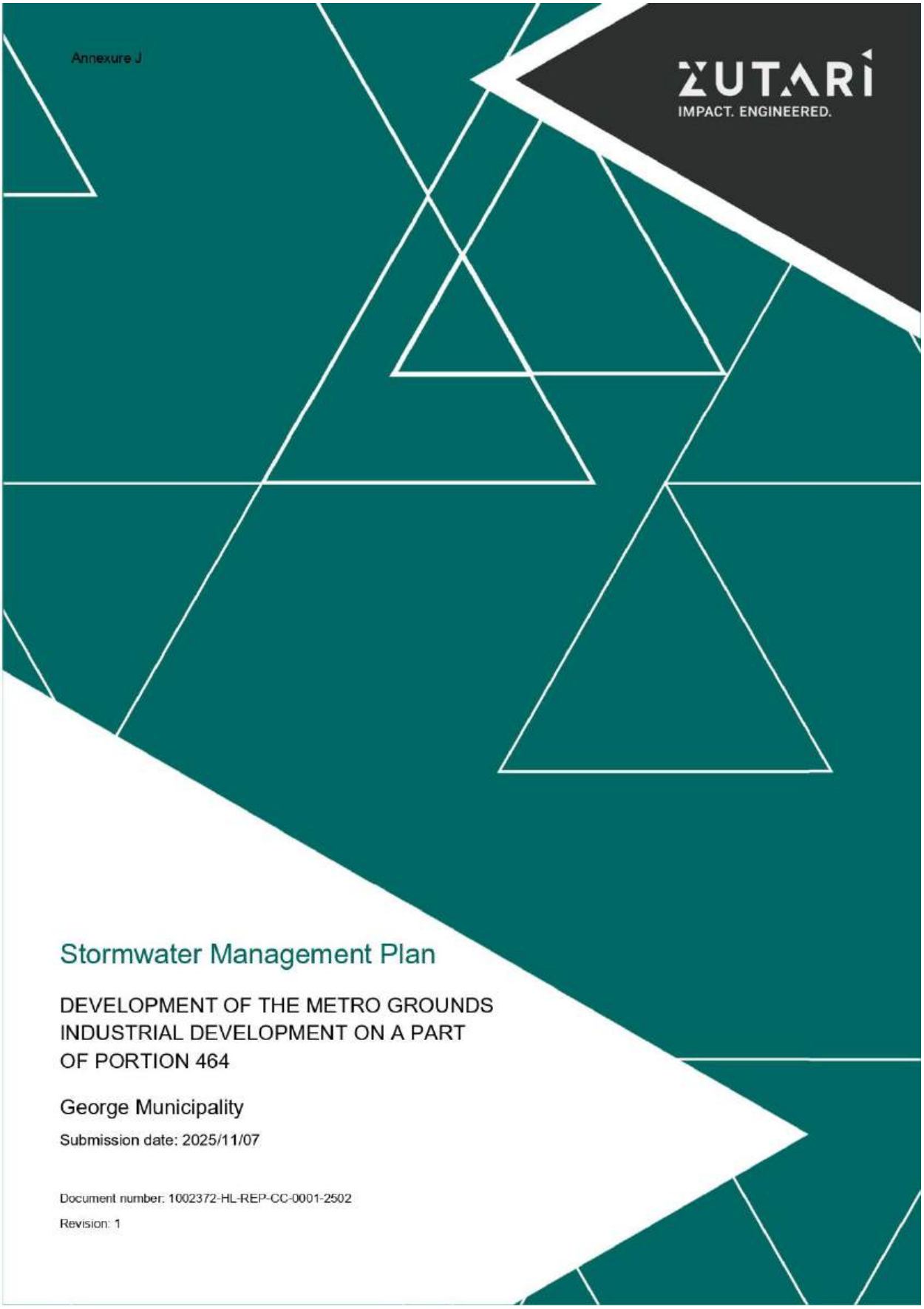
ANNEXURE J


Annexure J
ZUTARI
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Stormwater Management Plan
DEVELOPMENT OF THE METRO GROUNDS INDUSTRIAL DEVELOPMENT ON A PART OF PORTION 464
George Municipality
Submission date: 2025/11/07
Document number: 1002372-HL-REP-CC-0001-2502
Revision: 1

ANNEXURE J (continue)

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Current revision		1				

Approval			
Author signature		Approver signature	
Name	H Laubscher	Name	M Botha
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ANNEXURE J (continue)

1 Introduction

1.1 Background to Report

As per Figure 1: Locality Map below, the subject portion of the Remainder of Erf 464, George has been identified as land to accommodate an industrial development, with an educational component. The project intent is to enable the release of small industrial stands to users/buyers, whilst the educational erf is to be made available to secondary- or tertiary educational uses.

This report is based on the revised Conceptual Development Framework Layout, Drawing No. 1002372-0000-DRG-CC-0001-H, dated 9 September 2025, attached as Annexure A. Ideally, the existing bulk civil infrastructure will be utilized to accommodate the proposed development, herein referred to as the Metro Grounds Industrial Development. All future reticulation will conform to George Municipal Standards.

Zutari will look at the road design and civil services for the proposed development which includes the necessary infrastructure to collect and control stormwater runoff where required.

1.2 General and Development Location

The subject area is described as part of the Remainder of Erf 464, George and is indicated on the map below. The current zoning of the area in question is "Undetermined Use Zone" as per the provisions of the George Integrated Zoning Scheme Bylaw, 2017. Previously rights were approved for a bus-depot to be located to the east of the subject property. Note however that the implementation of the bus-depot is not included in this project.

Figure 1 : Locality Map

ANNEXURE J (continue)

The projected land use for the proposed development is as follows:

Land Use Description/ Erf Type	Zoning (STB. Scheme)	Area (ha)	% of Area
Education Facility	Community Zone I	5.34	30%
Light Industrial	Industrial Zone II	5.56	43%
Transport	Transport Zone 1	1.76	43%
Private Open Space	Open Space Zone II	1.3	7%
Public Street	Transport Zone II	2.58	20%
Total		**16.54**	**100%**

2 Objective of Report

The objective of this report is to:

- Analyze the local catchment area in order to :
  - Determine the 1:5-year (minor system) flow rates at points of interest; and
  - Determine sizes for stormwater drainage pipes, culverts and / or channels within the proposed development.
  - Determine the effect of external stormwater runoff and how this can be accommodated through the proposed development.
  - Make recommendations with respect to the discharge of runoff.
- Prepare drawings showing the outlet structure components and possible mitigating measures for stormwater drainage and erosion control i.e. energy dissipation and attenuation.

3 Design Criteria and Standards

3.1 Design Criteria

The following document serves as the basis for the detail design criteria and standards:

- Guidelines for Human Settlement Planning and Design ("Red Book").

3.2 Construction Specifications

All materials and workmanship shall comply with the specifications as set out in the South African National Standards for Civil Engineering (SANS).

3.3 Stormwater System

The stormwater system forms an integral part of the road and urban planning layout. The system rests on three legs, the minor system, the major system and an emergency system. Minor storms are catered for in the pipe system while major storms are routed through a linked system of roads and public open spaces using attenuation techniques. The emergency system recognizes failure of the minor and major system by storms greater than provided for in the major system or in the event of

malfunction of the minor system by providing continuous overland flow routes to minimize flooding of residential areas.

3.3.1 Minimum design criteria for stormwater system

The criteria to be used for the design of the systems is the following:

- Minor system: 5 year return period conveyed in an underground pipe system. Preferably the overland flow shall not exceed a depth of 200mm;
- Major system: 50 year return period. The difference between the 5 year and 50 year to be conveyed in the road prism with a flow depth not exceeding 150mm within the road reserve width;
- The minimum gradients for pipelines will be designed to give a minimum velocity of 0.7m per second with the pipes flowing full;
- The maximum flow velocity shall be 3.5m per second;
- Major Stormwater overflows are to be provided to convey the excess storm water from the streets into designated public open spaces;
- Stormwater flow velocities in road ways will be kept as low as possible and related to the surface finish to prevent scour and erosion; and
- Roads will be graded to ensure free and continuous flow to the main Stormwater system and to prevent localized ponding at intersections.

3.3.2 Pipelines/Culverts

- Stormwater pipes will generally be class 50D, 75D or 100D as required by the loading and installation conditions;
- Pipes will be laid on Class C bedding;
- The minimum cover on pipes will be 0.80m; and
- The minimum pipe diameter will be 450mm for longitudinal runs and catch pit connections.
- Box culverts will be class 75S, 100S or 150S depending on the span.

3.4 Road System

The road system forms an integral part of the local area plan.

3.4.1 Design criteria for Roads

The design criteria for roads are the following:

- Road reserve widths: 22m and 30m;
- Design life of the roads: 20 years;
- Subgrade CBR: 15 to 20;
- Subbase CBR: 45 minimum (processed crushed stone);
- Base course CBR: 80 minimum (processed crushed stone);
- Surfacing: Asphalt, paving or cape seal;
- Minimum road longitudinal grade: 0.475%; and
- Minimum road cross fall: 2-3% depending on final road surfacing type.

3.5 Standard of Engineering Services to be Provided

Level of services regarding roads and stormwater are as follows:

3.5.1 Roads and stormwater

- Road widths will be 6m in 22m and 6.4m in 30m reserves;
- Subgrade, Subbase and Base materials will be imported;
- Subsurface drainage will not be required;
- The underground piped stormwater drainage system will have a minimum of 450mm diameter;
- Where roads are surfaced, paving or asphalt surface will be provided;
- Combination kerbs, CK5 will be provided on the low side of all roads to drain stormwater towards catch pits;
- Mountable kerb, MK10 will be provided on the higher side of the roads;
- Barrier kerbs, BK2 and Channel, C1 will be installed around bell mouths. Bellmouth radiuses will be a minimum of 6m.
- All stormwater drains will be provided with a sand trap of at least 500mm deep.

4 Existing Stormwater Network

The site has a fairly steep slope gradient towards the Eastern, Southern and Western side, increasing towards natural drainage lines. There is no existing stormwater infrastructure near the proposed development. The upstream runoff and generated stormwater runoff from the proposed development will have to be conveyed by means of both an underground system as well as an overland flow system.

The watercourses are the current catchment source point of the proposed site. The internal stormwater will be designed in such a manner that it follows the natural topography of the site, and the outflow will be dispersed via energy dissipating outlets towards the drainage paths.

If required, indigenous vegetation will be established to the specifications of stormwater wetlands plant material contained in various publications to assist in reducing the risk of erosion and the establishment of wetlands for the purpose of stormwater attenuation. All ponds will be cordoned off for security and safety and necessary signage erected indicating the purpose of the ponds to raise awareness amongst the residents and public of the importance of stormwater control and treatment.

5 Stormwater Runoff Calculation

The calculated stormwater runoff is as follows:

Description	Metro Grounds, George	
MAP (mm)	552mm	
Area	20 ha	
Design Period	1:5 years	
	Pre Development	Post Development
Runoff Q (l/s)	2485	6553
Dispersal areas	Watercourses	Watercourses

From the above it can be seen that there will be an increase in volume of stormwater as a result of the proposed development.

ANNEXURE J (continue)

6 Proposed Design

The proposed layout of the development is still in draft format and the final stormwater layout and design will be done as soon as the layout has been finalized and approved. **Annexure A** shows the proposed extent of the development as well as proposed coverage.

Conventional stormwater networks consisting of stormwater catch pits, manholes and energy dissipating headwalls will convey the stormwater generated in the area into the proposed stormwater outlets and silt retention structures to minimize the peak runoff towards the existing detention areas. **Annexure D & E** shows typical examples of energy dissipation and silt retention structures.

A site specific and detailed stormwater design including mitigating measures as described in this report will be done within this framework following the finalization of the layout and may vary slightly from what is presented in this plan.

7 Floodlines

This proposed development is not directly affected by any Floodline. Feedback from the George Municipality's Civil Engineering Services Department, indicated that floodlines have been delineated for the Rand Street extension and are currently being reviewed. The intention is that the impact of this development on the flood lines should be considered as part of the study.

8 Spatial Planning Considerations

It is proposed that the Spatial Development Plan take cognizance of the required stormwater management. This includes:

- Provision of stormwater escape routes between erven to direct minor and major flows towards the existing watercourse area;
- Roads linking the proposed site with the existing/proposed access road should not restrict stormwater run-off;
- No erven should be constructed too close to the existing watercourse to impede overland flows or be infringing on the National Water Act (1998) Section 144; and
- Incorporation of the existing watercourse and detention ponds in the final SDP, if applicable.

9 Stormwater Management Techniques: During Construction

The stormwater surface run-off water will be managed carefully during construction. The following management techniques will be implemented:

- Temporary cut-off channels and berms;
- Routing of run-off towards the existing watercourse and current drainage routes;
- Erosion protection by means of gabions, Reno mattresses, Geofabric and/or any combination thereof;
- Compliance with a site specific Environmental Management Plan;

- Provision for dealing with water, in accordance with SABS 1200, will be stipulated in the Project Specification and Contract Documents. Of specific importance will be the following clauses:

  i. Clause 5.5 in SABS 1200 A;
  ii. Clause 5.3 in SABS 1200 AA;
  iii. Clause 5.1.3 in SABS 1200 D; and
  iv. Clause 5.1.2 in SABS 1200 DB.

10 Stormwater Management Techniques: Post-Construction

The factors to consider in Stormwater Management falls broadly into two main categories, namely those related to quantity and those related to quality.

Any development brings about changes to the natural environment of a site, which in turn has an effect or disrupts the natural hydrological cycle. Changes include, among other:

- Increase in impermeable surfaces (roads, roofs etc.) resulting in lower infiltration, higher run-off volumes and velocities;
- Changes to natural flow routes through earthworks, infrastructure and shaping of terrain; and
- Changes to local water course environment and ecology.

The management of the increased run-off volumes and velocities is important as it can be detrimental to the receiving drainage system and communities downstream of the site, as it could cause severe erosion, property damage and even loss of life.

By restricting peak flows to pre-development levels, the *status quo* of the catchment is maintained. This could be achieved through the implementation of the following recommended practices, as described in paragraphs 10.1 and 10.2 below.

10.1 Infiltration and Dissipation

By dispersing the run-off to various outfalls spread across the site, the recharge of the underground water table is promoted, and the risk of erosion reduced.

Energy dissipating structures combined with Reno mattresses to prevent scouring and erosion will be utilised creating a high friction factor and thereby reduce the velocity of stormwater. Refer to Appendix C for further information regarding energy dissipation.

The installation of Reno mattresses and gabion boxes at outlets acts as energy dissipaters and stilling basins. These structures are also used as silt traps to prevent the loss of silt to the natural water courses. Silt that gets trapped on the Reno mattresses acts as a growing medium for vegetation which thereby accelerates the re-establishment of natural vegetation. This rehabilitated vegetation also acts as a dissipation medium, resulting in attenuated run-off.

10.2 Attenuation

Attenuation functions by the principle of allowing large flows of water to enter a facility but limiting the outflow by having a small opening at the low point in the facility. The difference between in- and outflows is temporarily stored in an allocated space within which safe storage/detention can occur.

Attenuation in the form of large dams will not be possible in this instance, but rainwater in the proposed development will be discharged onto the road and flow into inlet works/catch-pits. The water will then proceed to the lowest point flowing out to the headwall. The aim is to ensure the maximum percentage of rainwater flows to the catchment source point near the proposed development area.

11 Conclusions and Recommendations

The planning of stormwater design elements must always be seen as a holistic process which incorporates much more than the infrastructural elements required in adequately dealing with stormwater. It affects a range of environmental goals and management principles and aims not only to mitigate negative impacts, but actively promote positive modifications in its application.

The design approach to be adopted for the proposed development and as discussed above, can be summarised as follows:

- Promotion of on-site infiltration;
- Minimise concentration of stormwater;
- Maintain pre-development run-off levels as far as possible;
- Enforcement of management principles;
- Identify escape routes for major floods;
- Responsible discharge of stormwater into downstream systems; and
- Allowing for the necessary attenuation where possible.

Certain aspects will require further consideration during the detail design stage, they are:

- Stormwater needs to be responsibly conveyed to the existing watercourse;
- Stormwater collected along the watercourse needs to be able to reach the existing drainage infrastructure downstream;
- The site development plan needs to adequately provide for servitudes to accommodate major flows;
- Maximisation of attenuation of the rainwater that most water can be catched.

As indicated in this report, the proposed site's stormwater will be managed in a responsible manner and be safely discharged into the surrounding drainage system, without any detrimental impacts to the environment or communities.

The application of this Plan on this particular project will lead to:

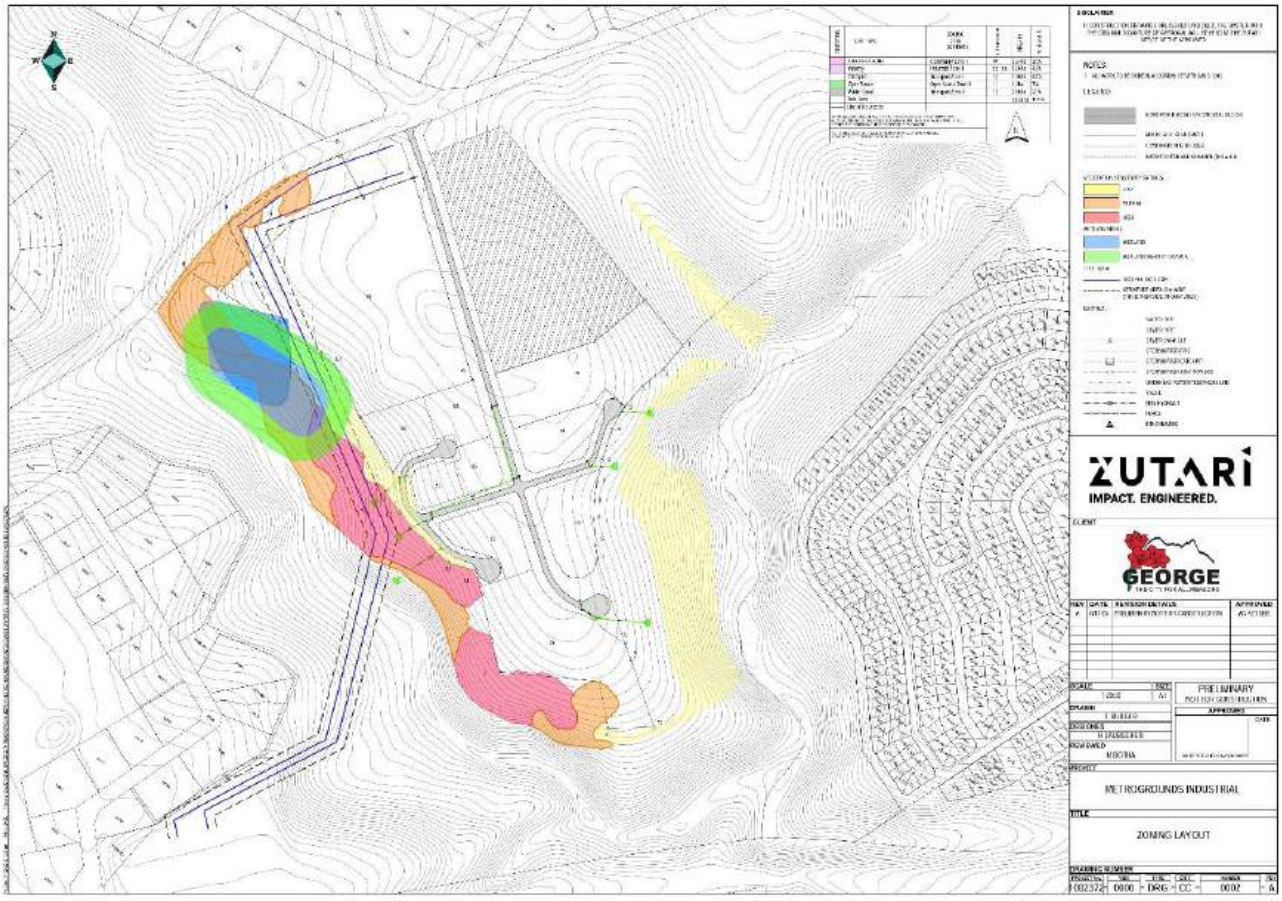
- Minimisation of the impacts of stormwater from new developments on receiving waters such as watercourses, wetlands, coastal waters, etc; and
- Prevention of further degradation of receiving waters by stormwater draining from existing developments, as well as in the long term the reversal of current undesirable stormwater impacts.

ANNEXURE J (continue)

Annexure A

Zoning Layout and Sensitive Areas

ANNEXURE J (continue)

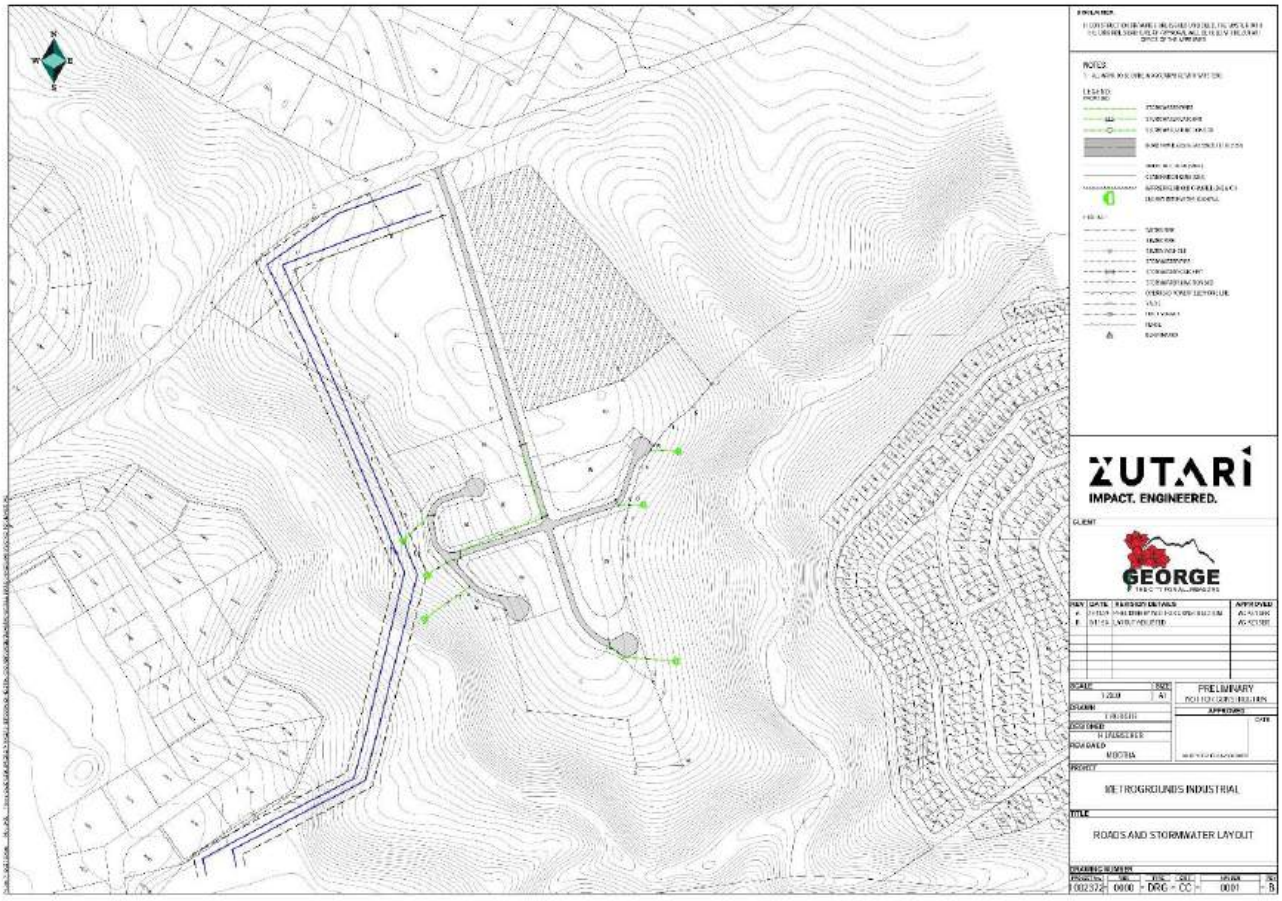


ANNEXURE J (continue)

Annexure B

Stormwater Services Layouts

ANNEXURE J (continue)

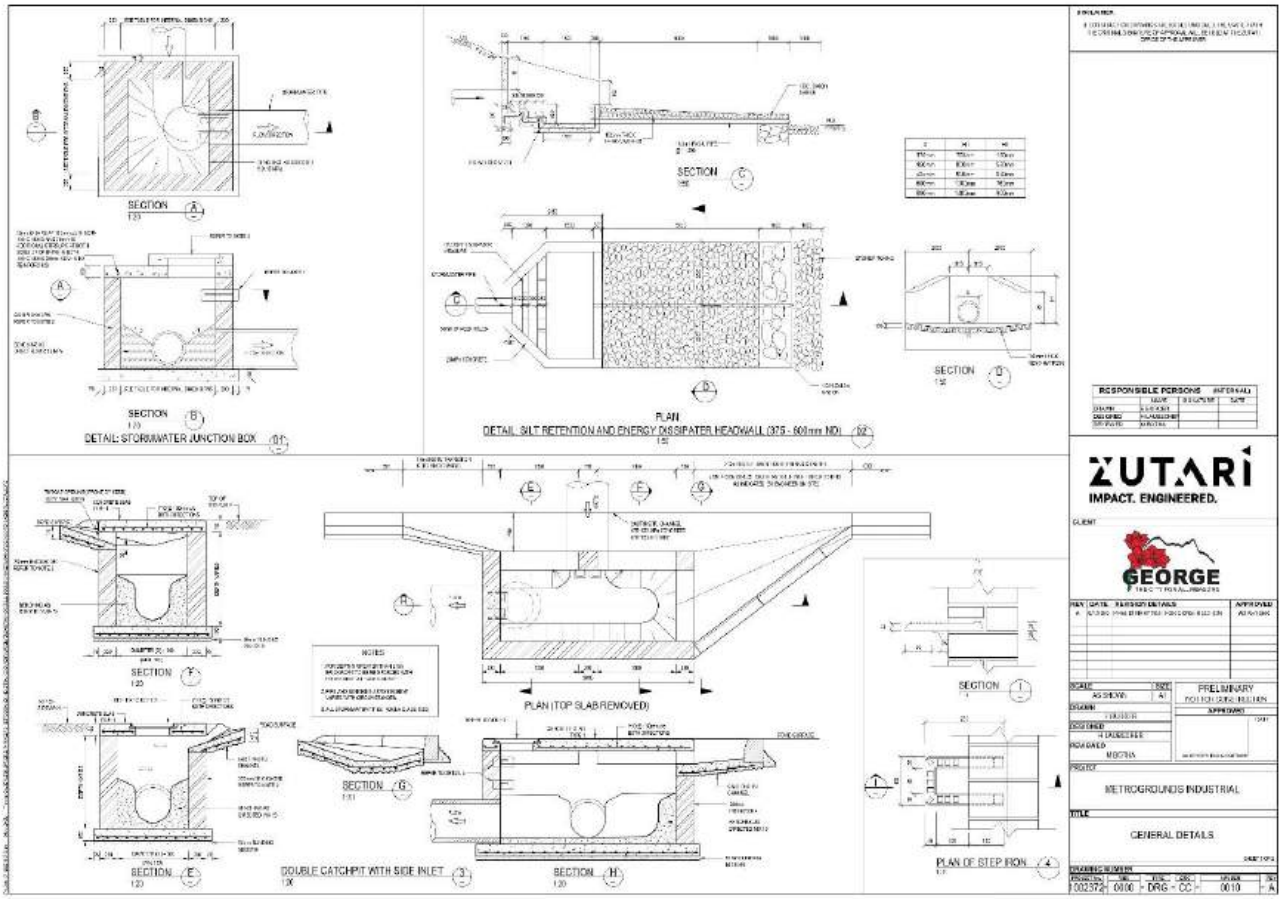


ANNEXURE J (continue)

Annexure C

Energy Dissipation Details 1

ANNEXURE J (continue)

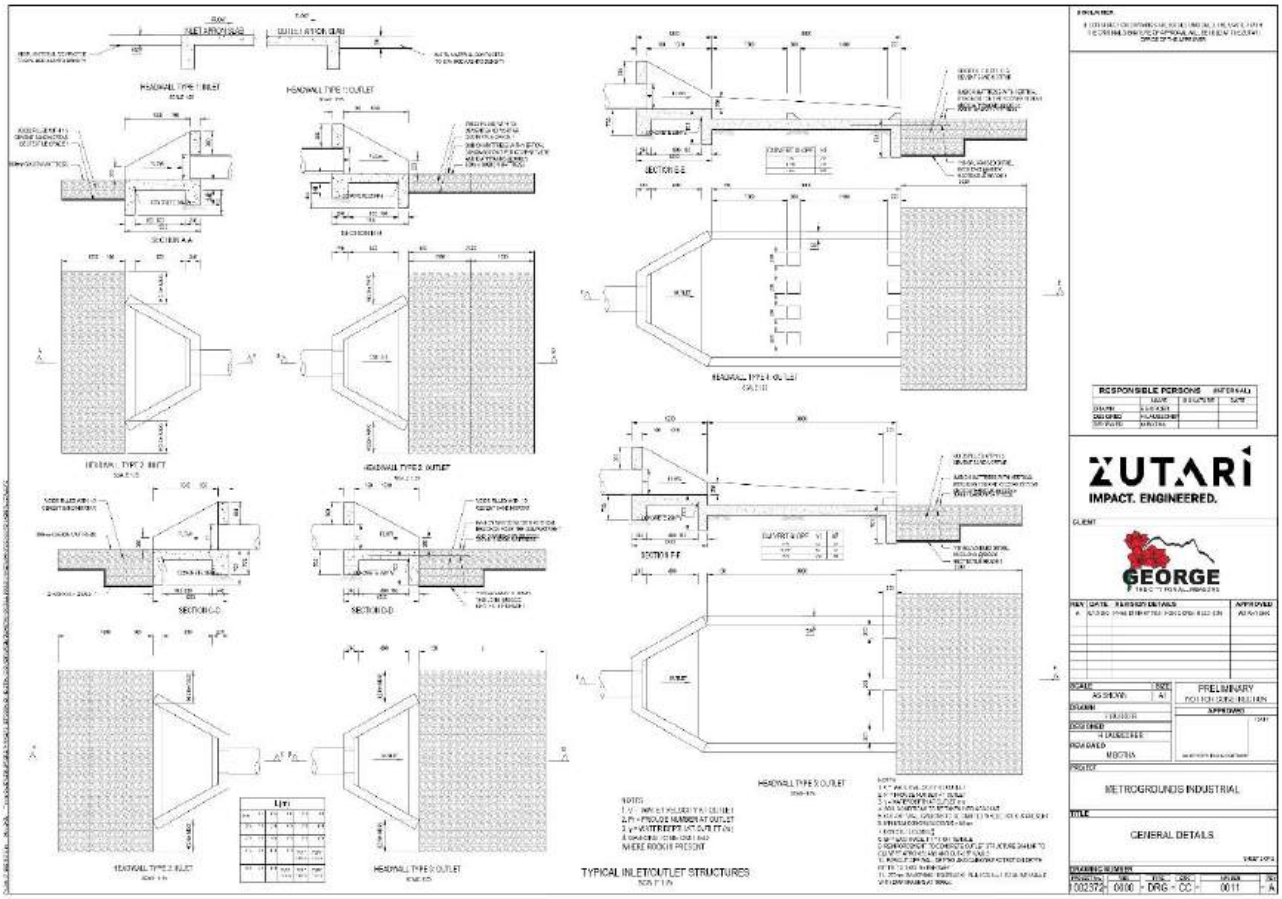


ANNEXURE J (continue)

Annexure D

Energy Dissipation Details 2

ANNEXURE J (continue)



ANNEXURE J (continue)

In diversity there is beauty and there is strength.

MAYA ANGELOU

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Revision

ANNEXURE K

Annexure K

URBAN ENGINEERING
CONSULTING CIVIL AND STRUCTURAL ENGINEERS

TRAFFIC IMPACT INVESTIGATION

PROPOSED METRO GROUNDS INDUSTRIAL DEVELOPMENT

Report Number 22-158_TIA

Date: November 2025 Revision (2)

ANNEXURE K

QUALITY ASSURANCE DATA

Report Title:	PROPOSED METRO GROUNDS INDUSTRIAL DEVELOPMENT
Client:	Zutari
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On behalf of Urban Engineering (Pty) Ltd

ANNEXURE K (continued)

EXECUTIVE SUMMARY

This report presents a Traffic Impact Assessment (TIA) conducted by Urban Engineering (Pty) Ltd, commissioned by Zutari, for the proposed Metro Grounds industrial development on the remainder of Erf 464 in George. The assessment aims to evaluate and advise on the proposed internal road network, focusing on planning aspects such as road layout, road reserve widths, intersection spacing, and forms of control, to ensure functionality, connectivity, and access.

1. **Site Description:**
   - Located at the intersection of PW Botha Boulevard and Ossie Urban Street, the site is largely undeveloped.
2. **Surrounding Road Network:**
   - PW Botha Boulevard is classified as a Class 3 District Distributor
   - Ossie Urban Street is classified as a Class 5 Access Road.
3. **Historical and Existing Conditions:**
   - Previous traffic studies conducted in 2011, 2015, and 2021 provide context for the current assessment, highlighting the necessity for infrastructure improvements due to increased traffic volumes.
4. **Key Issues Identified:**
   - Poor Shoulder Sight Distance (SSD) at the PW Botha Blvd/Ossie Urban Str intersection.

RECOMMENDATIONS

i. **Intersection Upgrades:**
   - **PW Botha Boulevard/Rand Street:**
     - Maintain as a signalized intersection instead of converting to a roundabout to improve safety and create a synchronized corridor with other signalized intersections.

ii. **Intersection of PW Botha Boulevard/Ossie Urban Street:**
   - Upgrade to a signalized intersection to mitigate the lack of sufficient shoulder sight distance and enhance synchronization with surrounding traffic signals.

iii. **Internal Road Network:**
   - Implement recommended intersection controls and driveway positions as per the provided layout plans to ensure maximum mobility.

iv. **Pedestrian and NMT Provisions:**
   - Establish UA-compliant sidewalks next to all new internal roads and along PW Botha Boulevard. Cross sections to include a landscaped furniture zone to enhance pedestrian safety and enhance the aesthetic appeal of the kerbside environment.
   - Include provisions for street lighting alongside new internal Metro Grounds roads to ensure safety and visibility at night.
   - Make provision for clearly defined (preferably Class 1 but minimum Class 3) bicycle routes/lanes in all road cross sections. Road layouts should also make provision for safe bicycle crossing areas at intersections.

ANNEXURE K (continued)

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LIST OF ABBREVIATIONS

GIZSBL	George Integrated Zoning Scheme By-Law
WCG	Western Cape Government
PGWC	Provincial Government of the Western Cape
AMG	Access Management Guidelines (2020)
RDE	Roadside Development Environment
UA	Universal Accessibility
NMT	Non-Motorised Transport
GLA	Gross Leasable Area
SATGRM	South African Trip Generation Rates Manual
CITP	Comprehensive Integrated Transport Plan
LOS	Level of Service
DoT	Department of Transport
MR	Main Road
DR	Divisional Road
RNIS	Road Network Information System
LILO	Left-In Left-Out
PWBB	PW Botha Boulevard
NMB	Nelson Mandela Boulevard

ANNEXURE K (continued)

1 INTRODUCTION

Urban Engineering (Pty) Ltd was appointed by Zutari for the Traffic Impact Assessment pertaining to the proposed industrial development (referred to as Metro Grounds) on the remainder of Erf 464, George.

2 TERMS OF REFERENCE

Based on George Municipality's request for quotation (Reference: ToR Metro Grounds Industrial: Layout Review, Outline Services Report and TIA, Revision 9 dated 27 July 2022), the terms of reference are stipulated as follows:

*"**Traffic Impact Assessment**: A traffic impact assessment for the purposes of the proposed Go-George bus depot was concluded (George Integrated Public Transport Network: Proposed Permanent Bus Depot on Part of Portion 464 George: Traffic Impact Assessment – Draft 2: 14 September 2021), which included references to the impact of the proposed industrial area. Working from the data contained in such report, if possible, a TIA to be done in respect of the proposed industrial development. The roads master planning context and/or the existing and proposed projects in the vicinity (wider context) of the site to be considered in the TIA in order to facilitate functionality, connectivity and access. Non-Motorized Transport and pedestrian movement to be enabled."*

3 OBJECTIVE OF THIS REPORT

This report aims to evaluate and advise on the proposed internal road network, focusing on planning aspects such as layout, road reserve widths, intersection spacing, layouts and forms of control. This report should be seen as a high-level road network planning tool. Road network planning is important when planning new developments because it can have significant impacts on the economy, society and health of the people living in and around the development area.

4 SITE DESCRIPTION AND LOCALITY

The site under consideration belongs to the municipality and comprises a part of the Remainder of Erf 464, George. The site is situated at the intersection of PW Botha Boulevard and Ossie Urban Street, roughly halfway between Nelson Mandela Boulevard and York Street. The site has approximate Latitude/Longitude coordinates of 33°59'21.34"S and 22°27'28.52"E. The site is mainly undeveloped except for an electrical substation situated at the entrance to the site. Photos taken during various site inspections between 2024 and 2025 are attached as **ANNEXURE A.**

Figure 4-1 - Site locality

ANNEXURE K (continued)

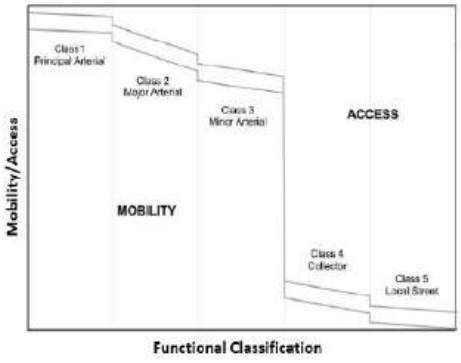
5 THE SURROUNDING ROAD NETWORK

Depending on which guidelines are being used, the nomenclature used in road classification varies slightly. For ease of reference, the differences between the terms used in the 2006 Department of Transport (DoT) guidelines and those specified in 2018 in the Road Classification and Access Management Guideline (COTO), are listed below:

Road Class	Function	DoT 2006 Guidelines	COTO 2018 (TRH 26 Manual)
Class 1	Mobility	Primary Distributor	Principal Arterial
Class 2		Regional Distributor	Major Arterial
Class 3		District Distributor	Minor Arterial
Class 4	Access / Activity	District Collector	Collector Street
Class 5		Access Road	Local Street
Class 6		Non-motorised access way	Walkway

Table 5-1 - Road Classification Nomenclature

Roadways are classified by function on the basis of the priority given to land access versus through-traffic movement. Class 1 and 2 arterial roads provide a predominantly "mobility" function and Classes 4 and 5 roads perform a collector and local "access" function.



Class	Function	Description
Class 1	Mobility	Principal Arterial
Class 2		Major Arterial
Class 3	Mobility/Access	Minor Arterial
Class 4		Collector
Class 5	Access	Local

Figure 5-1 - Relationship Between Access and Mobility

The functions of 'mobility' and 'access' overlap on minor arterials (Class 3 roads). This relationship between access and mobility has been indicated schematically in Figure 5-1.

Access Management is particularly important along Principal, Major and Minor Arterials and other primary roads that are expected to provide safe and efficient movement of traffic as well as limited access to property. However, Access Management is also necessary on lower-order roadways, such as Collector - and Local Streets, to address safety considerations, such as sight distance and corner clearance.

As indicated in Figure 4-1, the site is situated at the intersection of Ossie Urban Street and PW Botha Boulevard. The current intersection layout makes provision for free-flow movement along PW Botha Boulevard, with stop control along the minor roads only.

The current layout of the intersection of PW Botha Boulevard and Ossie Urban Street can be seen in die aerial photos included as Figure 5-2 below.

Figure 5-2 - Intersection Layout

5.1 PW BOTHA BOULEVARD

5.1.1 ROAD CHARACTERISTICS

PW Botha Boulevard is approximately 3100m long and runs predominantly in an East/West direction, providing a transportation link between Nelson Mandela Boulevard (NMB) in the east and York Street (MR0002) in the west. The surfacing is mainly bitumen based (asphalt) but short sections of interlocking paving or concrete are present at high traffic intersections. The cross sections in the vicinity of the site consist of a 9.8m wide surfaced roadway with concrete kerbs and a grassed verge on both sides. Stormwater is diverted by a combination of open stormwater channels and formal pipe infrastructure. The section under consideration has a posted speed limit of 60 km/h. This speed limit increases to 80 km/h, downstream of the PW Botha/Ossie Urban Intersection (towards Nelson Mandela Boulevard).

Figure 5-3 – PW Botha Boulevard Photos

The site is situated next to the GO GEORGE Industria-CBD Bus route (refer to Figure 5-4). Formal sidewalks are provided in isolated positions next to the GO GEORGE bus stops, but in general insufficient provision for Non-Motorised Transport (NMT) has been provided and pedestrians and cyclist are forced to make use of the roadway which they share with passenger vehicles, busses and heavy vehicles.

Figure 5-4 - Intersection Layout

At the time of the 2025 revision to this report (Revision 2), the PW Botha Boulevard road upgrade was in its final stages of completion, and the road surface was in a very good condition as indicated in the photos below.

Figure 5-5 - PW Botha Surface Condition

ANNEXURE K (continued)

5.1.2 ROAD CLASSIFICATION

Based on the George Roads Master Plan (Kantey and Templer, June 2006), PW Botha Boulevard is classified as a Class 3 District Distributor (refer to Figure 5-6).

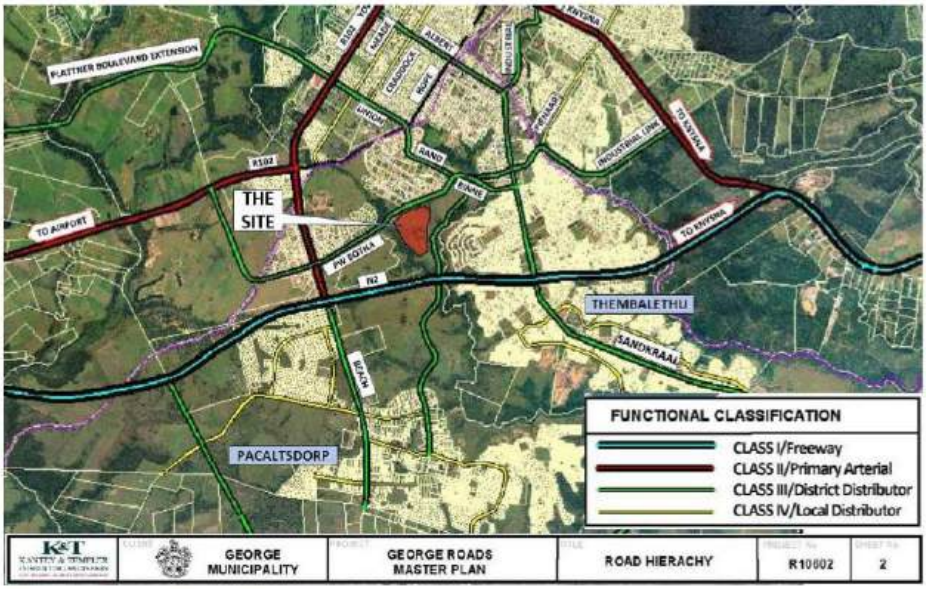


Figure 5-6 - George Roads Master Plan

The TRH 26 (SA Road Classification and Access Manual) defines Class 3 Minor Arterials as follows:

Class U3 Urban Minor Arterials

Urban minor arterials would typically be required to serve traffic in most urban areas, including small towns.

In cities and larger towns, the Class U3 arterials would be used to provide connections between districts of the city or town and form the last leg of the journey on the mobility road network, bringing traffic to within one kilometre of its final destination. In small towns, they would be used to provide general overall mobility to the whole town. The arterials can also be used to serve economic activity centres that are not served by Class 1 or 2 arterials.

The Class U3 arterials should also be used to serve as connectors to rural Class 3 routes. They should preferably start and stop at arterials of equal or one higher Class (2 to 3) but can connect to Class 1 principal arterials.

Minor arterials function as through routes on a district scale. While still carrying predominantly through traffic, they serve shorter distance trips with a length of around 2 km but can be as short as a single block if connecting higher order routes.

The minor arterials would typically carry volumes of traffic of between 10 000 and 40 000 vehicles per day.

5.2 OSSIE URBAN STREET

5.2.1 ROAD CHARACTERISTICS

Ossie Uban Street is approximately 685m long. The road starts at the PW Botha/Ossie Urban Intersection and terminates with a cul-de-sac at the end. The street is surfaced with bitumen-based sealer (asphalt) and the typical cross sections consist of a 9.6m wide surfaced roadway with concrete kerbs both sides. Multiple high- and low volumes driveways give direct access to the various industrial properties situated next to Ossie Urban Street. There are GO GEORGE bus stops at the intersection of Ossie Urban and PW Botha Boulevard, but Ossie Urban Street does not form part of the GO GEORGE bus route. Little to no provision is made for Non-motorized Transport (NMT) and pedestrians are forced to walk on the verge or within the roadway.

Figure 5-7 - Discovery Road Photos

The Roadside Development Environment is influenced by various industrial developments with direct access to Ossie Urban Street, as indicated in Figure 5-8.

Figure 5-8 - Ossie Urban Roadside Development Environment

5.2.2 ROAD CLASSIFICATION

Ossie Urban Street was not specifically addressed in the George Roads Master Plan (prepared by Kantey and Templer), but the road has been included in the George IMQS website. According to the George IMQS, Ossie Urban Street is classified as a Class 5 "Access Road" (refer to Figure 5-9).

Figure 5-9 - George IMQS Road Classification

The TRH 26 (SA Road Classification and Access Manual) defines Class 5 Local (Access) Streets as follows:

Class U5 Local Access Street

Class 5 streets provide access to individual properties. As they must provide exclusively an access or activity function, both traffic volumes and trip lengths must be significantly limited. They must not be continuous between roads of an order higher than Class 4.

Local streets should not carry any through traffic but only traffic with an origin or destination along the street, i.e. all the traffic using the local street will have a destination in the street itself. In terms of the TRH 26 Manual, local streets can be classified as either 5a or 5b as follows:

i) Class 5a Commercial local street

These local streets are found in areas with commercial, business, industrial, shopping and mixed-use residential developments. The streets often carry a high percentage of heavy vehicle traffic which uses the street to access loading areas or bus stops.

Commercial local streets should not carry volumes of more than about 5 000 vehicles per day. The length of the street should be limited to a maximum of about 1 km.

ii) Class 5b Residential local street

These local streets are found in residential areas and almost exclusively serve residential traffic and possibly some public transport as well as refuse and small delivery trucks.

Residential local streets should not carry more than about 1 000 vehicles per day or 100 vehicles during peak hours. If Class 5b residential local street volumes exceed 5 000 per day, this is a criterion to classify the road as a Class 4b residential collector.

Local residential streets should be short blocks of less than 0.5 km, with one kilometre being the maximum for safety reasons.

6 GUIDELINE DOCUMENTS

This investigation was undertaken in accordance with the following guidelines:

- National Land Transport Act, 2009 (Government Gazette No. 32110)
- South African Traffic Impact & Site Traffic Assessment Manual (TMH 16 Volume 1, COTO)
- South African Trip Data Manual (TMH 17, Draft 2.0, May 2018)
- Access Management Guidelines (WCG Dept. Transport and Public Works, 2020)
- George Roads Master Plan (Kantey and Templer, 2007)
- Urban Design Famework, (10 March 2023), Zutari
- Department of Transport, UTG 1 (1996) Geometric Design of Urban Arterial Roads
- Department of Transport UTG 5 (1996) Geometric Design of Urban Collector Roads

7 LITERATURE REVIEW

This report should be read in conjunction with the following reports and historic traffic studies:

1. Transport Impact Statement (TIS) pertaining to: *Proposed Permanent Bus Depot (Borcherds) on a Portion of Erf 464 George, (EJ Robertson Consultants, unreferenced, August 2011)*
2. Traffic Impact Assessment (TIA) pertaining to: *Proposed Development on Erf 464 (Metro Grounds) George, (SMEC Report Nr. C1461-Rev02, February 2015)*
3. Traffic Impact Assessment (TIA) pertaining to: *Proposed Permanent Bus Depot on Portion of Erf 464, George.* (Zutari Report Nr 1001403-0000-REP-KR-00001-1) Revision (Draft 2), dated 2021/09/14.

7.1 EJ ROBERTSON'S TRANSPORT IMPACT STATEMENT (UNREFERENCED, AUGUST 2011)

The Traffic Impact Statement (TIS) for the proposed permanent bus depot on Erf 464 in George was conducted to assess the traffic impacts as part of the George Integrated Public Transport Network (GIPTN). This initiative aimed to transform informal minibus taxi and bus operations into a regulated system. The selected 5-hectare site, located adjacent to PW Botha Boulevard, was chosen for its suitability in terms of land availability, operational efficiency, and minimal planning time. The report was based on the 2002 PGWC Road Access Guidelines.

The depot was designed to accommodate around 200 buses, featuring an office/administration block, staff facilities, a workshop, fuelling and wash bays, and security control. Access to the site was planned via a future road between PW Botha Boulevard and the East Rand extension, with provisions for handling large vehicle movements.

The TIS analysed traffic impacts, noting that bus movements were scheduled outside peak hours (04:00-06:00 and 16:00-18:00), minimizing conflicts with regular traffic. The expected increase in traffic was manageable within existing road capacities.

To mitigate traffic impact, recommendations included road modifications such as additional turn lanes, embayed bus stops, sidewalks, and provisions for future traffic signals. The TIS recommended acceptance of the site zoning and subdivision, with a review suggested if the depot was not operational within five years, incorporating data from interim operations at the York Street depot.

ANNEXURE K (continued)

7.2 SMEC'S TIA PERTAINING TO THE DEVELOPMENT OF ERF 464 (REPORT C1461-REV 2)

The Traffic Impact Assessment was prepared by SMEC South Africa for Royal Haskoning DHV and evaluated the impact of the Erf 464 residential development, on the existing road network. A short summary of the TIA is included below:

7.2.1 CONTEXT AND OPERATIONAL ANALYSIS

The development plan for Erf 464 included 674 erven, comprising 661 low-income residential erven, 3 transport zones, 6 public open spaces, 1 business zone, 2 crèches, and 1 authority erven. The layout was provided by DELplan Urban and Regional Planners.

Traffic counts were conducted on 20 September 2013 at the P.W. Botha Road / Rand Street / Binne Street T-junction for a 12-hour weekday period. These counts were used to determine the 2013 peak hour traffic volumes, which served as the baseline for analysis.

The analysis was performed using SIDRA INTERSECTION 5.1 software, and the analysis covered both the current (2013) and future (2018) scenarios:

- **2013 Scenario**: With the development, most junction movements will operate at acceptable LOS, except for the right turn from Rand Street in the AM peak hour, which will operate at LOS F.
- **2018 Scenario**: The 4-legged junction will generally operate at acceptable levels, but the right turn from Rand Street (North) will face significant delays (LOS F) and oversaturation.

7.2.2 GEOMETRIC ASPECTS

Access Points and Road Network: Rand Street to be extended to form a 4-legged junction with P.W. Botha Road and Binne Street, providing three access points to the new development.

Road Classification: The roads were classified as Class 4 local collectors.

Shoulder Sight Distance (SSD): SSD at the Rand Street extension is inadequate for both passenger and single unit vehicles, necessitating signalization to mitigate safety concerns.

Intersection Spacing: The proposed spacing of intersections and access points meets the guidelines.

Right Turning Lanes: Future traffic projections warrant a right turning lane at the P.W. Botha Road / Binne Street / Rand Street junction.

Left Turning Lanes: Not warranted based on future traffic projections.

7.2.3 SECONDARY ISSUES:

Pedestrians and Street Lighting: Recommendations include improvements for pedestrian safety and adequate street lighting.

Public Transportation Routes: Adjustments to accommodate new public transport routes and embayments were suggested.

7.2.4 SUMMARY AND RECOMMENDATIONS

The study concludes that the proposed development will significantly impact the existing road network, necessitating the implementation of mitigation measures, particularly signalization at critical junctions and the introduction of right-turn lanes. Ensuring adequate sight distances and intersection spacing will enhance safety and operational efficiency.

ANNEXURE K (continued)

7.3 ZUTARI'S TRAFFIC IMPACT ASSESSMENT (REF NR1001403-0000-REP-KR-00001-1)

The Traffic Impact Assessment (TIA) focused on the impact of the proposed permanent depot of the GO-GEORGE bus service on the road network (specifically in the Borcherds Industrial area). This new depot was deemed necessary due to the inadequacies of the current temporary depot on Erf 3472, York Street, which could not accommodate the anticipated growth in the bus fleet.

7.3.1 CONTEXT AND SITE DETAILS

The new depot was planned to be situated on a 4.6-hectare site on Erf 464, adjacent to PW Botha Boulevard, within the Borcherds Industrial area. This location was strategically chosen as it aligned with the George Spatial Development Framework. The temporary depot managed 122 buses, with an expected increase to 150 buses by 2025. This growth necessitated a larger facility to handle the demands of the bus service.

The TIA included detailed traffic counts (July 2021) and projections and access to the new depot was planned to be from PW Botha Boulevard. The report highlighted the importance of appropriate intersection spacing and throat lengths to ensure smooth ingress and egress from the depot, minimizing congestion and ensuring safety.

Specific recommendations were made for turning lanes at key intersections. The report suggested the installation of left and right turn lanes based on traffic volume projections during peak hours. This included detailed calculations for stacking distances and the capacity of the lanes to manage anticipated traffic without causing delays or safety issues.

7.3.2 MITIGATION MEASURES

Traffic Signal Installations: The TIA recommended the installation of traffic signals at the entrance/ exit into the Depot. Signals were necessary to manage the increased traffic flow and ensure safe turning movements, especially for buses entering and exiting the depot.

Entrance and Waiting Areas: To prevent backup onto the public road network, the depot required two (60m long) entrance lanes and ample stacking areas inside the depot.

Parking: The report recommends 93 passenger car parking bays and 194 bays for busses.

7.3.3 SECONDARY CONSIDERATIONS

Pedestrian and Cyclist Safety: The report also addressed the needs of pedestrians and cyclists, recommending appropriate crossings and safety measures to protect these vulnerable road users amidst the increased bus traffic.

Environmental and Community Impact: Consideration was given to the broader environmental and community impacts. Measures were proposed to mitigate noise and air pollution, ensuring the depot's operations did not affect the surrounding areas.

7.3.1 SUMMARY AND RECOMMENDATIONS

Implementation of Traffic Management Measures: The primary recommendation was the careful implementation of the proposed traffic management measures, including signal installations, turning lanes, and internal depot arrangements.

Monitoring and Evaluation: Ongoing monitoring and evaluation of traffic conditions post-implementation were recommended to ensure the measures were effective and to make adjustments as necessary.

The report proposed that PWBB be dualled should all planned development go ahead.

For ease of reference, the findings and recommendations of the Zutari report has been indicated schematically in Figure 7-1 below:

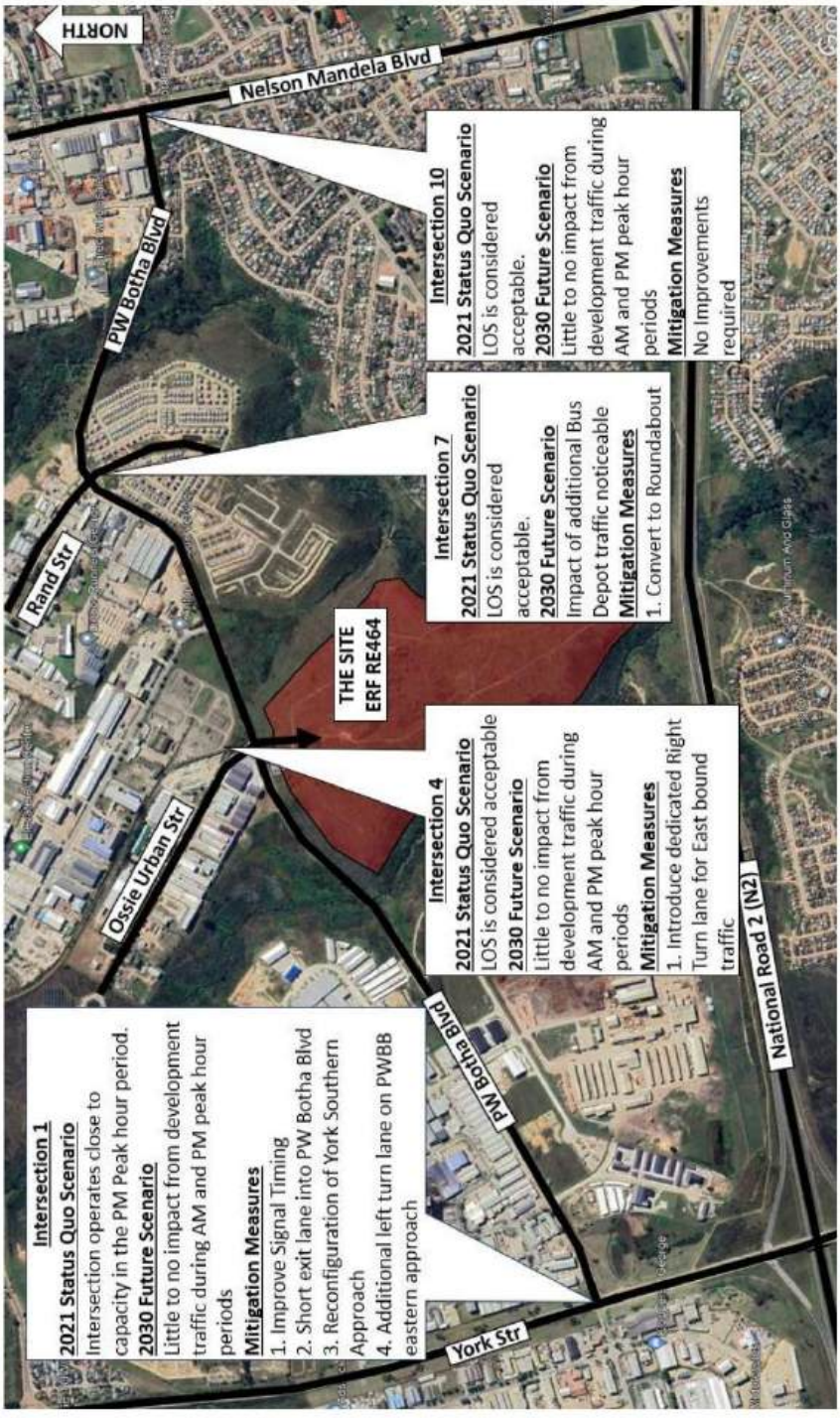


Figure 7-1 - Summary of Findings and Recommendations of Zutari Report

8 EXISTING (EXTERNAL) ROAD NETWORK

8.1 INTERSECTION SPACING

It is important to note that both the SMEC and Zutari reports, were based on the assumption that the intersection of PW Botha Boulevard and Rand Street will be converted to a roundabout. This is, however, not the case and the intersection has instead been converted to a traffic signal-controlled junction. The position of the site in relation to the other junctions (intersection spacing) along PW Botha Boulevard has been indicated schematically in Figure 8-1.

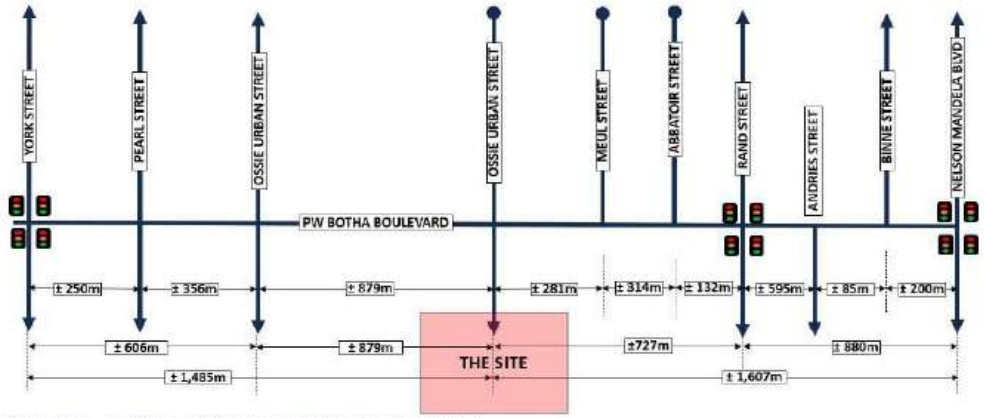


Figure 8-1 - Position of Site along PW Botha Boulevard

Since PW Botha Boulevard is a Class 3 Road (without medians), in the Suburban Roadside Development Environment, the spacing between signalised intersections along PW Botha Boulevard should be a minimum of 540 m, as recommended in the Western Cape Government's Access Management Guidelines (2020) (refer to Figure 8-2 and Table 8-1 below).

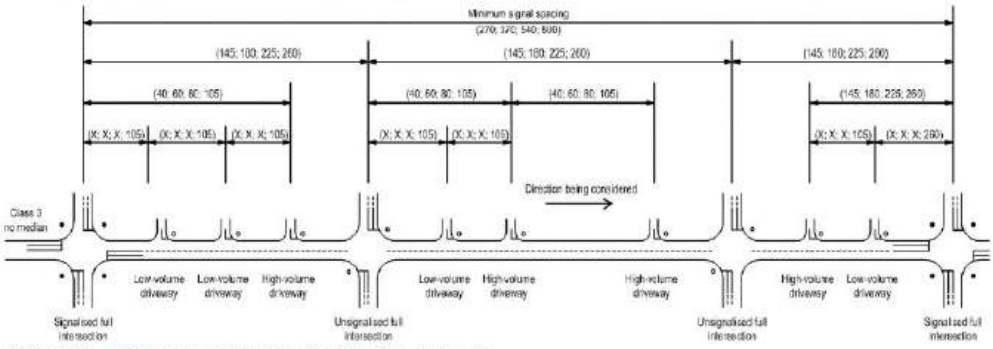


Figure 8-2 - AMG Intersection Spacing for Class 3 Roads

Roadside development environment	Road class Ideal spacing (m)		
	Class 2	Class 3	Class 4
CBD	417	305	243
Intermediate	583	417	305
Suburban	778	583	417
Semi-rural	1 222	778	583

Table 8-1 - Ideal Spacings (m) Before Adjustments

8.2 SHOULDER SITE DISTANCE

At a stop-controlled intersection, the driver of a stationary vehicle must be able to see enough of the intersecting main road to be able to cross before an approaching vehicle reaches the intersection, even if this vehicle comes into view just as the stopped vehicle starts to cross. Shoulder Sight Distance is measured from a passenger driver eye height (passenger car) of 1,05m to an object height of 1,3m. There must be no obstruction to the view in the sight triangle, defined as the area enclosed by the sight line and the centre line of the intersecting main road. The eye position is located 5m back from the road edge as indicated in Figure 8-3

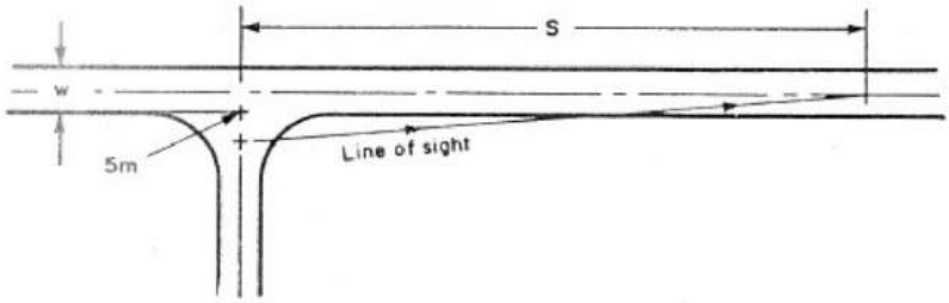


Figure 8-3 - Shoulder Sight Distance Parameters

Shoulder Sight distance is also a function of the Design Speed, Type of vehicle and Road width. In this instance the following assumptions are made:

- Design Speed: 60km/h
- Road Width = min 13,3m (9,8m + additional 3,5m right turn)
- Design Vehicle: Single Unit with Trailer

Based on the above assumptions it follows that a Shoulder Sight Distance of 250m is required along PW Botha Boulevard.

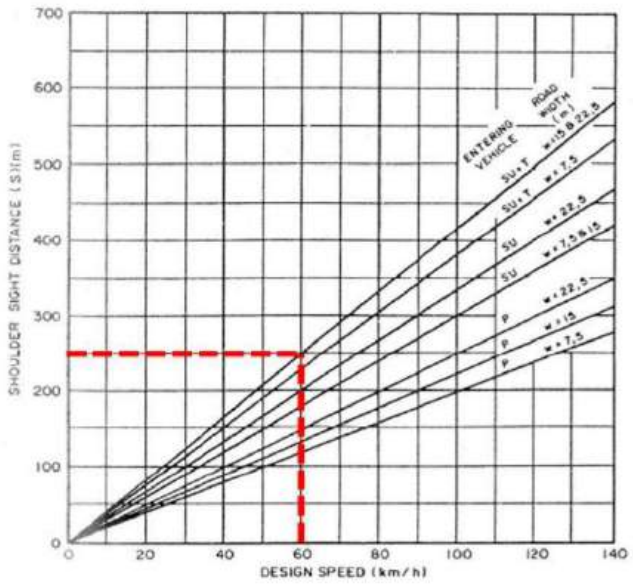


Figure 8-4 - Shoulder Sight Distance Requirement

Shoulder Sight Distance was not addressed in the Zutari Report, but site investigations reveal that SSD in both eastern and western directions, are severely obstructed by existing earth embankments (refer to Figure 8-5 below)

Figure 8-5 – Line of Sight

As an additional check, the line of sight at the road edge, was also measured on site, as indicated in Figure 8-6. It is important to note that the Line of sight was measured directly next to the PW Botha Boulevard road edge, and not at a 5m off-set as required for Shoulder Sight Distance.

Figure 8-6 - Line of sight Measured at Road Edge

Line of Sight:

a) **Towards the West**

The combination of both a horizontal and vertical curve along the western approach of PW Botha Boulevard, leads to insufficient line of sight (111m) when looking towards the west.

b) **Towards the East**

Line of sight in excess of 350m is available when looking towards the east from the new proposed intersection.

The lack of sufficient SSD and Line of Sight is highly alarming, especially when combined with slow moving vehicles such as busses and heavy vehicles.

ANNEXURE K (continued)

9 NEW (INTERNAL) ROAD NETWORK

9.1 CONCEPTUAL DEVELOPMENT FRAMEWORK

The proposed conceptual development framework was prepared by Zutari and makes provision for the following land uses:

Land Use	Zoning	Erf Number	Area (ha)	% of Area
Education Facility	Community Zone I	01	5.34ha	32%
Industry	Industrial Zone II	02-09	5.56ha	34%
Transport	Transport Zone I	10	1.76ha	11%
Open Space	Open space Zone II	11	1.3ha	8%
Public Streets	Transport Zone II	12	2.58ha	15%
Total Area			16.54ha	100%

Table 9-1 – Metro Grounds Land Use Table

The concept layout plan clearly indicates the proposed internal road network. This plan has been attached as **ANNEXURE B**, but for ease of reference an extract of the plan has been attached as Figure 9-1 below.

Figure 9-1 – Extract of Zutari's Zoning Drawing Rev I, (dated 30/10/2024)

From Figure 9-1, it is important to note the following:

1. The zoning drawing does not make provision for the existing electrical sub-station and possible future bus depot. These two erven do not form part of Zutari's application and will be dealt with directly by the relevant departments at George Municipality.
2. The layout makes provision for two main intersections. The first situated at the current junction of PW Botha Boulevard and Ossie Urban Street, and the second, at the future intersection with the proposed Rand Street extension.

9.2 ROAD CLASSIFICATIONS

Based on the intended function of the internal roads, they can be classified as indicated in Figure 9-2 below.

Figure 9-2 - Proposed Internal Road Classification

Road Classifications are specified in the TRH 26 South African Road Classification and Access Management Manual (Draft 2.0, May 2018). A summary of the relevant sections have been included below:

CLASS U4 URBAN COLLECTOR STREETS

Collector streets are used to penetrate local neighbourhoods with the purpose of collecting (and distributing) traffic between local streets and the arterial system. The streets are mainly intended to serve an access function with limited mobility and traffic volumes; trip lengths and continuity must be limited.

They should ideally not carry any through traffic but only traffic with an origin or destination along or near to the street. The majority of the traffic using the collector street will have a destination in the street itself or in a local street leading off the collector. A collector street must not be quicker to use to pass through an area than a mobility road although it is recognized that in the absence of a mobility route, collectors must allow for some through traffic, albeit at low speeds.

Class 4a major collectors may also be used in preference to arterials when "mixed" through and local traffic is unavoidable, such as when arterials pass commercial centres with no alternative access. In this case, the local access traffic must be favoured at the expense of the mobility function.

In terms of the TRH 26 Manual, collectors must be classified as either 4a or 4b as follows:

i) Class 4a Commercial (major) collector street

These collectors are found in areas with commercial, business, industrial, shopping and mixed-use residential developments. The streets carry a high percentage of heavy vehicle traffic and public transport.

Typical commercial collectors are CBD streets (whether two-way or one-way), shopping centre streets, activity spines and industrial distributors. Traffic volumes on the collectors vary greatly depending on their location. In busy shopping areas, the collectors can carry up to 25 000 vehicles or even more per day. The lengths of the roads should be limited to a maximum of about 2 km or 3 km if no through traffic is present.

ii) Class 4b Residential (minor) collector street

These collectors are found in residential areas and almost exclusively serve residential traffic and public transport.

Residential collectors should not carry more than about 10 000 vehicles per day or 1 000 vehicles during peak hours (although lower volumes are preferred). These volumes are the maximum that can safely be accommodated on this class of streets. If Class 4b residential collector street volumes exceed 10 000 per day, this is an indication that re-classifying the road may be required.

The lengths of the roads should be limited to a maximum of about 2 km.

CLASS U5 URBAN LOCAL STREETS

Class 5 streets provide access to individual properties. As they must provide exclusively an access or activity function, both traffic volumes and trip lengths must be significantly limited. They must not be continuous between roads of an order higher than Class 4.

Local streets should not carry any through traffic but only traffic with an origin or destination along the street, i.e. all the traffic using the local street will have a destination in the street itself.

In terms of this Manual, local streets must be classified as either 5a or 5b as follows:

i) Class 5a Commercial local street

These local streets are found in areas with commercial, business, industrial, shopping and mixed-use residential developments. The streets often carry a high percentage of heavy vehicle traffic which uses the street to access loading areas or bus stops.

Commercial local streets should not carry volumes of more than about 5 000 vehicles per day. The length of the street should be limited to a maximum of about 1 km.

ii) Class 5b Residential local street

These local streets are found in residential areas and almost exclusively serve residential traffic and possibly some public transport as well as refuse and small delivery trucks.

Residential local streets should not carry more than about 1 000 vehicles per day or 100 vehicles during peak hours. If Class 5b residential local street volumes exceed 5 000 per day, this is a criterion to classify the road as a Class 4b residential collector.

Local residential streets should be short blocks of less than 0.5 km, with one kilometre being the maximum for safety reasons.

ANNEXURE K (continued)

9.3 ROADSIDE DEVELOPMENT ENVIRONMENT

The density characteristics of the various Roadside Development Environment specified in the WCG's Access Management Guidelines (2020) have been indicated in Table 9-2.

Roadside development environment	Floor Area Ratio (m² of development per m² of land area)	Bulk (m²) Building height du/ha (pp/ha)[10]
CBD	> 1	10 000 m²/ha @ 50% coverage = 2 × storey @ 30% coverage = 3 × storey Residential = > gross 100 du/ha (400 pp/ha)
Intermediate	0.3–1	3 000 m² – 10 000 m²/ha @ 50% coverage = 1 × storey Residential = gross 25–100 du/ha (100–400 pp/ha)
Suburban	0.1–0.3	1 000 m² – 3 000 m²/ha Single/double storey Residential = gross < 10 du/ha
Boundary of urban area/defined Urban Edge		
Semi-rural	< 0.1	
Rural	< 1 bldg/10 ha	

Table 9-2 - Roadside Development Environment Characteristics

Based on Table 9-2, it is envisaged that ultimate density of the Metro Ground Industrial site will result in a Roadside Development Environment classification of "**Intermediate**".

9.4 ROAD RESERVES

Road reserve widths are specified in table 8.4 of the TRH 26 as indicated in Figure 9-3.

Class	Rural		Urban	
	Typical	Range	Typical	Range
Class 1	62	60 – 80	60	60 – 120
Class 2	48	40 – 70	40	38 – 62
Class 3	30	30 – 50	30	25 – 40*
Class 4a	25	-	25	20 – 40
Class 4b			20	16 – 30
Class 5a	20	-	22	15 – 25
Class 5b			14**	10 – 16

* Reserve up to 62 m is required to allow for Strategic Bus Rapid Transit (BRT).

** Reserve of 10.5 m is typical if street is less than 100 m long.

Figure 9-3 - Road Reserve Widths

Based on the above, the actual vs proposed road reserve widths can be summarised as follows:

Road Class	TRH 26 Recommended Road Reserve Width	Zutari Proposed Road Reserve Width	Comment
Class 4a Commercial Collector	25m	30m	Zutari's Proposed Road Reserve width is deemed sufficient
Class 5a Commercial Local Street	22m	22m	Zutari's Proposed Road Reserve width is deemed sufficient

Table 9-3 - Comparison between recommended and proposed road reserve widths

9.5 DRIVEWAYS

The term "driveway" describes the intersecting roadway giving direct access to a privately-owned property adjacent to the road where such intersecting roadway is not a public road or street. A driveway is usually the only access point to the property, although it is possible that connections could be made between adjacent properties through connecting roads provided by agreement between property owners or via a servitude registered for a road access. Larger developments may take access through more than one driveway from more than one road.

The 2020 AMG lists the three categories of "conventional driveways", defined by the number of vehicular trips generated per hour that use or are projected to use a driveway, as follows:

Domestic equivalent driveways are driveways giving vehicular access to private homes, micro businesses and farms which attract very small traffic volumes. In residential areas with small plot sizes the vehicle using the driveway may have to back into the through road when leaving the property. Domestic equivalent driveways have a small impact on the through road, but can result in conflicts where reversing manoeuvres take place into the through road. For this reason, domestic equivalent driveways are acceptable on Class 5 roads, but should be discouraged on Class 4 roads except where special provision is made for access to properties within the road reserve. This requires that there is sufficient space clear of the through traffic lanes for a vehicle reversing out of a property to manoeuvre within the road reserve so as to enter the traffic stream safely.

Low-volume driveways may carry larger traffic volumes than domestic equivalent driveways and are expected to serve larger developments. The lower volume driveway categories (domestic equivalent driveways and low-volume driveways) have no class equivalent as they generally carry lower volumes than the traffic volume carried by any class of public road.

High-volume driveways are equivalent to Class 5 local roads and are expected to carry larger traffic volumes than low-volume driveways.

Driveway category	Class equivalent	Roadside development environment				
		CBD	Intermediate	Suburban	Semi-rural	Rural
		Vehicles per hour				v.p.day
Domestic equivalent		< 5	< 5	< 5	< 5	< 5
Low-volume		5–30	5–30	5–30	5–30	5–30
High-volume	5	30–150	30–100	30–60	30–50	30–50
Equivalent collector	4	150–750	100–625	60–500	50–250	50–500
Equivalent minor arterial	3	750–1 500	625–1 250	500–1 000	250–500	500–1 000
Equivalent major arterial	2	> 1 500	> 1 250	> 1 000	> 500	> 1 000

Figure 9-4 - Categories of Driveways and threshold volumes

The WCG Access Management Guidelines (2020) provides guidelines on where driveways should be allowed for a given combination of road class and roadside development environment. The table shows that on Class 3 roads only high-volume driveways should be permitted.

Roadside development environment	Class 2 Major	Class 3 Minor			Class 4 Collector			Class 5 Local		
	LVD+HVD	DED	LVD	HVD	DED	LVD	HVD	DED	LVD	HVD
CBD										
Intermediate										
Suburban										

Figure 9-5 - Guidelines for permitting "conventional" driveways

9.6 INTERSECTION SPACING (CLASS 4 MAIN ROAD)

The guidelines published in the WCG Road Access Guidelines 2020 are proposed for the Metro Grounds development site. The minimum spacing distances are a function of the road class and level of intersection control as indicated schematically in the diagrams below:

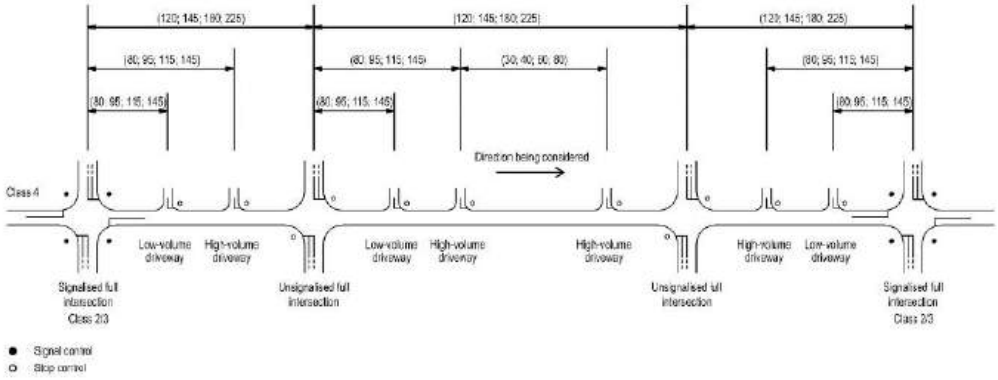


Figure 9-6 - Class 4 minimum spacing distances

Table 9.7 in the WCG Road Access Guidelines 2020 specifies a minimum spacing of 270m between signalised intersections on Class 4 roads as indicated in Figure 9-7 below.

Roadside development environment	Road class Minimum spacing (m)		
	Class 2	Class 3	Class 4
CBD	370	270	210
Intermediate	540	370	270
Suburban	800	540	370
Semi-rural[16]	1 200	800	540

Figure 9-7 - Minimum spacing of signalised intersection

Using the guidelines above, it is possible to provide the following:

1. Upgrade the existing PW Botha Boulevard/Ossie Urban Intersection into a signal controlled, full intersection.
2. Provide direct access into both the bus depot and education site via a signal controlled full intersection. This intersection must be situated a minimum distance of 270m from the existing PW Botha Boulevard/Ossie Urban Intersection.
3. Unsignalised Full Intersections on the two intersections with the minor (Class 5) roads.
4. Provide a signal-controlled intersection at the junction of Rand Road Extension and the future Metro Grounds Main Road.

   This proposed layout has been indicated schematically in Figure 9-8, and a layout plan has been attached as **ANNEXURE C)**

Figure 9-8 Proposed Internal Road Intersection Control

Since the proposed signal-controlled intersection at the junction of Rand Road Extension and the future Metro Grounds Main Road can only be implemented after both roads have been constructed, an interim solution is to provide a temporary turning circle at the end of Metro Grounds Main Road. A preliminary design of this circle has been prepared by Zutari and has been attached as **ANNEXURE D** to this report.

9.7 DRIVEWAY POSITIONS (CLASS 5 ROADS)

High and low volume driveway on the Class 5 roads must comply to spacing requirements indicated in Figure 9-9 below.

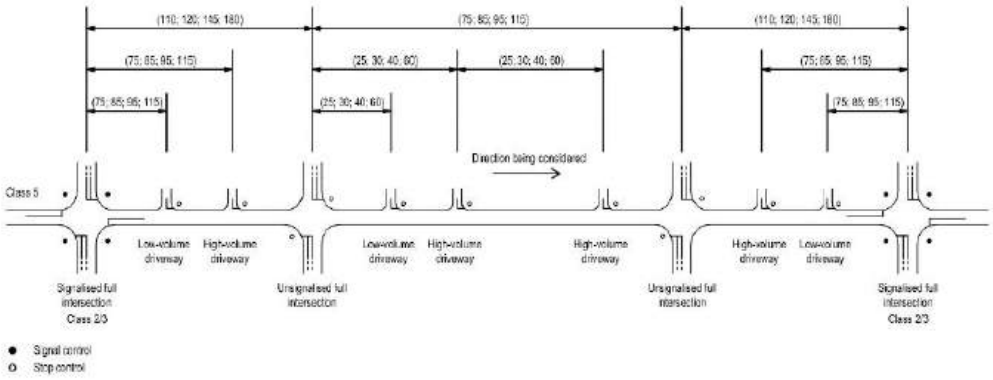


Figure 9-9 - Class 5 minimum spacing distances

Using Figure 9-9 as reference, the site access (driveway) positions must comply to the positions indicated in Figure 9-10 (refer to **ANNEXURE C** for a layout plan).

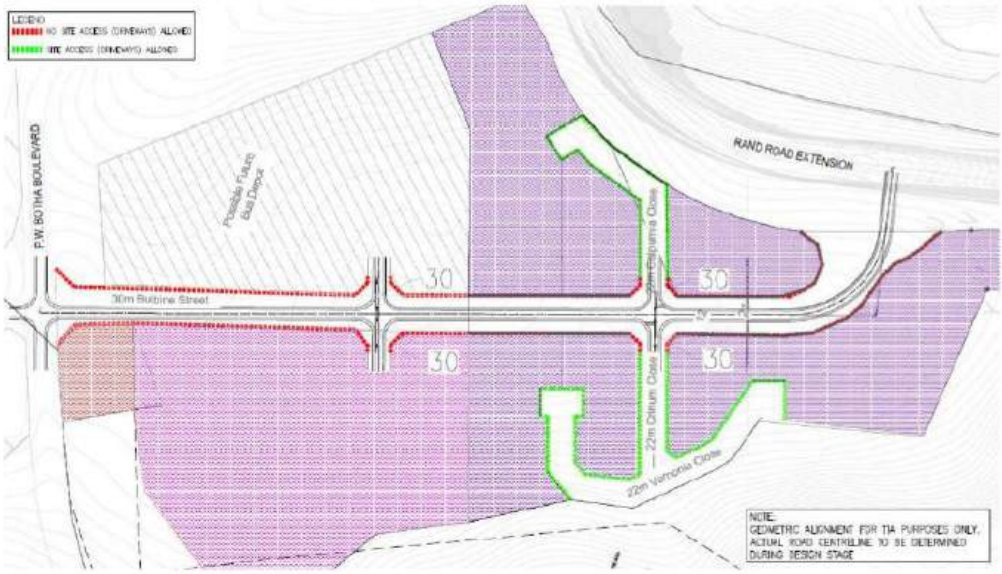


Figure 9-10 - Driveway Positions

9.8 HORIZONTAL CURVATURE

Based on both the UTG 1 (Geometric Design of Urban Arterial Roads) and UTG 5 (Geometric Design of Urban Collector Roads) guidelines, the recommended design practice is to use large radius curves without superelevation as far as possible. However, where large radius curves are not possible, superelevation can be introduced to offset the side friction forces of smaller radius curves. The following table should be used as guideline:

Minimum Radius for Horizontal Curves (m)						
Design Speed (Km/h)	Side Friction Factor (f)	Minimum radius for maximum superelevation rates (e)				
		-0.02	0	+0.02	+0.04	+0.06
60	0.15	220	190	170	150	135
80	0.14	425	365	315	280	255
100	0.13	-	610	530	465	420

Table 9-4 - Minimum Radius for Horizontal Curves

9.9 VERTICAL CURVES

The minimum rate of vertical curvature is determined by sight distance as well as by considerations of comfort of operation and aesthetics. The sight distance most frequently employed is the stopping sight distance measured from an eye height of 1.05m to an object height of 0.15m. In the case of sag curves, the sight distance is replaced by headlight illumination distance of the same magnitude, assuming headlight height of 0.6m and a divergence angle equal to 1 degree above the longitudinal axis of the headlights. Based on both the UTG 1 (Geometric Design of Urban Arterial Roads) and UTG 5 (Geometric Design of Urban Collector Roads) guidelines, values of K (based on stopping sight distance in the case of crest curves and headlight illumination distance in the case of sag curves) are given in Table 9-5

Minimum Values of K for Vertical Curves				
Design Speed (Km/h)	Stopping sight Distance (m)	Crest	K	
			Sag	
			Headlight	Comfort
60	80	16	17	8
80	115	33	31	16
100	155	60	52	25
120	210	110	60	30

Table 9-5 - Minimum Values of K for Vertical Curves

The minimum lengths of vertical curves are indicated in Table 9-6 below:

Minimum lengths of vertical curves	
Design Speed (km/h)	Length of Curve (m)
60	100
80	140
100	180
120	220

Table 9-6 - Minimum lengths of vertical curves

9.10 MAXIMUM AND MINIMUM GRADIENTS

The speed of passenger cars is relatively unaffected by gradient and the horizontal alignment will tend to govern the selection of speed. Truck speeds are however markedly affected by gradient. Both the UTG 1 (Geometric Design of Urban Arterial Roads) and UTG 5 (Geometric Design of Urban Collector Roads) provide guidelines with regards to the maximum gradients for different speeds and types of topography. Even though these documents are guidelines only and factors such as provision of auxiliary lanes and whole life economy of the road may suggest some other gradient, it is important that the geometric road designs adhere to these recommendations as far as possible

Where two roads intersect, the numerical sum of the gradients should not exceed 8% with a maximum gradient of 6% on either roadway.

In order to ensure effective stormwater flow, a minimum gradient of 1:200 (0.5%) should be adhered to as far as possible.

9.11 PARKING PROVISION

The George Integrated Zoning Scheme By-Law (2023) should be used to determine he parking requirements of the various land uses. It is important to note that the GIZSBL does not make provision for on-street parking and parking should be provided on the property for which parking is required.

SITE ACCESS AND EXIT

Based on the GIZSBL, vehicle entrances and exit ways to and from a property must conform to the following requirements:

1) The Municipality may require compliance with standard municipal or provincial access spacing guidelines.

ANNEXURE K (continued)

2) No access may be closer than 10 metres from an intersection as defined by the prolongation of street boundaries, except for industrial-zoned properties, where the distance must be 15 metres.

3) The Municipality may restrict or prohibit access if a pedestrian or traffic hazard is created or is likely to be created.

4) Vehicle entrances and exit ways to and from a property must conform to the following requirements:

   a) motor vehicle carriageway crossings must be limited to one per site per proclaimed street, public street or private road abutting the site;

   b) despite paragraph (a), where the total length of any street boundary of a site is 30 metres in length or more, one additional carriageway crossing may be permitted, provided that no two carriageway crossings are closer than 12 metres to each other;

   c) the minimum and maximum widths of motor vehicle carriageway crossings must be in accordance with the table, titled "Width of motor vehicle carriageway crossings" as measured on the street boundary, where a single carriageway crossing means the crossing may only be used as either an entrance or an exit only, not both, and a combined carriageway crossing means that the crossing can be used for both an entrance and an exit;

   d) the minimum width of a panhandle access may not be less than 4 metres wide unless otherwise determined by the Municipality. Width of motor vehicle carriageway crossing must comply to the table below:

Type of carriageway crossing	Minimum width	Maximum width
Dwelling units	2.5 metres	8.0 metres
Single entrance or exit way for other land uses	2.5 metres	4.0 metres
Combined entrance and exit way for other land uses	5.0 metres	8.0 metres

PARKING LAYOUT REQUIREMENTS

The following parking layout requirements apply unless otherwise stated in the zoning scheme:

a) parking layout configurations, minimum dimensions and ramps to a parking area must be in accordance with this zoning scheme or an approved site development plan;

b) A standard 90-degree parking bay for a motor vehicle shall measure at least 2,5 metres in width and 5.0 metres in length with 7.5 metres manoeuvring space or otherwise determined by the Municipality;

c) the layout of any parking area, except for parking in Single Residential Zone I, Single Residential Zone III and General Residential Zones I to III must ensure that vehicles can readily leave the site without reversing across the sidewalk, unless otherwise approved by the Municipality;

d) a tandem bay accommodating two motor vehicles is regarded as one bay for the purposes of this zoning scheme, except for Single Residential Zone I, Single Residential Zone III and General Residential Zones I to III, where a tandem bay is regarded as two bays;

e) visitor parking bays must be clearly demarcated, readily visible and accessible to visitors, and preferably grouped together;

f) parking areas must be used for the parking of vehicles which are lawfully allowed on them, and any activity which causes an obstruction for vehicular traffic or pedestrian use of the sidewalk is prohibited;

g) parking areas must be constructed and maintained in a state suitable for the parking and movement of vehicles;

h) control of access to and reservation of parking bays and / or areas is not permitted unless written approval has been obtained from the Municipality; either through an approved site development plan or other written approval; and

i) despite paragraphs (a) to (h), the Municipality may lay down more restrictive requirements related to parking, site access or motor vehicle carriageway crossing, if it considers this to be necessary from a pedestrian or traffic safety point of view.

9.12 PEDESTRIAN WALKWAYS AND FURNITURE ZONES

Where practically possible, the walkway should not be placed directly up against the road edge, but a furniture zone should be created between the road edge and the sidewalk, increasing the safety of those making use of the walkways. This notion is further advocated in The Neighborhood Planning and Design Guide (Department of Human Settlements, July 2019) also known as "The Red Book" in which the cross section included as Figure 9-11 is proposed.

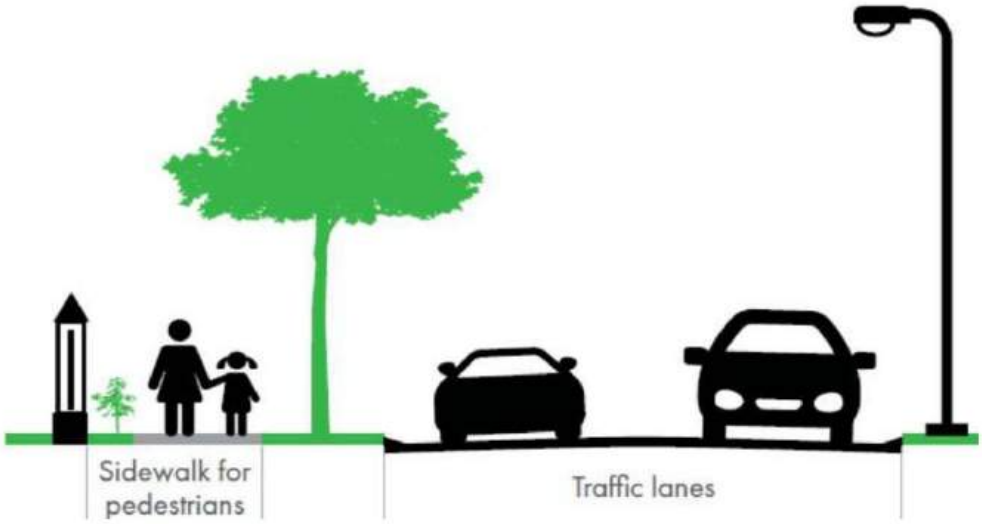


Figure 9-11 - Proposed Cross Section

10 SUMMARY

1) Urban Engineering (Pty) Ltd was appointed by Zutari for the Traffic Impact Assessment pertaining to a proposed industrial development (referred to as Metro Grounds) on remainder of Erf 464, George

2) The objective of this assessment is to evaluate and advise on the proposed internal road network planning aspects like layout, reserve widths, and intersections to ensure high-level functionality and safety.

3) Various historic TIA's pertaining to the proposed Meto Grounds development have been produced to date. The reports are listed below:

a) Transport Impact Statement (TIS) pertaining to: Proposed Permanent Bus Depot (Borcherds) on a Portion of Erf 464 George, (EJ Robertson Consultants, unreferenced, August 2011)

b) Traffic Impact Assessment (TIA) pertaining to: Proposed Development on Erf 464 (Metro Grounds) George, (SMEC Report Nr. C1461-Rev02, February 2015)

c) Traffic Impact Assessment (TIA) pertaining to: Proposed Permanent Bus Depot on Portion of Erf 464, George. (Zutari Report Nr 1001403-0000-REP-KR-00001-1) Revision (Draft 2), dated 2021/09/14.

4) This assessment, which focused on the master planning context of roads, including functionality, connectivity, and access, was based on the Zutari TIA dated 2021/09/14.

5) The Zutari TIA included traffic counts and detailed intersection analysis to reach the following recommendations:

Intersection of PW Botha Boulevard and York Street

a) Improve Signal Timing

b) Short exit lane into PW Botha Blvd

c) Reconfiguration of York Southern Approach

d) Additional left turn lane on PWBB eastern approach

Intersection of PW Botha Boulevard and Ossie Urban Street

e) Introduce dedicated Right Turn Lane for East bound traffic

Intersection of PW Botha Boulevard and Rand Street

f) Convert to roundabout

Intersection of PW Botha Boulevard and Nelson Mandela Boulevard

g) No Improvements required

6) An inspection of the site revealed unacceptable poor Shoulder Sight Distance at the PW Botha Boulevard/ Ossie Urban Intersection.

7) Analysis of the internal road network indicates that the proposed junctions are perfectly spaced in terms of the guidelines published in the Western Cape's Access Management Guidelines (2020).

11 RECOMMENDATIONS

Based on the findings of this report, the following recommendations are made:

1. The intersection of PW Botha Blvd/Rand Street should remain a signalised intersection.

1.1. Despite the recommendation in the Zutari TIA (*Proposed Permanent Bus Depot on Portion of Erf 464, George; Report Nr 1001403-0000-REP-KR-00001-1; Draft 2; dated 2021/09/14*) suggesting the upgrade of the PW Botha Boulevard/Rand Street Intersection to a roundabout, it is the opinion of this author that a signalised intersection would be a safer alternative due to the limited line of sight. Additionally, a signalised junction offers the potential for establishing a synchronized corridor between the existing signalised intersections at PW Botha Blvd/York Str and PW Botha Blvd/Nelson Mandela Blvd.

1.2. This recommendation should be proposed to the authors of the Zutari report for consideration and comment.

2. The junction of PW Botha Blvd & Ossie Urban Str should be upgraded to a signalised intersection.

ANNEXURE K (continued)

2.1. Contradictory to the Zutari TIA, it is the recommendation of this investigation to convert the PW Botha Blvd/Ossie Urban intersection into a signalised intersection. Once again, the introduction of a signalized intersection provides the opportunity to create a synchronised corridor and also mitigates the lack of sufficient sight lines and shoulder sight distances.

2.2. This recommendation should be proposed to the authors of the Zutari report for consideration and comment.

3. All other recommendations in the Zutari TIA should be adhered to.
4. Intersection controls for internal roads must comply to Drawing 22-158-01 (**ANNEXURE C)**

4.1. Access to the proposed bus depot and education facility should be provided by means of a signalised intersection. The position of the intersection should not be closer than 270m from Ossie Urban intersection and not closer than 145m from the new proposed Bulbine Street/Calpunia Close/Crinum Close intersection.

4.2. The intersection of Bulbine Street and Rand Street Extension should be signal controlled as shown in Drawing 22-158-01 (**ANNEXURE C**). If Bulbine Street is built before Rand Street Extension, a turning circle (**ANNEXURE D**) must be provided at its end. Once Rand Street Extension reaches the Bulbine Street intersection, the turning circle should be replaced with a signalized intersection.

4.3. Junctions between the Class 4 and Class 5 roads should be 2-way STOP controlled, with priority movement along the Class 4 road (Bulbine Street)

5. As indicated in Drawing 22-158-02 (**ANNEXURE C**) no driveway access should be allowed from Bulbine Street onto any neighbouring property.
6. Provision should be made for UA compliant sidewalks next to all new roads. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
7. Since the proposed Metro Grounds Development includes an educational facility, provision should be made for new UA compliant pedestrian sidewalks next to PW Botha Boulevard, all the way from York Street to Nelson Mandela Boulevard. These sidewalks must include a landscaped (grassed) furniture zone between the road edge and the sidewalk.
8. Provision should be made for street lighting next to all new internal Metro Grounds roads.
9. Cross sections of all new Metro Ground internal roads must make provision for clearly defined (Class 1 preferred but Class 3 as a minimum) bicycle routes/lanes. Road layouts must also include safe bicycle crossing areas at all intersections.
10. Geometric design of Metro Grounds internal roads must comply to the various guidelines and standards with regards to horizontal and vertical alignments.

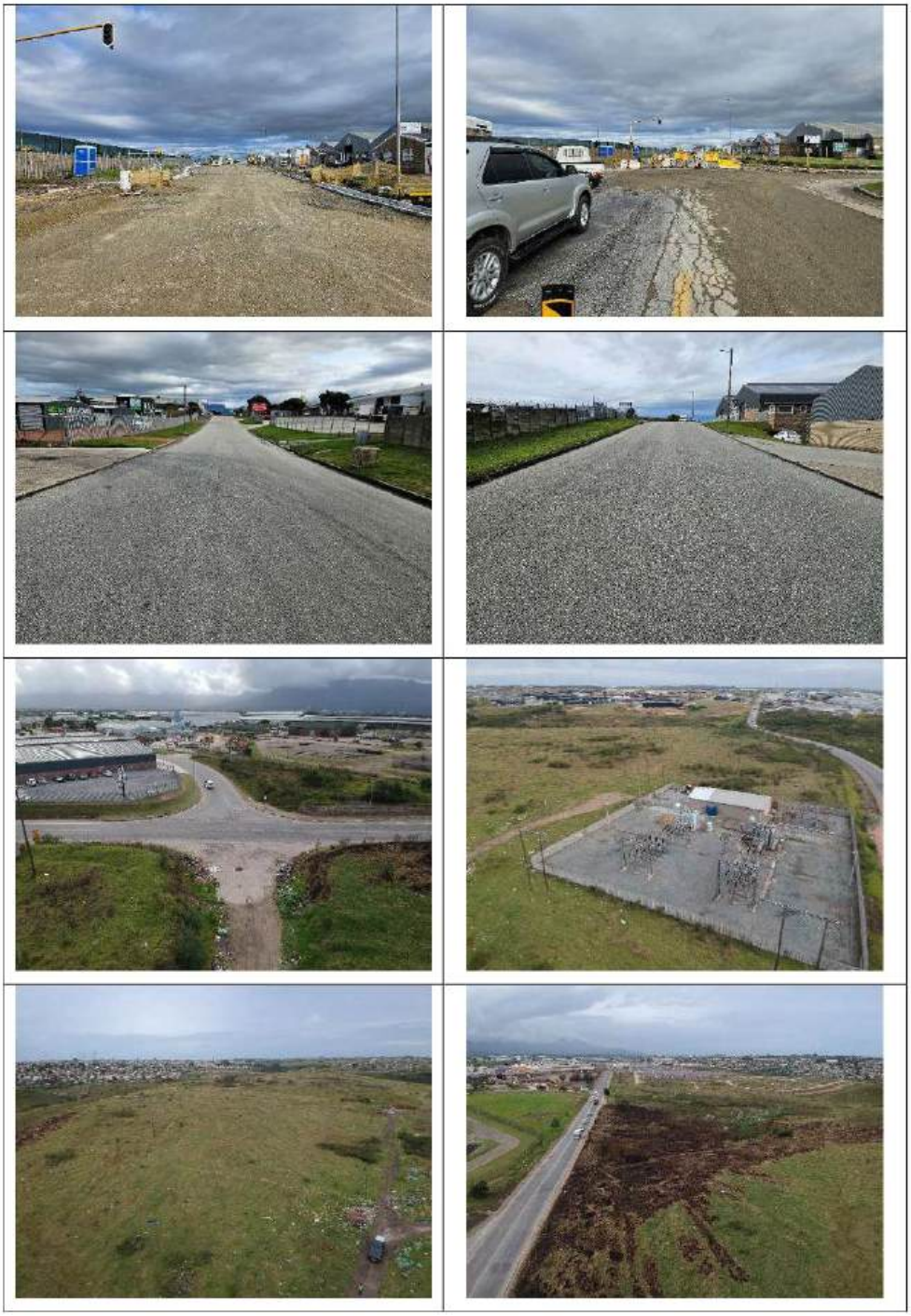
ANNEXURE K (continued)

ANNEXURE A

PHOTOS TAKEN DURING VARIOUS SITE INSPECTIONS

ANNEXURE K (continued)

ANNEXURE K (continued)



ANNEXURE K (continued)

ANNEXURE K (continued)

ANNEXURE K (continued)

ANNEXURE B

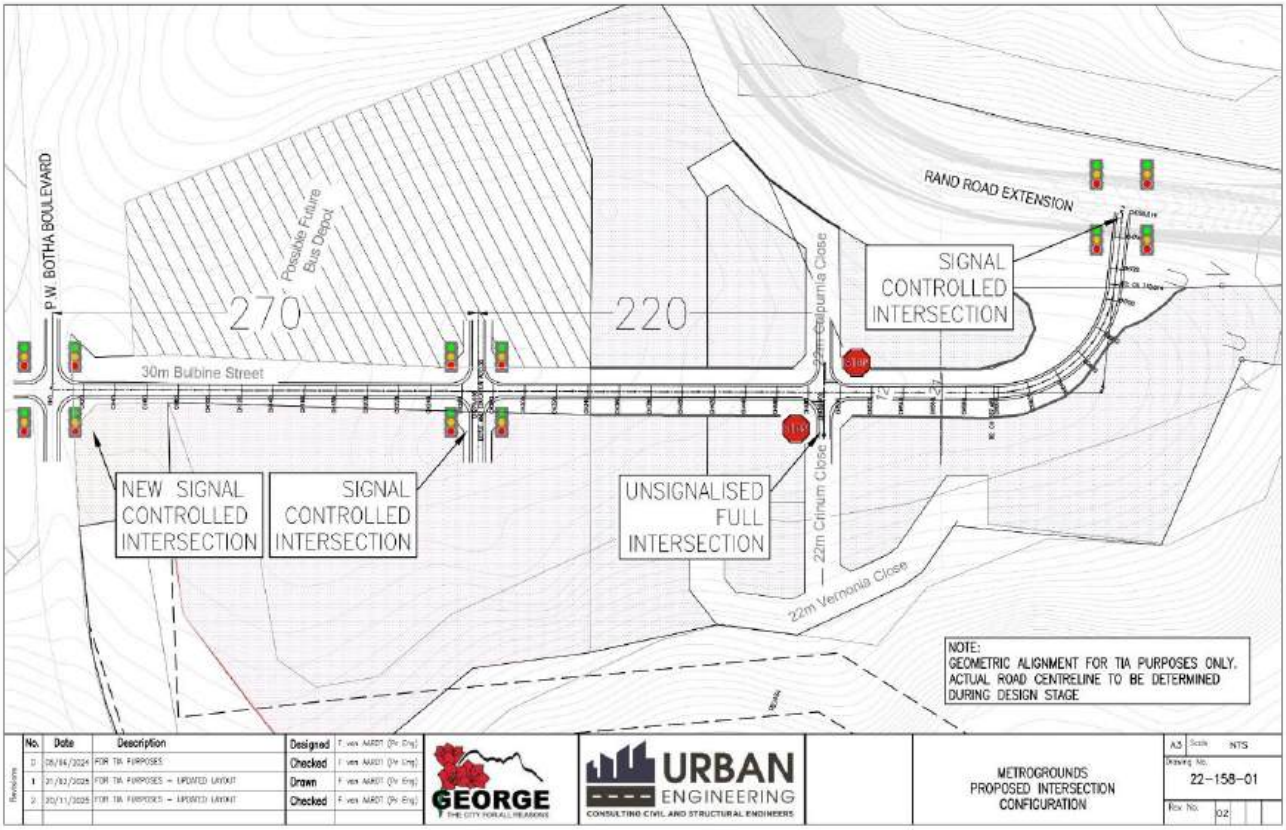
ZUTARI CONCEPTUAL DEVELOPMENT FRAMEWORK

ANNEXURE K (continued)

ANNEXURE C

DRAWINGS

ANNEXURE K (continued)



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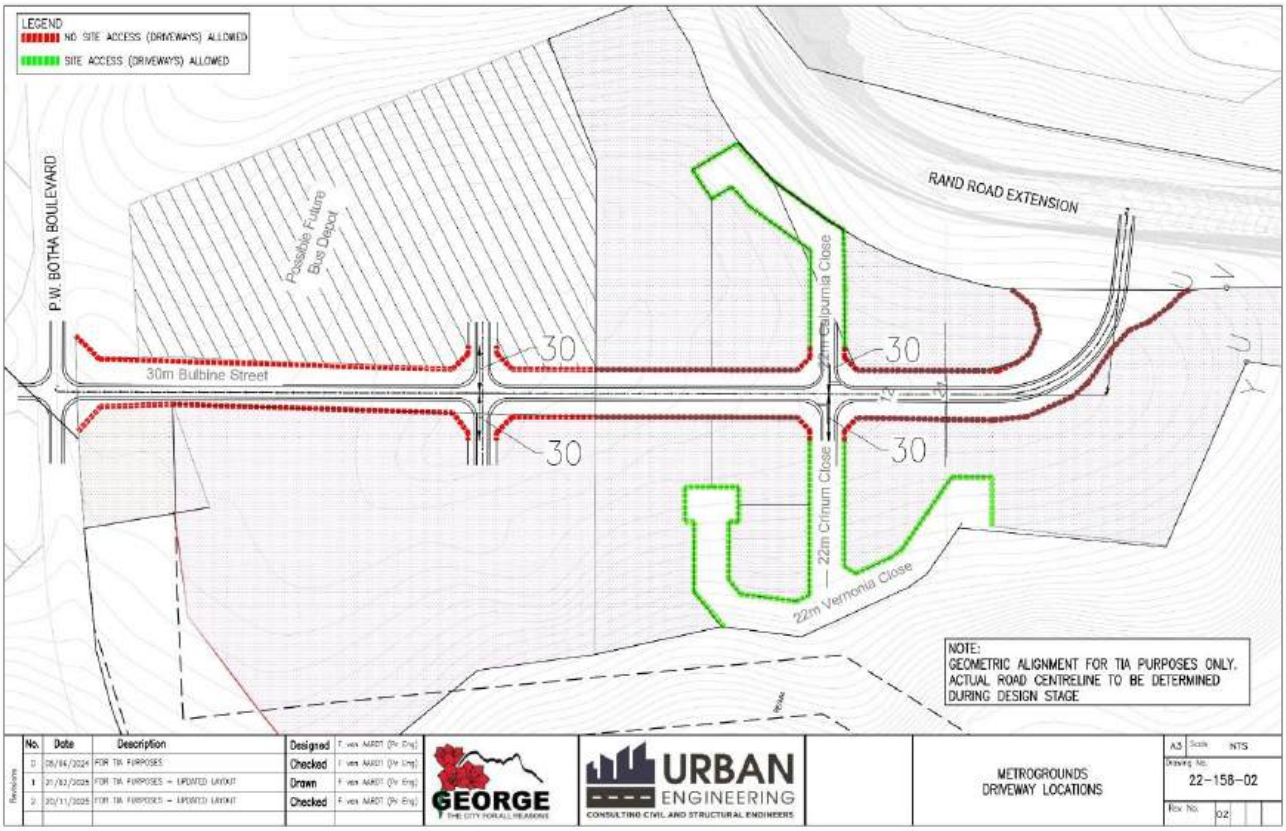
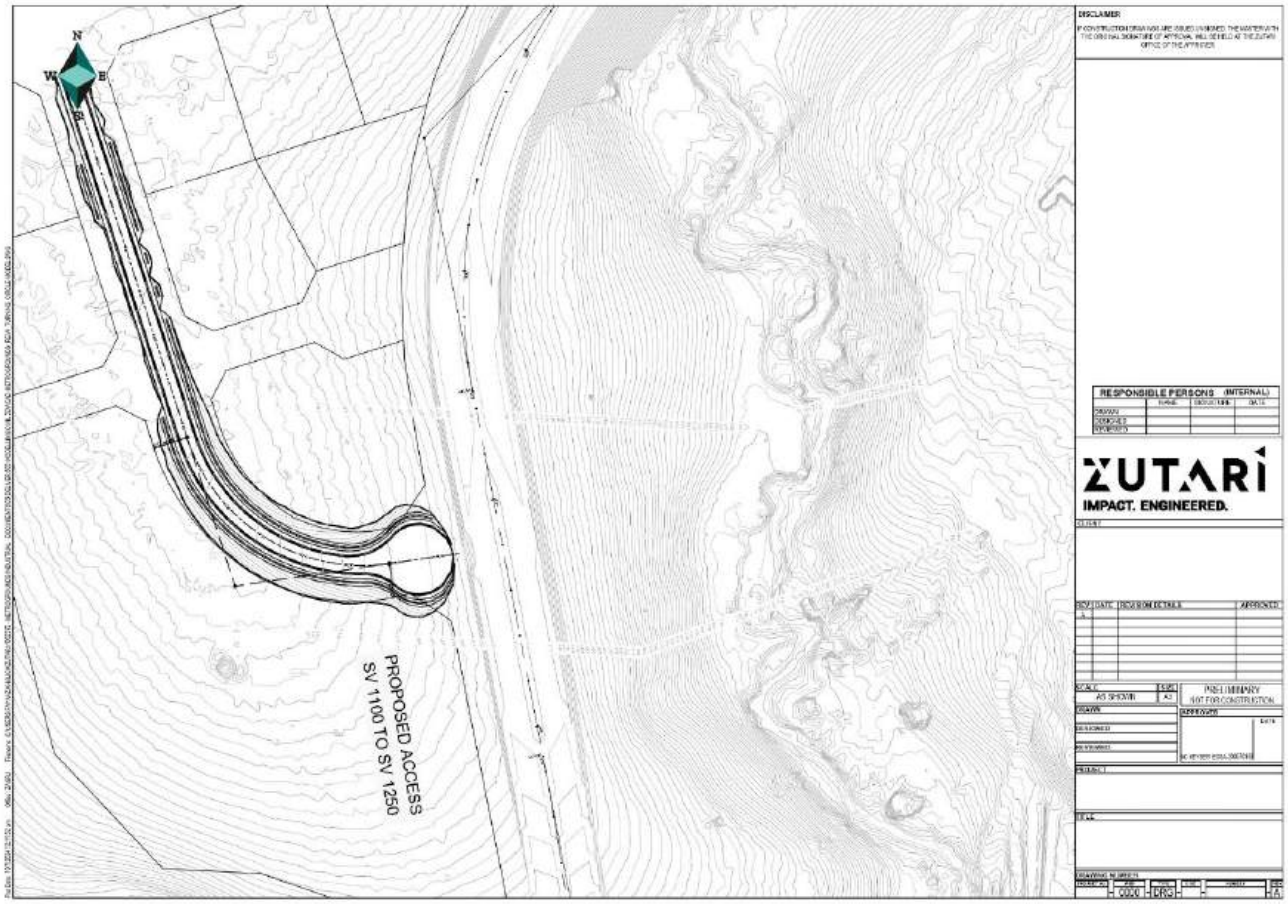


ANNEXURE K (continued)

ANNEXURE D

ZUTARI CONCEPT TURNING CIRCLE PLAN

ANNEXURE K (continued)



ANNEXURE L

Annexure L

GEOTECHNICAL REPORT

PROPOSED MIXED-USE DEVELOPMENT (INDUSTRIAL, BUSINESS & RESIDENTIAL) ON A PORTION OF REMAINDER OF ERF 464, GEORGE (METROGROUNDS)

22 September 2022 (Rev 0)

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ANNEXURE L (continued)

Report review history:

Revision No	Date	Prepared by:	Reviewed by:	Approved by:
0	22.9.2022	I Paton Pr Sci Nat Pr Tech Eng	S Ngema BSc Geol	I Paton Pr Sci Nat Pr Tech Eng

Authors qualifications and affiliations:

Iain Paton has post graduate degrees in Geology and Geotechnical Engineering and over 25 years' experience in the mining, energy and construction industries. Iain Paton is a registered geotechnical professional with the Engineering Council of South Africa (ECSA) and the South African Council for Natural and Scientific Professions (SACNSP). Iain Paton is a member of the Geotechnical Division of the South African Institute of Civil Engineering (SAICE), South African Institute of Engineering and Environmental Geologists (SAIEG), the and the Institute of Municipal Engineering of South Africa (IMESA).

Declaration of independence:

The authors of this report are independent professional consultant with no vested interest in the project, other than remuneration for work associated with the compilation of this report.

General limitations:

1. The investigation has been conducted in accordance with generally accepted engineering practice, and the opinions and conclusions expressed in the report are made in good faith based on the information at hand at the time of the investigation.
2. The contents of this report are valid as of the date of preparation. However, changes in the condition of the site can occur over time as a result or either natural processes or human activity. In addition, advancements in the practice of geotechnical engineering and changes in applicable practice codes may affect the validity of this report. Consequently, this report should not be relied upon after an eclipsed period of one year without a review by this firm for verification of validity. This warranty is in lieu of all other warranties, either expressed or implied.
3. Unless otherwise stated, the investigation did not include any specialist studies, including but not limited to the evaluation or assessment of any potential environmental hazards or groundwater contamination that may be present.
4. The investigation is conducted within the constraints of the budget and time and therefore limited information was available. Although the confidence in the information is reasonably high, some variation in the geotechnical conditions should be expected during and after construction. The nature and extent of variations across the site may not become evident until construction. If variations then become apparent this could affect the proposed project, and it may be necessary to re-evaluate recommendations in this report. Therefore, it is recommended that Outeniqua Geotechnical Services is retained to provide specialist geotechnical engineering services during construction in order to observe compliance with the design concepts, specifications and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction. Any significant deviation from the expected geotechnical conditions should be brought to the author's attention for further investigation.
5. The assessment and interpretation of the geotechnical information and the design of structures and services and the management of risk is the responsibility of the appointed engineer.

ANNEXURE L (continued)

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1. Introduction

1.1 Background information

A new mixed-use development (industrial, business & residential) has been proposed on a portion of Remainder of Erf 464 George in the Western Cape, known as the "Metrogrounds" (see **Figures 1, 2 & 3**).

The site was investigated in order to determine the geology and geotechnical properties of the site for the design of new structures and civil engineering services.

Figure 1: Site locality map

1.2 Scope of work

The scope of work was to conduct a broad-scope geotechnical survey and the following methods were proposed and accepted by the client:

- Review all available geotechnical information on the area.
- Conduct a walk-over survey of the site to assess the terrain, surface processes and apparent geotechnical risks.
- Conduct subsurface investigations to determine soil/rock profile and groundwater conditions, consisting of:
  - 20x test pits, excavated across the site with TLB/backhoe to max depth of 3m or refusal on rock/boulders.
- Log all test pits in accordance with South African standard methods (SAICE Guidelines for Soil and Rock logging in South Africa, 2002).
- Collect soil samples for testing at SANAS-accredited civil engineering laboratory in accordance with South African and/or American Standard methods (SANS or ASTM).

- Conduct insitu tests as per South African and/or American Standard methods (SANS or ASTM).
- Prepare a detailed factual and interpretive report, written by a registered Engineering Geologist/Geotechnical Engineer (SACNASP/ECSA), containing all information from the investigation and including soil classifications and recommendations for the design of foundations for structures and civil services, as required in the scope of works.
- Discuss geotechnical data and recommendations with civil and structural designers as and when required.

1.3 Available information

The following information was available for consultation:

- 1:50 000 & 1:250 000 geological maps of the area, obtained from the Council for Geoscience;
- Topo-cadastral data for the area, obtained from the National Geospatial Institute (NGI).
- Aerial photos of the area, obtained from the NGI and Google Earth.
- Site development plan provided by the town planners.
- In-house geotechnical database.

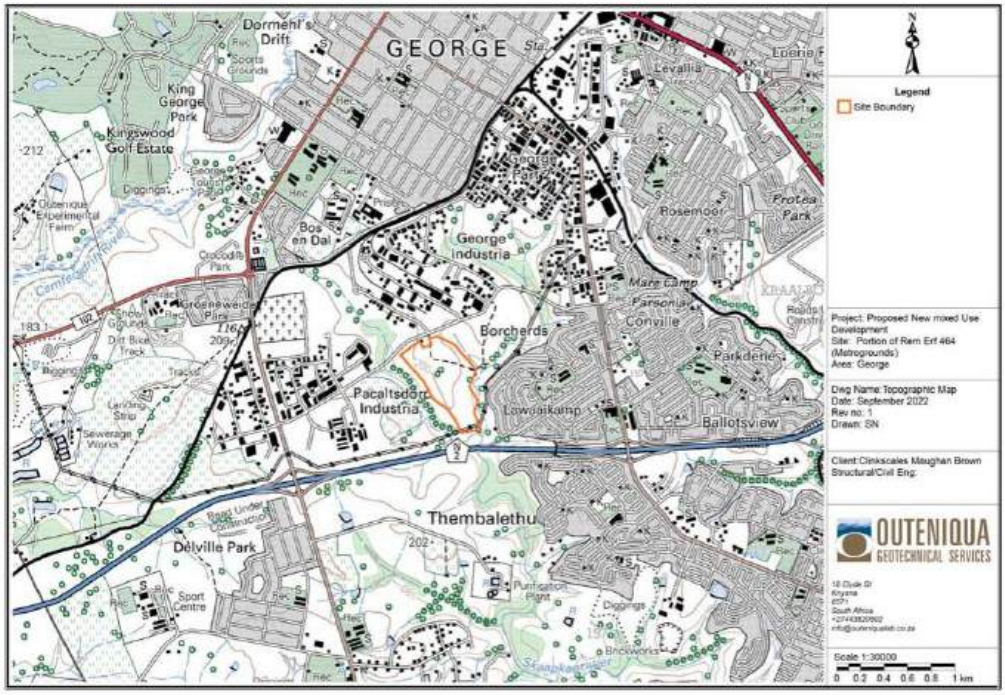


Figure 2: Topographical map of the site

Figure 3: Aerial photo map of the site

2. Site description

The proposed site covered an area of ~31.Ha and was located within the Tamsui Industrial area, to the east of Steinhoff Industrial Park. At time of the investigation, the site was vacant and was used for informal cattle grazing. There was evidence on site (and from aerial photography) of significant disturbance/alteration to the natural ground levels due to historical earthworks, diggings and dumping of fill material. There were also some overhead electrical lines noted crossing the site.

The climate of the region was classified as temperate, with cool winters and warm summers, and most rainfall occurring during the winter months. The Weinert Climatic-N No. for the area was 1-2, indicating a wet climate. Coastal cut-off low pressure systems and associated heavy rains have occurred in spring and autumn months with occasional very heavy rainfall events of 100mm or more in a 24hour period. In the summer months, moist air brought to the coastal region by the Indian Ocean anticyclone has generally been the source of rainfall. Winter rains are derived from the passage of polar cyclonic systems (cold fronts) with a predominant westerly wind along the southern coast. The average monthly minimum winter temperatures was 9°C and average maximum summer temperatures was 25°C.

The topography of the site was generally characterised by a prominent ridge/spur that runs in a southeast direction from the site entrance along PW Botha Boulevard. The ridgeline was bound on the west and east by tributaries of the Schaapkop River. The terrain on site sloped gently along the crest of the ridge, increasing to moderate towards the site boundaries. The vegetation consisted of long grass, small shrubs, medium to large bushes and clumps of large trees, but the vegetation on and around the sites was largely transformed from historical human activity on the site (See **Figures 4-7**). The surface conditions were generally dry at the time of the

ANNEXURE L (continued)

investigation but very moist near drainage lines. Access with vehicles onto the site varied from relatively easy along existing tracks (**Figure 6**) to difficult due to dense bush and existing heaps of fill material (**Figure 6-7**).

Figure 4: Typical gentle terrain and grassland vegetation on large parts of the site

Figure 5: Moderate slopes along the eastern side of the site

Figure 6: Jeep track access roads on the site

Figure 7: Heaps of fill encountered on parts of the site

3. Methods of investigation

A walk-over survey of the site was conducted prior to a subsurface investigation. The subsurface investigation consisted of twenty (20) test pits (See **Appendix 1** for a plan of the test positions). The test pits were excavated to a maximum depth of ~3m with a TLB/backhoe. This exercise was conducted in order to investigate the geology and geotechnical nature of the site, including soil types, moisture levels, consistency, etc. The soil profiles and photographs of the test pits were included in **Appendix 2** of this report.

Samples of insitu soils were collected from test pits for Foundation Indicator (grading, Atterberg limits and moisture content), Modified AASHTO maximum dry density, optimum moisture content, CBR and soil chemistry. The tests were conducted at SANAS-accredited civil engineering laboratories in accordance with standard South African test methods. See **Appendix 3** for details.

In situ dynamic cone penetrometer (DCP) tests were conducted at each of the test pit positions. The tests were done in accordance with TMH6 ST6. The probes were driven from GL to a depth of ~2m or refusal. Details of the tests were included in **Appendix 4** of this report.

An analysis of the information was then conducted to determine geotechnical parameters and recommendations were then formulated based on the available data.

4. Results of the site investigation

4.1 Regional geology

The site was indicated on the regional geological maps to be underlain by granite of the Maalgaten Suite of the George pluton (**Figure 8**). The George pluton consists of several granitic bodies that were intruded into older country rocks of the Kaaimans Group of meta-sediments during the Cambrian era (~525 million years ago). Younger meta-sedimentary rocks of the Peninsula Formation (Table Mountain group) were indicated to the north of the George area.

The George pluton has been subjected to intense deformation, similar to that of the older

country rocks of the Kaaimans Formation and typically exhibit strong penetrative planar and linear fabrics (structural features). In some places the granite has been intensely sheared, mainly along its margins. The Kango fault, a large dormant fault system, was mapped to the north of Outdshoorn, but there were no major geological faults in the immediate vicinity of the site and there was a low risk of seismic activity in the area (max peak horizontal ground acceleration 0.05g).

The Maalgaten granite is the most voluminous lithological unit of the George pluton which underlies most of the George area. The granite rock is poorly exposed in the George area and is typically covered by a thick soil overburden including colluvium, alluvium and residual saprolite.

The geology of the George area has been widely considered macro stable for urban development purposes with due consideration given to potential geotechnical constraints on a site-level.

4.2 Local soil and rock types

The test pits undertaken as part of this investigation indicated that the site consisted of areas underlain by natural (insitu) soil and areas underlain by deposits of uncontrolled fill (dumped soil). The natural (insitu) profile generally consisted of one or more horizons of colluvium (transported soil), which were underlain by a pedogenic horizon of ferricrete nodules (chemical deposit), which was underlain by residual granitic soil composed of clayey sand and/or sandy clay, derived from the insitu weathering of the underlying granite. See **Figure 9**.

Visual and tactile observations in test pits indicated that the insitu soil moisture contents were generally moist with localised very moist horizons.

The soil profile for the natural (insitu) soil was broadly defined into the following horizons:

- Moist, light red brown, loose, intact, SILTY FINE SAND, transported, colluvium.
- Slightly moist to moist, dark brown, medium dense, honeycombed/voided, SILTY SANDY ferricrete GRAVEL, pedogenic (not always present).
- Moist, yellow orange & red orange, firm-stiff, shattered, SAND & SILTY CLAY with fine, angular quartz GRAVEL, residual granite.
- Slightly moist to moist, yellow orange & light grey/brown, dense to very dense, intact, CLAYEY & SILTY SAND with fine, angular quartz and feldspar GRAVEL, completely weathered granite (saprolite).

The uncontrolled fill material that was encountered in some test pits consisted of a wide range of materials, but largely dominated by a mixture of soil, rubbish and rubble, which had been dumped on parts of the site over a long period of time. A significantly thick (but apparently localised) deposit was encountered in test pit TP3. See **Figure 10**.

ANNEXURE L (continued)

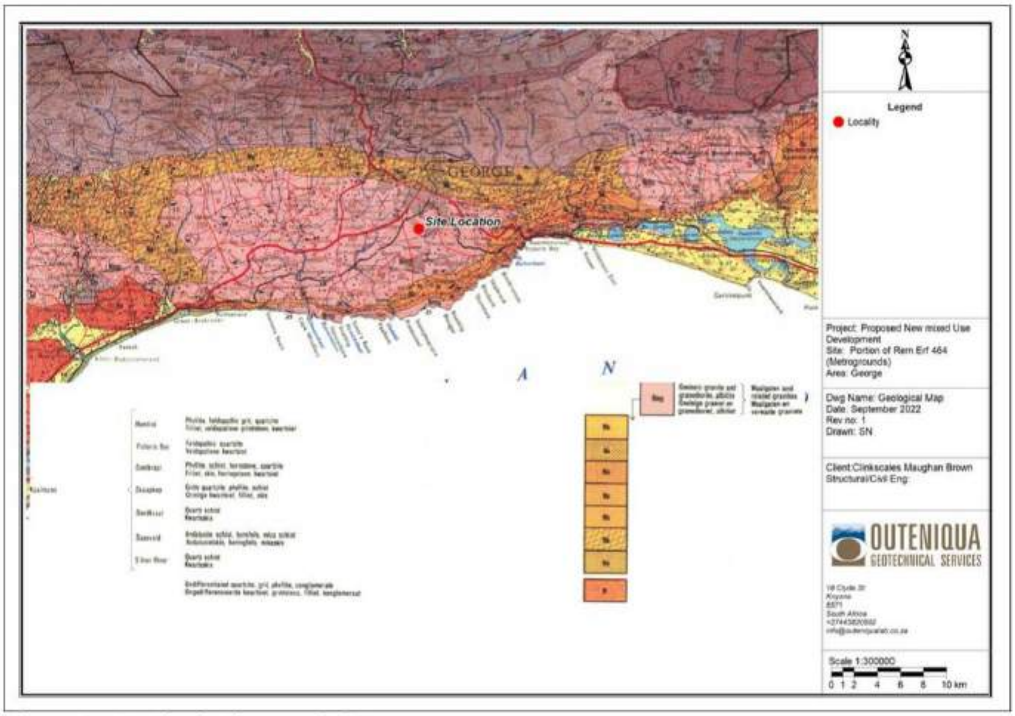


Figure 8: Geological map of site

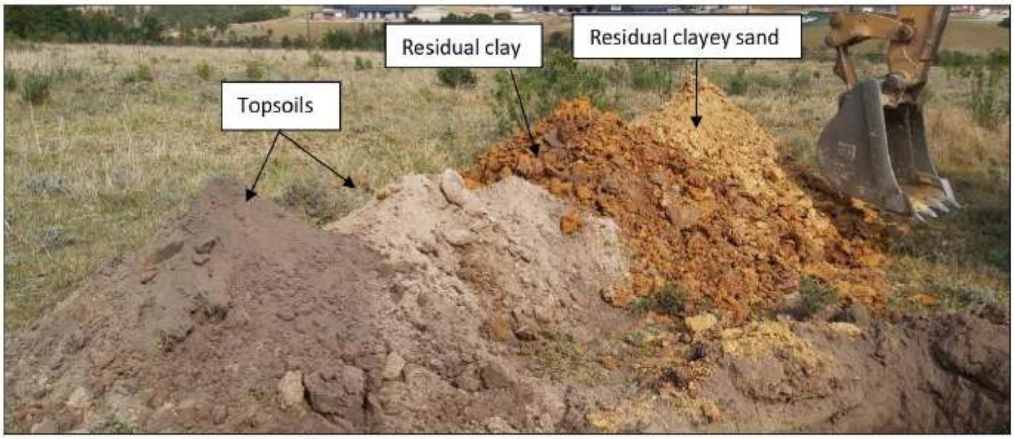


Figure 9: Typical insitu soil types extracted from test pits

Figure 10: Fill material encountered at TP3

A summary of soil horizons recorded in test pits has been provided in **Table 1 and Figure 11**.

Table 1: Summary of soil horizons recorded in test pits (in mm)

Test pos. No.	*Imported (fill) soil*	*Transported*	*Pedogenic soil*	*Residual soil*	*Rock*	*Total depth*	*Refusal?*
TP1	-	0-700	700-1300	1300-2500	-	2500	No
TP2	-	0-1600	1600-2200	2200-3000	-	3000	No
TP3	0-3000	-	-	3000-3200	-	3200	No
TP4	0-200	200-1000	1000-1200	1200-3000	-	3000	No
TP5	0-300	300-1000	1000-1100	1100-3600	-	3600	No
TP6	-	0-700	700-900	900-3000	-	3000	No
TP7	0-200	200-700	700-1000	1000-2800	-	2800	No
TP8	-	0-500	-	500-3000	-	3000	No
TP9	0-200	200-700	700-900	900-3200	-	3200	No
TP10	-	0-800	800-1000	1000-3000	-	3000	No
TP11	0-300	300-1000	1000-1100	1100-3000	-	3000	No
TP12	0-500	500-1600	-	1600-3000	-	3000	No
TP13	-	0-300	300-500	500-2500	-	2500	No
TP14	0-400	400-900	900-1100	1100-3000	-	3000	No
TP15	-	0-400	-	400-2800	-	2800	No
TP16	0-200	200-800	800-1100	1100-3000	-	3000	No
TP17	-	0-500	-	500-3000	-	3000	No
TP18	-	0-1300	1300-1500	1500-3000	-	3000	No
TP19	-	0-600	-	600-3000	-	3000	No
TP20	-	0-600	600-700	700-3000	-	3000	No

4.3 Insitu tests

DCP tests indicated typically loose consistency in the upper 0.8m of the profile but generally improving to medium dense/firm to dense/stiff below this depth. Loose horizons broadly

correlated to the transported colluvium, with a sharp improvement in bearing capacity at the base of this horizon, marking the top of the pedogenic gravel, which was relatively dense. Below the pedogenic ferricrete, tests indicated sporadic softening into firm (softer) clay horizons, but generally then transitioning downward into more stiff residual clays. In areas where a layer of uncontrolled fill covered the insitu soil, the DCPs indicated a thicker layer of loose soil with higher penetration rates (e.g. TP12). At some test positions (e.g. TP18) very moist – wet soil also resulted in high penetration rates, indicating lower bearing capacity of this soil. In summary, the tests generally indicated low bearing capacity for shallow foundations in the upper portion of the profile, requiring some consideration.

4.4 Lab tests

Representative samples of the insitu soil types were collected for Foundation Indicator tests to determine the particle size distribution (grading) and Atterberg limits. The results of the Foundation Indicator tests were summarised in **Table 2**.

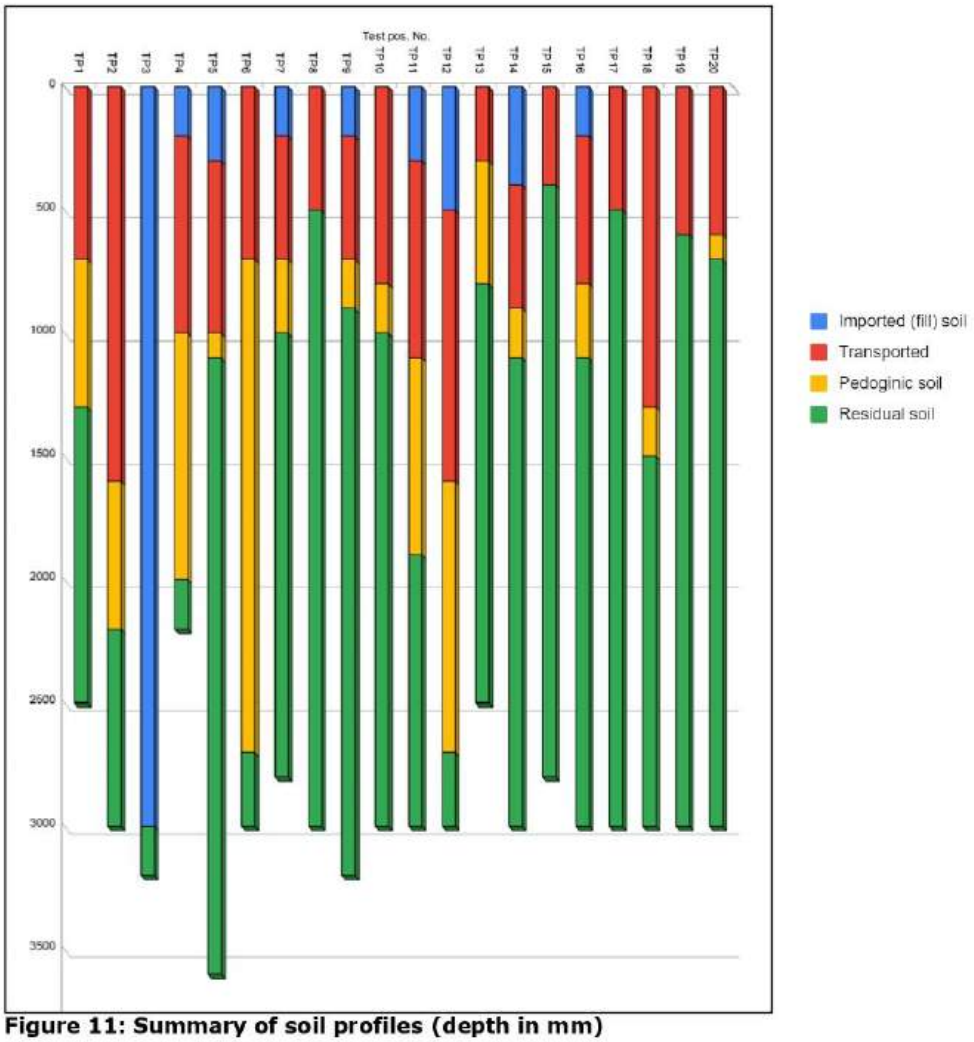


Figure 11: Summary of soil profiles (depth in mm)

ANNEXURE L (continued)

Table 2: Summary of Foundation Indicator test results

Test Pit No	Sample Depth (mm)	Atterberg Limits			Particle Analysis (%)				MC*	PE**	USC
		PI	LL	LS	Clay	Silt	Sand	Gravel			***
TP1	200-700	5	15	3	25	34	41	0	20.5	Low	CL-ML
TP1	700-1300	19	51	10	48	40	36	6	22.9	Low-Med	MH
TP7	700-1000	3	15	2	7	15	17	61	24	Low	GM
TP7	1000-2000	19	47	10	4	18	33	1	43	Low-Med	ML
TP7	2000-2800	18	44	9	32	16	50	2	36	Low-Med	SC
TP13	500-800	7	20	4	11	19	38	32	9.6	Low	SM-SC
TP13	800-1300	13	31	7	10	20	34	36	8.5	Low	SC
TP14	1100-2100	21	55	11	39	12	32	17	19.1	Low-Med	MH
TP18	600-1300	2	14	1	17	25	52	6	13.6	Low	SM
TP19	600-1600	15	42	8	29	25	41	5	22.1	Low-Med	ML

* Insitu Moisture Content ** Potential Expansiveness *** Unified Soil Classification

Foundation Indicator tests of residual soils indicated generally well-graded fine soils with a mixture of clay, silt and sand–sized particles (See **Figure 12**).

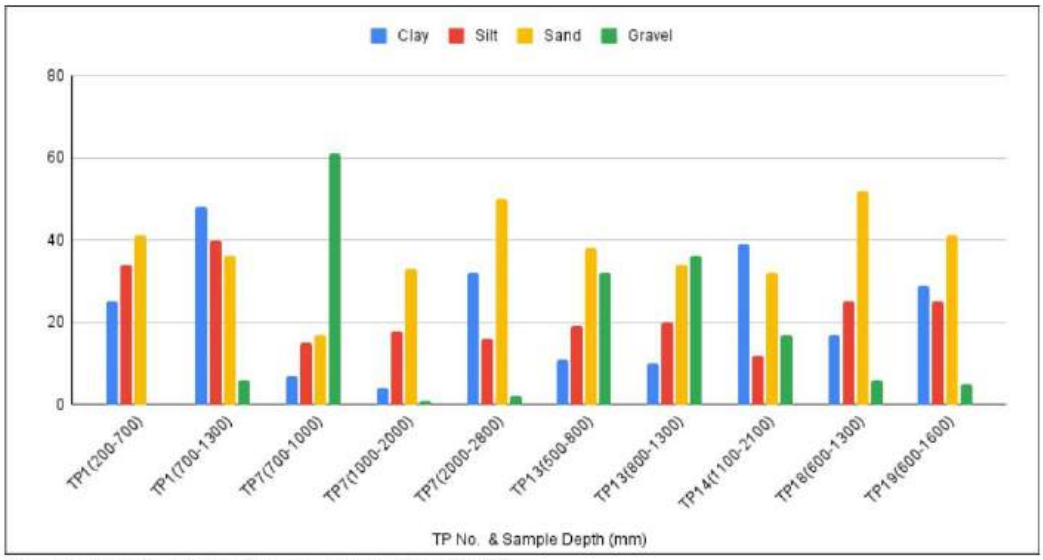


Figure 12: Particle size analysis distributions

Plasticity index (PI) was generally low to medium (<25 – see **Figure 13**). A borderline low-medium potential expansivity was expected from the residual soils which concurred with experience in the area. The soils tested were classified into the following groups under the Unified Soil Classification (USC) system:

- CL– Inorganic clays of low to medium plasticity
- ML – Inorganic silts of low to medium plasticity.
- GM – Silty gravels, gravel-sand-silt mixtures.
- MH – Inorganic silts of high plasticity.
- SC – Clayey sand, sand-clay mixtures.
- SM – Silty sand, sand-silt mixtures.

ANNEXURE L (continued)

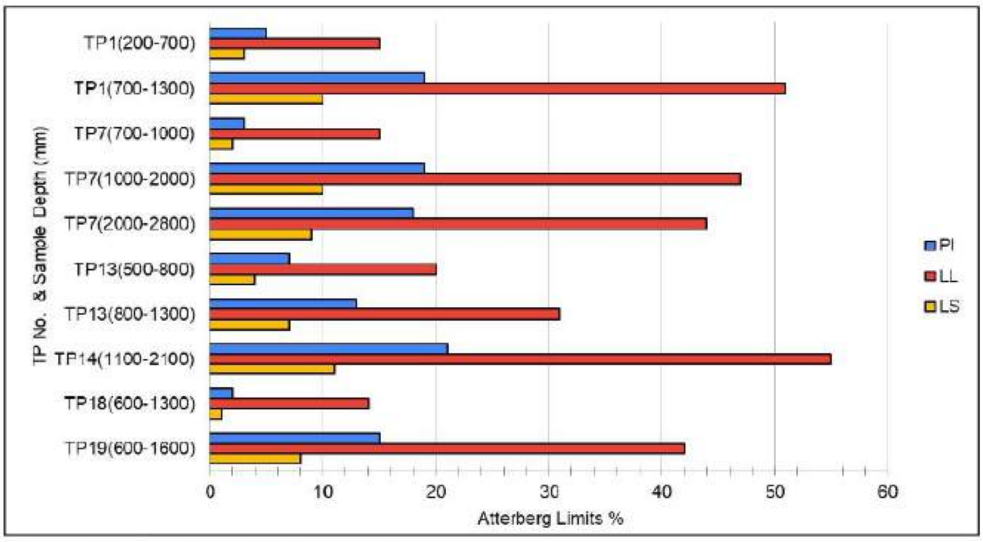


Figure 13: Atterberg Limits results

Representative samples were collected for Modified AASHTO density (Mod), CBR & Road Indicator tests to determine the potential of the material for structural fill purposes and/or for subgrade fill in road pavement design. The results of the tests were summarised in **Table 3** and **Figure 14**.

With one exception (the ferricrete gravel from TP14), the test results generally indicated low grading moduli (fine-grained), high swell/dilation properties, and generally low CBR values, indicating poor-quality road-building materials. Further recommendations were provided in **Chapter 6**.

Table 3: Summary of Mod/CBR/Indicator test results

Test Pit No	*Sample Depth (mm)*	*CBR at*					*Swell (%)*	*PI (%)*	*GM*	*MDD/ OMC*	*MDD/ OMC*
		100%	*98%*	*95%*	*93%*	*90%*					
TP1	700-1300	3	3	2	2	2	1.8	19	0.84	1662/21.9	Not Classified
TP13	800-2500	15	13	10	9	7	0.6	16	1.68	2072/7.8	Not Classified
TP14	400-1100	43	35	27	22	17	0	NP	1.24	2223/7.6	G6
TP19	600-1600	2	2	2	2	1	2.3	15	0.91	1810/16.2	Not Classified

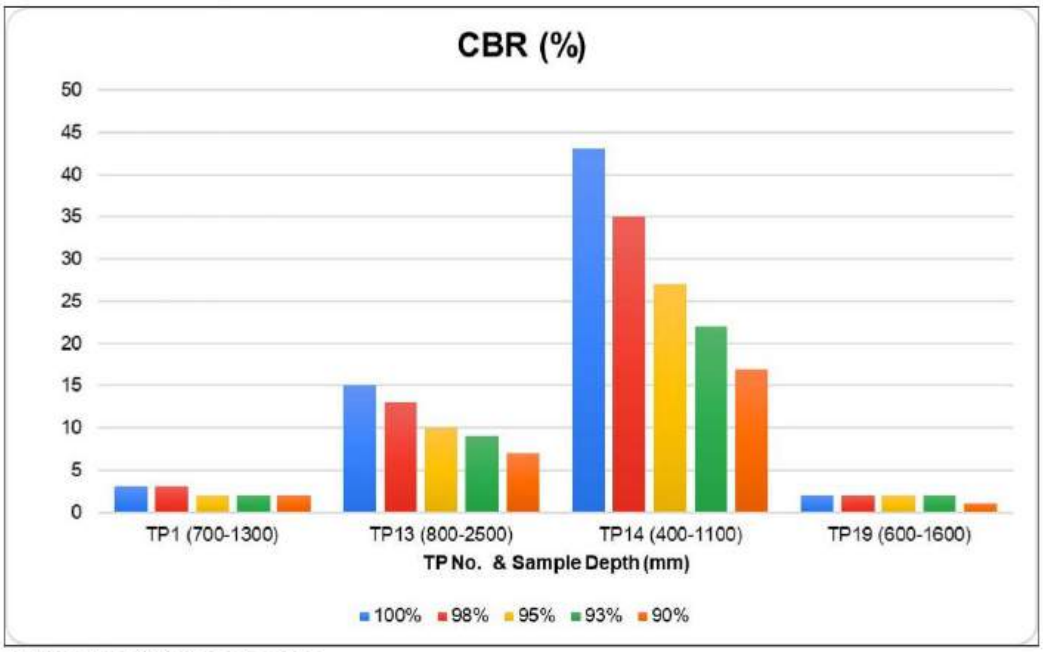


Figure 14: CBR test results

Samples of *in situ* soils were collected for soil chemistry tests (pH & Conductivity) in order to determine the aggressiveness of the soil which can affect buried services and concrete foundations. A summary of the results of the pH and conductivity tests were provided in **Table 4**.

Table 4: pH and conductivity test results summary

Test Position	*pH*	*Conductivity (S/m)*
TP1	7.8	0.0765
TP13	7.2	0.0437
TP14	6.7	0.0336
TP18	6.8	0.0192

Corrosion of metallic pipe fittings and concrete reinforcement may be negatively influenced by low or high pH, and high conductivity (indicating high concentration of dissolved salts in the soils). An indication of the influence of pH and conductivity on the corrosiveness of soil is given in **Table 5**.

Table 5: Influence of pH and conductivity on the corrosiveness of soil

pH	*Conductivity (S/m)*	*Potential Corrosiveness*
7-8	<0.01	Non-corrosive
5-6 or 9-10	0.01-0.05	Mildly corrosive
3-4 or 11-12	0.05-0.1	Corrosive
<3 or >12	>0.1	Highly corrosive

The lab results indicate mild to corrosive soil conditions due to dissolved salts in the soils, which is common in clayey soils and can cause corrosion (rusting) of buried metallic structures.

Undisturbed samples were also collected for oedometer tests to determine the compressibility and swell characteristics of the soil. The results were not available at the time of going to press and would be released in a revised report as they become available.

5. Geotechnical assessment

5.1 Geotechnical mapping

The site was broadly mapped according to the dominant geotechnical constraints that were identified during the investigation (See **Figure 15**). The constraints identified were discussed in the following chapters.

Figure 15: Geotechnical Map

5.2 Bearing capacity and settlement

Observations made in test pits and analysis of DCP tests indicated low bearing capacity of the insitu soils in the upper 1.0-1.5m below natural ground level, possibly extending slightly deeper in some areas. A conservative safe bearing capacity of 67kPa was calculated at a nominal founding depth of 0.7m below NGL on firm insitu soil (See Appendix 5) with less than 10mm expected settlement (classified as Terrain 1 - C1 category in terms of SANS10400-H). The underlying residual clays (weathered granite) generally presented a better founding medium with higher bearing capacity.

A significant portion of the site was underlain by thick deposits of rubbish/soil mix with no safe bearing capacity and thus classified as "uncontrolled fill" (Terrain 2 - Site Class P in terms of SANS10400-H). The fill highly sporadic and variable and was deemed unsuitable for recompaction and load bearing due to the presence of deleterious materials such as highly compressible organic material and rubbish (general waste). It was difficult to accurately assess

the lateral and vertical extent of the fill. It appeared as if the site had had several old trenches excavated and backfilled, in addition to the several obvious heaps of fill on surface. The presence of significant fill would have to be taken into account in the design of foundations and earthworks.

5.3 Heave

The investigations indicate potentially active clays with medium potential expansiveness, which concurs with previous experience in the area. The range of potential heave was conservatively estimated, based on empirical calculations, for the entire site at 10-15mm (H1 category in terms of SANS10400-H).

5.4 Groundwater

No free groundwater seepage was encountered in test pits but very moist soil conditions were noted in test pits on the lower slopes on the site, near drainage lines. Seasonal groundwater seepage was also expected in the uncontrolled fill material as this material contained significant voids. Seasonal seepage was also expected in the upper 1.5m in the profile during wet seasons which could potentially affect excavations and construction of foundations, requiring dewatering and some improvements.

5.5 Surface drainage and soil permeability

The central ridgeline/crest of the site had a fairly low slope gradient (increasing west and east towards natural drainage lines), and the insitu soils had a low permeability (estimated at 10^{-6} m/s). Surface water was encountered in some small existing localised depressions across the site (small ponds) where rainwater had accumulated on surface.

5.6 Slope stability

No natural slope stability issues were identified or expected from the areas proposed for development. Areas where uncontrolled filling has occurred on slopes, or where the natural ground has been significantly modified (excavations/diggings) could present some localised stability problems.

5.7 Excavations

All excavations to 3m were classified as "Soft" in terms of SABS1200D. Sidewalls of test pits were highly unstable at angles greater than 45° for any length of time mainly due to the unstable topsoil material.

6. Recommendations

The design of structures and civil services is the responsibility of the appointed civil and structural engineers. The recommendations contained herein do not supersede any applicable standards, codes or project specifications.

The following recommendations are based on limited information gained from the site investigation, and although the confidence in the information is high, variation in ground conditions may occur between information points. All geotechnical information should be confirmed during construction and if necessary, additional investigations may have to be commissioned. Any significant variations are to be brought to the attention of the authors for

comment or further recommendations. It is recommended that the structural engineer discuss his/her conceptual design with the geotechnical specialist to ensure that any calculations and recommendations are in line with current information.

6.1 General town planning and site development

The presence of existing infrastructure (overhead electrical lines) may have an impact on the proposed town planning layout. The natural topography will also play a significant role. The presence of deposits of uncontrolled fill could also present a hazard and obstacle to development, requiring earthworks to treat/remove this unsuitable material. The site topography and soil conditions therefore lends itself to the development of a series of engineered platforms.

6.2 Earthworks and civils

Civil works should be designed and constructed in accordance with SABS 1200, COLTO and/or any site-specific specifications provided by the civil engineer.

Some bush clearing, including the removal of medium sized trees would be required to clear site in preparation for construction. It is recommended that at least 150mm of organic-rich topsoil is stripped from the development areas (roads, platforms, etc) and stockpiled separately on site for landscaping purposes. Tree roots should also be grubbed from these areas. Any existing ponds or depressions that may contain surface water, that are not to be retained as part of the development, should be pumped dry and backfilled with suitable compacted fill to reinstate ground levels. Environmental input may be required for development near watercourses.

It is recommended that the site is developed with a series of engineered platforms using a combination of cut-to-fill terraces on sloping ground and ripped and recompacted soil on flatter ground.

Insitu soil obtained from excavations for platforms, road box cuts and services trenches is likely to be fine-grained and problematic for use as a compactable load-bearing fill material, and should therefore be used only for non-structural fill applications or general fill over pipe cradles.

Recommendations for road design include the cutting of the roadbed to the required line and level, followed by compaction to 90% MDD to identify soft spots, which should be removed and replaced with suitable imported compactable fill, such as G7 or G9. Side drainage is important to achieve compaction of the roadbed. Subsoil drains on upslope side or both sides (in the case of flat terrain) are also recommended. The recommended road layerworks include 150mm of G7 SSG (compacted to 93%MDD), followed by 150mm G5 subbase (compacted to 95%MDD), followed by 150mm G1/2 base course and asphalt, or alternatively 80mm concrete pavers. Stabilisation of the subbase can be considered due to the poor subgrade conditions.

Good site landscaping and a piped underground stormwater management system is recommended to collect, divert and control the discharge of stormwater from properties and roads to prevent flooding and ingress into subsoils, which could affect the stability of the soils, causing settlement of structures or erosion problems.

6.3 Foundations

Foundations should be designed and constructed in accordance with SANS 10400-H or any site-specific specification issued by the structural engineers.

Site testing indicates the presence of moderately problematic insitu soils, including active and/or compressible soils. However, the tests also indicated the presence of significant deposits of variable but widespread uncontrolled fill material which could be highly compressible and problematic under structures. The impact of this and other constraints is the requirement for improved foundation systems to mitigate settlement of structures. The recommended improvements include removal and replacement of unsuitable soil below foundations, stiffening of foundation reinforcement, and/or improved site drainage measures. Further investigations may be required during construction to develop solutions. Additional systems such as brick-force reinforcement and articulation joints in walls are also recommended where appropriate.

The recommended foundation systems for single/double storey structures include reinforced concrete strip foundations or rafts, supported on dense/stiff insitu soil or engineered fill. On sloping ground, where potentially loose overburden can be removed to a minimum depth of say 1m, structures can be well founded in cut on stiff insitu soil. In areas with flatter ground, potentially loose overburden (assume minimum 0.7m) should be ripped and recompacted with several passes of a pad-foot roller to achieve minimum density of 93%MDD. Additional improvements, such as a layer of selected granular fill such as G5, G6 or G7 gravel/crushed rock, can be considered as a final fill layer on such compacted platforms below the raft, compacted to 95%MDD. If localised thicker deposits of highly unsuitable soil are encountered during earthworks, decisions can be made on site to remove and replace more material as dictated by the on-site conditions.

7. Conclusions

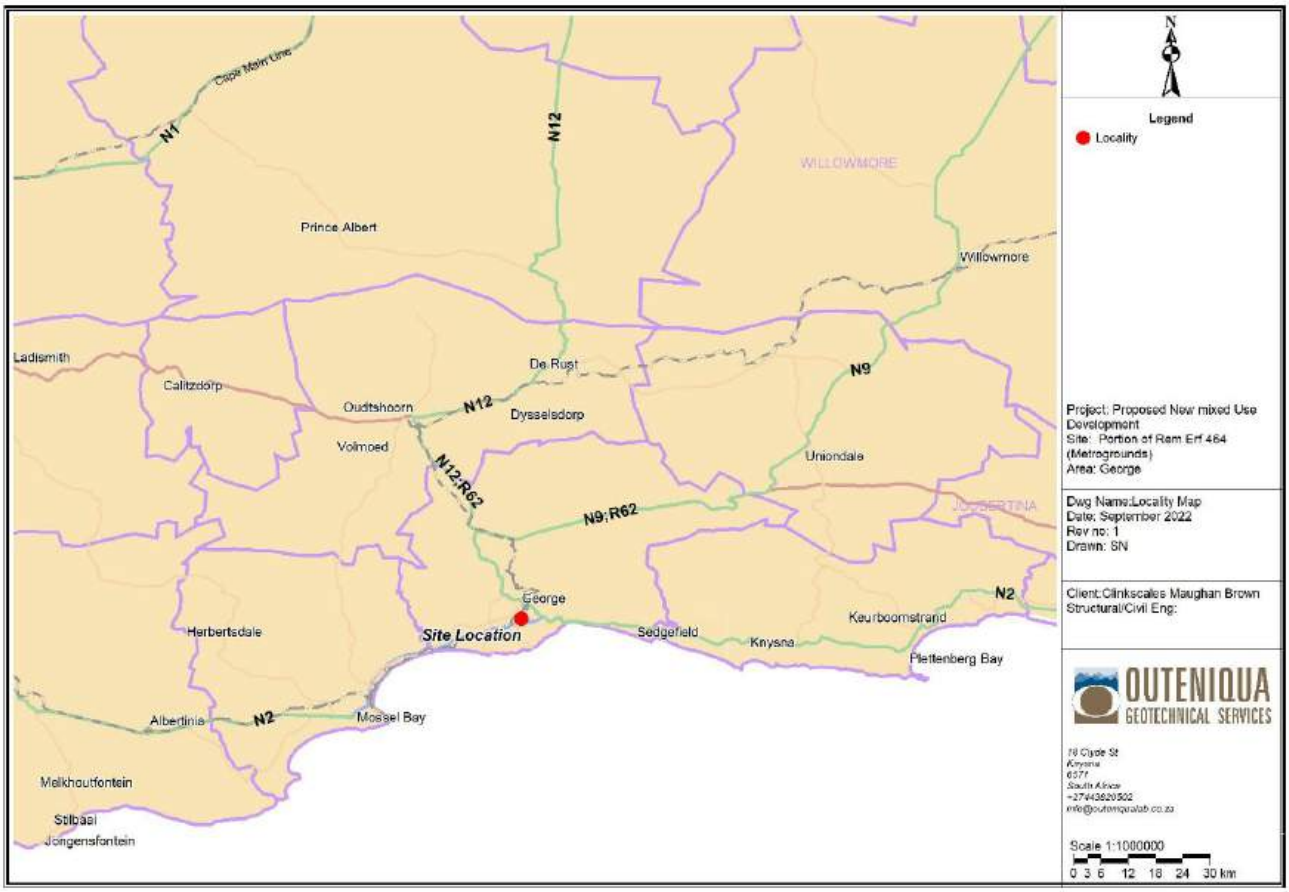
The site was generally considered suitable for the proposed urban development, but some challenging geotechnical constraints were encountered, requiring special engineering solutions to mitigate excessive movements in structures. Some preliminary recommendations were provided for consideration by the designers, but all information should be verified on site and further investigations may be required.

ANNEXURE L (continued)

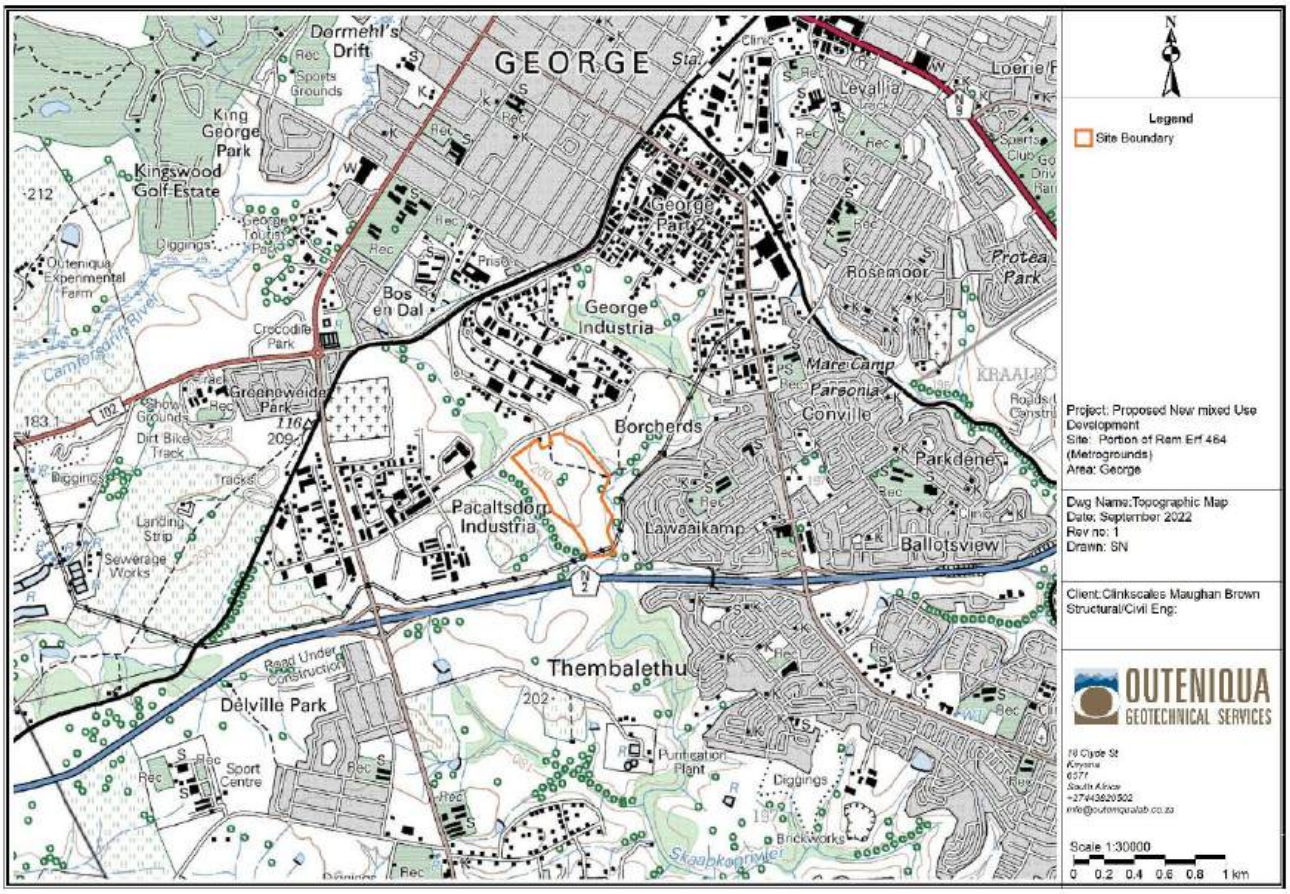
Appendix 1

Maps

ANNEXURE L (continued)

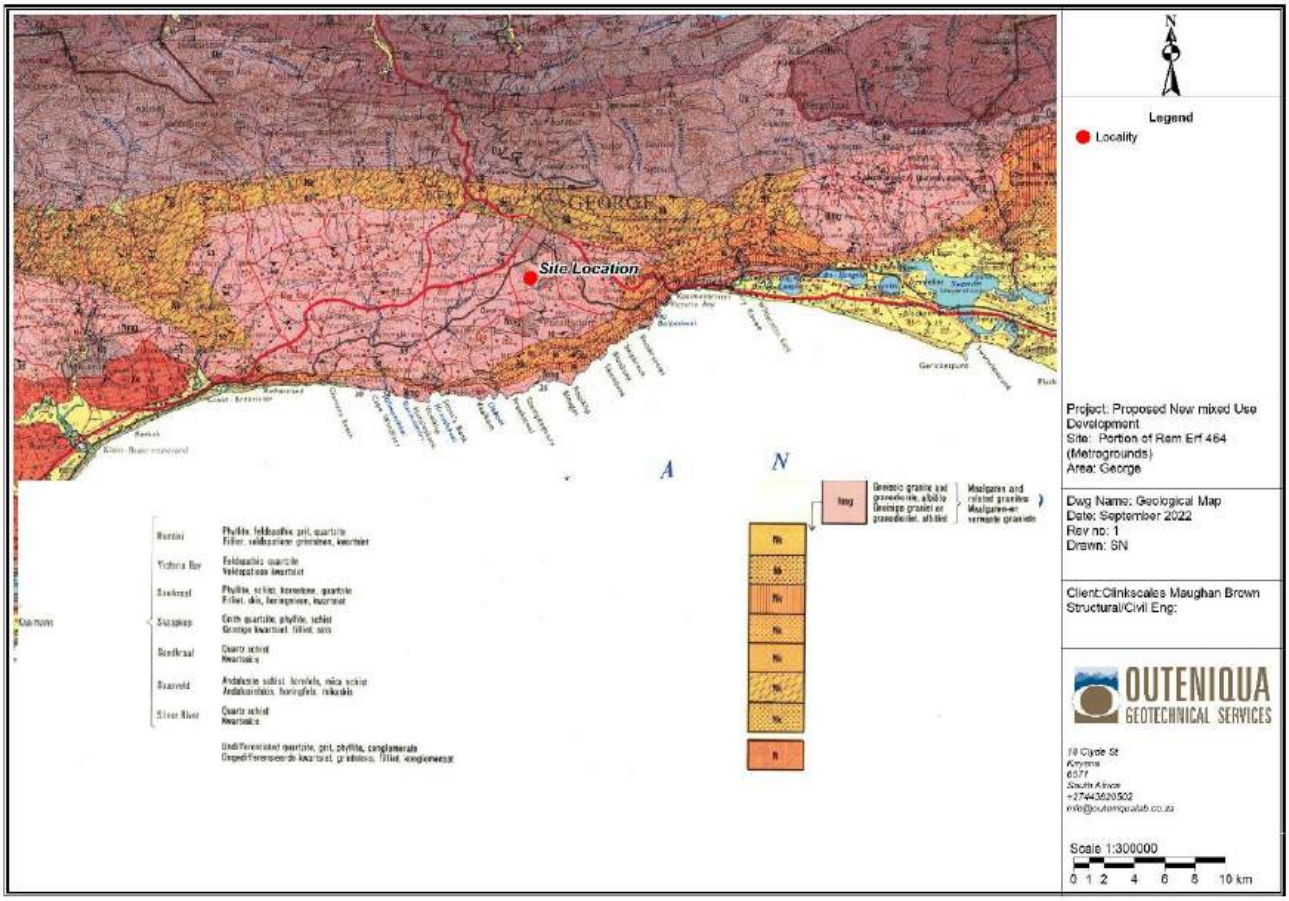


ANNEXURE L (continued)

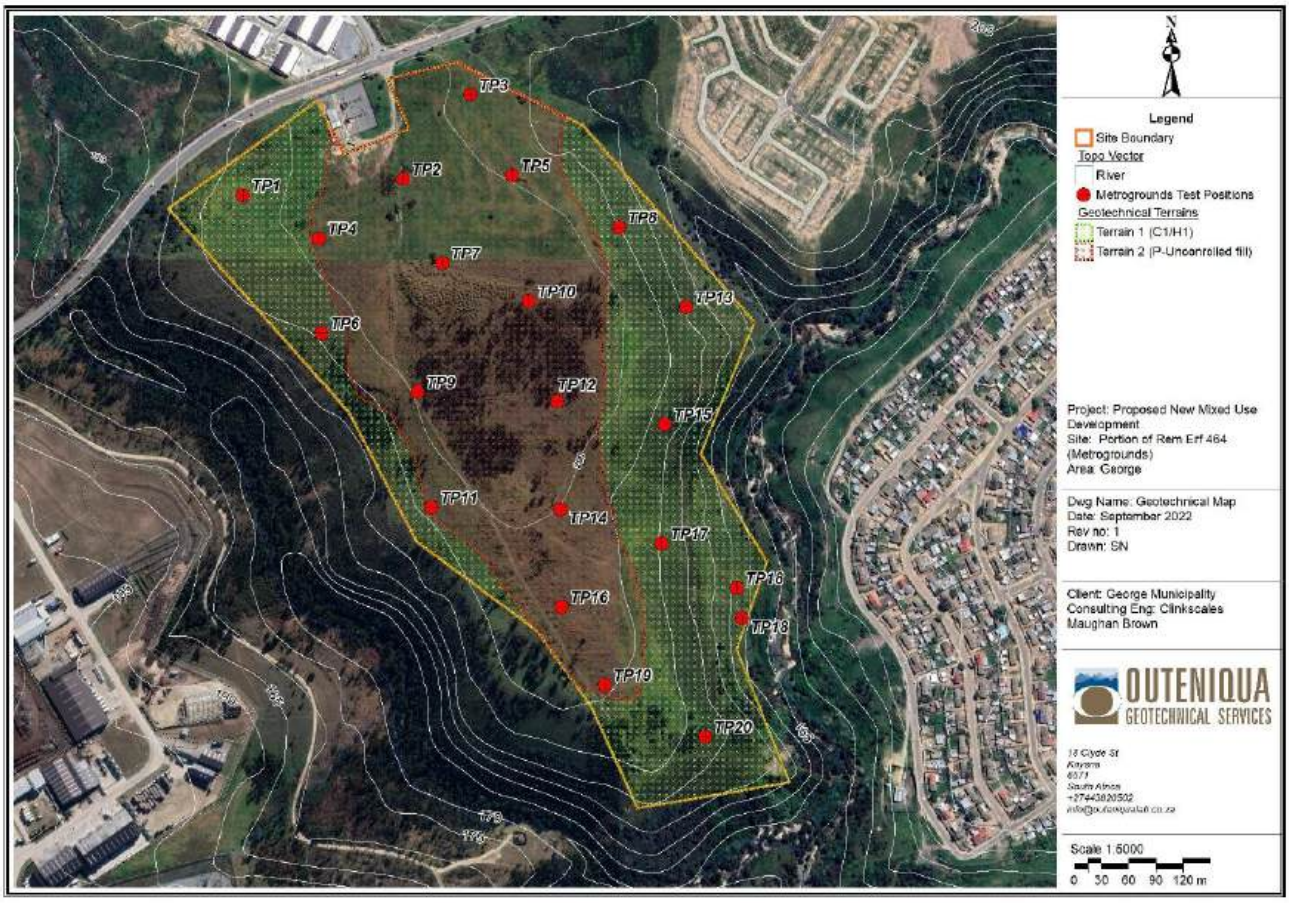


ANNEXURE L (continued)

ANNEXURE L (continued)



ANNEXURE L (continued)



ANNEXURE L (continued)

Appendix 2

Test pit profiles

ANNEXURE L (continued)

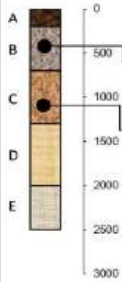
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 1

Datum: NGL | Co-ords: 23 Y0050289 X3762495 | Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **SILTY SAND**, topsoil (with roots)

(200 to 700) Moist, dark grey brown, loose to medium dense, intact, **CLAYEY SILTY FINE SAND**, colluvial.

Foundation Indicator

(700 to 1800) Moist, red orange becoming yellow orange & brown, firm to stiff, shattered, **SANDY SILTY CLAY with fine GRAVEL**, residual granite. Gravel is fine of quartz grains and some ferricrete nodules.

Foundation Indicator & MOD/CBR/Indicator & PH Conductivity

(1800 to 2000) Slightly moist to moist, yellow orange & brown, dense, faintly shattered, **CLAYEY & SILTY SAND with GRAVEL**, residual granite. Gravel is fine of quartz grains.

(2000 to 2600) Slightly moist, light yellow to yellow orange, dense to very dense, intact, **CLAYEY & SILTY SAND with GRAVEL**, completely weathered granite (saprolite). Gravel is fine of quartz and feldspar grains and some very soft rock fragments.

Near refusal in very dense weathered granite
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

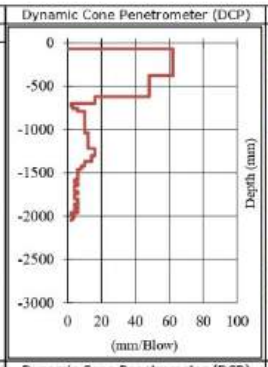
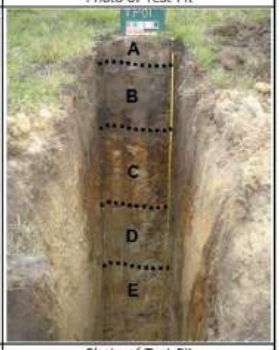
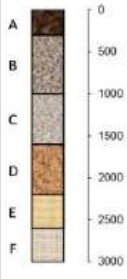


Photo of Test Pit



TP 2

Datum: NGL | Co-ords: 23 Y0050114 X3762476 | Key to symbols: Sample taken | Groundwater



(0 to 300) Moist to very moist, dark brown, loose, intact, **SILTY SAND**, topsoil (with roots)

(300 to 1000) Very moist, dark brown to brown, loose, intact, **CLAYEY SILTY SAND**, colluvial.

(1000 to 1600) Very moist, dark brown, stiff, intact, **SANDY SILT & CLAY**, colluvial.

(1600 to 2200) Moist, yellow brown & dark red, firm to stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine of quartz grains and some ferricrete nodules.

(2200 to 2600) Moist, yellow orange & grey, firm, intact, **SANDY SILT & CLAY with GRAVEL**, residual granite. Gravel is fine of quartz grains.

(2600 to 3000) Moist, yellow brown & grey, dense, intact, **CLAYEY & SILTY SAND with GRAVEL**, residual / completely weathered granite (saprolite). Gravel is fine of quartz and feldspar grains.

Uncontrolled backfill encountered to 2600mm in western face.
DCP2A done in backfill.
No refusal, TP stopped at 3.0m
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

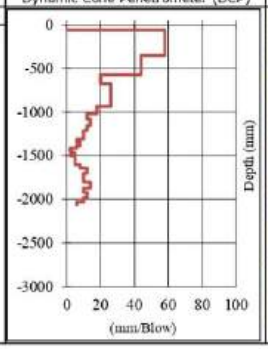


Photo of Test Pit

ANNEXURE L (continued)

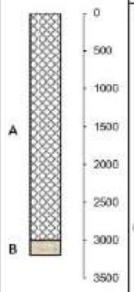
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 3

Datum: NGL | Co-ords: 23 Y0050042 X3762385
Key to symbols: Sample taken | Groundwater



(0 to 3000) Moist, light yellow brown & yellow orange & dark brown, medium dense, irregular distributed, **GRAVELLY SILT & SAND, CLAYEY SILTY FINE SAND with occasional RUBBLE**, fill.

(3000 to 3500) Slightly moist, light yellow brown & grey, very dense, intact, **SILTY & SANDY GRAVEL**, completely weathered granite (saprolite). Gravel is fine of quartz and feldspar grains and few soft rock fragments.

Near refusal on very soft rock
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

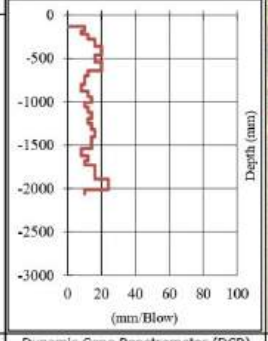
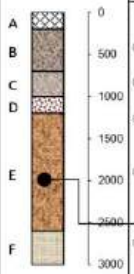


Photo of Test Pit

TP 4

Datum: NGL | Co-ords: 23 Y0050206 X3762542
Key to symbols: Sample taken | Groundwater



(0 to 200) Slightly moist, light yellow & light brown, medium dense, intact, **CLAYEY SILTY SAND**, fill (with roots)

(200 to 700) Moist, dark brown, medium dense, intact, **SILTY FINE SAND**, colluvial.

(700 to 1000) Slightly moist, light grey, loose to medium dense, intact, **SILTY SAND**, colluvial.

(1000 to 1200) Moist, dark red orange, very dense, honeycombed, **CLAYEY GRAVEL**, pedogenic. Gravel is fine to coarse ferricrete nodules and concretions.

(1200 to 2600) Moist, dark red orange to yellow orange & brown, stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine of quartz grains.

Swell

(2600 to 3000) Slightly moist to moist, light yellow & grey, dense to very dense, intact, **CLAYEY GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine of quartz and feldspar grains.

No refusal, TP Stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

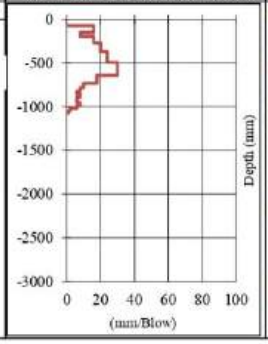


Photo of Test Pit

ANNEXURE L (continued)

OUTENIQUA GEOTECHNICAL SERVICES

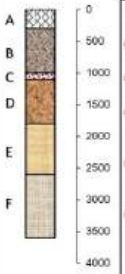
Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 5

Datum: NGL | Co-ords: 23 Y0049996 X3762472

Key to symbols: ● Sample taken ▼ Groundwater



(0 to 300) Moist, light yellow brown & dark brown, loose to medium dense, intact, **GRAVELLY SILTY SAND**, fill (with roots)

(300 to 1800) Moist, dark brown, loose to medium dense, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(1800 to 2100) Moist, dark red orange, dense, intact, **CLAY & SANDY GRAVEL**, pedogenic. Gravel is fine to medium ferricrete nodules.

(2100 to 2800) Moist, dark red orange & dark yellow orange, stiff, shattered, **SANDY SILT & CLAY with GRAVEL**, residual granite. Gravel is fine of quartz grains.

(2800 to 3200) Slightly moist to moist, dark yellow orange to light grey, medium dense to dense, intact, **CLAY & SILTY SAND with GRAVEL**, residual granite. Gravel is fine of quartz grains.

(3200 to 3400) Slightly moist, light grey, dense to very dense, intact, **SILTY SAND & GRAVEL**, completely weathered granite (saprolite). Gravel is fine quartz and feldspar grains.

Near refusal in very dense completely weathered granite
No water seepage encountered
Partially intersecting 600mm wide x 3.5m deep backfilled trench

Dynamic Cone Penetrometer (DCP)

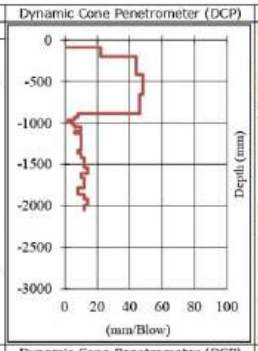
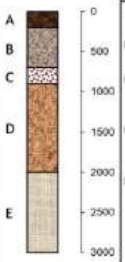


Photo of Test Pit

TP 6

Datum: NGL | Co-ords: 23 Y0050202 X3762645

Key to symbols: ● Sample taken ▼ Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILT & SAND**, topsoil (with roots)

(200 to 700) Moist, dark brown, loose to medium dense, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(700 to 900) Very moist, dark brown, dense, honeycombed/voided, **CLAYEY SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules and traces of quartz pebbles.

(900 to 2800) Moist, dark red orange & yellow orange, stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine, angular of quartz grains.

(2800 to 3000) Moist, light yellow & grey, dense, intact, **CLAY & GRAVELLY SILT & SAND,** completely weathered granite (saprolite)**.** Gravel is fine, angular, of quartz and feldspar grains.

No refusal, TP stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

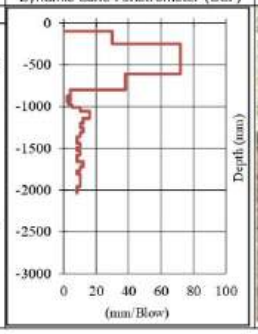
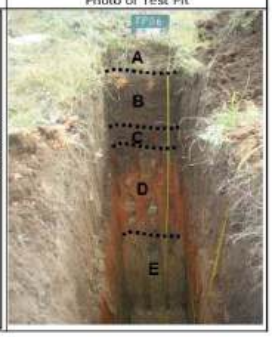


Photo of Test Pit



ANNEXURE L (continued)

OUTENIQUA GEOTECHNICAL SERVICES

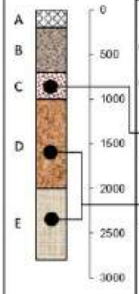
Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 7

Datum: NGL | Co-ords: 23 Y0050071 X3762568

Key to symbols: ● Sample taken | ▼ Groundwater



(0 to 200) Moist, light yellow & dark brown, medium dense, intact, **CLAY & SILTY SAND**, fill (with roots)

(200 to 700) Moist, dark brown, loose to medium dense, intact, **CLAYEY & SILTY FINE SAND**, colluvial.

(700 to 1000) Slightly moist to moist, dark brown, medium dense, honeycombed/voided, **SILTY SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules.

Foundation Indicator

(1000 to 2000) Moist, yellow orange & red orange, stiff, shattered, **SAND & SILTY CLAY with GRAVEL**, residual granite. Gravel is fine, angular of quartz grains.

Foundation Indicator

(2000 to 2800) Slightly moist to moist, yellow orange & light grey brown, dense to very dense, intact, **CLAYEY & SILTY SAND with GRAVEL**, completely weathered granite (saprolite). Gravel is fine, angular quartz and feldspar grains.

Near refusal in very dense weathered granite

No water seepage encountered

Dynamic Cone Penetrometer (DCP)

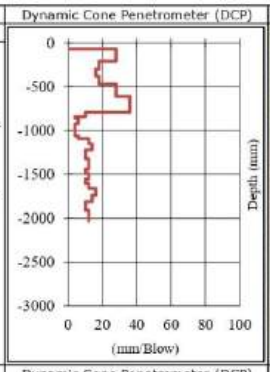
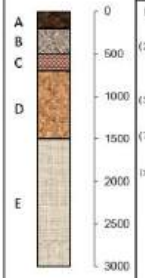


Photo of Test Pit

TP 8

Datum: NGL | Co-ords: 23 Y0049879 X3762528

Key to symbols: ● Sample taken | ▼ Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(200 to 500) Moist, dark brown, dense, voided/clast supported, **CLAYEY SILTY GRAVEL & COBBLES**, colluvial/pedogenic. Gravel is ferricrete nodules. Cobbles are angular to sub-rounded quartzite.

(500 to 700) Moist, dark brown to light brown, dense, pinholed, **CLAYEY SANDY FINE GRAVEL**, residual granite. Gravel is fine quartz grains.

(700 to 1300) Moist, dark yellow orange & dark red orange & dark brown, stiff shattered, **SANDY SILTY CLAY,** residual granite.

(1300 to 3000) Slightly moist, dark yellow orange & dark red & grey, very dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is quartz and feldspar grains with some soft rock fragments.

No refusal, TP stopped

No water seepage encountered

Dynamic Cone Penetrometer (DCP)

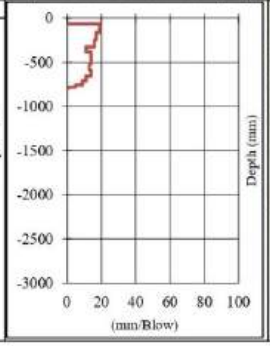


Photo of Test Pit

ANNEXURE L (continued)

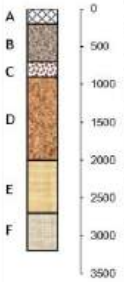
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 9

Datum: NGL | Co-ords: 23 Y0050098 X3762708 | Key to symbols: Sample taken | Groundwater



(0 to 200) Slightly moist, dark brown, loose, intact, **SILTY SAND**, fill (with rubble)

(200 to 700) Slightly moist, dark brown, medium dense, intact, **SILTY FINE SAND**, colluvial.

(700 to 900) Slightly moist, dark brown & dark red orange, dense, honeycombed/voided & clast supported, **SILT & SANDY GRAVEL**, pedogenic. Gravel ferricrete nodules and concretions.

(900 to 2000) Slightly moist, dark red orange & dark yellow orange, stiff to very stiff, shattered, **SANDY SILTY CLAY**, residual granite.

(2000 to 2700) Slightly moist, light red orange to light yellow orange, dense to very dense, intact, **CLAYEY SILT & SAND with GRAVEL**, residual granite. Gravel is fine, angular of quartz grains.

(2700 to 3000) Slightly moist, light yellow & grey, very dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine to medium, angular quartz and feldspar grains.

Western face exposed backfill up to 2800mm
No refusal, TP stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

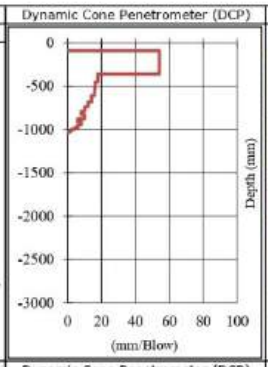
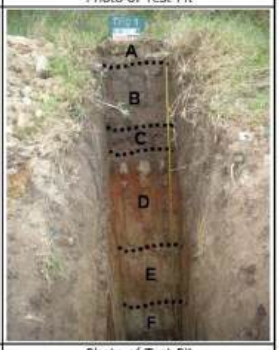
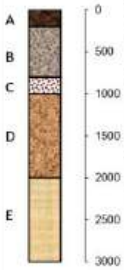


Photo of Test Pit



TP 10

Datum: NGL | Co-ords: 23 Y0049977 X3762609 | Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **SILTY SAND**, topsoil (with roots)

(200 to 800) Moist, dark brown, loose to medium dense, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(800 to 1000) Moist, dark brown & dark red orange, dense to very dense, honeycombed/voided & clast supported, **CLAYEY SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules and concretions with occasional quartz pebbles at base.

(1000 to 2000) Moist, dark red orange & yellow orange & brown, stiff, shattered, **SANDY SILTY CLAY**, residual granite.

(2000 to 3000) Moist, light yellow orange blotched light red orange, dense/stiff, intact, **CLAYEY SAND & SILT WITH GRAVEL**, residual granite. Gravel is fine angular quartz grains.

No refusal, TP stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

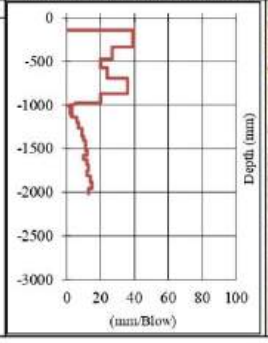
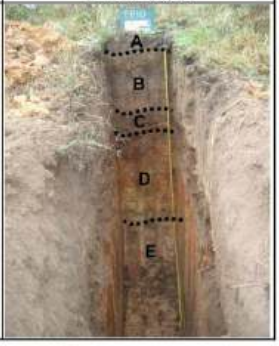


Photo of Test Pit



ANNEXURE L (continued)

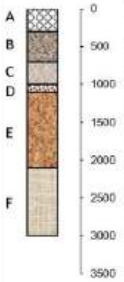
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 11

Datum: NGL | Co-ords: 23 Y0050082 X3762833 | Key to symbols: Sample taken | Groundwater



(0 to 300) Moist, dark brown & light brown, medium dense, intact, **GRAVELLY SILTY SAND**, fill (with roots)

(300 to 700) Moist, dark brown, medium dense, intact, **CLAYEY SILTY SAND**, colluvial.

(700 to 1000) Slightly moist, dark brown, stiff, shattered, **SANDY SILT & CLAY**, colluvial.

(1000 to 1500) Slightly moist, dark red & dark red orange, very dense, honeycomb/voided & clast supported, **CLAYEY SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules and concretions.

(1500 to 2100) Moist, dark red orange & yellow orange & dark brown, stiff, shattered, **SANDY SILTY CLAY**, residual granite.

(2100 to 3000) Moist, light yellow orange & grey, very dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains.

No refusal, TP stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

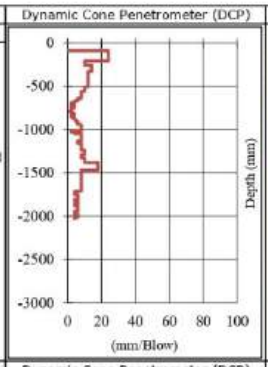
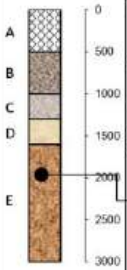


Photo of Test Pit

TP 12

Datum: NGL | Co-ords: 23 Y0049945 X3762717 | Key to symbols: Sample taken | Groundwater



(0 to 500) Moist, dark brown & light yellow & red orange, loose/soft, intact, irregularly distributed **CLAYEY SILTY SAND and SANDY & SILTY CLAY**, fill (with roots)

(500 to 1000) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(1000 to 1200) Moist, dark grey brown, loose to medium dense, intact, **SILTY FINE SAND with GRAVEL**, colluvial. Gravel is ferricrete nodules at base.

(1200 to 1600) Moist, light red orange, dense, intact, **CLAYEY SAND**, colluvial.

(1600 to 2000) Moist, light yellow & red orange & light grey, stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine angular quartz grains.

Swell

No refusal, TP stopped
No water seepage
Southern face exposed backfilled excavation to ~2m.
Uneven ground due to several old backfilled excavations

Dynamic Cone Penetrometer (DCP)

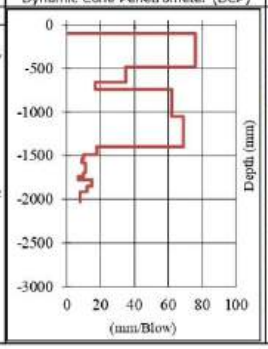


Photo of Test Pit

ANNEXURE L (continued)

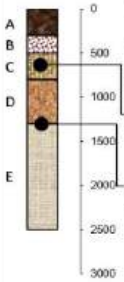
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 13

Datum: NGL | Co-ords: 23 Y0049806 X3762614 | Key to symbols: Sample taken | Groundwater



(0 to 300) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(300 to 500) Moist, dark brown & dark red orange, medium dense, voided, **SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules and quartz pebbles.

(500 to 800) Moist, brown, medium dense, pinholed, **GRAVELLY COARSE SAND**, residual granite. Gravel is fine quartz grains.

Foundation Indicator

(800 to 1300) Moist, light yellow & light red orange, very stiff/very dense, shattered, **CLAYEY & SILTY GRAVEL & SAND**, residual granite. Gravel is fine quartz grains.

Foundation Indicator & MOD/CBR/Indicator & PH Conductivity

(1300 to 2500) Slightly moist, light yellow & grey, very dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains with some very soft rock fragments.

Near refusal in very dense material
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

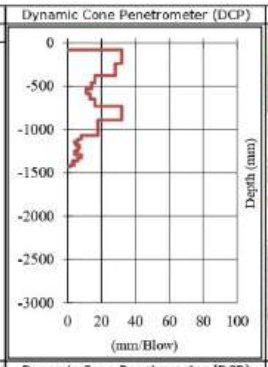
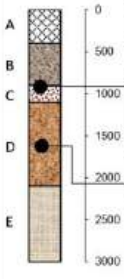


Photo of Test Pit

TP 14

Datum: NGL | Co-ords: 23 Y0049942 X3762835 | Key to symbols: Sample taken | Groundwater



(0 to 400) Moist, dark brown & yellow orange & red orange, loose, intact, **CLAYEY SILTY SAND**, fill (with roots)

(400 to 900) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(900 to 1100) Moist, dark brown & red orange, dense, voided/honeycombed & clast supported, **CLAYEY SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules.

MOD/CBR/Indicator & PH Conductivity

(1100 to 2100) Moist, dark red orange & dark yellow orange, stiff to very stiff, shattered, **SANDY SILTY CLAY**, residual granite. Gravel is fine angular quartz

Foundation Indicator

(2100 to 3000) Moist, light yellow & grey, dense, intact, **CLAYEY SAND & SILT with GRAVEL**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains.

No refusal, TP stopped
No water seepage encountered
DCP 4a assumed to encountered old backfilled trench

Dynamic Cone Penetrometer (DCP)

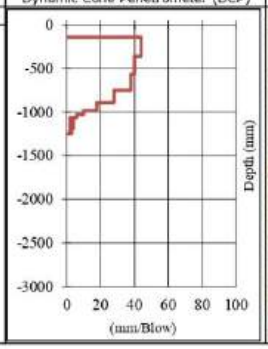


Photo of Test Pit

ANNEXURE L (continued)

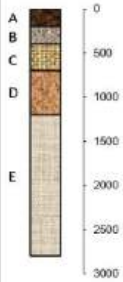
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 15

Datum: NGL | Co-ords: 23 Y0049828 X3762742
Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(200 to 400) Moist, dark brown, loose to medium dense, pinholed, **CLAYEY SAND & GRAVEL**, colluvial. (with occasional cobbles and ferricrete nodules)

(400 to 700) Moist, dark brown to brown, medium dense, pinholed, **CLAYEY GRAVELLY COARSE SAND**, residual granite. Gravel is fine quartz grains. (leached).

(700 to 1200) Moist, light yellow orange & brown, very stiff/very dense, shattered, **SANDY SILTY CLAY to CLAYEY & SILTY SAND with GRAVEL**, residual granite. Gravel is fine angular quartz grains.

(1200 to 2800) Slightly moist, light yellow orange & grey, very dense, intact, **GRAVELLY SILTY SAND**, completely weathered granite (saprolite). Gravel is fine quartz and ferricrete nodules and some soft rock fragments.

Near refusal in very dense material
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

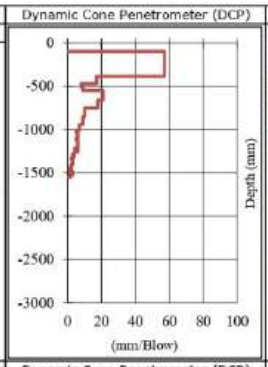
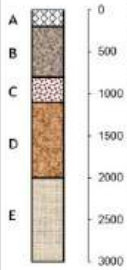


Photo of Test Pit

TP 16

Datum: NGL | Co-ords: 23 Y0049940 X3762941
Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown & red orange, loose to soft, irregularly distributed, **CLAYEY SILTY SAND & SILTY CLAY**, fill (with roots)

(200 to 800) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(800 to 1100) Moist, dark brown, medium dense, voided/honeycombed & clast supported, **CLAYEY SANDY GRAVEL with COBBLES**, pedogenic. Gravel is ferricrete nodules and quartz pebbles. Cobbles are quartzite.

(1100 to 2000) Moist, dark red orange & dark yellow orange & brown, firm to stiff, shattered, **SANDY SILTY CLAY**, residual granite.

(2000 to 2000) Moist, light yellow & light orange & light grey, dense, intact, **CLAYEY SAND & SILT with GRAVEL**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains.

No refusal, TP stopped
No water seepage encountered
Encountered E-W trending backfilled trench with rubble up to 2m

Dynamic Cone Penetrometer (DCP)

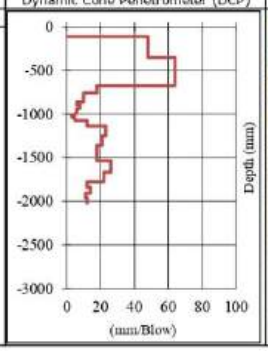
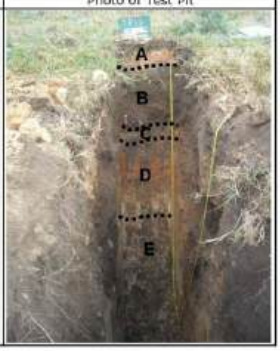


Photo of Test Pit



ANNEXURE L (continued)

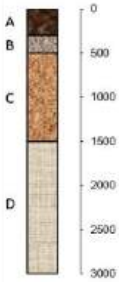
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 17

Datum: NGL | Co-ords: 23 Y0049831 X3762871
Key to symbols: Sample taken | Groundwater



(0 to 300) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(300 to 500) Moist, grey brown, medium dense, intact, **SILTY FINE SAND**, colluvial.

(500 to 1500) Moist, brown & dark red orange, very stiff to stiff, shattered, **SANDY SILTY CLAY**, residual granite.

(1500 to 3000) Moist, light yellow & light grey, dense to very dense, intact, **CLAYEY & GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains.

Near refusal in very dense material
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

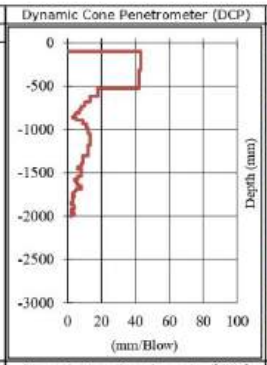
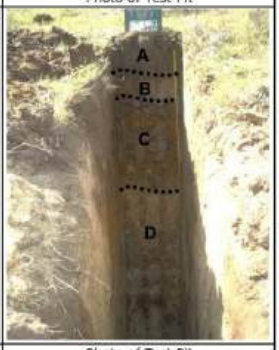
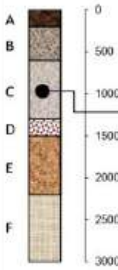


Photo of Test Pit



TP 18

Datum: NGL | Co-ords: 23 Y0049740 X3762919
Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(200 to 600) Moist to very moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, colluvial.

(600 to 1500) Very moist to wet, light grey brown, loose to very loose, intact, **SILTY FINE SAND**, colluvial.
PH Conductivity

(1200 to 1500) Very moist, dark brown & dark red orange, dense, voided/honeycombed & clast supported, **CLAYEY & SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules.

(1500 to 2200) Moist, light yellow & red orange & dark brown, firm to stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine angular quartz grains.

(2200 to 3000) Moist, light yellow & red orange & light grey, dense, intact, **CLAYEY & GRAVELLY SILTY SAND,** completely weathered granite (saprolite). Gravel is fine quartz and feldspar grains with soft rock fragments.

No refusal, TP stopped
No water seepage but very wet at 1.3m

Dynamic Cone Penetrometer (DCP)

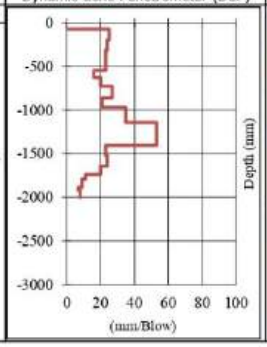


Photo of Test Pit

ANNEXURE L (continued)

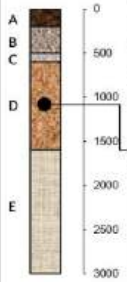
OUTENIQUA GEOTECHNICAL SERVICES

Geotechnical Soil Profile

Client:	Clinkscales Maughan-Brown (Pty)Ltd
Project:	Portion of Rem Erf 464 (Metrogrounds)
Area:	George
Date:	03.08.2022
Excavator:	TLB

TP 19

Datum: NGL | Co-ords: 23 Y0049892 X3763025 | Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(200 to 500) Moist, grey brown, loose to medium dense, intact, **SILTY FINE SAND**, colluvial.

(500 to 600) Moist, dark brown, dense, intact, **CLAYEY FINE SAND**, colluvial.

(600 to 3400) Moist, dark red orange & yellow orange & dark brown, stiff, shattered, **SANDY SILTY CLAY** becoming **CLAYEY SILT & SAND**, residual granite.

MOD/CBR/Indicator & Foundation Indicator

(1400 to 2000) Moist, light yellow & light grey, dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine angular quartz and feldspar grains.

No refusal, TP stopped
No water seepage encountered
Encountered E-W trending backfilled trench with rubble up to 2m

Dynamic Cone Penetrometer (DCP)

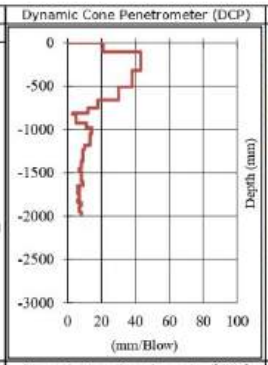
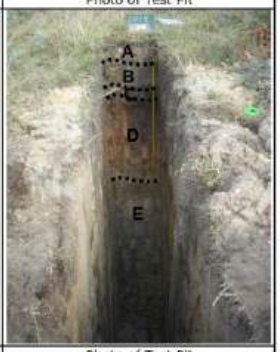
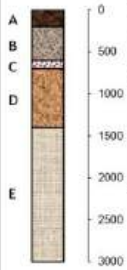


Photo of Test Pit



TP 20

Datum: NGL | Co-ords: 23 Y0049783 X3763081 | Key to symbols: Sample taken | Groundwater



(0 to 200) Moist, dark brown, loose, intact, **CLAYEY SILTY FINE SAND**, topsoil (with roots)

(200 to 600) Very moist, dark brown to grey brown, loose, intact, **SILTY FINE SAND**, colluvial.

(600 to 700) Moist to very moist, dark brown & dark red orange, medium dense, voided/honeycombed & matrix supported, **CLAY & SANDY GRAVEL**, pedogenic. Gravel is ferricrete nodules.

(700 to 1400) Moist, dark red orange & brown to grey, stiff to very stiff, shattered, **SANDY SILTY CLAY with GRAVEL**, residual granite. Gravel is fine angular quartz grains.

(1400 to 2000) Slightly moist, light yellow orange & light grey, dense to very dense, intact, **GRAVELLY SILT & SAND**, completely weathered granite (saprolite). Gravel is fine angular quart and feldspar grains and very soft to soft rock fragments.

No refusal, TP stopped
No water seepage encountered

Dynamic Cone Penetrometer (DCP)

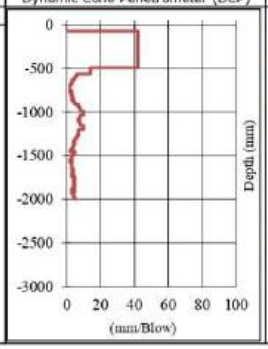


Photo of Test Pit

ANNEXURE L (continued)

Appendix 3

Lab test data

ANNEXURE L (continued)

OUTENIQUA LAB (Pty) Ltd.

Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

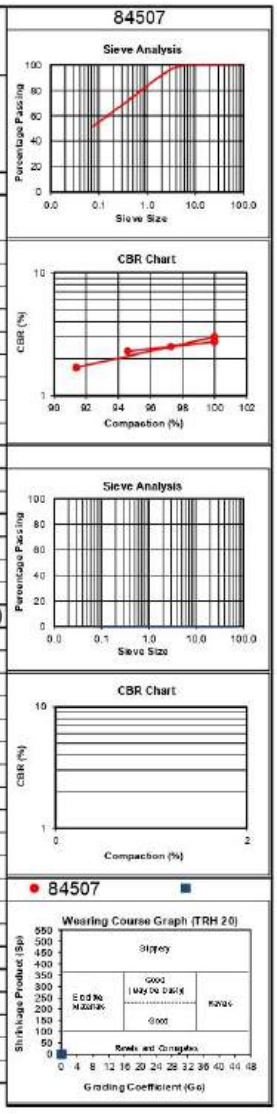
R-CBR-1-8 May-19

T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	15/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	1/4

TEST REPORT
CALIFORNIA BEARING RATIO

Sample Position (SV)		TP1 - Layer 3	COLTO: Not Classified				84507
Depth (mm)		700-1300					
Sample No		84507					
Materials Description	Source	In-situ					
	Colour	Reddish Orange to Yellowish Orange					
	Soil Type	Sandy Elastic Silt					
	Classification	Existing					
Material Indicators - (SANS 3001 Method GR1)							
Percentage Passing	75 mm	100		Opinion			
	63 mm	100					
	50 mm	100					
	37.5 mm	100					
	28 mm	100					
	20 mm	100					
	14 mm	100					
	5 mm	99					
	2 mm	92					
	0.425 mm	73					
	0.075 mm	51.7					
Material Indicators - (SANS 3001 Method PR5)							
Grading Modulus		0.84					
Coarse Sand Soil-Mortar (%)		21					
Atterberg Limits - (SANS 3001 Method GR10)							
Liquid Limit (%)		54					
Plasticity Index (%)		19					
Linear Shrinkage (%)		9.5					
Material Strength - (SANS 3001 Method GR30,GR40 - SCALPED)							
MDD	Max Dry Density (kg/m³)	1662					
	Optimum Moisture Content (%)	21.9					
	Mould Moisture Content (%)	21.8					
A	Relative Compaction (%)	100.0					
	Swell (%)	1.8					
B	Relative Compaction (%)	94.6					
	Swell (%)	2.0					
C	Relative Compaction (%)	91.4					
	Swell (%)	2.1					
CBR	@100% Max Dry Density	3					
	@98% Max Dry Density	3					
	@95% Max Dry Density	2					
	@93% Max Dry Density	2					
	@90% Max Dry Density	2					
Material Condition							
Insitu Moisture Content (%)							
Soil Classification Achieved By The Material							
COLTO:		Not Classified					
AASHTO System		A-7-5					
Unified System		MH					



· **Specimens delivered to Outeniqua Lab in good order.**

Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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1. The opinion column is an interpretation of the direct comparison between the quoted specification and the single test sample results obtained. The compliant (✓), non compliant (×) and uncertain (±) opinion indicators are based on an approximate 95% level of confidence with reference to SAMM GUIDANCE 1, Issue 2 : 20 June 2007 Section 2.
2. The uncertain (±) indicates that the test result is either equal to or is above / below the specified limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliant (✓) or non compliant (×) based on a 95% level of confidence with reference to SAMM GUIDANCE 1, Issue 2 : 20 June 2007 Section 2.
3. This report (with attachments) is the correct record of all measurements made, and may not be reproduced other than with full written approval from the Director of Outeniqua Lab (Pty) Ltd.
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5. While every care is taken to ensure the correctness of all tests and reports, neither Outeniqua Lab (Pty) Ltd nor its employees shall be liable in any way whatever for any error made in the execution or reporting of tests or any erroneous conclusions drawn therefrom or for any consequence thereof.

Director: L Heathcote B-Tech. (Civil Eng.) & BSc Hons (Transport)

ANNEXURE L (continued)

OUTENIQUA LAB (Pty) Ltd.

Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

R-CBR-1-8 May-19

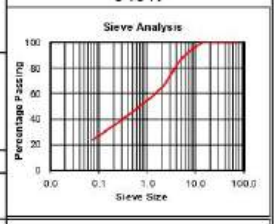
T0347

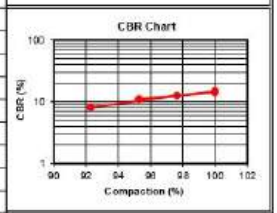
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	15/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	2/4

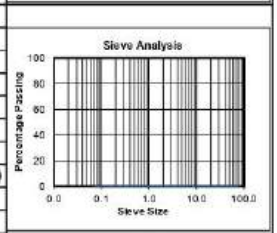
TEST REPORT
CALIFORNIA BEARING RATIO

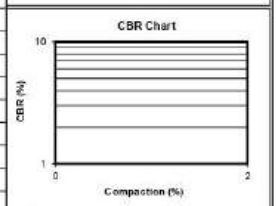
Sample Position (SV)		TP13 - Layer 4 & 5	COLTO: Not Classified				
Depth (mm)		800-2500					
Sample No		84517					
Materials Description	Source	In-situ					
	Colour	Reddish Orange to Yellowish Orange					
	Soil Type	Gravelly Sandy Silty Clay					
	Classification	Existing					
Material Indicators - (SANS 3001 Method GR1)							
Percentage Passing	75 mm	100		Opinion			
	63 mm	100					
	50 mm	100					
	37.5 mm	100					
	28 mm	100					
	20 mm	100					
	14 mm	100					
	5 mm	87					
	2 mm	65					
	0.425 mm	44					
	0.075 mm	23.9					
Material Indicators - (SANS 3001 Method PR5)							
Grading Modulus		1.68					
Coarse Sand Soil-Mortar (%)		32					
Atterberg Limits - (SANS 3001 Method GR10)							
Liquid Limit (%)		36					
Plasticity Index (%)		16					
Linear Shrinkage (%)		8.0					
Material Strength - (SANS 3001 Method GR30,GR40 - SCALPED)							
MDD	Max Dry Density (kg/m³)	2072					
	Optimum Moisture Content (%)	7.8					
	Mould Moisture Content (%)	7.8					
A	Relative Compaction (%)	100.0					
	Swell (%)	0.6					
B	Relative Compaction (%)	95.3					
	Swell (%)	0.7					
C	Relative Compaction (%)	92.3					
	Swell (%)	0.8					
CBR	@100% Max Dry Density	15					
	@98% Max Dry Density	13					
	@95% Max Dry Density	10					
	@93% Max Dry Density	9					
	@90% Max Dry Density	7					
Material Condition							
Insitu Moisture Content (%)							
Soil Classification Achieved By The Material							
COLTO:		Not Classified					
AASHTO System		A-2-6					
Unified System		SC					

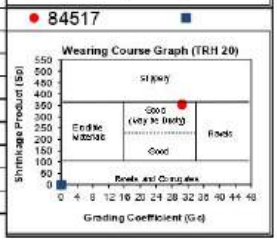
84517











- **Specimens delivered to Outeniqua Lab in good order.**

Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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1. The opinion column is an interpretation of the direct comparison between the quoted specification and the single test sample results obtained. The compliant (✓), non compliant (✗) and uncertain (♦) opinion indicators are based on an approximate 95% level of confidence with reference to SAMM GUIDANCE 1, Issue 2 : 20 June 2007 Section 2.
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ANNEXURE L (continued)

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Materials Testing Laboratory
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Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

R-CBR-1.8 May-19

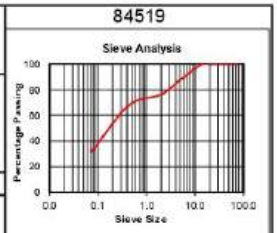
T0347

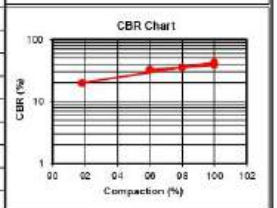
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	15/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	3/4

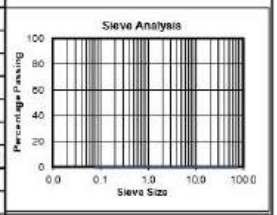
TEST REPORT
CALIFORNIA BEARING RATIO

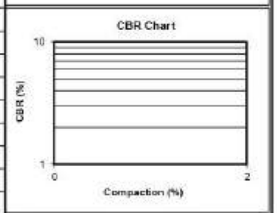
Sample Position (SV)		TP14 - Layer 2 & 3	COLTO:				
Depth (mm)		400-1100	G6 Subbase				
Sample No		84519					
Materials Description	Source	In-situ					
	Colour	Reddish Orange to Yellowish Orange					
	Soil Type	Gravelly Sandy Silty Clay					
	Classification	Existing					
Material Indicators - (SANS 3001 Method GR1)							
Percentage Passing	75 mm	100		Opinion			
	63 mm	100					
	50 mm	100					
	37.5 mm	100					
	28 mm	100					
	20 mm	100					
	14 mm	100					
	5 mm	88					
	2 mm	76					
	0.425 mm	68					
	0.075 mm	32.0					
Material Indicators - (SANS 3001 Method PR5)							
Grading Modulus		1.24	1.20 - 2.60	✓			
Coarse Sand Soil-Mortar (%)		11					
Atterberg Limits - (SANS 3001 Method GR10)							
Liquid Limit (%)		Undetermined					
Plasticity Index (%)		NP	≤ 12	✓			
Linear Shrinkage (%)		NP	≤ 5	✓			
Material Strength - (SANS 3001 Method GR30,GR40 - SCALPED)							
MDD	Max Dry Density (kg/m³)	2223					
	Optimum Moisture Content (%)	7.6					
	Mould Moisture Content (%)	7.7					
A	Relative Compaction (%)	100.0					
	Swell (%)	0.0	≤ 1.0	✓			
B	Relative Compaction (%)	96.0					
	Swell (%)	0.0					
C	Relative Compaction (%)	91.8					
	Swell (%)	0.0					
CBR	@100% Max Dry Density	43					
	@98% Max Dry Density	35					
	@95% Max Dry Density	27	≥ 25	*			
	@93% Max Dry Density	22					
	@90% Max Dry Density	17					
Material Condition							
Insitu Moisture Content (%)							
Soil Classification Achieved By The Material							
COLTO:		G6 Subbase					
AASHTO System		A-2-4					
Unified System		SM					

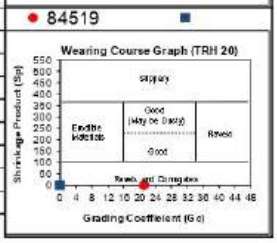
84519











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Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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ANNEXURE L (continued)

OUTENIQUA LAB (Pty) Ltd.

Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

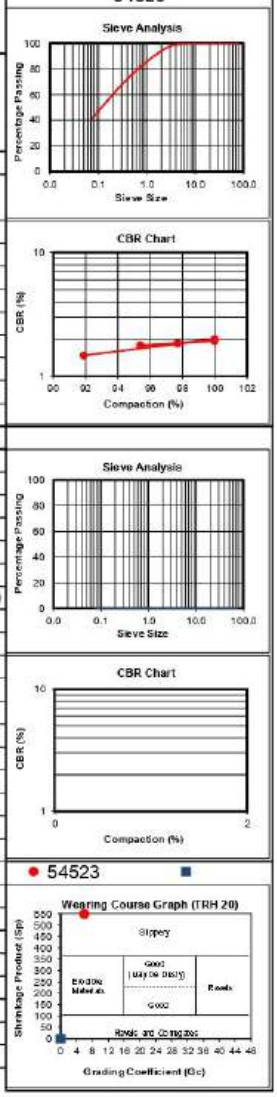
R-CBR-1-8 May-19

T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	15/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	4/4

TEST REPORT
CALIFORNIA BEARING RATIO

Sample Position (SV)		TP19 - Layer 4	COLTO: Not Classified				54523
Depth (mm)		600-1600					
Sample No		54523					
Materials Description	Source	In-situ					
	Colour	Reddish Orange to Yellowish Orange					
	Soil Type	Sandy Silty					
	Classification	Existing					
Material Indicators - (SANS 3001 Method GR1)							
Percentage Passing	75 mm	100		Opinion			
	63 mm	100					
	50 mm	100					
	37.5 mm	100					
	28 mm	100					
	20 mm	100					
	14 mm	100					
	5 mm	100					
	2 mm	94					
	0.425 mm	73					
	0.075 mm	41.9					
Material Indicators - (SANS 3001 Method PR5)							
Grading Modulus		0.91					
Coarse Sand Soil-Mortar (%)		22					
Atterberg Limits - (SANS 3001 Method GR10)							
Liquid Limit (%)		42					
Plasticity Index (%)		15					
Linear Shrinkage (%)		7.5					
Material Strength - (SANS 3001 Method GR30,GR40 - SCALPED)							
MDD	Max Dry Density (kg/m³)	1810					
	Optimum Moisture Content (%)	16.2					
	Mould Moisture Content (%)	16.2					
A	Relative Compaction (%)	100.0					
	Swell (%)	2.3					
B	Relative Compaction (%)	95.4					
	Swell (%)	2.5					
C	Relative Compaction (%)	91.9					
	Swell (%)	2.7					
CBR	@100% Max Dry Density	2					
	@98% Max Dry Density	2					
	@95% Max Dry Density	2					
	@93% Max Dry Density	2					
	@90% Max Dry Density	1					
Material Condition							
Insitu Moisture Content (%)							
Soil Classification Achieved By The Material							
COLTO:		Not Classified					
AASHTO System		A-7-6					
Unified System		SM					



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Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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ANNEXURE L (continued)

R-FIND-1-6 Jan-22

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Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

sanas T0347

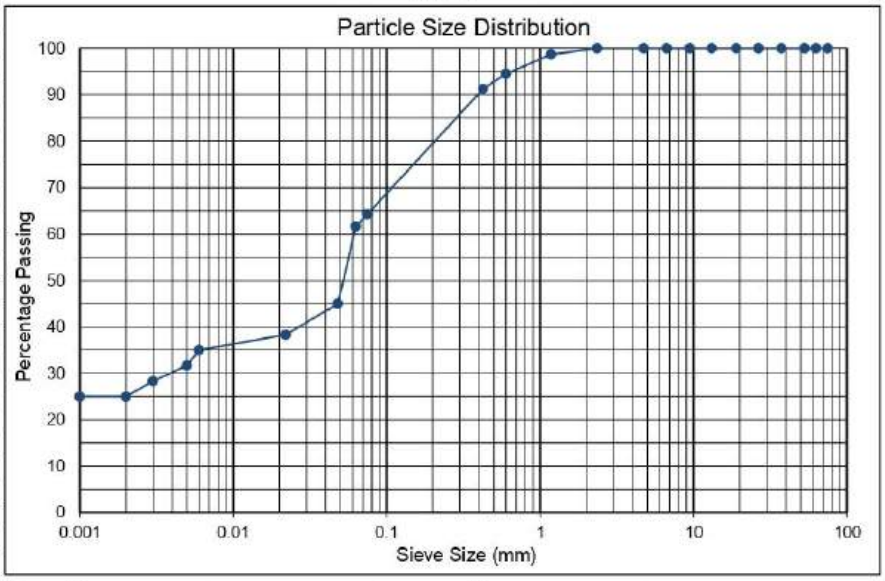
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	1/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP1 - Layer 2
Depth (mm):		200-700
Sample No.:		84504
Materials Description	Source	In-situ
	Colour	Dark Grey Brown
	Soil Type	Silt/Silty Clay
	Classification	Trial Pit

75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	100
2.36mm	100
1.18mm	99
0.6mm	95
0.425mm	91
0.075mm	64
0.063mm	62
0.048mm	45
0.022mm	38
0.006mm	35
0.005mm	32
0.003mm	28
0.002mm	25
0.001mm	25

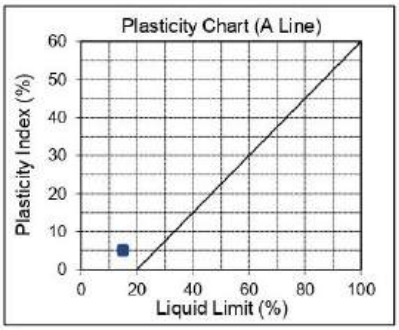
Percentage Passing

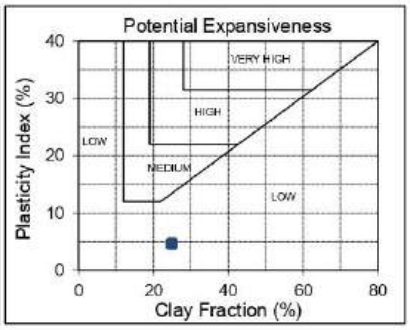


Liquid Limit (%)	15
Plasticity Index (%)	5
Linear Shrinkage (%)	3
Moisture Content (%)	20.5

% Clay	25
% Silt	34
% Sand	41
% Gravel	0

Unified Soil Classification	CL-ML
AASHTO Soil Classification	A-4





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Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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ANNEXURE L (continued)

R-FIND-1-6 Jan-22

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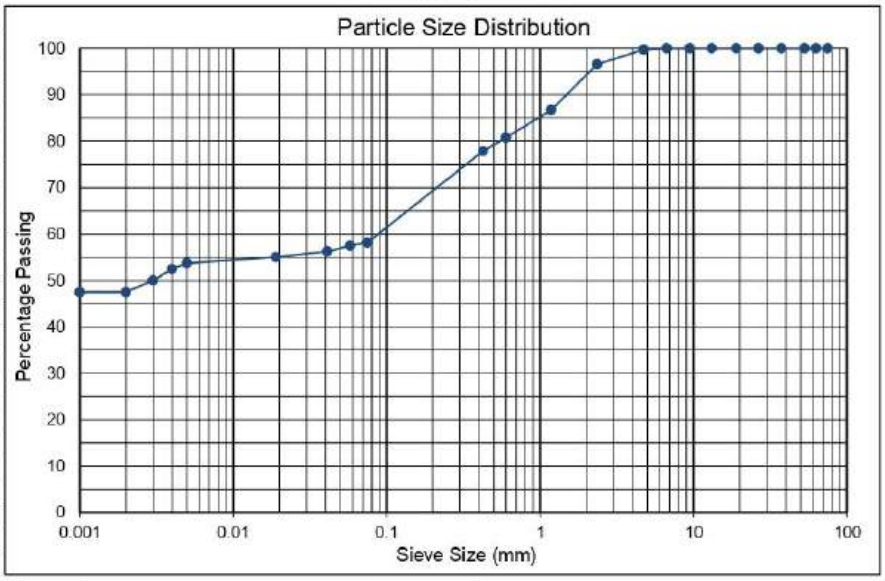
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	2/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP1 - Layer 3
Depth (mm):		700-1300
Sample No.:		84505
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Sandy Elastic Silt
	Classification	Trial Pit

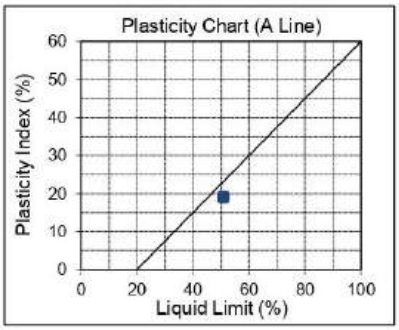
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	100
2.36mm	97
1.18mm	87
0.6mm	81
0.425mm	78
0.075mm	58
0.058mm	58
0.041mm	56
0.019mm	55
0.005mm	54
0.004mm	53
0.003mm	50
0.002mm	48
0.001mm	48

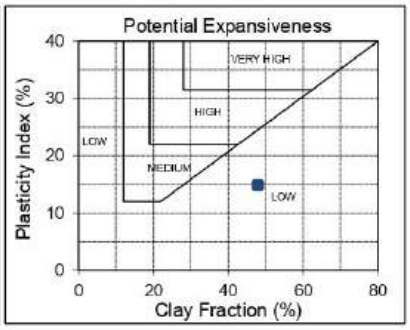


Liquid Limit (%)	51
Plasticity Index (%)	19
Linear Shrinkage (%)	10
Moisture Content (%)	22.9

% Clay	48
% Silt	10
% Sand	36
% Gravel	6

Unified Soil Classification	MH
AASHTO Soil Classification	A-7-5





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ANNEXURE L (continued)

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R-FIND-1-6 Jan-22

sanas Testing Laboratory T0347

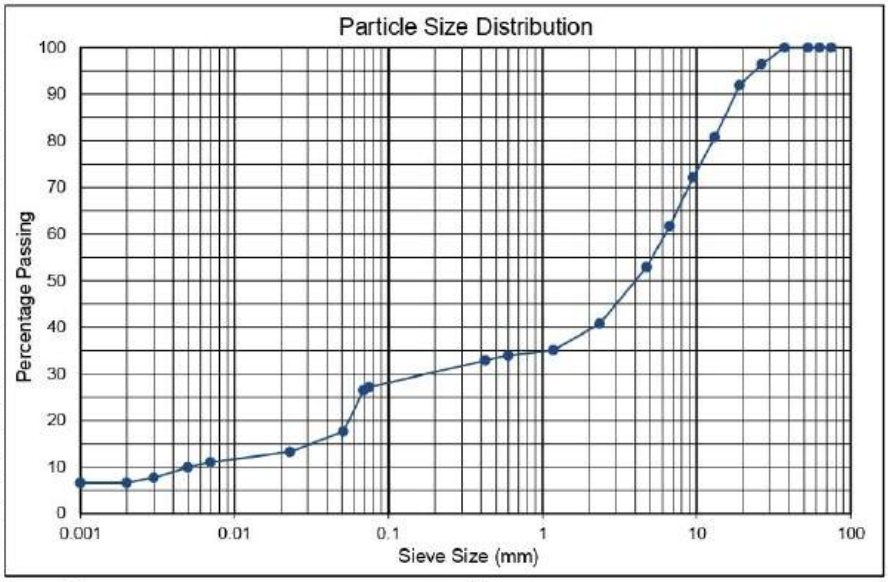
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	3/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP7 - Layer 3
Depth (mm):		700-1000
Sample No.:		84510
Materials Description	Source	In-situ
	Colour	Dark Brown
	Soil Type	Silty Gravel with Sand
	Classification	Trial Pit

75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	97
19mm	92
13.2mm	81
9.5mm	72
6.7mm	62
4.75mm	53
2.36mm	41
1.18mm	35
0.6mm	34
0.425mm	33
0.075mm	27
0.069mm	26
0.051mm	18
0.023mm	13
0.007mm	11
0.005mm	10
0.003mm	8
0.002mm	7
0.001mm	7

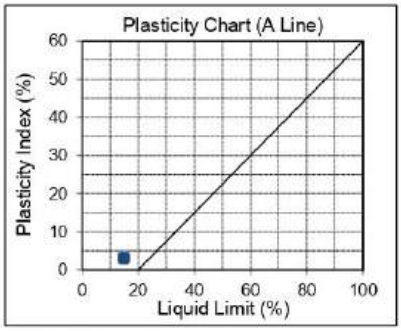
Percentage Passing

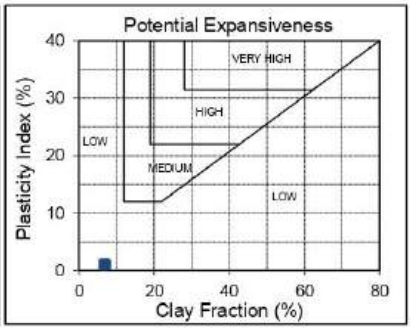


Liquid Limit (%)	15
Plasticity Index (%)	3
Linear Shrinkage (%)	2
Moisture Content (%)	24.0

% Clay	7
% Silt	15
% Sand	17
% Gravel	61

Unified Soil Classification	GM
AASHTO Soil Classification	A-2-4





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ANNEXURE L (continued)

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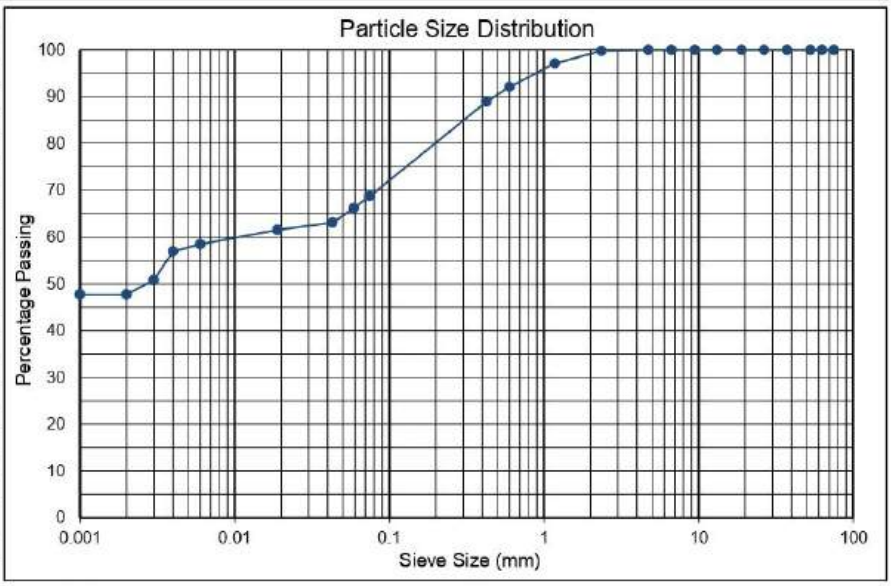
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	4/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP7 - Layer 4
Depth (mm):		1000-2000
Sample No.:		84511
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Sandy Silt
	Classification	Trial Pit

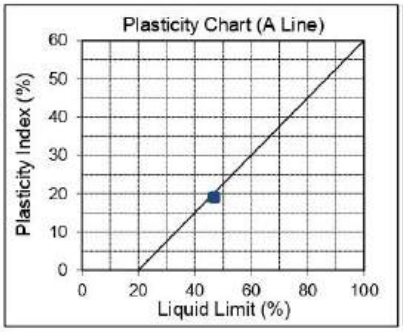
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	100
2.36mm	100
1.18mm	97
0.6mm	92
0.425mm	89
0.075mm	69
0.059mm	66
0.043mm	63
0.019mm	62
0.006mm	58
0.004mm	57
0.003mm	51
0.002mm	48
0.001mm	48

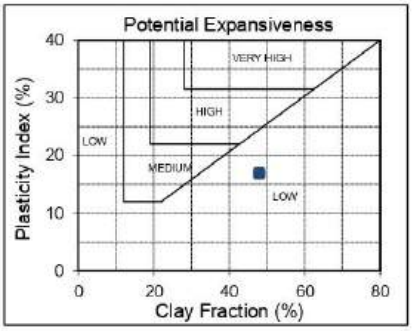


Liquid Limit (%)	47
Plasticity Index (%)	19
Linear Shrinkage (%)	10
Moisture Content (%)	43.0

% Clay	48
% Silt	18
% Sand	33
% Gravel	1

Unified Soil Classification	ML
AASHTO Soil Classification	A-7-6





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ANNEXURE L (continued)

R-FIND-1-6 Jan-22

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Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za
T0347

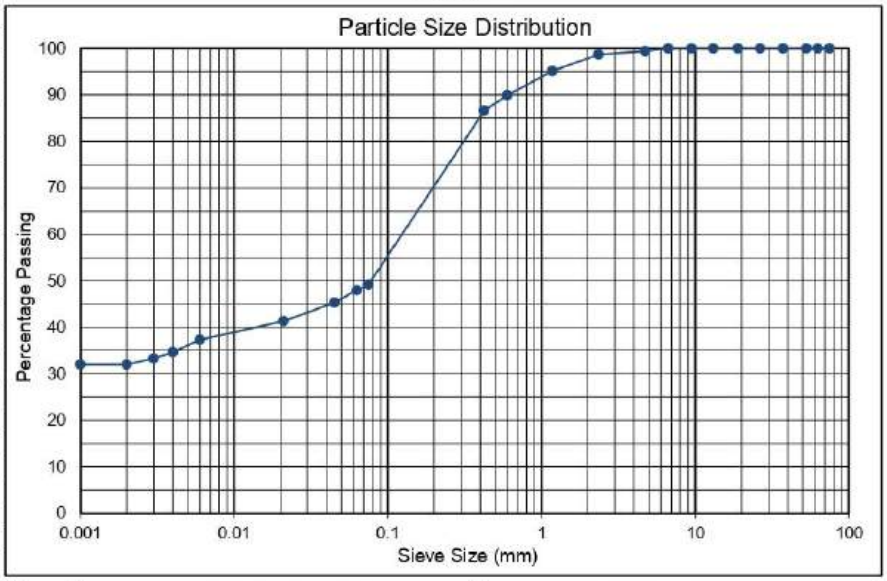
Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	5/10

TEST REPORT

FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP7 - Layer 5
Depth (mm):		2000-2800
Sample No.:		84512
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Clayey Sand
	Classification	Trial Pit

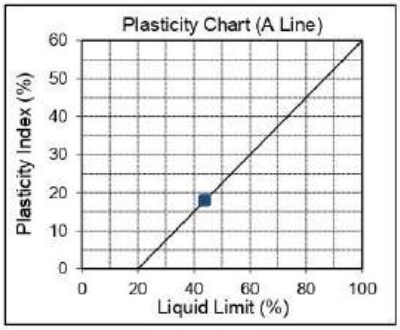
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	99
2.36mm	99
1.18mm	95
0.6mm	90
0.425mm	87
0.075mm	49
0.063mm	48
0.045mm	45
0.021mm	41
0.006mm	37
0.004mm	35
0.003mm	33
0.002mm	32
0.001mm	32

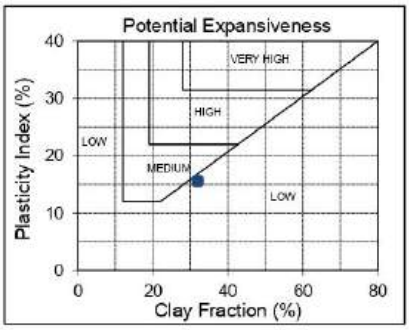


Liquid Limit (%)	44
Plasticity Index (%)	18
Linear Shrinkage (%)	9
Moisture Content (%)	36.0

% Clay	32
% Silt	16
% Sand	50
% Gravel	2

Unified Soil Classification	SC
AASHTO Soil Classification	A-7-6





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Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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Director: L Heathcote B-Tech. (Civil Eng.) & BSc Hons (Transport)

ANNEXURE L (continued)

OUTENIQUA LAB (Pty) Ltd.

Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

R-FIND-1-6 Jan-22

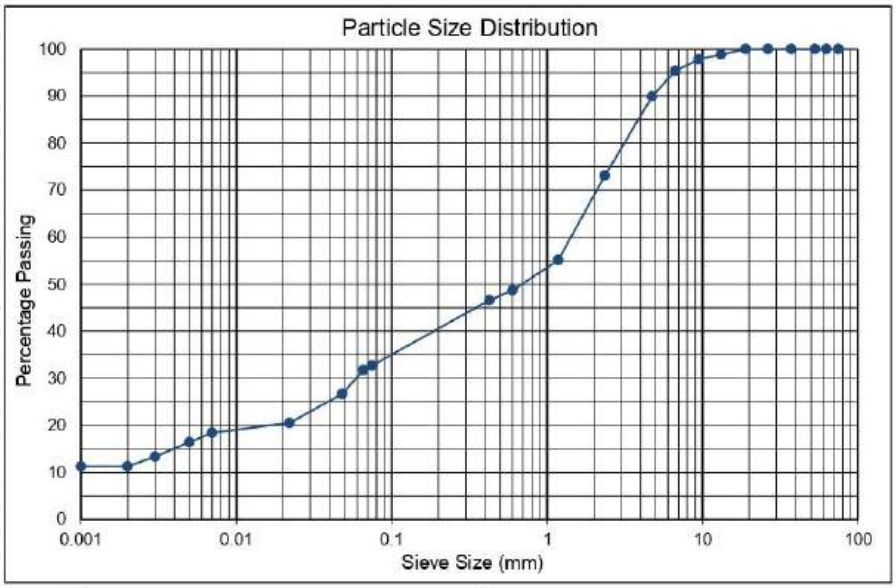
sanas Testing Laboratory T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	6/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP13 - Layer 3
Depth (mm):		500-800
Sample No.:		84514
Materials Description	Source	In-situ
	Colour	Dark Brown
	Soil Type	Silty/Clayey Sand
	Classification	Trial Pit

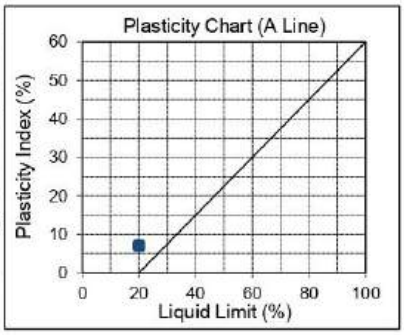
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	99
9.5mm	98
6.7mm	95
4.75mm	90
2.36mm	73
1.18mm	55
0.6mm	49
0.425mm	47
0.075mm	33
0.066mm	32
0.048mm	27
0.022mm	21
0.007mm	18
0.005mm	16
0.003mm	13
0.002mm	11
0.001mm	11

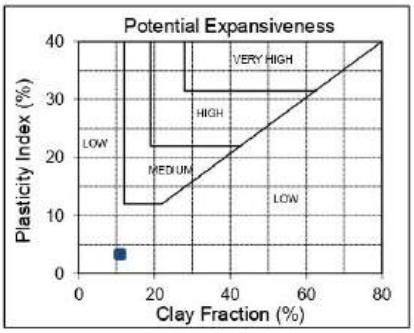


Liquid Limit (%)	20
Plasticity Index (%)	7
Linear Shrinkage (%)	4
Moisture Content (%)	9.5

% Clay	11
% Silt	19
% Sand	38
% Gravel	32

Unified Soil Classification	SM-SC
AASHTO Soil Classification	A-2-4





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Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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Director: L Heathcote B-Tech. (Civil Eng.) & BSc Hons (Transport)

ANNEXURE L (continued)

OUTENIQUA LAB (Pty) Ltd.

R-FIND-1-6 Jan-22

Registration No. 95/07742/07
Materials Testing Laboratory
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

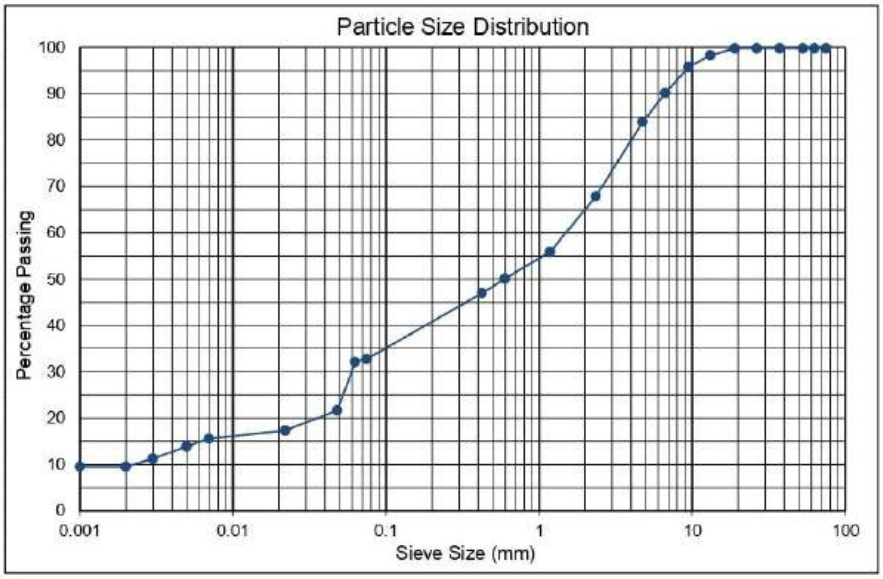
T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	7/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP13 - Layer 4
Depth (mm):		800-1300
Sample No.:		84515
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Clayey Sand with Gravel
	Classification	Trial Pit

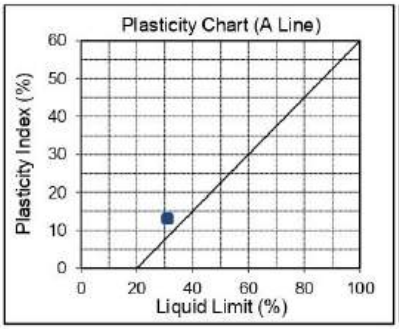
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	98
9.5mm	96
6.7mm	90
4.75mm	84
2.36mm	68
1.18mm	56
0.6mm	50
0.425mm	47
0.075mm	33
0.063mm	32
0.048mm	22
0.022mm	17
0.007mm	16
0.005mm	14
0.003mm	11
0.002mm	10
0.001mm	10

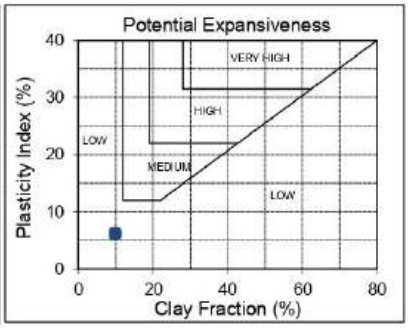


Liquid Limit (%)	31
Plasticity Index (%)	13
Linear Shrinkage (%)	7
Moisture Content (%)	8.5

% Clay	10
% Silt	20
% Sand	34
% Gravel	36

Unified Soil Classification	SC
AASHTO Soil Classification	A-2-6





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Ruaan Lesch
Technical Signatory
For Outeniqua Lab (Pty) Ltd.

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ANNEXURE L (continued)

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R-FIND-1-6 Jan-22

Registration No. 95/07742/07
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6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

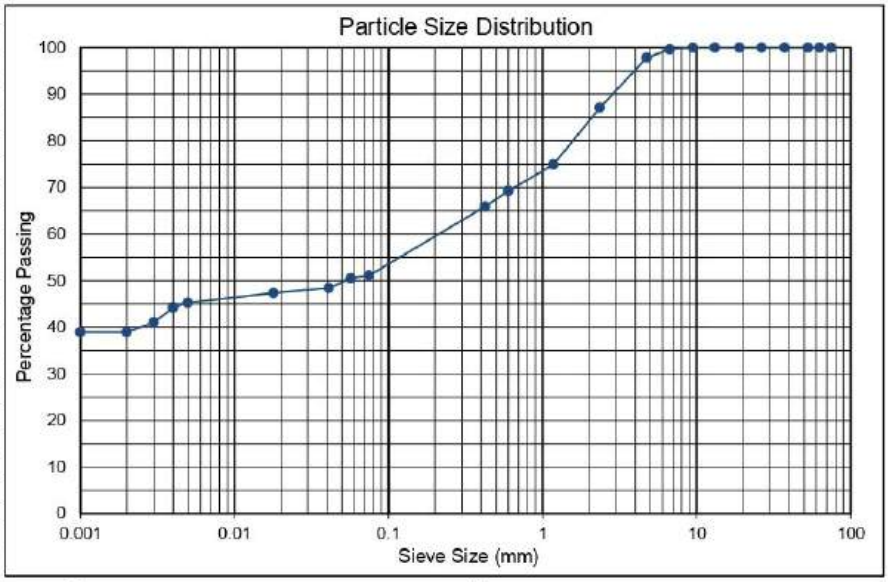
T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	8/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP14 - Layer 4
Depth (mm):		1100-2100
Sample No.:		84520
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Sandy Elastic Silt
	Classification	Trial Pit

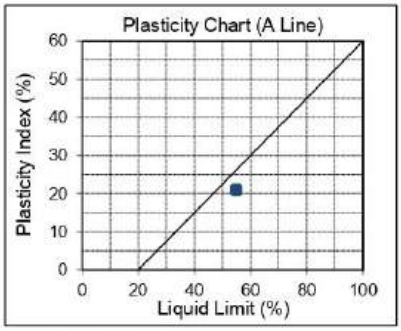
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	98
2.36mm	87
1.18mm	75
0.6mm	69
0.425mm	66
0.075mm	51
0.057mm	51
0.041mm	48
0.018mm	47
0.005mm	45
0.004mm	44
0.003mm	41
0.002mm	39
0.001mm	39

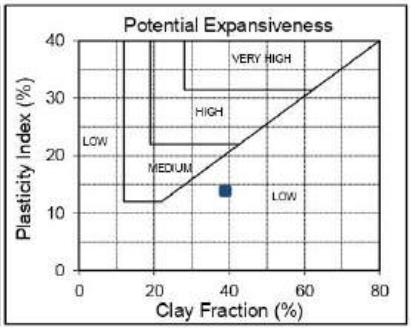


Liquid Limit (%)	55
Plasticity Index (%)	21
Linear Shrinkage (%)	11
Moisture Content (%)	19.1

% Clay	39
% Silt	12
% Sand	32
% Gravel	17

Unified Soil Classification	MH
AASHTO Soil Classification	A-7-5





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For Outeniqua Lab (Pty) Ltd.

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ANNEXURE L (continued)

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6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

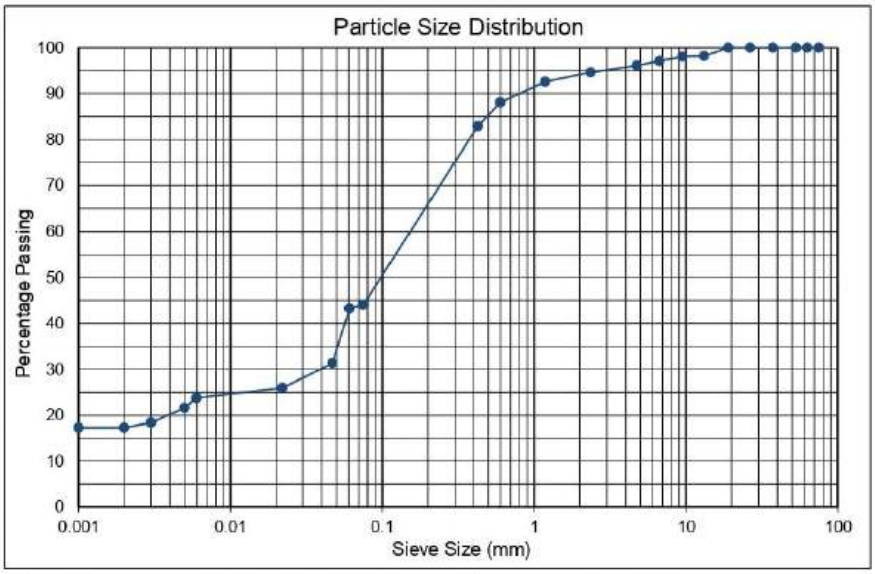
T0347

Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	9/10

TEST REPORT
FOUNDATION INDICATOR - (ASTM Method D422)

Sample Position (SV)		TP18 - Layer 3
Depth (mm):		600-1300
Sample No.:		84521
Materials Description	Source	In-situ
	Colour	Greyey Brown
	Soil Type	Silty Sand
	Classification	Trial Pit

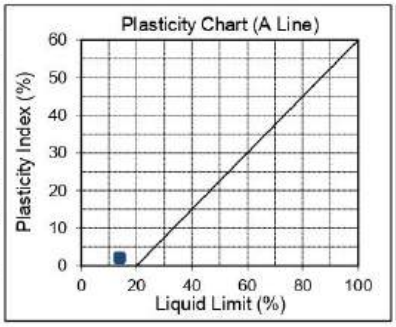
Percentage Passing	
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	98
9.5mm	98
6.7mm	97
4.75mm	96
2.36mm	95
1.18mm	93
0.6mm	88
0.425mm	83
0.075mm	44
0.061mm	43
0.047mm	31
0.022mm	26
0.006mm	24
0.005mm	22
0.003mm	18
0.002mm	17
0.001mm	17

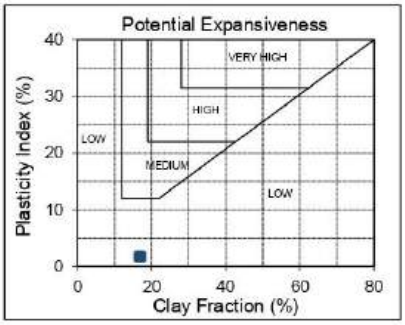


Liquid Limit (%)	14
Plasticity Index (%)	2
Linear Shrinkage (%)	1
Moisture Content (%)	13.6

% Clay	17
% Silt	25
% Sand	52
% Gravel	6

Unified Soil Classification	SM
AASHTO Soil Classification	A-4





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ANNEXURE L (continued)

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Customer :	Outeniqua Geotechnical Services P O Box 964 Knysna 6570	Project :	Metro Grounds - George
		Date Received :	04/08/2022
		Date Reported :	23/08/2022
		Req. Number :	2778/22
Attention :	Iain Paton	No. of Pages :	10/10

TEST REPORT

FOUNDATION INDICATOR - (ASTM Method D422)

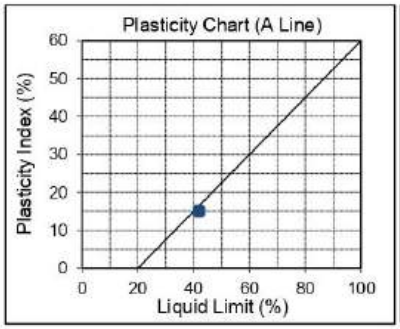
Sample Position (SV)		TP19 - Layer 4
Depth (mm):		600-1600
Sample No.:		84523
Materials Description	Source	In-situ
	Colour	Reddish Orange to Yellowish Orange
	Soil Type	Sandy Silt
	Classification	Trial Pit

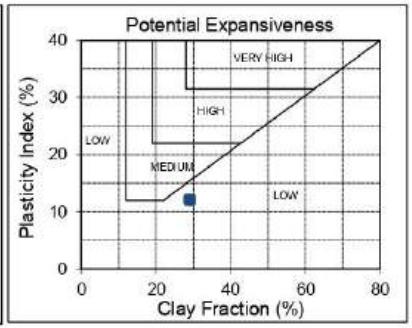
75.0mm	100
63.0mm	100
53.0mm	100
37.5mm	100
26.5mm	100
19mm	100
13.2mm	100
9.5mm	100
6.7mm	100
4.75mm	99
2.36mm	96
1.18mm	91
0.6mm	85
0.425mm	80
0.075mm	56
0.059mm	54
0.044mm	49
0.02mm	44
0.006mm	40
0.004mm	36
0.003mm	30
0.002mm	29
0.001mm	29

Liquid Limit (%)	42
Plasticity Index (%)	15
Linear Shrinkage (%)	8
Moisture Content (%)	22.1

% Clay	29
% Silt	25
% Sand	41
% Gravel	5

Unified Soil Classification	ML
AASHTO Soil Classification	A-7-6





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For Outeniqua Lab (Pty) Ltd.

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Director: L Heathcote B-Tech. (Civil Eng.) & BSc Hons (Transport)

ANNEXURE L (continued)

Email: jacobus@labco.co.za ■ www.labco.co.za
Phone: +27 (0)21 905 0515
Cape Town Branch ■ 15 Warrior Crescent, Blackheath. ■ PO Box 6627 Kraaifontein North, 7572

MATERIALS TEST REPORT

Client	:	Outeniqua Lab (Pty) Ltd			
Address	:	Po Box 3186	**Client Reference**	:	-
	:	George	**Order No.**	:	OUT 69H
	:	6536	**Report Status**	:	Complete
Attention	:	Carla Damon	**Date Received**	:	26 08 2022
Facsimile	:	-	**Date Tested**	:	30/08/2022 - 01/09/2022
E-mail	:	carla@outeniqualab.co.za	**Date Reported**	:	02 09 2022
Project	:	pH & Conductivity			
Job Card	:	C-4059	**Page**	:	1 of 2
Sampling		SAMPLES DELIVERED TO THE LABORATORY			
Procedure(s):		SAMPLES DELIVERED TO THE LABORATORY			

Herewith please find the test report(s) pertaining to the above project. All tests were conducted in accordance with prescribed test method(s). Information herein consists of the following:

Test(s) conducted / Item(s) measured	Test Method(s)
The Determination of pH value	TMH1 - A20
The Electrical Conductivity of a Saturated Soil Paste and Water	TMH1 - A21T

Any test results contained in this report and marked with * in the table above are "not SANAS accredited" and are not included in the schedule of accreditation for this laboratory.

Any information contained in this test report pertain only to the areas and/or samples tested. Documents may only be reproduced or published in their full context.

While every care is taken to ensure that all tests are carried out in accordance with recognised standards, neither Labco Southern Africa (Pty) Ltd nor its employees shall be liable in any way whatsoever for any error made in the execution or reporting of tests or any erroneous conclusions drawn therefrom or for any consequences thereof.

All interpretations, Interpolations, Opinions and/or Classifications contained in this report falls outside our scope of accreditation.

The following parameters, where applicable, were excluded from the classification procedure: Chemical modifications, Additional fines, Fractured Faces, Soluble Salts, pH, Conductivity, Coarse Sand Ratio, Durability (COLTO: G4-G9).

The following parameters, where applicable, were assumed: Rock types were assumed to be of an Arenaceous nature with Siliceous cementing material.

Unless otherwise requested or stated, all samples will be discarded after a period of 3 months.

Our Standard Terms And Conditions apply and are available on request.

Any information gained by the laboratory prior, during or after the test process will be treated as confidential and will not be reproduced or disclosed to any person or organisation, unless required to do so by law.

Deviations in Test Methods:

**All results are authorized by technical signatories.

Saul de Vlam
Technical Signatory.

ANNEXURE L (continued)

Labco
Email: jacobus@labco.co.za ■ www.labco.co.za
Phone: +27 (0)21 905 0515
Cape Town Branch ■ 15 Warrior Crescent, Blackheath ■ PO Box 6627 Kraaifontein North, 7572

Job Card No: C-4059 Page No. : 2 of 2

AGGREGATE TEST REPORT

Laboratory Number					C4059/1	C4059/2	C4059/3	C4059/4		
Field Number										
Client Reference					84506	84516	84518	84522		
Depth (mm)					700-1300	800-2500	400-1100	600-1300		
Position					Tp 1 - Layer 3	Tp 13 - Layer 4 & 5	Tp 14 - Layer 2 & 3	Tp 18 - Layer 3		
Description					R/O to Y/O Sandy Silty Clay	R/O to Y/O Gravelly sandy silty clay	R/O to Y/O Clayey Silty Fine Sand	Grey Brown Silty Fine Sand		
Sieve Analysis - SANS 3001 - AG1	% Passing	100	(mm)							
		75	(mm)							
		63	(mm)							
		50	(mm)							
		37.5	(mm)							
		28	(mm)							
		20	(mm)							
		14	(mm)							
		10	(mm)							
		7.1	(mm)							
		5	(mm)							
			(mm)							
		2	(mm)							
		1	(mm)							
		0.6	(mm)							
		0.425	(mm)							
		0.300	(mm)							
		0.150	(mm)							
		0.075	(mm)							
Finess Modulus			SANS 3001-PR5							
Coarse Sand Ratio				(%)						
Flakiness Index	Total		SANS 3001-AG4*	(%)						
	+20mm-28mm		SANS 3001-AG4*	(%)						
	+14mm-20mm		SANS 3001-AG4*	(%)						
Aggregate Crushing Value	Dry		SANS 3001-AG10*	(%)						
	Wet		SANS 3001-AG10*	(%)						
	Eth. Glycol		SANS 3001-AG15	(%)						
10% Fines Aggregate Crushing Test (FACT)	Dry		SANS 3001-AG10*	(kN)						
	Wet		SANS 3001-AG10*	(kN)						
	Eth. Glycol		SANS 3001-AG15	(kN)						
	Wet/Dry Ratio		SANS 3001-AG10*	(%)						
Bulk Density	Loose		TMH1 B9*	(kg/m^3)						
	Compacted		TMH1 B9*	(kg/m3)						
Average Least Dimension	Manual		SANS 3001-AG2*	(mm)						
	Machine		SANS 3001-AG2*	(mm)						
	Computation		SANS 3001-AG3	(mm)						
Water Absorption	>5mm		SANS 3001-AG20*	(%)						
	<5mm		SANS 3001-AG21*	(%)						
pH Value			TMH1 - A20		7.8	7.2	6.7	6.8		
Conductivity			TMH1 - A21T	(mS/m^{-1})	0.0765	0.0437	0.0336	0.0192		

ANNEXURE L (continued)

Appendix 4

DCP test data

ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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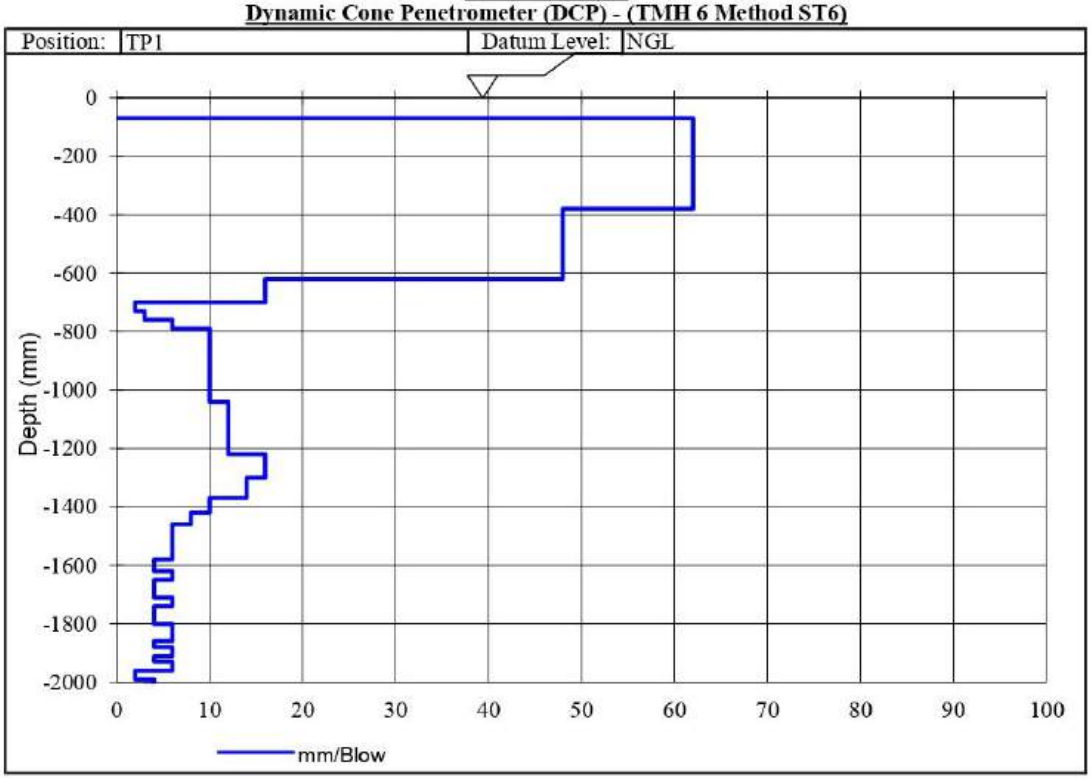
18 Clyde Street, Knysna : PO Box 964, Knysna, 6570
Tel: 044 3820502 : Fax: 044 3820503 : e-mail: iain@outeniqualab.co.za

Customer :	Clinkscales Maughan-Brown (Pty)Ltd 39 Victoria Street George 6529	Project :	Portion of Rem Erf 464 George
		Date Received :	27.07.2022
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	1 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP1 Datum Level: NGL



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ANNEXURE L (continued)

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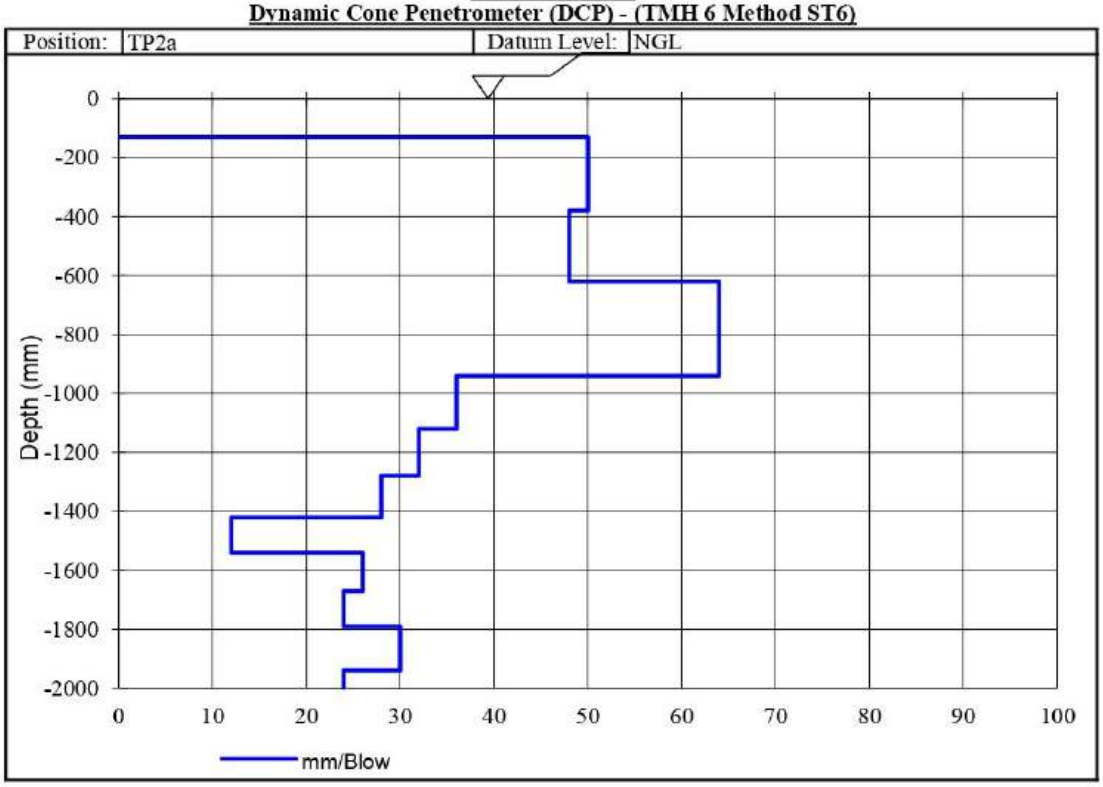
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP2a Datum Level: NGL



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ANNEXURE L (continued)

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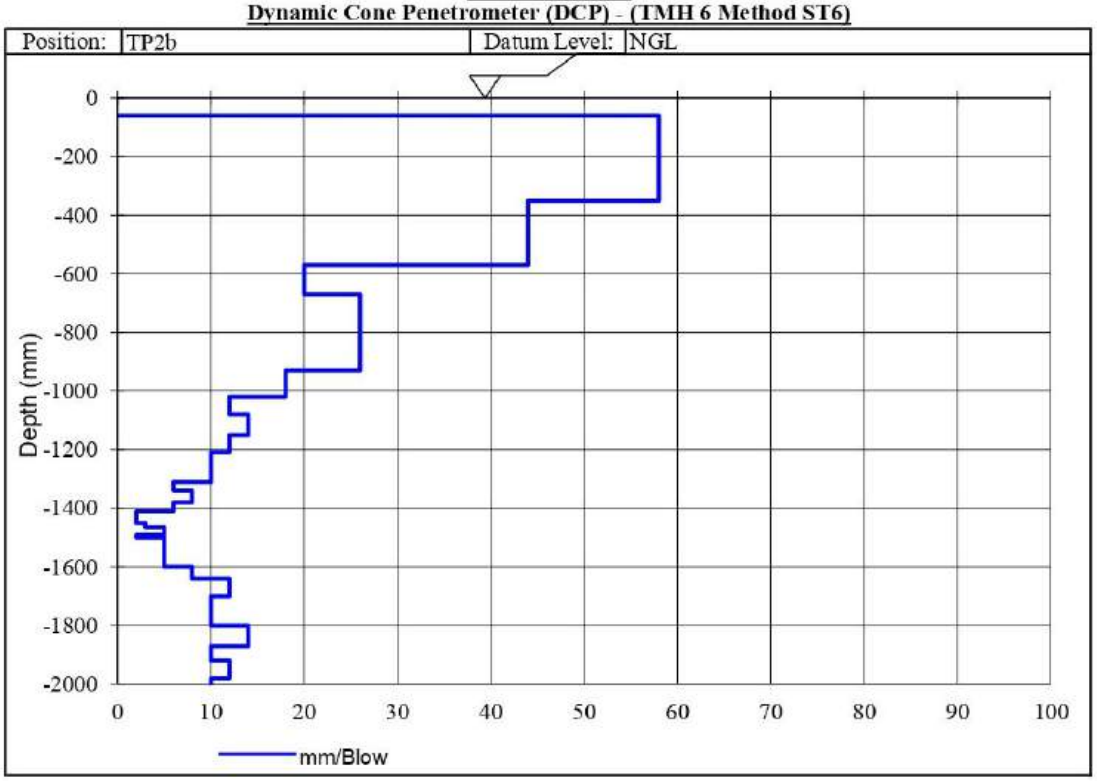
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP2b Datum Level: NGL



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ANNEXURE L (continued)

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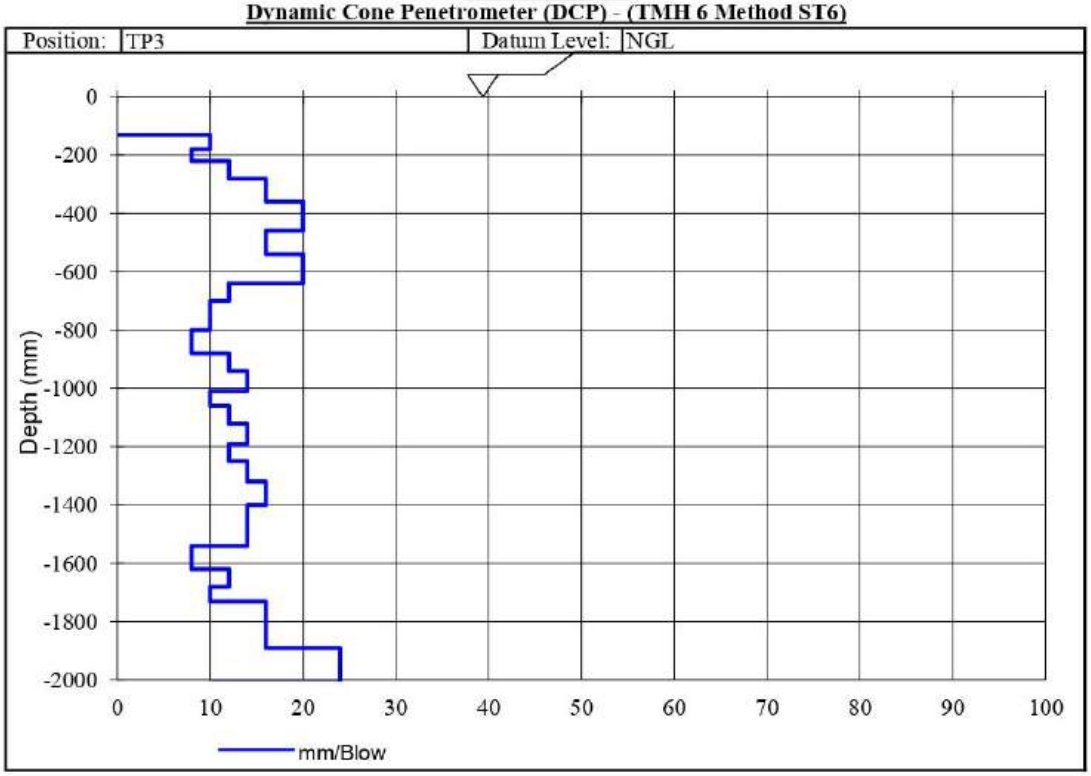
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP3 Datum Level: NGL



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ANNEXURE L (continued)

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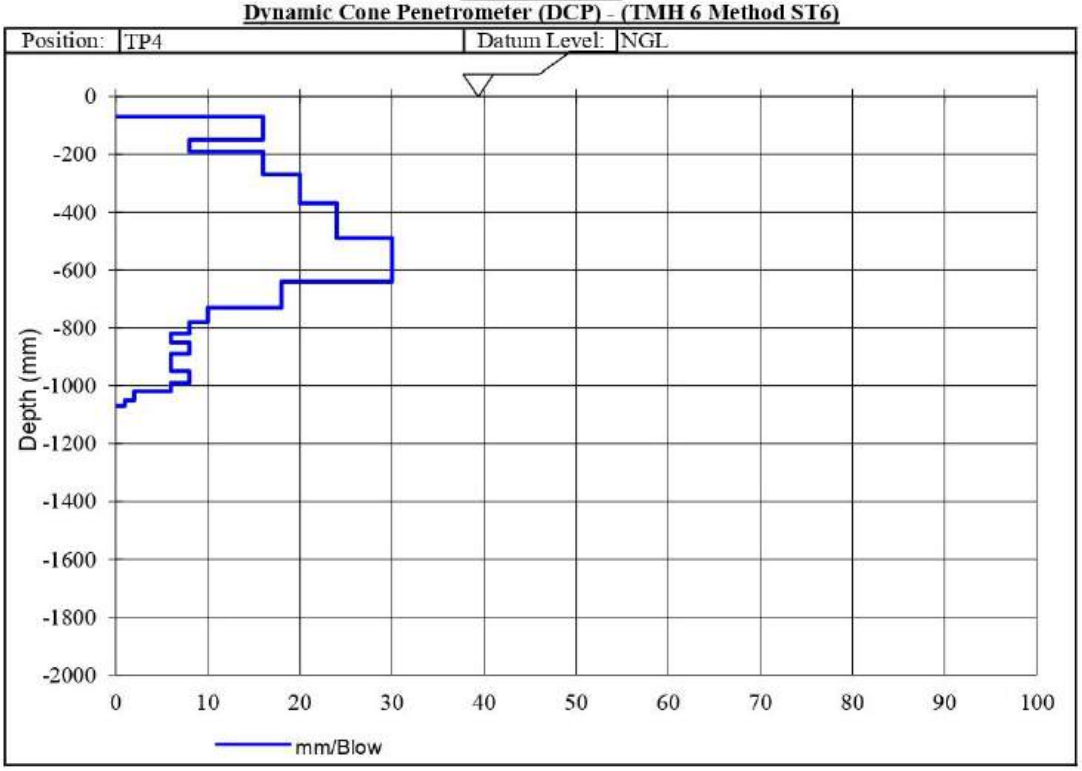
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP4 Datum Level: NGL



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ANNEXURE L (continued)

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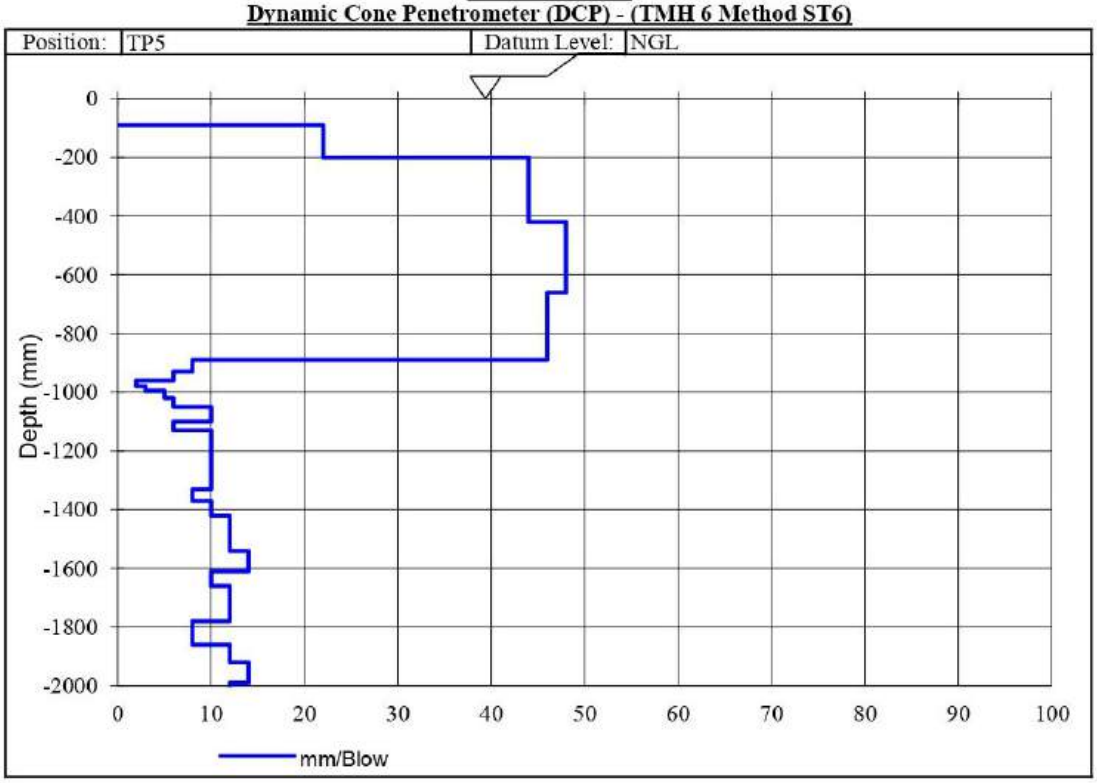
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP5 Datum Level: NGL



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ANNEXURE L (continued)

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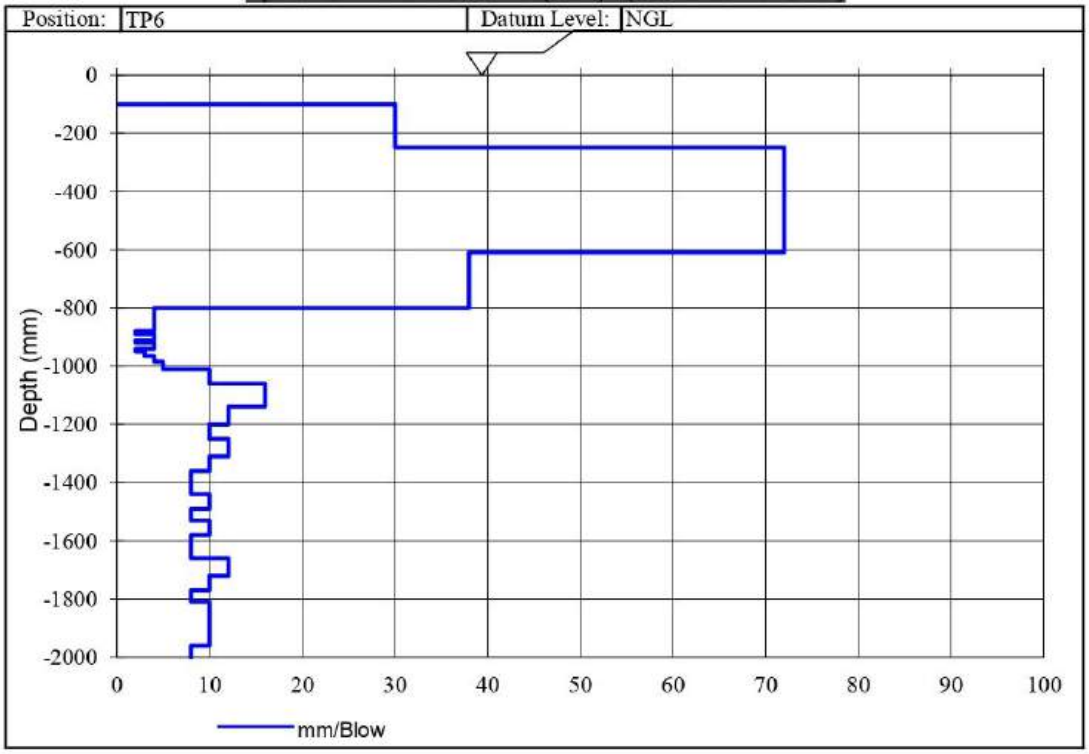
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP6 Datum Level: NGL



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ANNEXURE L (continued)

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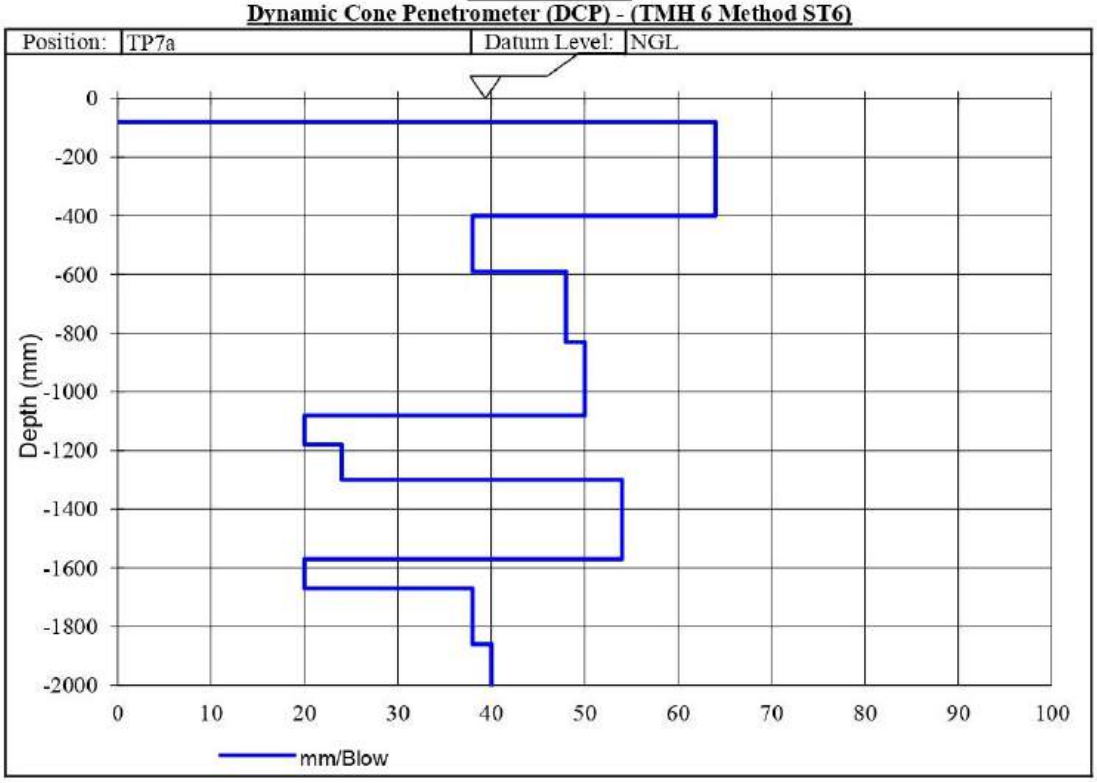
Attention :	Rohann Steenekamp	No. of Pages :	8 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position:	TP7a	Datum Level:	NGL



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ANNEXURE L (continued)

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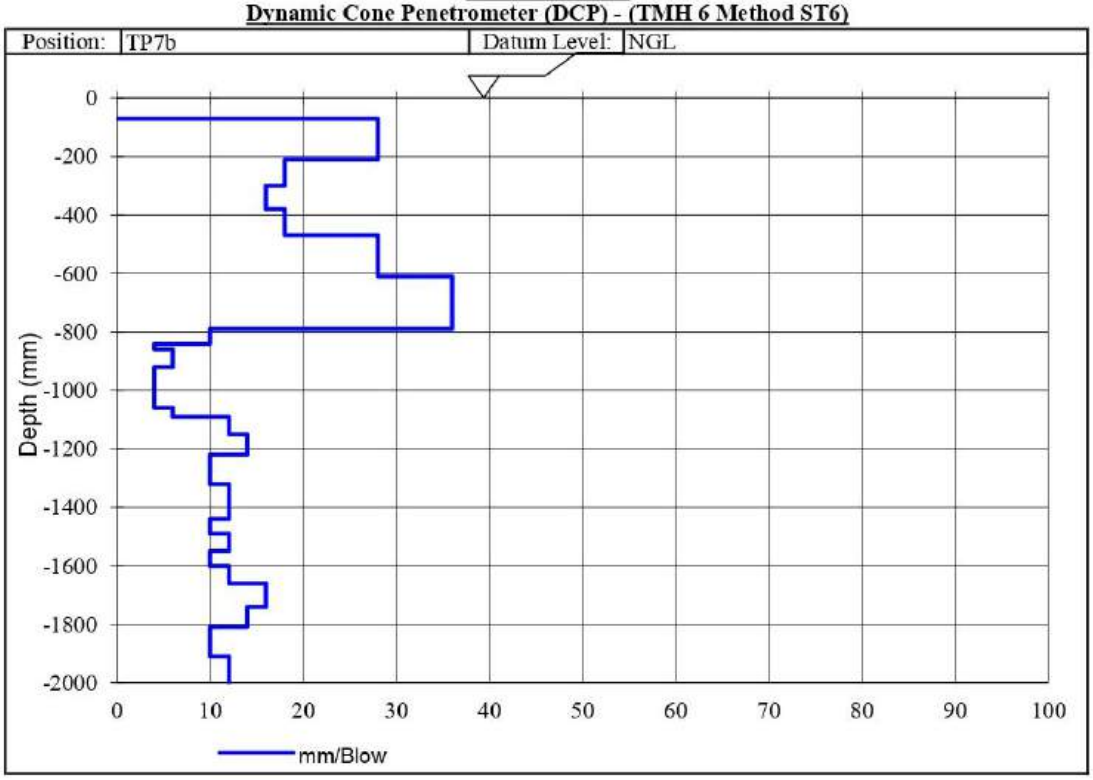
Attention :	Rohann Steenekamp	No. of Pages :	9 of 23

TEST REPORT
Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP7b Datum Level: NGL



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ANNEXURE L (continued)

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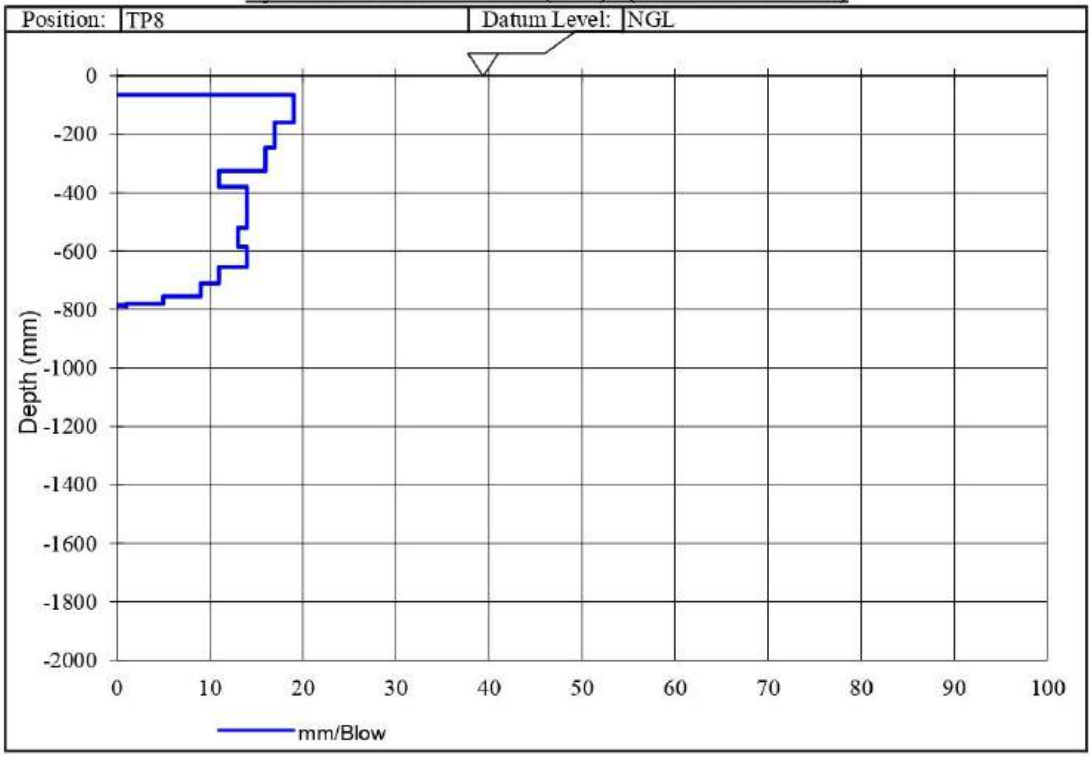
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position:	TP8	Datum Level:	NGL



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ANNEXURE L (continued)

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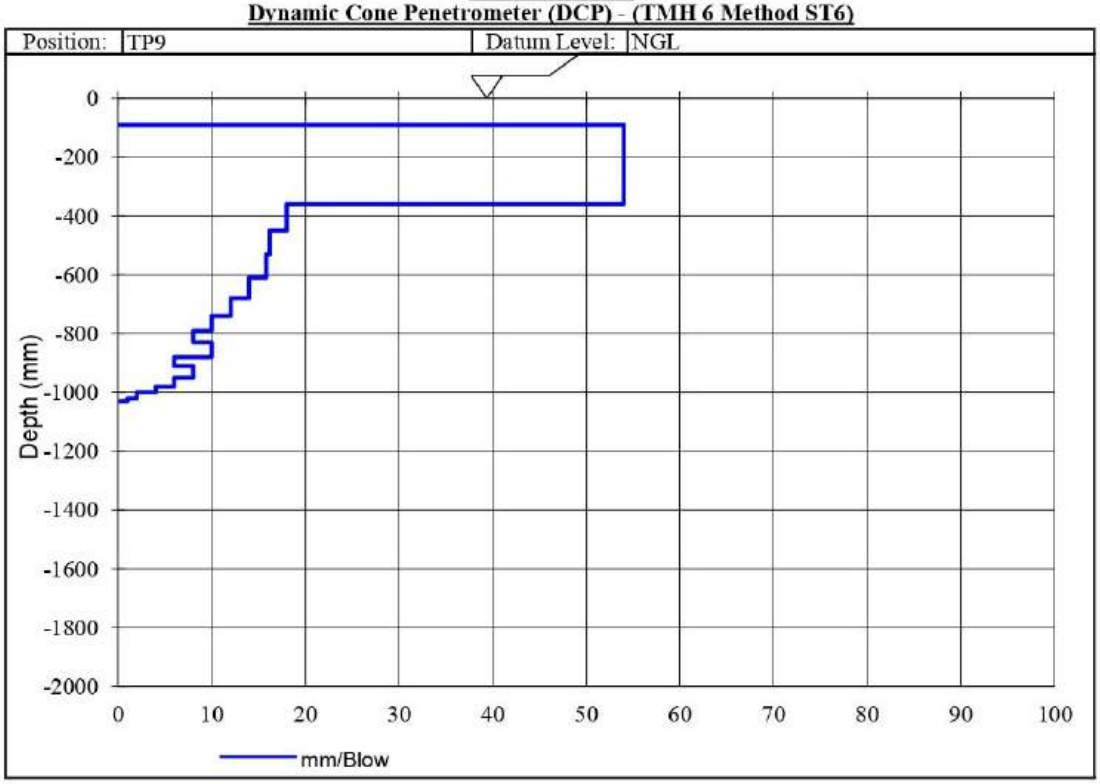
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP9 Datum Level: NGL



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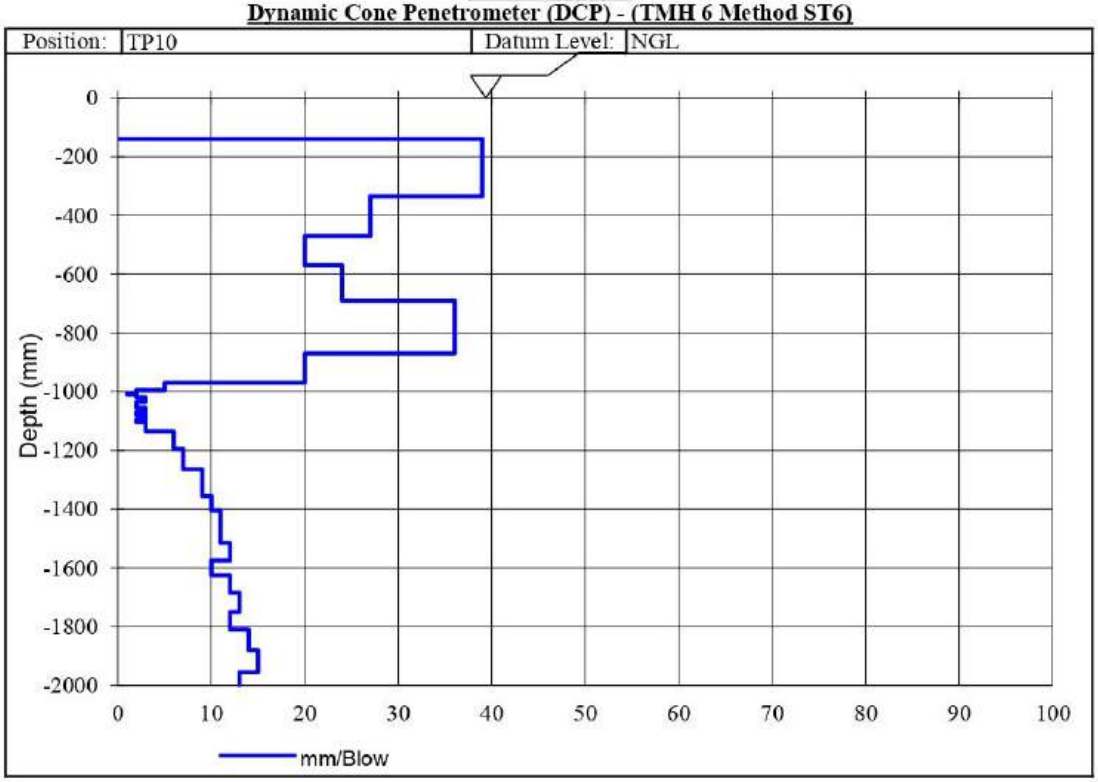
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position:	TP10	Datum Level:	NGL



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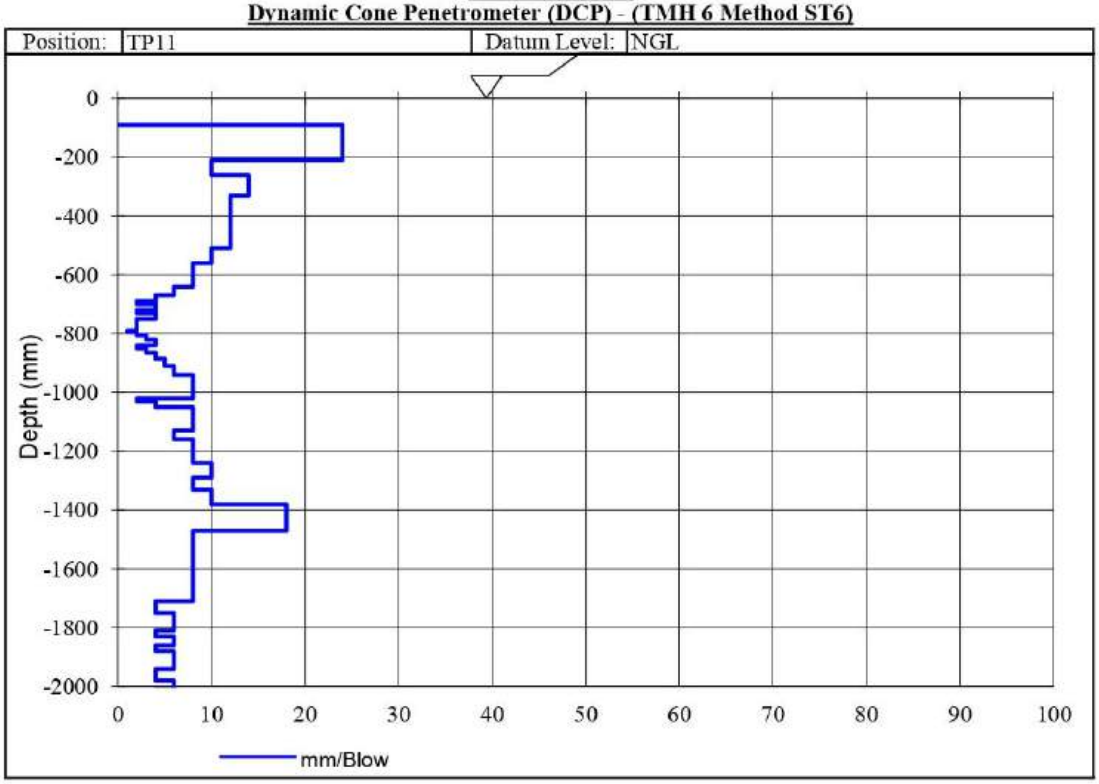
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP11 Datum Level: NGL



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ANNEXURE L (continued)

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	George	Date Reported :	3.08.2022
	6529	Req. Number :	
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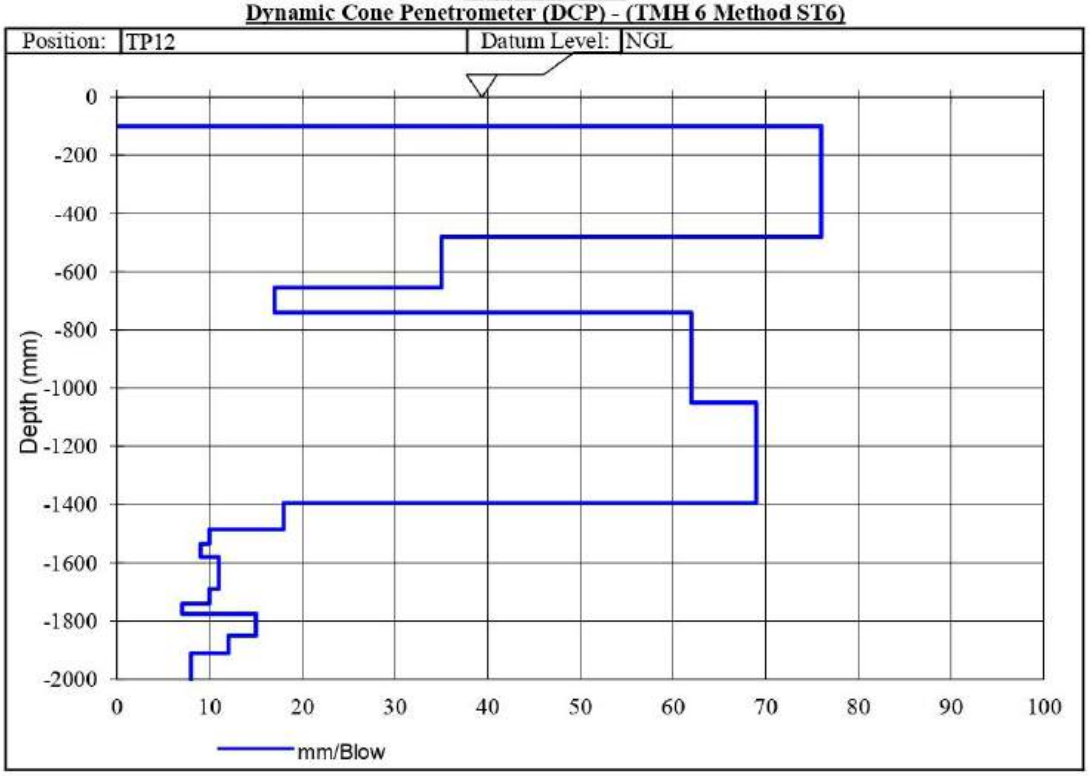
TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP12 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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Geotechnical Engineering Consultants

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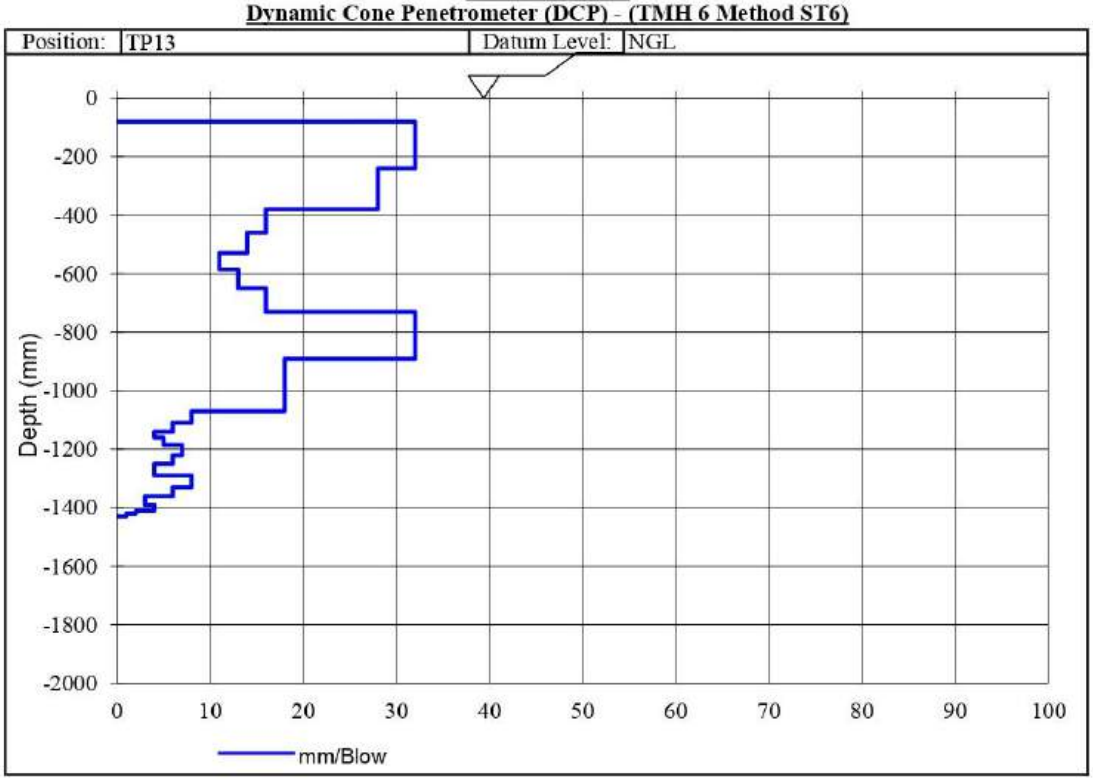
18 Clyde Street, Knysna : PO Box 964, Knysna, 6570
Tel: 044 3820502 : Fax: 044 3820503 : e-mail: iain@outeniqualab.co.za

Customer :	Clinkscales Maughan-Brown (Pty)Ltd 39 Victoria Street George 6529	Project :	Portion of Rem Erf 464 George
		Date Received :	27.07.2022
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	15 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP13 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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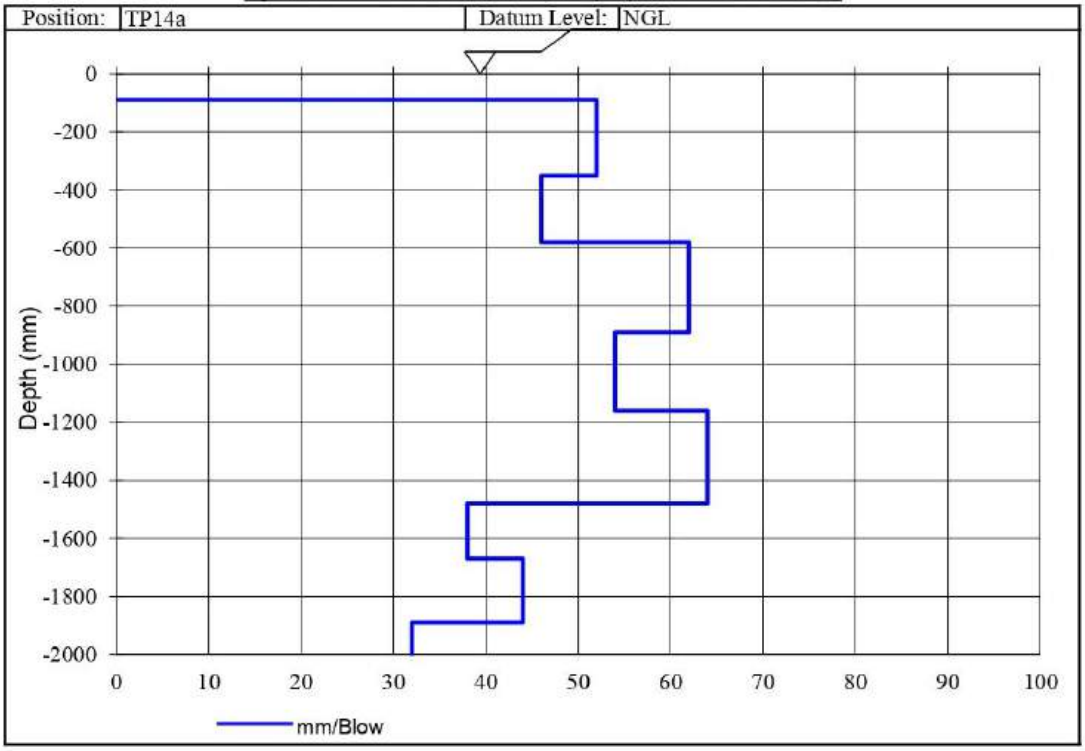
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	16 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP14a | Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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Tel: 044 3820502 : Fax: 044 3820503 : e-mail: iain@outeniqualab.co.za

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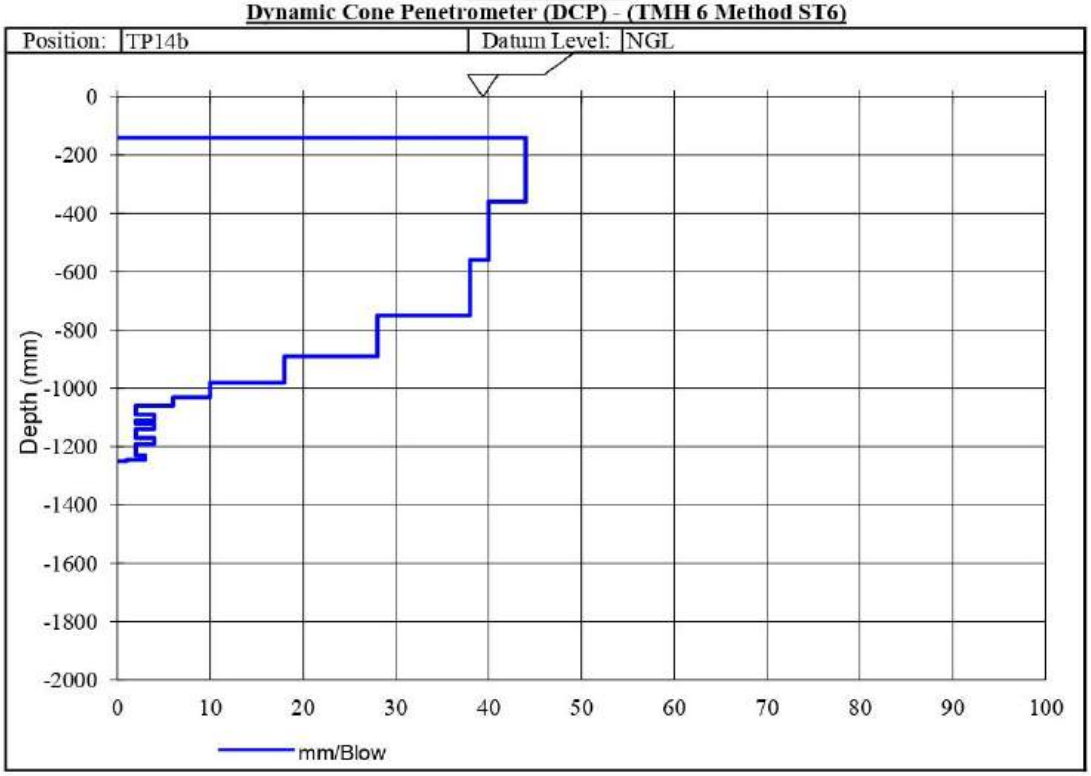
		Date Received :	27.07.2022
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	17 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP14b Datum Level: NGL



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Members: Iain Paton BSc Hons MEng Pr Sci Nat MSAIEG MSAICE

ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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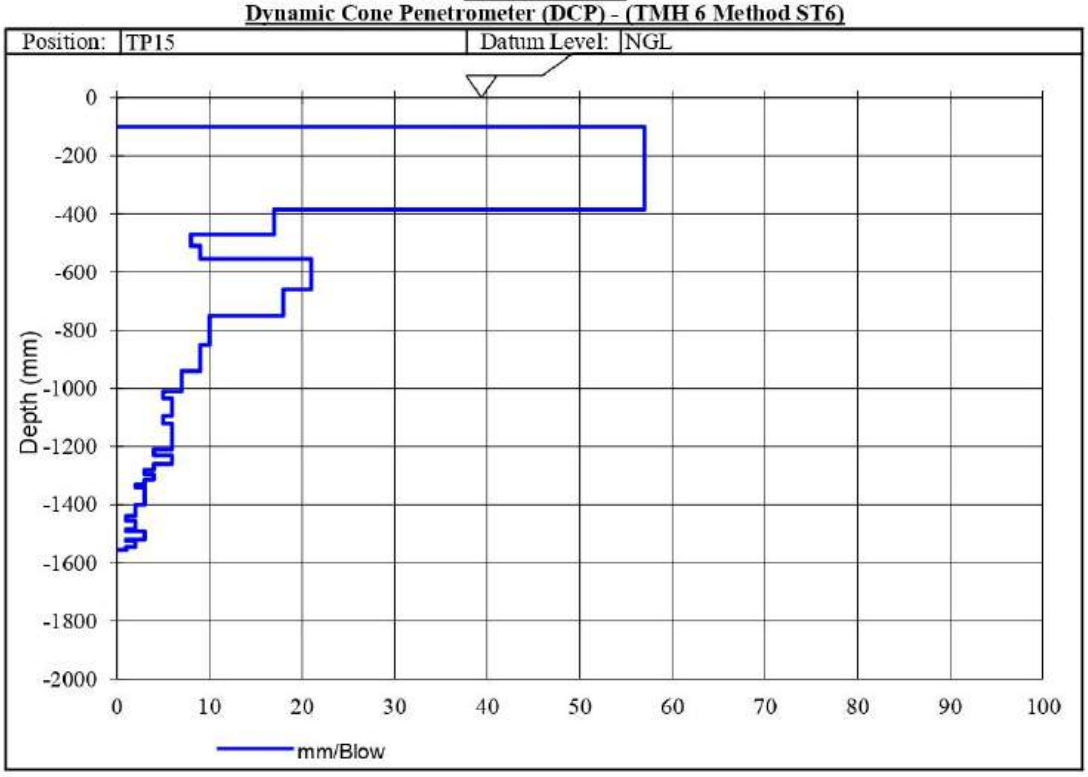
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	18 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP15 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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Customer :	Clinkscales Maughan-Brown (Pty)Ltd 39 Victoria Street George 6529	Project :	Portion of Rem Erf 464 George
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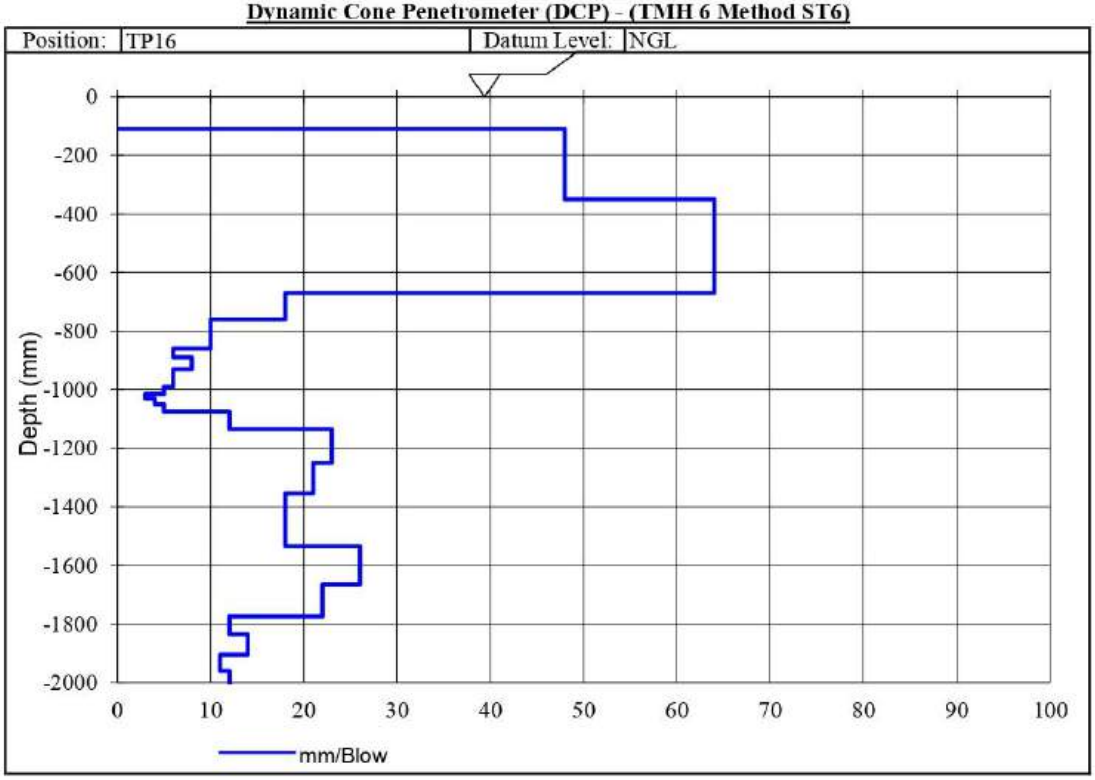
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	19 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP16 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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		Date Received :	27.07.2022
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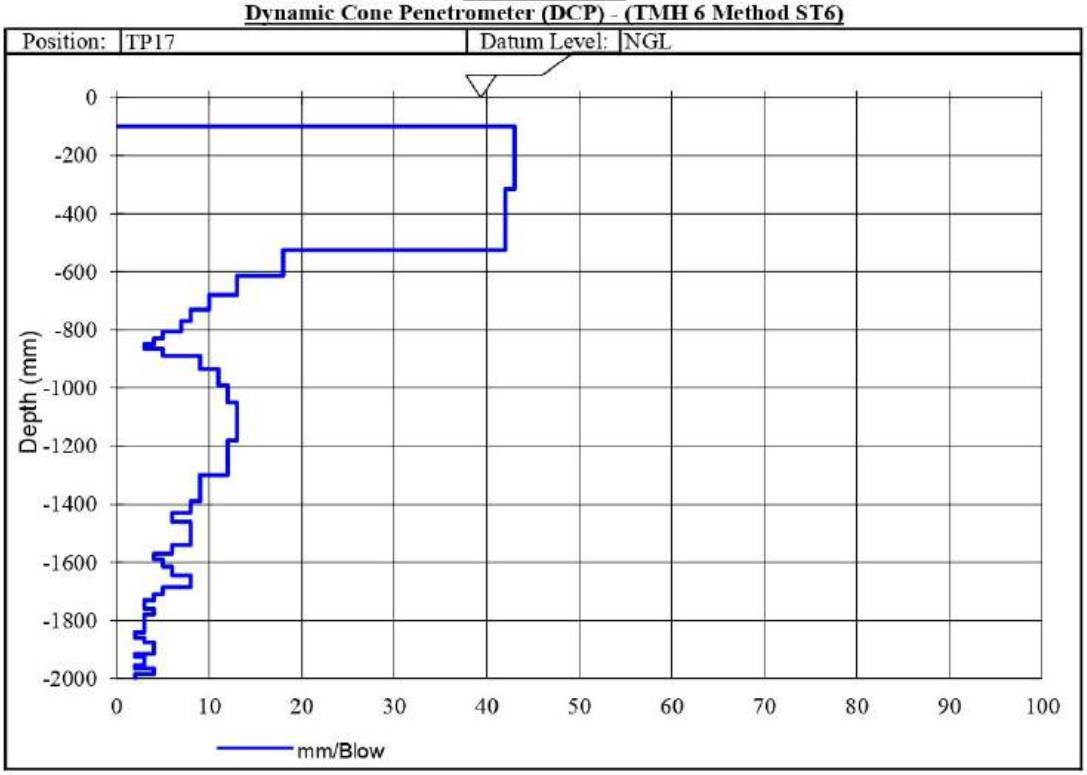
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	20 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP17 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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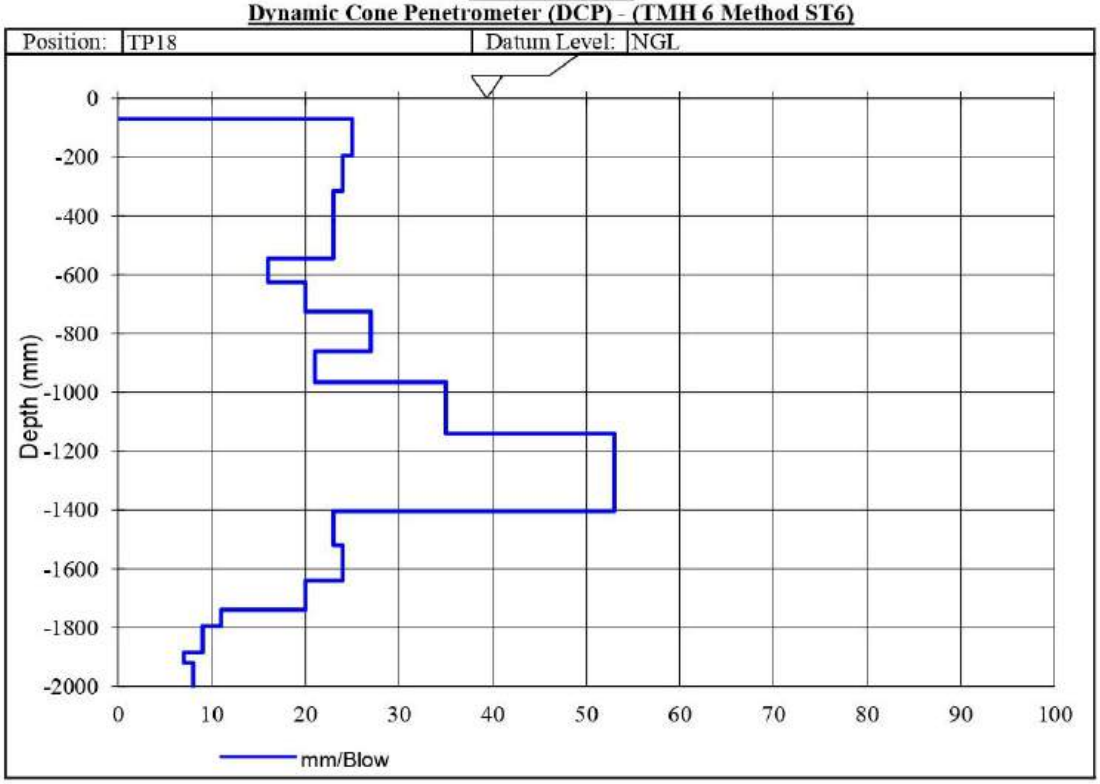
		Date Received :	27.07.2022
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	21 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP18 Datum Level: NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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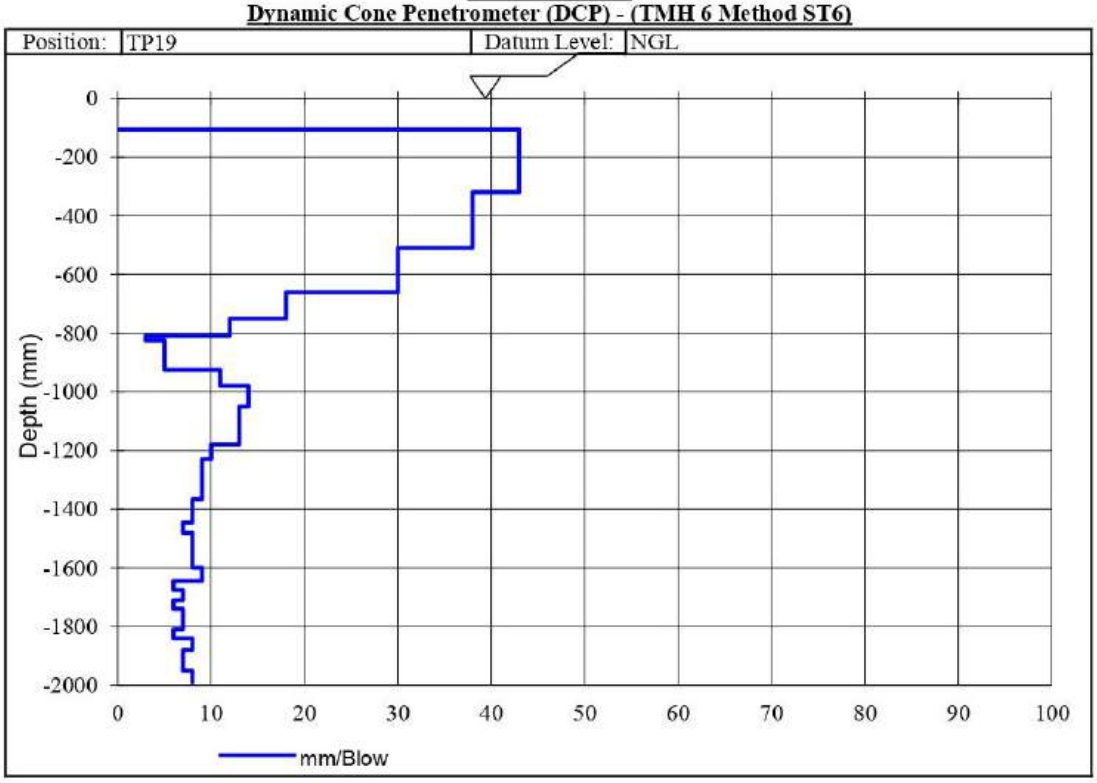
		Date Received :	27.07.2022
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	22 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position:	TP19	Datum Level:	NGL



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ANNEXURE L (continued)

R-DCP-1-5 Dec-14

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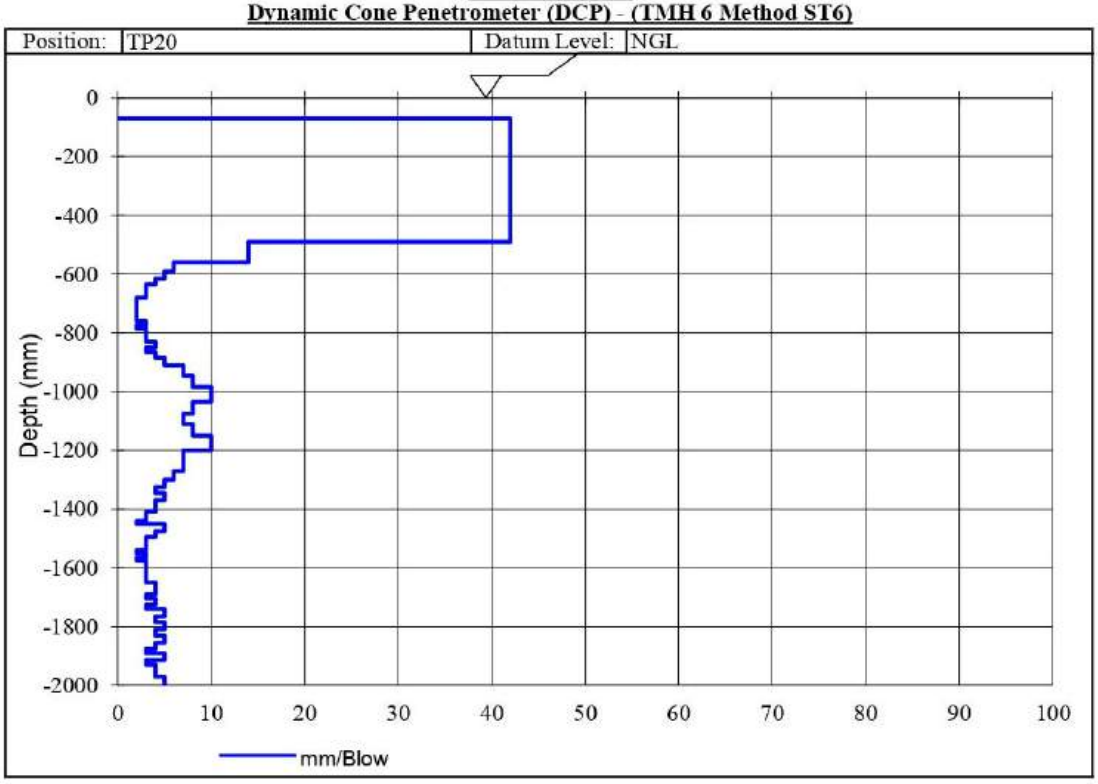
		Date Reported :	3.08.2022
		Req. Number :	
Attention :	Rohann Steenekamp	No. of Pages :	23 of 23

TEST REPORT

Dynamic Cone Penetrometer (DCP) - (TMH 6 Method ST6)

Position: TP20 Datum Level: NGL



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ANNEXURE L (continued)

Appendix 5

Calculations

ANNEXURE L (continued)

Potential Heave Calculations - Van der Merwe Method*

Site: Metrogrounds TP no: 7

From (Depth in mm)	To (Depth in mm)	Depth from (ft)	Depth to (ft)	Depth factor	Potential Expansiveness	Total Heave (in)	Heave (mm)	NHBRC Cat
0	200	0	1	0.943	0	0.0	0.00	
200	700	1	2	0.824	0	0.0	0.00	
700	1000	2	3	0.75	0	0.0	0.00	
1000	2000	3	7	2.268	0.25	0.6	14.40	
2000	2800	7	9	0.798	0	0.0	0.00	
						0.6	14.40	H1

Potential Expansiveness		Inches
Very High		1
High-Very High		0.75
High		0.5
Medium		0.25
Low		0

* Van der Merwe, D M 1964. The prediction of heave from the plasticity index and percentage clay fraction of soils. The Civil Engineer in South Africa, 6(6): 103–107.

ANNEXURE L (continued)

Potential Heave Calculations - Van der Merwe Method*

Site: Metrogrounds TP no: 14

From (Depth in mm)	To (Depth in mm)	Depth from (ft)	Depth to (ft)	Depth factor	Potential Expansiveness	Total Heave (in)	Heave (mm)	NHBRC Cat
0	400	0	1	0.943	0	0.0	0.00	
400	900	1	3	1.574	0	0.0	0.00	
900	1100	3	4	0.668	0	0.0	0.00	
1100	2100	4	7	1.6	0.25	0.4	10.16	
2100	3000	7	10	1.133	0	0.0	0.00	
						0.4	10.16	H1

Potential Expansiveness		Inches
Very High		1
High-Very High		0.75
High		0.5
Medium		0.25
Low		0

* Van der Merwe, D M 1964. The prediction of heave from the plasticity index and percentage clay fraction of soils. The Civil Engineer in South Africa, 6(6): 103–107.

ANNEXURE L (continued)

Potential Heave Calculations - Van der Merwe Method*

Site: Metrogrounds TP no: 19

From (Depth in mm)	To (Depth in mm)	Depth from (ft)	Depth to (ft)	Depth factor	Potential Expansiveness	Total Heave (in)	Heave (mm)	NHBRC Cat
0	200	0	1	0.943	0	0.0	0.00	
200	500	1	2	0.824	0	0.0	0.00	
500	600	2	2	0	0	0.0	0.00	
600	1600	2	5	2.014	0.25	0.5	12.79	
1600	3000	5	10	2.137	0	0.0	0.00	
						0.5	12.79	H1

Potential Expansiveness		Inches
Very High		1
High-Very High		0.75
High		0.5
Medium		0.25
Low		0

* Van der Merwe, D M 1964. The prediction of heave from the plasticity index and percentage clay fraction of soils. The Civil Engineer in South Africa, 6(6): 103–107.

ANNEXURE L (continued)

FOUNDATION DESIGN	Subject: SOIL BEARING CAPACITY (TERZAGHI)				
	Design Code/Ref:	Proj.	Location:	Designer:	Date:
		Metrogrounds	WCape, ZA	IP	23-Sep-22

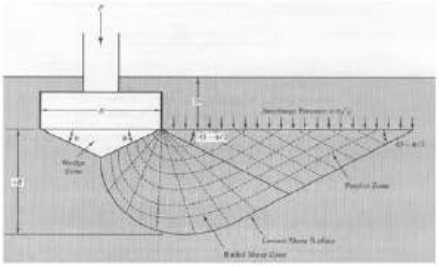
CODE REF. **CALCULATIONS & SKECTHES**

Compute the allowable bearing pressure using Terzaghi equation for the footing and soil parameters shown in Figure 1

Soil type	CL/ML	Consistency:	F

D =	0.70 m	Min Footing Embedment Depth
γ =	18.0 kN/m³	Soil Density
Ø' =	20 deg	Effective Friction Angle
c' =	5 kPa	Effective Cohesion
B =	0.6 m	Footing Width

Footing Type: Strip



		Ref
Ø' =	20 deg	1
N_c =	17.69	2
N_q =	7.44	2
N_γ =	3.6	2
s_c =	1.0	2
s_γ =	1.0	2
q =	12.6	

If $q_{ult} = cN_cS_c + qN_q + 0.5\gamma BN_\gamma S_\gamma$ [2]

then $q_{ult} = (182.2 + 32.76\,B)$

$q_{ult} = 201.9$ kPa

$$q_a = \frac{q_{ult}}{SF}$$

If SF = 3 Factor of Safety

Then q_a = 67.3 kPa Allowable bearing capacity

References:

1 Byrne, G. et al. 2019. A Guide to Practical Geotechnical Engineering in Africa, 5th Ed. Franki
2 Das, B. 2016. Principles of Foundation Engineering, 8th ed. Cengage Learning, Boston MA

ANNEXURE M

Annexure M

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

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

NOVEMBER 2025

Western Cape Government

ANNEXURE M

Department of Environmental Affairs and
Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024

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

GENERAL PROJECT DESCRIPTION

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

Project Title: **Metro Grounds Mixed-Use Development**

The George Municipality proposes the establishment of a light industrial development and an educational facility on part of the Remainder of Erf 464, George. The project involves the subdivision and rezoning of erven as well as the design and construction of the following:

- Internal road network (including road signs, markings and intersections),
- Stormwater controls (road drainage and stormwater outlet structures),
- Potable water reticulation,
- Electrical reticulation, and
- Sewage reticulation.

ANNEXURE M

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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18. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ("NEM:AQA"), the submission of the Report must also be made as follows, for-
    - Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.
    - Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS	
CAPE TOWN OFFICE: **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1)** (City of Cape Town, West Coast District, Cape Winelands District & Overberg District)	**GEORGE REGIONAL OFFICE:** **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3)** (Central Karoo District & Garden Route District)
The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X9086 Cape Town, 8000	The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530

ANNEXURE M

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.	
Locality Map:	The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following: ▪ an accurate indication of the project site position as well as the positions of the alternative sites, if any; ▪ road names or numbers of all the major roads as well as the roads that provide access to the site(s) ▪ a north arrow; ▪ a legend; and ▪ a linear scale. For ocean-based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken, and a map at an appropriate scale, clearly indicating the area within which the activity is to be undertaken. Where a comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development **must** be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): o Watercourses / Rivers / Wetlands o Flood lines (*i.e.*, 1:100 year, 1:50 year and 1:10 year where applicable); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"); o Ridges; o Cultural and historical features/landscapes; o Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites, indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that show the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

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ACRONYMS

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

ATTACHMENTS

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

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	Maps		
	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	x
	Appendix A3:	A map with the GPS coordinates for linear activities	x
Appendix B:	Appendix B1:	Site development plan(s)	✓
	Appendix B2	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	✓
Appendix C:	Photographs		✓
Appendix D:	Biodiversity overlay map		✓
Appendix E:	Permit(s) / license(s) / exemption notice, agreements, comments from the State Department/Organs of state and service letters from the municipality.		
	Appendix E1:	Final comment/ROD from HWC	See final
	Appendix E2:	Copy of comment from Cape Nature	See final
	Appendix E3:	Final Comment from the DWS	See final
	Appendix E4:	Comment from the DEA: Oceans and Coast	n/a
	Appendix E5:	Comment from the DAFF	See final
	Appendix E6:	Comment from WCG: Transport and Public Works	See final
	Appendix E7:	Comment from WCG: DoA	See final
	Appendix E8:	Comment from WCG: DHS	See final
	Appendix E9:	Comment from WCG: DoH	See final
	Appendix E10:	Comment from DEA&DP: Pollution Management	See final
	Appendix E11:	Comment from DEA&DP: Waste Management	See final
	Appendix E12:	Comment from DEA&DP: Biodiversity	See final
	Appendix E13:	Comment from DEA&DP: Air Quality	See final
	Appendix E14:	Comment from DEA&DP: Coastal Management	n/a
	Appendix E15:	Comment from the local authority	See final
	Appendix E16:	Confirmation of all services (water, electricity, sewage, and solid waste management)	✓
	Appendix E17:	Comment from the District Municipality	See final
	Appendix E18:	Copy of an exemption notice	n/a
	Appendix E19	Pre-approval for the reclamation of land	n/a
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	*See specialist studies Appendix G
	Appendix E21:	Proof of land use rights	n/a
	Appendix E22:	Proof of public participation agreement for linear activities	n/a
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.		See final
Appendix G:	Specialist Report(s)		✓
Appendix H:	EMPr		✓
Appendix I:	Screening tool report		✓
Appendix J:	The impact and risk assessment for each alternative		n/a
Appendix K:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline		✓

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Appendix L	Any other attachments must be included as subsequent appendices		
	Appendix L1	EAPs CV	✓
	Appendix L2	EAPS' EAPASA Certificate	✓
	Appendix L3	Engineering Services Report	✓
	Appendix L4	Electrical Services Report	✓
	Appendix L5	Stormwater Management Plan	✓

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SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		GEORGE OFFICE: REGION 3
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	(Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	George Municipality		
Name of contact person for Applicant/Proponent (if other):	Delia Power		
Company/ Trading name/State Department/Organ of State:	George Municipality		
Company Registration Number:	N/A		
Postal address:	PO Box 19		
	George		Postal code: 6530
Telephone:	+27(0) 44 801 9476		Cell: N/A
E-mail:	dpower@george.gov.za		Fax: N/A
Company of EAP:	Zutari (Pty) Ltd		
EAP name:	Patrick Killick		
Postal address:	PO Box 509		
	George		Postal code: 6530
Telephone:	+27(0) 44 805 5432		Cell: N/A
E-mail:	Patrick.killick@zutari.com		Fax: (044) 873 5843
Qualifications:	MPhil: Environmental Management		
EAP registration no:	2021/4095		
	Supporting EAP: Silindile Sibiya Bsc Hons in Environmental Science and is registered as an EAP with EAPASA (2021/3651)		
Duplicate this section where there is more than one landowner Name of landowner:	George Municipality		
Name of contact person for landowner (if other):	Delia Power		
Postal address:	PO Box 19		
	George		Postal code: 6530
Telephone:	+27(0) 44 801 9476		Cell: N/A
E-mail:	post@george.gov.za		Fax: N/A
Name of Person in control of the land:	George Municipality		
Name of contact person for the person in control of the land:	Delia Power		
Postal address:	PO Box 19		
	George		Postal code: 6530
Telephone:	+27(0) 44 801 9476		Cell: N/A
E-mail:	post@george.gov.za		Fax: N/A

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	George Municipality	
Contact person:	Delia Power	
Postal address:	PO Box 19	
	George	Postal code: 6530
Telephone	+27(0) 44 801 9476	Cell: N/A
E-mail:	dpower@george.gov.za	Fax: N/A

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

1.	Is the proposed development (please tick):	New	✓	Expansion		
2.	Is the proposed sites (s) a brownfield or greenfield site? Please explain.					
The site is a greenfield site from a development perspective. The proposed industrial area is currently undeveloped, with modified grassland and stands of predominantly Wattle species. Although the site is described as a greenfield, it has experienced various levels of disturbance activity in the past and is therefore not representative of the natural environmental state. Aerial images show, and the George Municipality confirmed, that the site was used in the past for the disposal of night soil, and the disposal furrows are clearly visible on historic aerial images.						
~~3.~~	**~~For Linear activities or developments~~**					
~~3.1.~~	~~Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:~~					
~~3.2.~~	~~Development footprint of the proposed development for all alternatives.~~					~~m²~~
~~3.3.~~	~~Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.~~					
~~3.4.~~	~~Indicate how access to the proposed routes will be obtained for all alternatives.~~					
~~3.5.~~	~~SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives~~					
~~3.6.~~	**~~Starting point co-ordinates for all alternatives~~**					
	~~Latitude (S)~~	~~°~~	~~'~~	~~"~~		
	~~Longitude (E)~~	~~°~~	~~'~~	~~"~~		
	~~Middle point co-ordinates for all alternatives~~					
	~~Latitude (S)~~	~~°~~	~~'~~	~~"~~		
	~~Longitude (E)~~	~~°~~	~~'~~	~~"~~		
	~~End point co-ordinates for all alternatives~~					
	~~Latitude (S)~~	~~°~~	~~'~~	~~"~~		
	~~Longitude (E)~~	~~°~~	~~'~~	~~"~~		
Note: For Linear activities or developments longer than 500m, a map indicating the coordinates for every 100m along the route must be attached to this BAR as Appendix A3.						
4.	**Other developments**					
4.1.	Property size(s) of all proposed site(s):				**Erf 464: ± 1,108.72 ha (11,087,244.40m²)** (includes large portions of undeveloped land and road reserves spread across George)	
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				0 m²	
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				**± 16.54 ha** (16,540 m²)	
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).					
The proposed infill industrial development intends to accommodate industrial erven, appropriate to the site context and facilitating small- and medium-enterprise development. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility. The proposed development does not require the future Rand Street extension for access or to make it functional; it will link into PW Botha Blvd. Extension of Rand Street is therefore not included in this development proposal. A Transport Zone I site is also included to accommodate a portion of the bus depot project, adjoining the project. The proposed infill development will be subdivided into the components and footprints as included in Table 1 below, please see the site plan/ layout in						

ANNEXURE M

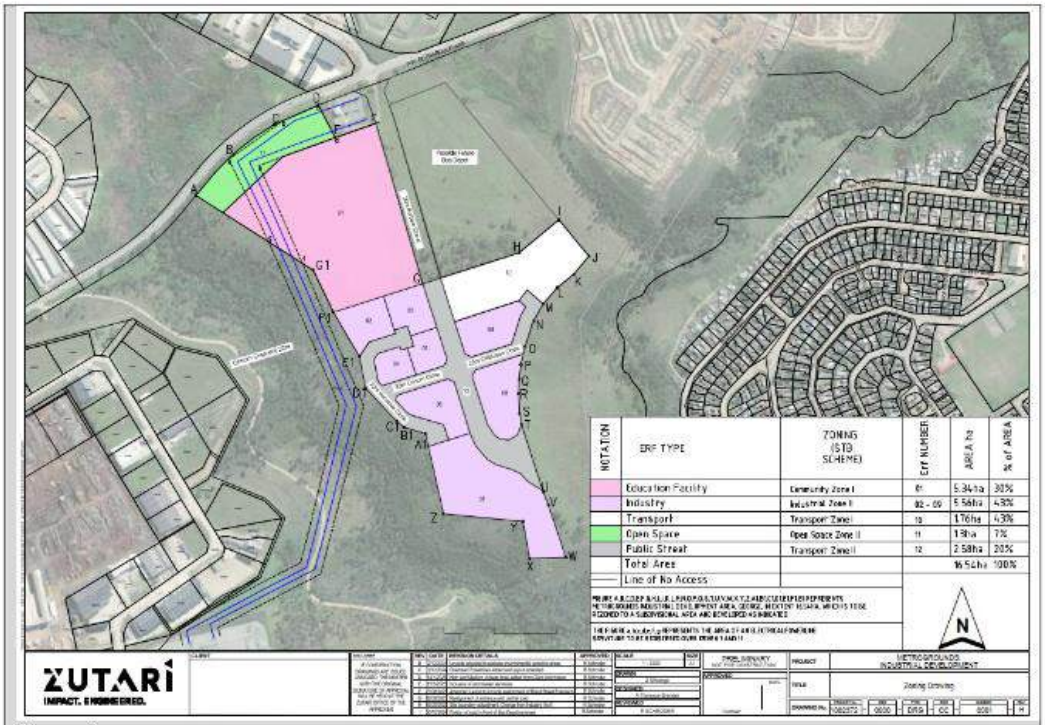

Figure 1 below.

Table 1: Summary of the proposed land uses

Land Use	Zoning	Erven	Area (ha)
Education Facility	Community Zone I	1	5.34
Industrial	Industrial Zone II	2-9	5.56
Transport	Transport Zone I	10	1.76
Open Space	Open Space II	11	1.3
Public Street	Transport Zone II	12	2.58
		Total	**16.54**

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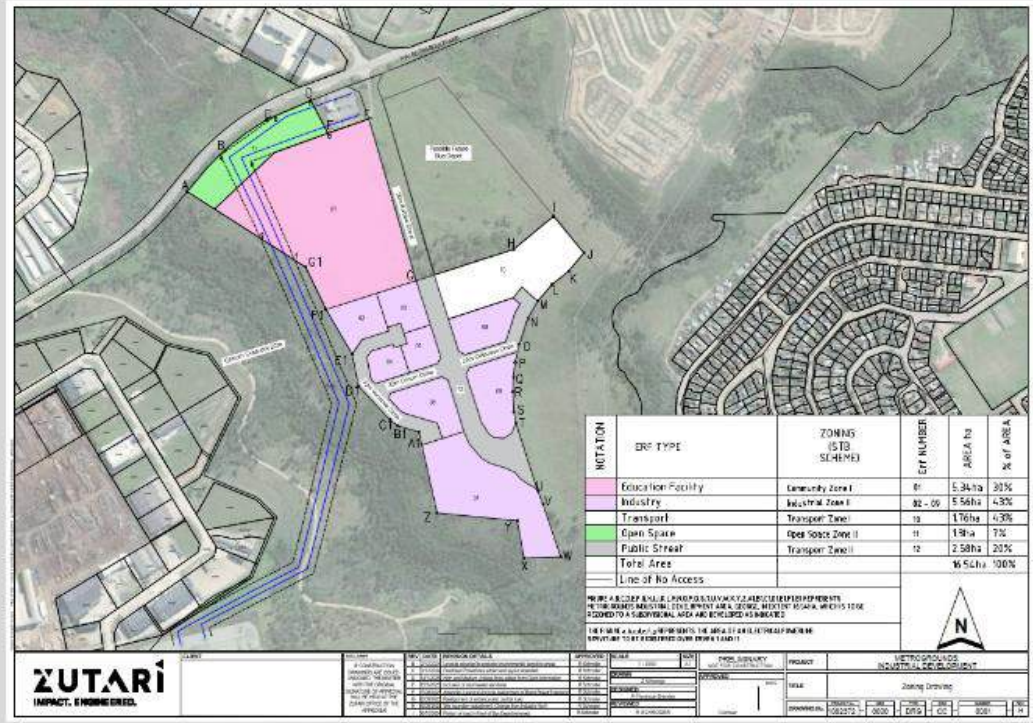

Figure 1: Proposed infill development plan.

George Municipality appointed Zutari to compile an engineering services report for the proposed development, which is included as Appendix G10 of this report. Provided below is a summary of the technical information. Please refer to the appended report for full details. The standards of engineering services to be provided are also detailed in the report.

Bulk Water Supply

- Bulk water distribution lines with a diameter > 200mm and <= 250mm are positioned on the Northern border of the Metro Grounds Site, i.e. along P.W. Botha Boulevard. The proposed development would connect to the existing water reticulation system.
- The proposed development is classified as mainly a Business/Commercial/ Industrial type of development. A peak demand of 8.66 ℓ/s will be designed for.
- Sufficient capacity exists at the water treatment plants.
- The existing reservoirs have enough storage capacity and capacity for fire flow conditions to accommodate this development.
- The existing system has enough capacity to accommodate the proposed development without bulk supply upgrades.
- The George Municipality confirmed that sufficient spare bulk water services capacity is available – Appendix E1 6.

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Figure 2: Existing water services bordering the site.

Bulk Sewage System

- A wastewater reticulation system exists within the boundaries of the proposed development.
- The proposed development falls within the Outeniqua Wastewater Treatment Works' (WWTW) drainage area and will drain to the WWTW through the existing gravity sewer network, where it will be treated.
- It is proposed that the development will drain to the existing Schaapkop Pump Station indicated on the remainder of erf 13486. From this point, all wastewater generated will be pumped to the Outeniqua Wastewater Treatment Plant, where it will be treated.
- The George Municipality has confirmed that sufficient spare bulk sewerage services capacity is available – Appendix E16.

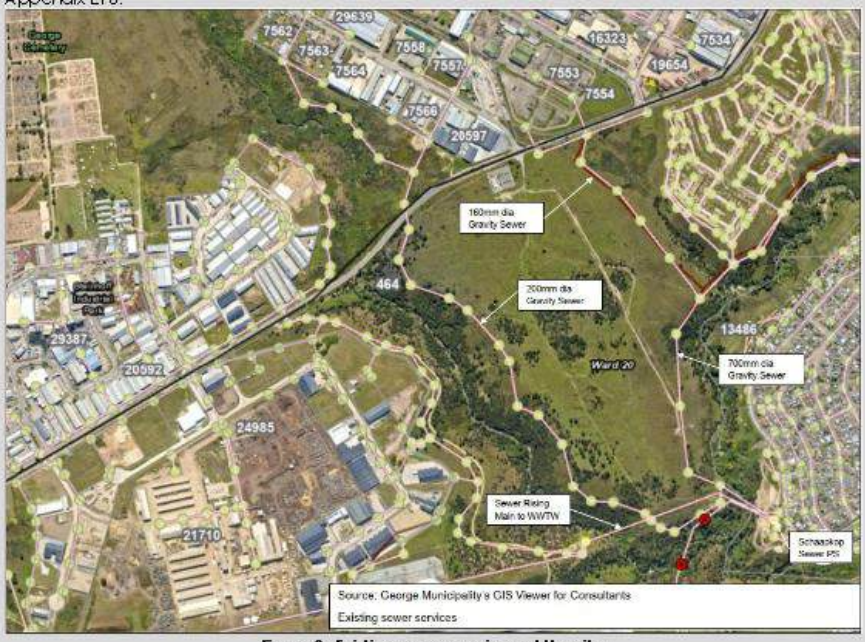

Figure 3: Existing sewer services at the site.

Storm water

- A stormwater management plan was developed for the site and in included in Appendix L5.
- The site has a fairly steep slope gradient, increasing towards natural drainage lines. There is no existing stormwater infrastructure near the proposed development.
- The upstream runoff and generated stormwater runoff from the proposed development will have to be conveyed by means of both an underground system as well as an overland flow system.
- The internal stormwater will be designed in such a manner that it follows the natural topography of the site, and the outflow will be dispersed via energy-dissipating outlets towards the drainage paths.

ANNEXURE M

- Conventional stormwater networks consisting of stormwater catch pits, manholes and energy dissipating headwalls will convey the stormwater generated in the area into the proposed stormwater outlets and silt retention structures to minimise the peak runoff.
- Energy dissipating structures combined with Reno mattresses to prevent scouring and erosion will be utilised, creating a high friction factor and thereby reducing the velocity of stormwater. These will be utilised at the stormwater outlet structures.
- The stormwater system forms an integral part of the road and urban planning layout. The system rests on three legs, the minor system, the major system and an emergency system. Minor storms are catered for in the pipe system while major storms are routed through a linked system of roads and public open spaces using attenuation techniques. The emergency system recognises failure of the minor and major systems by storms greater than provided for in the major system or in the event of malfunction of the minor system, by providing continuous overland flow routes to minimise flooding of residential areas.

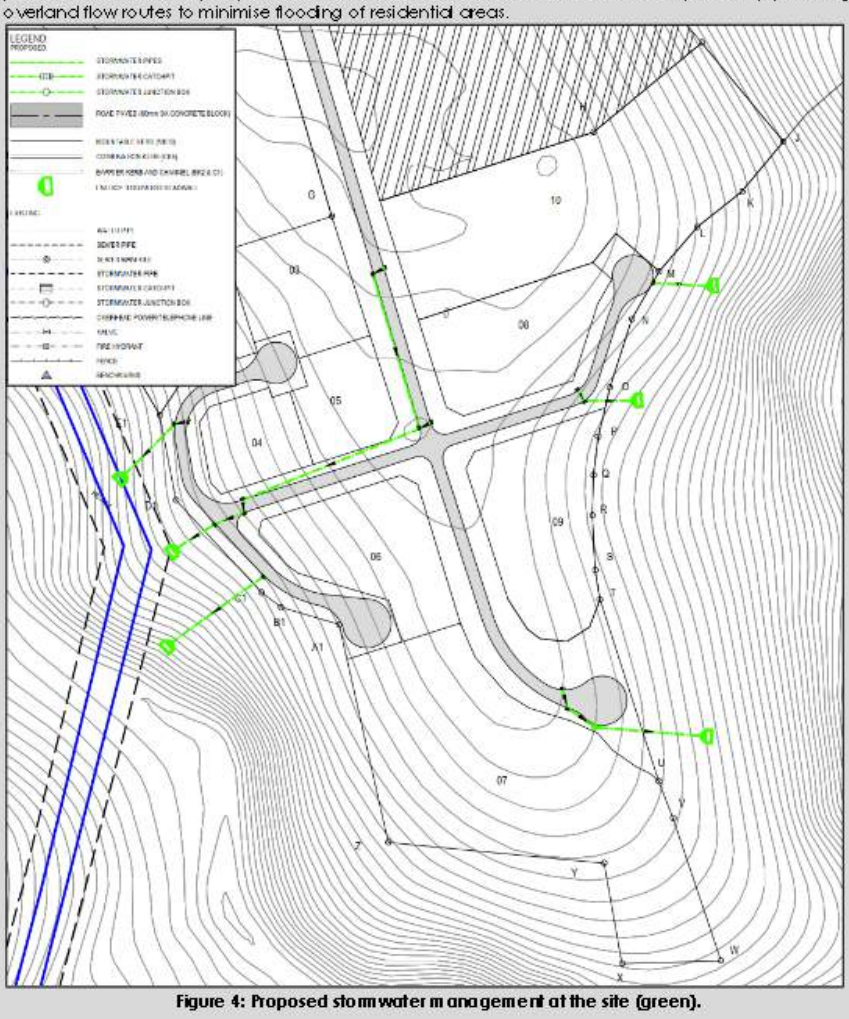

Figure 4: Proposed stormwater management at the site (green).

ANNEXURE M

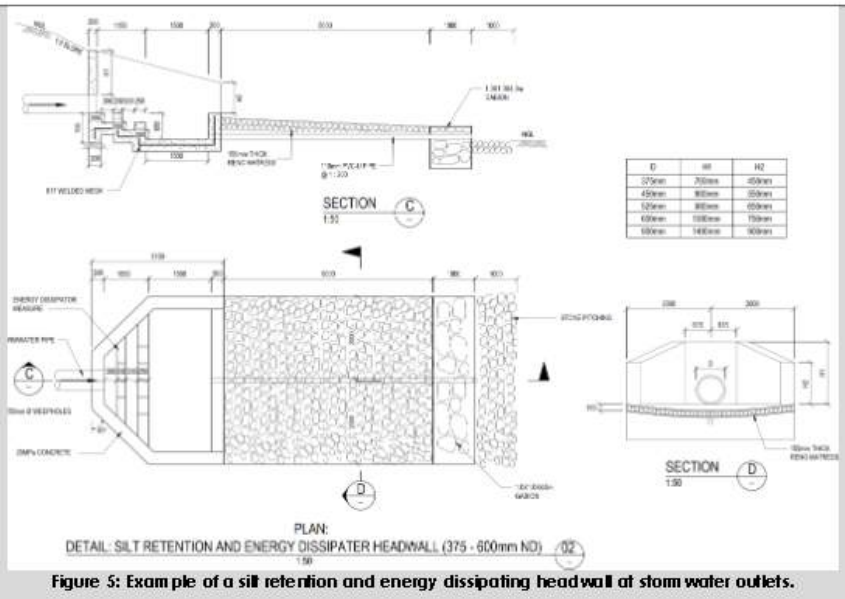

Figure 5: Example of a silt retention and energy dissipating headwall at storm water outlets.

Access Roads

- Access to the proposed development is currently obtained from the existing intersection of PW Botha Boulevard and Ossie Urban Street and the access road to the existing electrical sub-station. Details regarding access have been investigated and discussed in a Traffic Impact Study conducted by Urban Engineering.
- The proposed development does not require the future Rand Street extension for access or to make it functional; it will link into PW Botha Blvd.

Solid Waste

- Refuse removal will be dealt with once a week, as applicable to all the current residential and business/ industrial areas within the George Municipal area.
- The George Municipality has confirmed that sufficient spare waste services capacity is available – Appendix E1 6.
- Waste will be collected as part of the existing operation.
- George Municipality does not have a landfill site for domestic waste, and all domestic waste is transferred to the Petro SA Landfill site.

Electrical Services

- An electrical services report has been compiled for the project and is included in Appendix L6.
- The George Municipality has confirmed that there is sufficient spare electrical capacity to cater for the needs of the development – Appendix E1 6.
- The identified point of connection for the development is at the existing 11kV busbars inside the Tamsui Substation Switchroom.
- The proposed connection will include the supply and installation of the following (indicated in the figure below and described in more detail in the electrical services report):
  - Two 11kV feeder circuit breakers inside the existing switching station building to supply the development
  - 185 mm2 Cu x 3 core 11kV underground ring cable from the above-mentioned circuit breakers supplying the internal network.
- Please refer to the full electrical report for details and high-definition drawing.
- The electrical reticulation will be revised in accordance with the latest project plan

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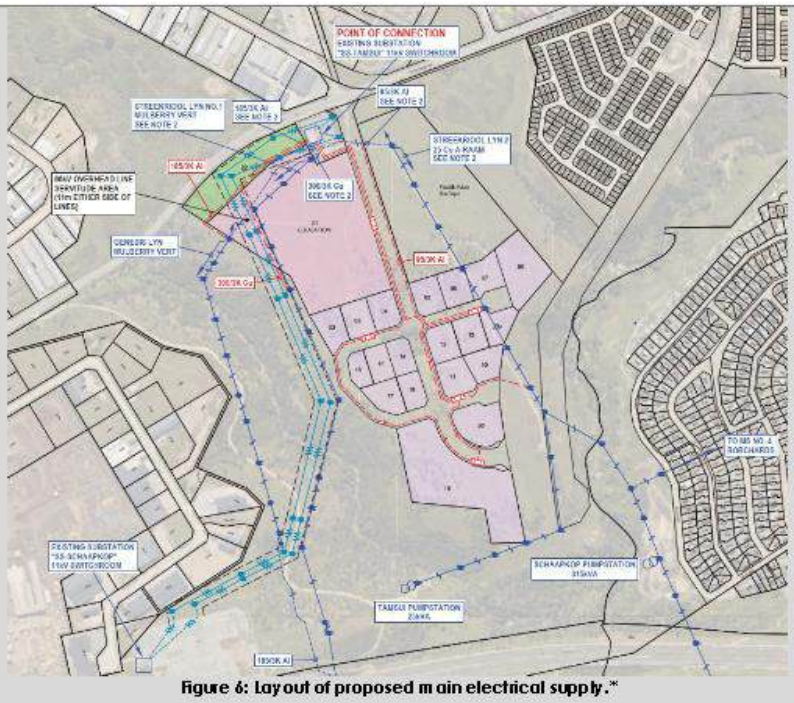

Figure 6: Layout of proposed main electrical supply.*

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

Access to the proposed development is currently obtained from the existing intersection of PW Botha Boulevard and Ossie Urban Street and the access road to the existing electrical sub-station. Access to the Metro Mixed Use Development will be provided by and shared with the planned bus depot, adjacent to the development. The access road was removed from the Metro Grounds development and included as part of the bus depot application, as the bus depot will be developed first.

The proposed development will also provide an intersection with the planned Rand Street extension, which can be developed once both roads have been established. In the interim, a temporary turning circle is planned at the end of Metro Grounds Main Road, where it would intersect the future Rand Street extension.

The proposed development does not require the future Rand Street extension for access or to make it functional; it will link into PW Botha Blvd.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	2	7	0	0	0	0	0	0	0	0	0	4	6	4	0	0	0	0	0

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	33°	59`	25.98``
	Longitude (E)	22°	27`	31.50``

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

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

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

Is the following legislation applicable to the proposed activity or development?

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

1. Other legislation

List any other legislation that is applicable to the proposed activity or development.	
LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	***Describe how the proposed development complies with and responds:***
National Environmental Management Act (Act 107 of 1998 as amended)	Environmental Impact Assessment is being undertaken in terms of Chapter 5 of NEMA using the 2017 EIA regulations.
National Environmental Management: Biodiversity Act (Act 10 of 2004)	The identification of the on-site vegetation and the ecosystem status associated with the vegetation is undertaken in terms of this Act. This Act also applies to the control and management of Alien Invasive Species (AIS), which includes animals and vegetation.
National Water Act (Act 36 of 1998)	The proposed project is located within 500m of a regulated area. According to Section 21 (c) and (i) of the National Water Act, any water use activities that occur within the regulated area of a watercourse will require authorisation. Low-Risk activities require a General Authorisation (GA), while Medium or High-Risk activities require a Water Use License (WUL).
National Waste Management Strategy	All waste from construction to decommissioning must be dealt with in terms of this strategy.
Western Cape Biodiversity Act (Act 6 of 2021)	The purpose is to protect biodiversity in the Western Cape. It regulates activities that may impact biodiversity, including development projects. The potential impacts on biodiversity for the proposed project have been assessed. The proposed project is located within a Terrestrial Biodiversity CBA in terms of the Western Cape Biodiversity Spatial Plan (WCBSP), 2023.
Spatial Planning and Land Use Management (Act 16 of 2013)	This application complies with the following General Principles for development as stated in Chapter 2 of SPLUMA Section 7 (b): The principle of spatial sustainability, whereby spatial planning and land use management systems must: (vi) promote land development in locations that are sustainable and limit urban sprawl; and (vii) result in communities that are viable; Section 7 (c): The principle of efficiency whereby: Land development optimises the use of existing resources and infrastructure.

2. Policies

Explain which policies were considered and how the proposed activity or development complies with and responds to these policies.	
George Municipality Spatial Development Framework (2023)	The MSDF (2023) promotes the extension of industrial areas in George. A part of the implementation of this policy includes new industrial (range of erf sizes and industry types) areas for implementation. The Metro grounds Industrial area package has been released.
George Municipality Integrated Development Plan (2022-2027)	The Metro Grounds development is identified as a catalytic project in the Integrated Development Plan (IDP) and is part of the provincial investment projects.

Western Cape Provincial Spatial Development Framework (2022)	Over the past few years, the Western Cape Province has explored ways of fostering intergovernmental planning and implementation. This process has evolved and is now set to enable the implementation of the NDP, on the one hand, and to enhance the development and implementation of the Provincial Strategic Plan, on the other. Planning in the Western Cape Province has matured to a phase where joint planning and implementation is a fundamental element in ensuring Sustainable and integrated service delivery. The Metro Grounds industrial development is a part of the provincial infrastructure investment projects 2022/2023-2023/2024.
Garden Route District Municipality (2022-2027)	According to the Garden Route District Municipality IDP, one of the strategic objectives of George Municipality is to develop and grow. George is the economic hub of the Garden Route and is renowned for its diverse economy, driven by agriculture, manufacturing, tourism, and retail. As a regional centre, it boasts well-established infrastructure, including an airport that connects the district to major cities. The proposed infill development will contribute to the economic growth of George.

3. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development, and explain how they have influenced the development proposal.	
Western Cape Biodiversity Spatial Plan (WCBSP) and Guidelines (2023)	The WCBSP was considered as part of this EIA to determine any biodiversity priority areas located within the development site.
Guideline for Public Participation (2013)	The PPP for this process is based on this Guideline and also includes any updated regulations.
Guideline on Need & Desirability (2013)	Need & Desirability refers to the temporal and spatial need of an area for a specific development. This Guideline was used to define the requirements and implications of Need & Desirability.
Guideline for Environmental Management Plans (2005)	An EMPr has been included with this Basic Assessment to provide practical and implementable actions to ensure that the development maintains sustainability and minimise impacts through all its phases. The document is drafted as per the Guidelines and requirements of NEMA.
Guideline on Environmental Management Plans (2005)	An EMPr has been included with this Basic Assessment to provide practical and implementable actions to ensure that the development maintains sustainability and minimise impacts through all its phases. The document is drafted as per the Guidelines and requirements of NEMA.

4. Protocols

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

A Screening Tool Report (STR) was generated using the DFFE's online Screening Tool, and the theme sensitivities identified by the report are identified in Table 2 below.

Table 2: Environmental sensitivities picked up by the DFFE Screening Tool

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme	X			
Defence Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

The Screening Tool sensitivity rating, verified sensitivity rating and the implications for specialist studies are disclosed for each of the relevant themes to follow:

- **Landscape/Visual Impact Assessment**
  - The STR recommended that a Landscape/Visual Impact Assessment be considered for the proposed project, even though a sensitivity has not been picked up for this theme.
  - The project is located adjacent to a residential area and will be visible from the N2 highway and, therefore, a **Landscape/Visual Impact Assessment was undertaken** as part of the application for Environmental Authorisation, this report has been attached as an appendix.

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- **Archaeological and Cultural Heritage Impact Assessment**
  - The DFFE STR gives the site a **Very high** Archaeological and Cultural Heritage sensitivity.
  - The specialist finds little archaeological, palaeontological or built heritage of cultural significance on the site and is deemed to be of **Low** sensitivity. A Notice of Intent to Development (NID) was submitted to Heritage Western Cape (HWC).
  - In response to the Notification of Intent to Develop, Heritage Western Cape responded that, You are hereby notified that, since there is no reason to believe that the proposed development of an industrial area on Erf 464 Portion Remainder, Metro Grounds Industrial Development, George will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay.
  - Therefore, no heritage impact assessment is required for the proposed development.
- **Palaeontology Impact Assessment**
  - The STR states that a palaeontology impact assessment be included even though a sensitivity has not been identified for this theme.
  - The specialist finds little archaeological, palaeontological or built heritage of cultural significance on the site and is deemed to be of **Low** sensitivity. A NID was submitted to HWC.
  - A **palaeontological impact assessment will, therefore, not be undertaken** based on the response from HWC.
- **Terrestrial Biodiversity Impact Assessment**
  - The DFFE STR gives the site a **Very high** Terrestrial Biodiversity sensitivity.
  - The specialist confirms this rating and finds that portions of the site (secondary fynbos along the valley edges) carry a **Very high** sensitivity rating.
  - A **terrestrial biodiversity impact assessment as per the protocols was undertaken** by a biodiversity specialist. The report's findings are included in this Basic Assessment Report.
- **Aquatic Biodiversity Impact Assessment**
  - The DFFE STR gives the site a **Very high** Aquatic Biodiversity sensitivity.
  - The specialist confirms the **Very high** rating and concludes: Considering that the proposed development is to take place within the regulated area of 3 watercourses, the development is in the Outeniqua SWSA, together with the present impact on the watercourses that include chemical pollution (leaking sewer infrastructure) and erosion, as well as the increase of harden surfaces by the proposed development, the aquatic biodiversity potentially affected by the proposed development is confirmed to be **Very High**.
  - An **aquatic impact assessment as per the protocols was undertaken** by an aquatic specialist. The report's findings are included in this Basic Assessment.
- **Socio-Economic Assessment**
  - The DFFE STR does not provide a sensitivity rating for this theme but identifies a socioeconomic assessment as a required study.
  - The project to construct a mixed-use industrial development will have a range of positive and negative socioeconomic impacts on surrounding communities and the economy, which will be an important consideration in reaching a decision.
  - A **socioeconomic assessment was undertaken** by a socioeconomic specialist and the findings are included in this Basic Assessment.
- **Plant Species Assessment**
  - The DFFE STR rates the site as having a **medium** plant species sensitivity.
  - The specialist concluded that the fynbos vegetation along the valleys and valley edges has a **High** sensitivity, while the vegetation in the transformed fields are unlikely to support SCC and, therefore, has a **Low** sensitivity.
  - With some high-sensitivity areas, **a plant species impact assessment was undertaken** as per the protocols by a botanical specialist. The report's findings are included in this Basic Assessment.
- **Animal Species Assessment**
  - The DFFE STR gives the site a **High** rating for animal species sensitivity.
  - Following a site investigation, the specialist found a **Low** sensitivity for the following reasons:
    - This is attributed to the degraded condition of the site and the absence of suitable habitat for SCCs.
    - The habitat of the Knysna Warbler (***Bradypterus sylvaticus***), which is present in the riparian thick vegetation along the Skaapkop River valley adjacent to the proposed development area, will not be impacted as the proposed development footprint is located at a significant distance from its suitable habitat.
    - The observed faunal diversity during the site visit was notably low, indicating that the area is not functioning as a significant habitat for key faunal species.
    - The development of the industrial zone surrounding the site has largely contributed to the decline of the site's ecological value. Industrial activities often lead to habitat destruction, pollution, and increased human encroachment, which impact the faunal diversity in surrounding areas.
  - An **animal species compliance statement was undertaken;** the findings are included as part of this Basic Assessment.
- **Agricultural Impact Assessment (Not required by the STR)**
  - The DFFE STR gives the site a **Medium** for agricultural sensitivity.
  - The agricultural assessment also finds the site to be of **Medium** sensitivity but disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6. Although the climate and terrain may allow for viable crop production, other factors constrain the potential of the site to practically deliver agricultural produce and, therefore, limit its agricultural production potential. These factors include:
  - Its location, which has been transformed by expanding urbanisation, leaves it surrounded largely by non-agricultural land uses.

        - The fact that land use planning in the spatial development framework designates the site for non-agricultural use.
    - For these reasons, the site will never be viably utilised for agricultural production, and its potential is therefore assessed here as non-existent. An agricultural impact must, by definition, cause a change to the future agricultural production potential of the land. If there is no change, there is no impact. Because the site has no current agricultural production potential due to the limitations of its location, the occupation of the site by the development cannot change its agricultural production potential. The development will, therefore, have zero agricultural impact and is therefore assessed as acceptable.
    - With a verified medium sensitivity and under the agriculture protocols for specialist assessment, **an agricultural compliance statement was undertaken** the findings are included in this Basic Assessment Report.
- **Civil Aviation Theme (Not required by the STR)**
    - The DFFE STR rates the site as **Very high** for civil aviation sensitivity but does not identify the need for a civil aviation specialist assessment.
    - The George Airport is located ~7.5km from the proposed development, which is within 8km of the George Airport and confirms the **Very high** civil aviation sensitivity rating.
    - As per the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Civil Aviation Installations, **a Civil Aviation Compliance Statement is included** as part of this Basic Assessment Report.
- **Defence Theme (Not required by the STR)**
    - The DFFE STR gives the site as **Low** for defence sensitivity and does not identify the need for a defence specialist assessment.
    - No negative impacts are expected on defence installations in the **Low** sensitivity areas, and therefore, **no further assessment will be undertaken**.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant **Basic Assessment Activity (ies)** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
27	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes are undertaken in accordance with a maintenance management plan.	The proposed development requires the clearance of approximately 16.54 hectares of defined indigenous vegetation.
Activity No(s):	Provide the relevant **Basic Assessment Activity (ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
4	The development of a road wider than 4 metres with a reserve of less than 13,5 metres. Western Cape i. Areas zoned for use as public open space or equivalent zoning; ii. Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: (aa) Areas zoned for conservation use; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	The development will result in the construction of new roads wider than 4m outside the urban area where there is indigenous vegetation. The proposed development is not located within the current outer extent of actual urban development.
12	The clearance of an area of 300 square metres or more of indigenous vegetation, except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. Western Cape i. Within any critically endangered or endangered ecosystem listed in terms of Section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans;	The proposed development will result in the clearance of more than 300m² of defined indigenous vegetation where the ecosystem, Garden Route Granite Fynbos, is listed as Critically Endangered in terms of the ecosystem threat status. The site is also located inside a Critical Biodiversity Area (CBA) as per the 2023 Biodiversity Spatial Plan (which is not a bioregional plan).

	iii. Within the littoral active zone or 100 metres inland from the high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; iv. On land, where, at the time of the coming into effect of this Notice or thereafter, such land was zoned open space, conservation or had an equivalent zoning; or v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	

Note:

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

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

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

List the applicable listed activities in terms of the NEM:A QA

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

The applicant proposes the establishment of light industrial erven and an erf for an education facility on part of the Remainder of Erf 464. It is the intention of the application to subdivide and rezone the property for the following development components:

Land Use	Zoning	Area (ha)
Education Facility	Community Zone I	5.34
Industry	Industrial Zone II	5.56
Transport	Transport Zone I	1.76
Open Space	11Open Space II	1.3
Public Street	12Transport Zone II	2.58
	Total	**16.554**

Please refer to Section 4.4 of this report, which provides a detailed description of the preferred alternative for the proposed project.

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

The current zoning of the site is undetermined.

The site will be subdivided and rezoned to the following:

- Community Zone I (Education facility) on ±5.34 ha.
- Eight erven of Industrial Zone I (Industry) on a combined ±5.56ha.
- Transport Zone I on ±1.76ha
- Open Space Zone II (Open Space) on ± 1.3 ha.
- Public Street (Transport Zone II) on ±2.58 ha

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

There are no existing approvals or conflicts for the proposed site.

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

Over the past few years, the Western Cape Province has explored ways of fostering intergovernmental planning and implementation. This process has evolved and is now set to enable the implementation of the NDP, on the one hand, and To enhance the development and implementation of the Provincial Strategic Plan, on the other. Planning in the Western Cape Province has matured to a phase where joint planning and implementation **are** a fundamental element in ensuring Sustainable and integrated service delivery.

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The Metro Grounds industrial development is a part of the provincial infrastructure investment projects 2022/2023-2023/2024.	
4.2	The Integrated Development Plan of the local municipality.
The Metro Grounds development is identified as a catalytic project in the Integrated Development Plan (IDP) and is part of the provincial investment projects.	
4.3.	The Spatial Development Framework of the local municipality.
The proposed development falls within the study area of the George South-East Local Spatial Development Framework, 2015, and the area is earmarked for industrial development. According to the Municipal Spatial Development Framework (MSDF) (2023), promotes the extension of industrial areas in George. As part of the implementation of the growth policy, new industrial (range of erf sizes and industry types) areas are identified for implementation. The Spatial Development for George Municipality is based on six themes. The proposed development is in line with Theme B: Facilitate enabling and inclusive Economic Growth. The expansion of industrial facilities is one of the proposals to achieve the goals of the Economic Growth theme. The Metro Grounds Industrial area package has been released for implementation.	
4.4.	The Environmental Management Framework applicable to the area.
There is currently no adopted EMF for George Municipality.	
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
The original layout for the Metro Grounds Industrial development was amended to avoid the environmentally sensitive areas (high biodiversity rating and wetlands) located **to** the west of the proposed site. The original layout had a footprint of approximately 19.99ha, **layout, which** was reduced to 18.55ha **to accommodate environmental sensitivities (botanical and wetland) and then again to accommodate changes in adjacent projects (i.e. the bus depot and Rand Street extension) and the final footprint is now 16.54ha.**	
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
According to the WCBSP (2017), **the** majority of the Metro Grounds industrial site was not located within a Critical Biodiversity Area (CBA), with only some sections around the periphery of the earmarked site falling within mapped critical biodiversity areas (CBAs) and Ecological Support Areas (ESAs). According to the updated WCBSP (2023), the Metro Grounds Industrial site now falls within a Terrestrial Critical Biodiversity Area (CBA1). The site has been ground-truthed by the Terrestrial Biodiversity Specialist and has **been** confirmed in the report that the new CBA1 areas on the proposed development sites have been incorrectly mapped, and this has been **brought** to the attention of Cape Nature, as the vegetation is transformed with no natural remaining vegetation.	
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
N/A	
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
There are no changes to the screening tool report submitted with the application form.	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The proposed Metro Grounds Industrial Development will be located on vacant land located outside the urban edge of George. The site has been used for the disposal of night soil in the past; however, this practice has been halted for many years.	
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
The waste from the site will feed into the existing municipal waste services. The site will be accessed via the existing dedicated signal-controlled intersection on P.W. Botha Boulevard. The site will utilise a portion of land which is ideally located for light industrial development as it borders the existing industrial area of George. It is ideally located for infill industrial development and optimally uses the portion of land.	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E1 6).
The George Municipality has confirmed service capacity for the following: • Electrical Capacity – Appendix E1 6 • Water – Appendix E1 6 • Sewage – Appendix E1 6 • Waste – Appendix E1 6	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
Please see Appendix K.	

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SECTION F: PUBLIC PARTICIPATION

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

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

N/A

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

- The PPP for the project complies with the requirements of the Environmental Regulation 41 of the EIA Regulations, 2014 (as amended) -
  - Fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of the site where the activity to which the application relates is or is to be undertaken; an
  - Giving written notice, in any manner provided for in section 47D of the NEMA, to –
    - the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
    - owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
    - the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represents the community in the area;
    - (the municipality (Local and District Municipality) which has jurisdiction in the area;
    - Any organ of state having jurisdiction in respect of any aspect of the activity; and
    - any other party as required by the Competent Authority;
  - Placing an advertisement in -
    - one local newspaper; or
    - Using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy;(ii) disability; or (iii) any other disadvantage.
- The PPP for the project complies with the regulations stated above. It was undertaken as follows:
  - No pre-application PPP was undertaken.
  - A Site notice was fixed at a location where the public had the best chance of viewing the notice.
  - No alternative sites that warrant a site notice placed at any other location were considered.
  - Notification was given to relevant parties as per the requirements of the EIA Regulations.
  - An advertisement was placed in the 'George Herald' local newspaper. The newspaper complied with the minimum requirements of the Regulations and informed the public of the availability of the Draft BAR 30-day review and comment period, the comment period date, to whom and how to submit comments.
  - One hard copy of the Draft BAR was lodged at the George Library (Caledon Street).
  - A soft copy of the Draft BAR was available on Zutari's website.
  - A register of Interested and Affected Parties (I&APs) was maintained.
- A Comments and Responses Report is being maintained for the project and will be submitted together with the Final BAR for decision-making.
- Proof of PPP is included in Appendix F.

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

The following State Departments would be considered as part of the BA process and are therefore automatically registered as I&APs:

- Breede-Olifants Catchment Management Agency (BOCMA)
- CapeNature
- Department of Agriculture, Forestry and Fisheries (DAFF)
- Garden Route District Municipality
- George Municipality (various branches – refer to I&AP register)
- George Municipality
- Heritage Western Cape
- Western Cape Government, Department of Agriculture
- Western Cape Government, Department of Environmental Affairs & Development Planning
- Western Cape Government, Department of Transport and Public works

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

- Not applicable

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

- Pending PPP

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

Pending PPP

6.2 REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

ANNEXURE M

Note:

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

The EAP must notify I&APs that all information submitted by I&APs becomes public information.

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

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

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

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

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

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	✓NO
1.2.	Provide the name and or company that conducted the specialist study.		
N/A			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
N/A			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and the type of aquifer (if present) have influenced your proposed development.		
N/A			

2. Surface water

2.1.	Was a specialist study conducted?	✓YES	NO
2.2.	Provide the name and/or company that conducted the specialist study.		
Mr F.M. Rickler and J.M. Dabrowski- Confluent Environmental (Pty) Ltd			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		

The DFFE screening tool classified the site as being of Very High aquatic biodiversity for the following reasons:

- An aquatic Critical Biodiversity Area (CBA1) is mapped along one or more of the property boundaries; and
- The entire development area falls within the Outeniqua Strategic Water Source Area (SWSA).

The proposed development area is located in quaternary catchment K30C, in the catchment of the Skaapkop River.

According to the Aquatic Specialist Report compiled by Confluent, the proposed development will take place within the regulated area of three watercourses, and the development is located within the Outeniqua Strategic Water Source Area (SWSA). Therefore, the aquatic biodiversity potentially affected by the proposed development is confirmed to be Very High.

Two unchanneled valley-bottom (UVB) wetlands and a non-perennial stream are mapped adjacent to the boundaries of the development area. None of the watercourses occurs within the boundaries of the development area.

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To easily refer back to the watercourses near the proposed development area, the watercourses will be referred to as hydrogeomorphic units (HGM)[1] in combination with a number.

- HGM1 – An UVB wetland flowing along the western boundary of the development area before it joins the Skaapkop River (Figure 7)
- HGM2 – A non-perennial stream is mapped to flow along the eastern boundary of the development area and flows into the Skaapkop River (Figure 7).
- HGM3 - The Skaapkop River flows along the lower eastern boundary of the proposed development area and is mapped as an UVB wetland. (Figure 7).

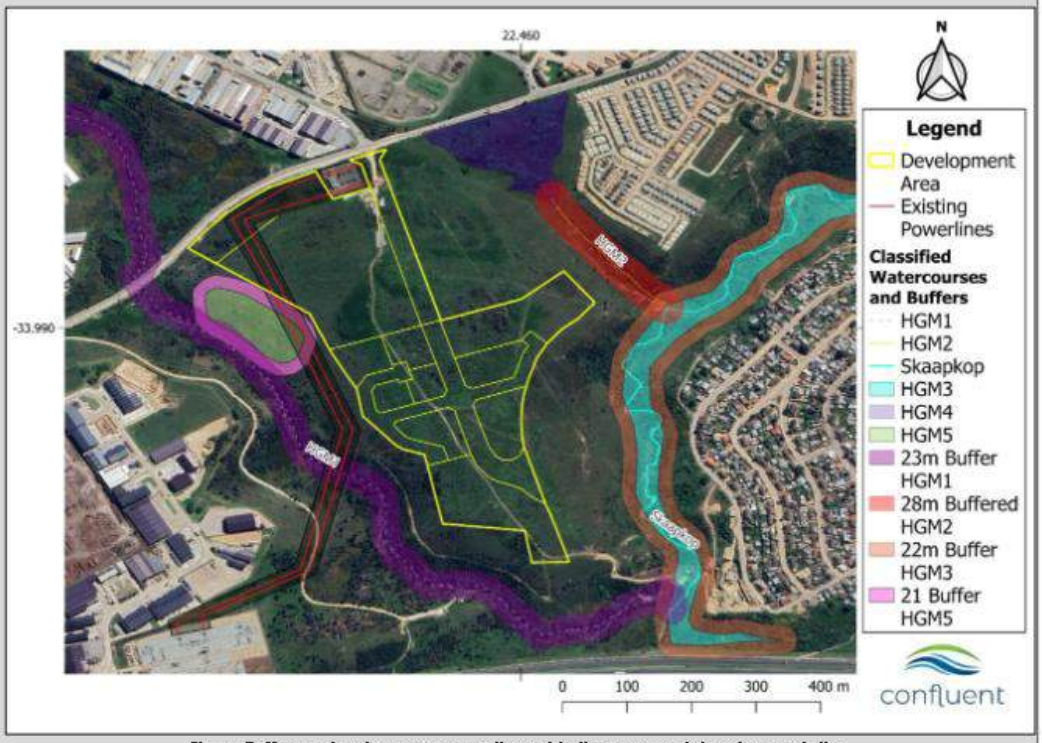

Figure 7: Mapped water resources adjacent to the proposed development site

Historical wetland features associated with HGM1 have now all but disappeared, and it is now more representative of a non-perennial stream. HGM1 is primarily dominated by Kikuyu grass and black wattle, with erosion along its banks.

HGM2 is a non-perennial stream, with prominent bed and banks with intermittent flow following rainfall events. The upper section of HGM2 is a seep wetland (HGM4) that follows the contours, changing to a channel as the valley becomes steeper downstream. HGM2 has been subjected to severe head-cut erosion all along its length till its confluence with the Skaapkop River.

Wetland habitat along the Skaapkop River (HGM3) has been heavily eroded, leading to a distinct, incised channel, bordered by remnant wetland vegetation along the banks. The vegetation in wetland areas is dominated by grasses and Juncus effusus, other species, including *Zantedeschia aethiopica*, *Cliffortia odorata* and invasives including *Cortaderia selloana*.

HGM4 is classified as an artificial seep wetland (situated on a slope with overland inflow and channelled outflow) associated with stormwater from two culverts draining PW Botha Boulevard and the industrial area upstream.

A seep wetland (HGM5) is present near the northwest corner of the proposed development area. HGM 5 is situated on a slope with overland inflow as well as interflow - channelled outflow is, however, absent at HGM5.

The revised Metro Grounds industrial development layout avoids the recommended buffer zones of the watercourses/wetlands near the development site.

[1] The Hydrogeomorphic (HGM) Classification identifies groups of wetlands that function similarly using three criteria that fundamentally influence how wetlands function. These criteria are geomorphic setting, water source, and hydrodynamics. Geomorphic setting refers to the landform in which the wetland occurs, its geologic evolution, and its topographic position in the landscape.

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Figure 8: A – Erosion on the western banks of HGM1, B – Headcut erosion within HGM2, C – vegetation within HGM4, D – Sewage leaking into HGM4, E – HGM3 east of the development area, F – Sewage leaking into HGM3.

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	✓NO
3.2.	Provide the name and/or company that conducted the specialist study.		
N/A			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
N/A			
3.4.	Explain how estuary management plans (if applicable) have influenced the proposed development.		
N/A			
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones have influenced the proposed development.		
N/A			

4. Biodiversity

4.1.	Were specialist studies conducted?	✓YES	NO
4.2.	Provide the name and/or company that conducted the specialist studies.		
Bianke Fouche and Dr James Dabrowski-Confluent Environmental (Pty) Ltd			

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4.3.	Explain which systematic conservation planning and other biodiversity informants, such as vegetation maps, NFEPA, NSBA, etc., have been used and how this has influenced your proposed development.

The following guidelines were used for the Terrestrial Biodiversity theme:

- The Western Cape Biodiversity Spatial Plan Handbook and summary booklet (Cape Nature, 2017; Pool-Sandvliet et al., 2017).
- The Subtropical Thicket Ecosystem Programme Handbook: Integrating the natural environment into land-use decisions at the municipal level: towards sustainable development (Pierce & Mader, 2006).
- Vegetation Map (2018)
- Ecosystem Guidelines for the Albany Thicket Biome (SANBI & CEN Integrated Environmental Management Unit, 2021)
- The Garden Route Initiative (GRI) map (Vlok et al., 2008)
- National Freshwater Ecosystem Priority Areas (NFEPA)

The proposed development site is mapped as the Garden Route Granite Fynbos (Critically Endangered, with vegetation along the development site not representing natural fynbos. Despite the disturbances from invasive plants and other impacts like illegal dumping on the site, the secondary fynbos sections support a good diversity of plant species.

According to the WCBSP (2017), the majority of the Metro Grounds industrial site was not located within a Critical Biodiversity Area (CBA), with only some sections around the periphery of the earmarked site falling within mapped critical biodiversity areas (CBAs) and Ecological Support Areas (ESAs)(Figure 9).

According to the updated WCBSP (2023), the Metro Grounds Industrial site now falls within a Terrestrial Critical Biodiversity Area (CBA1). The site has been ground-truthed by the Terrestrial Biodiversity Specialist and has been confirmed in the report that the new CBA1 areas on the proposed development sites have been incorrectly mapped, and this has been brought to the attention of Cape Nature, as the vegetation is transformed with no natural remaining vegetation. (Figure 9).

Mitigation measures for the impact of the proposed development have been taken into consideration for the proposed industrial development. Impact has been found not to have any residual impact post mitigation.

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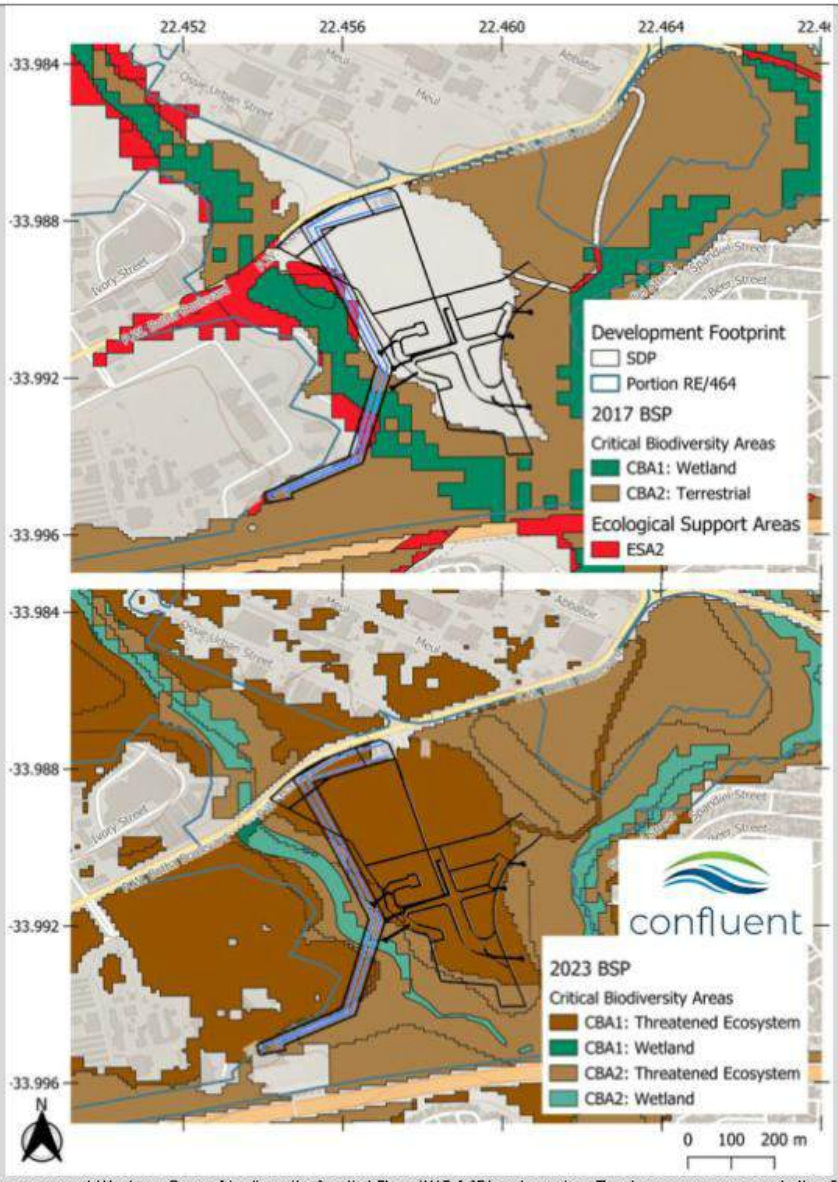

Figure 9: The mapped Western Cape Biodiversity Spatial Plan (WC BSP) categories. The top map represents the 2017 version of the map, which was in place at the beginning of this application, and the bottom map indicates the updated BSP, which was only released in early 2025.

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

Two of the objectives of the WCBSP is to:

- Provide guidelines that set out the desired management objectives for land and use in each category of biodiversity priority areas.
- Provide spatial planning and land-use decision-making guidelines to ensure environmentally sustainable development and resource use.

According to the WCBSP (2023), the development site falls within a Terrestrial Critical Biodiversity Area (CBA1). Mitigation measures for the impact of the proposed development have been taken into consideration for the proposed industrial development. The desired management objectives for CBA1 are to maintain in a natural area or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive sensitive land-uses are appropriate. The proposed development will have a low impact post mitigation; therefore, it is in line with the objectives of CBA1.

The Terrestrial Biodiversity Specialist and has confirmed in the report that the new CBA1 areas on the proposed development sites have been incorrectly mapped and this has been bought to the attention of Cape Nature, as the vegetation is transformed with no natural remaining vegetation. Unless actively rehabilitated and restored it is unlikely to return to natural vegetation.

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

According to the WCBSP (2017), the majority of the Metro Grounds industrial site was not located within a Critical Biodiversity Area (CBA), with only some sections around the periphery of the earmarked site falling within mapped critical biodiversity areas (CBAs) and Ecological Support Areas (ESAs)(Figure 9).

According to the updated WCBSP (2023), the Metro Grounds industrial site now falls within a Terrestrial Critical Biodiversity Area (CBA1). The site has been ground-truthed by the Terrestrial Biodiversity Specialist and has been confirmed in the report that the new CBA1 areas on the proposed development sites have been incorrectly mapped, and this has been brought to the attention of Cape Nature, as the vegetation is transformed with no natural remaining vegetation.

CBA2 areas are in the same place they were in the 2017 version (Figure 9).

Figure 10: WCBSP (2023) of the proposed Metro Grounds Industrial Site

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

N/A

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

The observed faunal diversity during the site visit was notably low, indicating that the area is not functioning as a significant habitat for key faunal species.

Based on the recommendations from the Terrestrial Biodiversity specialist, the development activities should be restricted to the designated footprint area to prevent encroachment into surrounding areas and habitats of conservation concern.

The proposed development will incorporate green spaces with indigenous vegetation into the site plan. These spaces can serve as biodiversity refuges and help mitigate the ecological footprint of the development.

5. Geographical Aspects

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

The proposed development will have the following geographical and physical aspects:

- The transformation of land from undeveloped to built-up land (i.e. change of human and physical characteristics)
- The removal of vegetation will lead to a visual contrast.
- There will be increased vehicular movement in the vicinity.
- The generation of waste;
- The generation of dust, and
- The use of energy resources and water.

The influence of these aspects on the development relates to the mitigation of predicted impacts.

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6. Heritage Resources

6.1.	Was a specialist study conducted?	✓YES	NO
6.2.	Provide the name and/or company that conducted the specialist study.		
Stefan De Kock- Perception Planning			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
No sensitive heritage resources have been identified on site. The study area has been substantially degraded through vegetation clearing, earthworks, dumping, installation of engineering services and various other forms of human intervention for an extended period (i.e. pre-1936) and is now enveloped by established development comprising a broad range of urban-related land uses. Preliminary analysis of the cultural landscape context did not reveal important traditional landscape patterns of cultural significance that may be negatively impacted through the implementation of the proposal. Similarly, the proposal is not likely to impact on archaeological, palaeontological or built heritage of cultural significance. Based on the information made available, it is therefore considered that the proposal would not impact any heritage resources of cultural significance and that no further heritage-related studies would be necessary			

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how this has influenced the proposed development.
No cultural or historically significant elements have been identified. In response to the Notification of Intent to Develop, Heritage Western Cape responded that, *You are hereby notified that, since there is no reason to believe that the proposed development of an industrial area on Erf 464 Portion Remainder, Metro Grounds Industrial Development, George will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay.* Refer to Appendix E1 for the statement issued by HWC.

•

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
The Garden Route District Municipality encompasses seven local municipalities, each contributing differently to its overall composition. Within the Garden Route District Municipality, George Municipality accounts for 35.3% of the total population and 34.1% of the households. The local municipality experienced 2.8% year-on-year population growth between 2013 to 2023, surpassing the district municipality's growth rate of 2.3%. Both the district municipality (DM) and local municipality (LM) experienced higher growth rates compared to the Western Cape (1.9%). The population's growth rate serves as a key indicator of increasing opportunities within both the DM and LM. Furthermore, the population density of 58.3 individuals per km² indicates enough space to accommodate a larger population in the local municipality. The average household income in the local municipality compares close to the district, at an average of R16 502, which is slightly higher than the district's average of R15 368 and significantly lower than the provincial average of R20 266.	
8.2.	Explain the socio-economic value/contribution of the proposed development.
The proposed development is poised to draw in a surge of residents to the study area, primarily owing to the numerous employment opportunities that will be generated as a direct result of the project. The creation of multiple job opportunities serves as a compelling magnet, enticing individuals to relocate and settle within the vicinity of the project. This influx of population is expected to be a natural consequence of the employment prospects that the project brings, thereby contributing significantly to the demographic landscape of the area. As these employment opportunities take place, the local community is likely to witness an influx of new residents, thereby fostering both social and economic growth within the region.	
8.3.	Explain what social initiatives will be implemented by the applicant to address the needs of the community and to uplift the area.
Job creation- Due to the operation, industry stimulation and employment opportunities, households could potentially experience better standards of living. Due to the development of a new education facility in the area, the supply of available education facilities for the community of the region.	
8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place, etc) and how this has influenced the proposed development.
• The removal of vegetation leading to increased visual contrast, degradation of the landscape character and visual intrusion. • Alteration of surface topography as a result of infrastructure placement and positioning, leading to loss of visual quality and visual exposure. • The proposed development will result in noise impacts during the construction and operation phase of the project. • Due to the development of a new industrial zone, new businesses, mainly businesses generating pollutants, the community's view, air and sound can potentially be compromised. There will be planting of trees to mitigate the visual impacts from the N2 and improve scenic quality. The trees will also act as a noise buffer for the neighbouring communities	

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SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred property and site alternative.

The proposed Metro Grounds industrial development will be located on the Remainder of Erf 464, George. No site alternatives are available.

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

No other properties were investigated.

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

The proposed site location is owned by George Municipality so this would eliminate the need to buy or lease the property. The proposed development fits in with the surrounding industrial land use. The property and development were earmarked and forms part of the George South-East Local Spatial Development Framework (October 2015).
The site is ideally located near existing industrial erven and municipal services.

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

The proposed site location is owned by George Municipality so this would eliminate the need to buy or lease the property. The proposed development fits in with the surrounding industrial land use. The property and development were earmarked formed part of the George South-East Local Spatial Development Framework (October 2015).
The site is ideally located for a development of this nature, there is easy access to public road transportation.

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

George Municipality proposes the development of a portion of the Remaining Extent of Erf 464.

There is limited developable land within the George Municipality Urban Edge, the site has been selected for development by the applicant, no other site alternative has been considered for this type of development due to space constraints. The site is ideally located near existing industrial erven and municipal services.

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

No site alternatives were considered so the impacts listed below are for the preferred site alternative.

Negative:

- Noise
- Dust
- Loss of vegetation
- An increase in traffic due to construction vehicles and heavy vehicles could create short-term disruptions and safety hazards for current road users.
- Removal of vegetation leading to increased visual contrast, degradation of the landscape character and visual intrusion to sensitive receptors.
- Risk of erosion
- Risk of contaminating watercourses

Positive:

- Job creation
- Investment in the facility will generate revenue for the government during the construction period through a combination of personal income tax, VAT, companies' tax etc.
- Increased GDP
- Temporary increase in household earnings
- Contribution to skills development
- Temporary increase in employment
- Sustainable increase in national and local government revenue

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

Provide a description of the preferred activity alternative.

The subject portion of the Remainder of Erf 464, George has been identified as land to accommodate an industrial development.

The project involves the identification, subdivision and zoning of serviced light industry erven for small- and medium-enterprises
development. The industrial stands will be serviced with electrical, water, wastewater, stormwater and road infrastructure, which are included in this application. The small industrial stands will be released to users or buyers. The proposed development also includes an educational erf that is earmarked to be developed as a tertiary educational facility.

- Education facility: 5.32 ha
- Industry: 8.33 ha
- Private open space: 1.3 ha
- Public Street: 3.70 ha

A detailed description of the proposed development (preferred alternative) is provided earlier in this report.

Provide a description of any other activity alternatives investigated.

Provide a motivation for the preferred activity alternative.

The preferred activity alternative, which includes education, industrial, private open space, and street zonings, has been identified as the most appropriate option to address the current and future land use needs within the George Local Municipality. This alternative directly supports the municipality's strategic development goals by providing erven that meet growing demand for industrial and educational facilities, while also ensuring the integration of accessible open space and supporting infrastructure.
The site's location adjacent to the existing industrial area makes it particularly suitable for this form of development.

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Provide a detailed motivation if no activity alternatives exist.

With limited developable land within the George Municipality's Urban Edge, the proposed site has been selected for the development by the applicant, no site alternatives have been considered.

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

Positive

- An increase in employment opportunities during construction and operation.
- Increase in Industrially Zoned Property Supply in the Area.
- Optimize vacant land located within the urban edge.
- Increase in Education Supply in the Area.
- Sustainable increase in national and local government revenue due to the operation of the industrial development and education facility.
- Creation of Sustainable Employment Positions Nationally and Locally.
- Temporary increase in country's GDP due to capital expenditure during the construction period.
- There will be an increased contribution to skills development during construction of the proposed development. The proposed education facility will also contribute to the development and enhancement of skills of young people in George.

Negative:

- An increase in traffic due to construction vehicles and heavy vehicles could create short-term disruptions and safety hazards for current road users.
- An impact on the demographics of the area as a result of in-migration in response to job opportunities will occur.
- Permanent change in the local landscape character from the operation of the industrial complex, educational facility and the proposed bus terminal.
- Risk of erosion
- Risk of contamination of watercourses
- Removal of vegetation leading to increased visual contrast, degradation of the landscape character and visual intrusion to sensitive receptors.

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

Provide a description of the preferred design or layout alternative.

The original layout had a footprint of approximately 19.99ha, which was amended to largely avoid the identified environmentally sensitive areas (botanical and aquatic resources), resulting in an amended layout with a footprint of 18.55ha. Subsequently, there were additional changes to accommodate the Rand Street Extension and the bus depot (including access road), which resulted in a further revision of the layout to a 16.54ha footprint. The three key layouts are shown below to understand the progression of the project layout through the application.

Original proposed layout (19.99ha)

Revision 1 Layout (18.55ha)

Revision 2 Layout (16.54ha)

Figure 11: Layout revisions

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

Original proposed layout - 19.99ha

The original layout had the following components and footprints:

- Education facility: 7.14 ha
- Industry: 9.1 ha
- Public Street: 4.65 ha

Revision 1 – 18.55ha

Revision 1 had the following components and footprints:

- Community Zone I (Education facility) on ±5.32 ha
- Industrial Zone I (Industry) on ±8.33ha
- Open Space Zone II (Open Space) on ± 1.3 ha
- Public Street (Transport Zone II) on ±3.70 ha

Revision 2 – 16.54ha

Revision 2 had the following components and footprints:

- Community Zone I (Education facility) on ±5.34 ha.
- Industrial Zone I (Industry) on ±5.56ha.
- Transport Zone I on ±1.76ha
- Open Space Zone II (Open Space) on ± 1.3 ha.
- Public Street (Transport Zone II) on ±2.58 ha

Provide a motivation for the preferred design or layout alternative.

The proposed layout has largely avoided the sensitive areas and is aligned with future adjoining projects. Therefore, this allows the applicant (George Municipality) to reduce impacts on the environmentally sensitive areas. In terms of the impact mitigation hierarchy, the team has avoided impacts by reducing the footprint of the proposed Metro Grounds development. Efforts have also been made to align the project with future adjoining projects to ensure that an integrated layout is realised.	
Provide a detailed motivation if no design or layout alternatives exist.	
As described above, the applicant considered two layout options before finalising the layout. The original layout encroached on sensitive environmental features (wetlands), and the layout was therefore revised to avoid these features, and further adjusted to align with future adjoining projects (i.e. the bus depot and Rand Street Extension).	
List the positive and negative impacts that the design alternatives will have on the environment.	
Positive: • The preferred layout has avoided key environmentally sensitive areas. • The layout will integrate with the future adjoining projects. Negative: • Leaking sewage infrastructure is a pervasive problem throughout the whole of the upper Skaapkop catchment, and additional developments will only increase the burden on a system that is currently failing to effectively reticulate existing sewage volumes.	
1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred technology alternative:	
Implementation of Sustainable Drainage Systems (SuDS) with the objective of Sustainable Drainage Systems (SuDS) must be implemented by the respective end user with the objective of attenuating stormwater onsite and reducing volumes of stormwater input into the development-wide stormwater system and watercourses: • Rainwater harvesting tanks must be installed at all buildings; • Swales and detention ponds must be incorporated into the open space network to attenuate stormwater runoff; encourage infiltration and reduce the speed, energy and volumes at which stormwater is discharged from the site; • Use of permeable paving to encourage infiltration into the soil; and • Use of detention ponds and artificial wetlands to capture stormwater runoff and reduce the velocity of discharge from the site.	
Provide a description of any other technology alternatives investigated.	
No other technology alternatives were investigated.	
Provide a motivation for the preferred technology alternative.	
The technology alternative is not being assessed.	
Provide a detailed motivation if no alternatives exist.	
At this stage, there are no feasible or reasonable technology alternatives, and detailed consideration for the use of water and energy-saving technologies will be taken in the next phase of development.	
List the positive and negative impacts that the technology alternatives will have on the environment.	
Technology alternatives are not being assessed.	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
The proposed development will operate as a mixed-use industrial (commercial) and educational facility.	
Provide a description of any other operational alternatives investigated.	
No operational alternatives were investigated.	
Provide a motivation for the preferred operational alternative.	
No operational alternatives exist.	
Provide a detailed motivation if no alternatives exist.	
The site was earmarked for the proposed Metro Grounds Mixed Use development, which was included in the MSDF. The applicant will implement the proposed alternative.	
List the positive and negative impacts that the operational alternatives will have on the environment.	
Negative impacts: • Degradation and erosion of aquatic habitat/watercourses due to increased stormwater discharge from the development. • Degradation of watercourses caused by edge-effects associated with increased anthropogenic activity within and around the development area. • Increased human activity that might disturb the habitat of the Knysna Warbler along the Skaapkop River. • Negative impacts on the sense of places (noise, dust and visual). **Positive impacts:** • Employment creation during construction and operation. • Growth of municipal revenues due to raised taxes and service levies. • Contribution to Regional GDP. • Contribution to skills development. • Temporary increase in household earnings • Increase in education supply in the George area.	
1.6.	The option of not implementing the activity (the 'No-Go' Option).
Provide an explanation as to why the 'No-Go' Option is not preferred.	
The "no go "alternative is the option of declining to proceed with the proposed development, in which case the status quo and/or current activities on the project site would continue. If this option is chosen, there will be no impact on the existing environmental baseline and no benefits to the local economy and affected communities.	

The "no go" alternative thus bears the opportunity cost of socioeconomic benefits to the local community that will go unrealised.	
1.7.	Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
N/A	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
The original proposed layout for the Metro Grounds industrial development was as per Figure 11 above. The original layout was approximately 19.99ha, which was amended to avoid sensitive areas. The amended layout **Error! Reference source not found.** is approximately 18.55ha in size. The preferred layout has avoided all the environmentally sensitive areas and has reduced the environmental impacts on the wetlands and the sensitive vegetation.	

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during the identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
The identified no-go areas are all the areas outside of the development footprint. Buffers have been created around the environmentally sensitive areas.

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

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.
No significant impacts were assessed for the proposed development. All specialists undertook compliance statements which were in line with the guidelines and protocols for specialist assessments. The proposed development sites do not contain any definable sensitive areas and has been heavily transformed. The following methodology was used to assess the impacts: This section outlines the proposed method for assessing the significance of the potential environmental impacts. For each predicted impact, criteria are ascribed, and these include the intensity (size or degree scale), which also includes the type of impact, being either a positive or negative impact; the duration (temporal scale); and the extent (spatial scale), as well as the probability (likelihood). The methodology is quantitative, whereby professional judgement is used to identify a rating for each criteria based on a seven-point scale (refer to Table 3); and the significance is auto-generated using a spreadsheet through application of the calculations in Figure 12. Specialists can comment where they disagree with the auto-calculated impact significance rating.

Calculations

For each predicted impact, certain criteria are applied to establish the likely **significance** of the impact, firstly in the case of no mitigation being applied and then with the most effective mitigation measure(s) in place.

These criteria include the **intensity** (size or degree scale), which also includes the **type** of impact, being either a positive or negative impact; the **duration** (temporal scale); and the **extent** (spatial scale). These numerical ratings are used in an equation whereby the **consequence** of the impact can be calculated. Consequence is calculated as follows:

Consequence = type x (intensity + duration + extent)

To calculate the significance of an impact, the **probability** (or likelihood) of that impact occurring is applied to the consequence.

Significance = consequence x probability

Depending on the numerical result, the impact would fall into a significance category as negligible, minor, moderate or major, and the type would be either positive or negative.

Figure 12: Calculation of significance

Table 3: Assessment criteria for the evaluation of impacts

Criteria	Numerical Rating	Category	Description
Duration	1	Immediate	Impact will self-remedy immediately
	2	Brief	Impact will not last longer than 1 year
	3	Short term	Impact will last between 1 and 5 years
	4	Medium term	Impact will last between 5 and 10 years
	5	Long term	Impact will last between 10 and 15 years
	6	On-going	Impact will last between 15 and 20 years
	7	Permanent	Impact may be permanent, or in excess of 20 years
Extent	1	Very limited	Limited to specific isolated parts of the site
	2	Limited	Limited to the site and its immediate surroundings
	3	Local	Extending across the site and to nearby settlements
	4	Municipal area	Impacts felt at a municipal level
	5	Regional	Impacts felt at a regional level

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	6	National	Impacts felt at a national level
	7	International	Impacts felt at an international level
Intensity	1	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
	2	Very low	Natural and/ or social functions and/ or processes are slightly altered
	3	Low	Natural and/ or social functions and/ or processes are somewhat altered
	4	Moderate	Natural and/ or social functions and/ or processes are moderately altered
	5	High	Natural and/ or social functions and/ or processes are notably altered
	6	Very high	Natural and/ or social functions and/ or processes are majorly altered
	7	Extremely high	Natural and/ or social functions and/ or processes are severely altered
Probability	1	Highly unlikely / None	Expected never to happen
	2	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
	3	Unlikely	Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur
	4	Probable	Has occurred here or elsewhere and could therefore occur
	5	Likely	The impact may occur
	6	Almost certain / Highly probable	It is most likely that the impact will occur
	7	Certain / Definite	There are sound scientific reasons to expect that the impact will definitely occur

When assessing impacts, broader considerations are also taken into account. These include the level of confidence in the assessment rating; the reversibility of the impact; and the irreplaceability of the resource as set out in Table 4, Table 5 and Table 6, respectively.

Table 4: Definition of confidence ratings

Category	Description
Low	Judgement is based on intuition
Medium	Determination is based on common sense and general knowledge
High	Substantive supportive data exists to verify the assessment

Table 5: Definition of reversibility ratings

Category	Description
Low	The affected environment will not be able to recover from the impact - permanently modified
Medium	The affected environment will only recover from the impact with significant intervention
High	The affected environmental will be able to recover from the impact

Table 6: Definition of irreplaceability ratings

Category	Description
Low	The resource is not damaged irreparably or is not scarce
Medium	The resource is damaged irreparably but is represented elsewhere
High	The resource is irreparably damaged and is not represented elsewhere

Table 7: Significance Categories

Significance:	negative	positive
Negligible	Negligible - negative	Negligible - positive
Minor	Minor - negative	Minor - positive
Moderate	Moderate - negative	Moderate - positive
Major	Major - negative	Major - positive

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

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

CONSTRUCTION

Project phase	Construction			
Impact	**Visual: Intensification of industrial landscape within the George.**			
Description of impact	Alteration of the landscape through its transformation from an urban, undetermined open space to an industrial nature.			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts.		
Potential mitigation	Dust management from wind and the movement of vehicles.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Minor - negative**	
Comment on significance	The minor significance is largely due to the short-term of construction impacts and the fact that other similar developments already exist in the area.			
Cumulative impacts	Cumulative impacts are expected to be of low significance.			

Project phase	Construction			
Impact	**Aquatic: Increase of erosion due to the clearance of vegetation during the construction phase**			
Description of impact	As vegetation is being cleared for construction, more soil surface is exposed, which will increase the likelihood of erosion and sediment being deposited into receiving watercourses by surface runoff during heavy rainfall events.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Soil loss is related to the length of time that soils are exposed prior to rehabilitation or stabilisation. Therefore, the gap between construction activities and rehabilitation should be minimised. Phased construction and progressive rehabilitation, where practically possible, are therefore important elements of the erosion control strategy. • Install silt fences or sediment barriers around the perimeter of the construction site to trap sediment-laden runoff and prevent it from entering the surrounding watercourses. • Do not clear vegetation outside the development area. • The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffers. • All stockpiles must be covered at the end of the day. • Install temporary drainage controls such as swales or berms to manage runoff where necessary. • All materials used during construction must follow the best practice guidelines set out for each product. • Check weather reports ahead and prepare the site when rainfall is predicted. Discontinue any works on the site during rainfall. • Construct check dams or sediment basins for flooded construction areas to be drained into if need be, to trap sediment, and facilitate sediment settlement before runoff reaches the non-perennial drainage line. • All bare areas should be revegetated with appropriate locally occurring species, to bind the soil and limit erosion potential. • Topsoil should be removed and stored in a designated area separately from subsoil and away from construction activities. Topsoil should be reapplied where appropriate as soon as possible in order to encourage and facilitate rapid regeneration of the natural vegetation in cleared areas.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
Extent	Very limited	Limited to specific isolated parts of the site	Very limited	Limited to specific isolated parts of the site

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Intensity	Very high	Natural and/ or social functions and/ or processes are majorly altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Unlikely	Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Construction			
Impact	**Aquatic: An increase in erosion due to the clearance of vegetation during the construction phase**			
Description of impact	As vegetation is being cleared for construction, more soil surface is exposed, which will increase the likelihood of erosion and sediment being deposited into receiving watercourses by surface runoff during heavy rainfall events.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Soil loss is related to the length of time that soils are exposed prior to rehabilitation or stabilisation. Therefore, the gap between construction activities and rehabilitation should be minimised. Phased construction and progressive rehabilitation, where practically possible, are therefore important elements of the erosion control strategy.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
Extent	Very limited	Limited to specific isolated parts of the site	Very limited	Limited to specific isolated parts of the site
Intensity	Very high	Natural and/ or social functions and/ or processes are majorly altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Unlikely	Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

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Project phase	Construction			
Impact	**Socio-Economic: Increased Production**			
Description of impact	Expenditure associated with the construction of the proposed mixed-use development will impact the production of the local economy.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• The project developer should use locally sourced inputs where feasible in order to maximize the benefit to the local economy. Sub-contracting of local construction companies to occur as far as possible for the construction of facilities.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Municipal area	Impacts felt at a municipal level	Regional	Impacts felt at a regional / provincial level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Almost certain / Highly probable	It is most likely that the impact will occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource ireplaceability	High	The resource is irreparably damaged and is not represented elsewhere	High	The resource is irreparably damaged and is not represented elsewhere
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Socio-Economic: Increase in GDP**			
Description of impact	Temporary increase in the country's GDP due to capital expenditure during the construction period			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• The project developer is to use locally sourced inputs where feasible in order to maximise the benefit to the economy.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Municipal area	Impacts felt at a municipal level	Municipal area	Impacts felt at a municipal level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Almost certain / Highly probable	It is most likely that the impact will occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive, supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource ireplaceability	High	The resource is irreparably damaged and is not represented elsewhere	High	The resource is irreparably damaged and is not represented elsewhere
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of a positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

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Project phase	Construction			
Impact	**Socio-Economic: Contribution to Skills Development**			
Description of impact	Employees will develop and enhance skills, thereby increasing experience and knowledge.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• In order to maximise the positive impact, it is suggested that the project company provide training courses for employees, where feasible, to ensure that employees gain as much as possible from the work experience. Facilitate the transfer of knowledge between experienced employees and the staff. Perform a skills audit to determine the potential skills that could be sourced in the area.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Limited	Limited to the site and its immediate surroundings	Municipal area	Impacts felt at a municipal level
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Likely	The impact may occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource ireplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Socio-Economic: Temporary Increase in Household Earnings**			
Description of impact	Employed individuals will increase the income of their respective households and thereby experience an improvement in their standard of living.			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• Local employment will benefit local households and the local area.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Limited	Limited to the site and its immediate surroundings	Municipal area	Impacts felt at a municipal level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Likely	The impact may occur	Certain/definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	Medium	Determination is based on common sense and general knowledge	High	Substantive, supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact, permanently modified	Low	The affected environment will not be able to recover from the impact, permanently modified
Resource ireplaceability	Low	The resource is not irreparably damaged or is not scarce	Low	The resource is not irreparably damaged or is not scarce
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

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Project phase	Construction			
Impact	**Socio-Economic: Sustainable increase in national and local government revenue**			
Description of impact	The investment in the facility will generate revenue for the government during the construction period through a combination of personal income tax, VAT, companies' tax, etc.			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Positive impact, no mitigation proposed.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Almost certain / Highly probable	It is most likely that the impact will occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - positive**		**Minor - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. There would be no mitigation measures.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Socio-Economic: Temporary Increase in Employment**			
Description of impact	The construction of the projects will positively impact the community and beyond by creating a number of job opportunities.			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Organise local community meetings to advise the local labour on the project that is planned to be established and the jobs that can potentially be applied for. Where feasible, effort must be made to employ locally in order to create maximum benefit for the communities.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Municipal area	Impacts felt at a municipal level	Regional	Impacts felt at a regional/provincial level
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Likely	The impact may occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not irreparably damaged or is not scarce	Low	The resource is not irreparably damaged or is not scarce
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

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Project phase	Construction			
Impact	**Socio-Economic: Negative Change to the Sense of Place**			
Description of impact	Negative impact on the sense of place (noise, dust and visual) for farmers where construction activities will take place			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Ensure proper health and safety plans are in place during the construction period to ensure safety on and around the site during construction. Site watering (or use of appropriate dust suppressant) when required to reduce dust emitted from the construction site.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Likely	The impact may occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	Low	Judgement is based on intuition	Low	Judgement is based on intuition
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Without mitigation, the impact will be of negative nature and of minor significance. Post-mitigation, the significance will be negligible.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Socio-economic: Temporary Increase in Social Conflicts with the Influx of People**			
Description of impact	An impact on the demographics of the area as a result of in-migration in response to job opportunities will occur.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• Where feasible, effort must be made to employ local labour in order to create maximum benefit for the communities and limit in-migration. Train unemployed local community members with insufficient skills and increase absorption of local labour, thereby decreasing in-migration.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Probable	The impact has occurred here or elsewhere and could therefore occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Without mitigation, the impact will be of negative nature and of minor significance. Post-mitigation, the significance will be negligible.			
Cumulative impacts	N/A			

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Project phase	Construction			
Impact	**Socio-Economic: Impact on Economic and Social Infrastructure**			
Description of impact	An increase in traffic due to construction vehicles and heavy vehicles could create short-term disruptions and safety hazards for current road users.			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Provide public transportation service for workers in order to reduce congestion on roads. Partner with local municipalities and other prominent users of the local roads to upgrade them to meet the required capacity and intensity of the vehicles related to the planned construction activities. Transportation contractors must adhere to the road rules and regulations. Utilise only designated access routes & entrance/exits from the site. Implement appropriate signage & road safety measures at entrance/exit to the site and on site			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Municipal area	Impacts felt at a municipal level	Local	Extending across the site and to nearby settlements
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Likely	The impact may occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Without mitigation, the impact will be of negative nature and of minor significance. Post-mitigation, the significance will be negligible.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Socio-Economic: Safety and Security**			
Description of impact	Farmers might feel that the increase in accessibility will increase theft in the area			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Ensure proper 24/7 security patrols the construction sites, as well as controlled access			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Probable	The impact has occurred here or elsewhere and could therefore occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	Without mitigation, the impact will be of negative nature and of minor significance. Post-mitigation, the significance will be negligible.			
Cumulative impacts	N/A			

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Project phase	Construction			
Impact	**Terrestrial Biodiversity: The Increased Risk of Invasive Plant Species Proliferation in Sensitive Fynbos Habitat Over Time.**			
Description of impact	Disturbance from: a) the period of time passing before the start of construction and b) pre-construction activities (e.g., site clearing, delineating the construction area etc.) will create conditions that favour the establishment of invasive alien plant species such as *Acacia mearnsii*, *Acacia melanoxylon*, and *Hakea sericea*, already documented on site and within the secondary fynbos fragments.			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• Implement an invasive alien plant control and management plan along the valley edges to the valley bottom. This should preferably occur prior to constriction. • Conduct plant rescue operations for species of conservation concern before site clearing in areas that will be affected by stormwater infrastructure. • Require contractor training on avoiding unnecessary encroachment into fynbos areas. • All new staff must be briefed about the layout of the construction site, including no-go areas, to ensure awareness of the sensitive surrounding environment that must not be disturbed.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Long term	Impact will last between 10 and 15 years	Brief	Impact will not last longer than 1 year
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Construction			
Impact	**Terrestrial Biodiversity: Loss and Further Fragmentation of Garden Route Granite Fynbos due to e.g., Stormwater Infrastructure, Occurring in Sensitive Fynbos**			
Description of impact	Vegetation clearance for infrastructure and development will result in direct habitat loss, particularly affecting the critically endangered Garden Route Granite Fynbos.			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• Demarcate no-go high sensitivity areas, especially around valley slopes where fynbos persists. • Incorporate a well-planned, phased construction approach to minimize the total disturbed area at any given time. • Minimize soil disturbance and establish defined walking paths to prevent soil compaction during clearing. • Ensure immediate rehabilitation of disturbed areas with indigenous species to limit reinvasion potential.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Long term	Impact will last between 10 and 15 years	Short term	Impact will last between 1 and 5 years
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention

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Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	N/A			

Project phase	Construction			
Impact	**Increased Negative Edge Effects Leading to Biodiversity Loss due to Construction Activities Occurring Close-by Remnant Fynbos Patches**			
Description of impact	• Increased human activity, construction dust, and potential pollution will degrade remnant fynbos patches, exacerbating ecological stressors like altered fire regimes and further invasive species encroachment. This impact also includes the impact that could occur if the the construction phase is inappropriately concluded and not cleaned up. See table 13 for mitigation measures.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• Implement dust suppression techniques and ensure proper waste disposal on-site. • Ensure proper waste management to prevent pollution of sensitive areas.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Long term	Impact will last between 10 and 15 years	Short term	Impact will last between 1 and 5 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Almost certain / Highly probable	It is most likely that the impact will occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Minor - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	N/A			

ANNEXURE M

OPERATIONAL IMPACTS

Project phase	Operation			
Impact	**Visual: Alteration of the landscape through its transformation from a rural to an industrial nature.**			
Description of impact	Alteration of the landscape through its transformation from a rural to an industrial nature.			
Mitigatability	Low	Mitigation does not exist; or mitigation will slightly reduce the significance of impacts		
Potential mitigation	Planting of street trees as per the specifications in the EMP.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Positive	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Permanent	Impact may be permanent, or in excess of 20 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate - negative**		**Moderate - positive**	
Comment on significance	The main driver of significance is the long duration. An impact of minor negative is probably more accurate due to the existing built nature of the surrounding areas.			
Cumulative impacts	Cumulative impacts are expected to be of low significance.			

Project phase	Operation			
Impact	**Socio-Economic: Sustainable Increase in Production**			
Description of impact	Expenditure associated with the operation of the development and its impact on the production of the local economy.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• The project developer should use locally sourced inputs where feasible in order to maximise the benefit to the local economy. Sub-contracting of local construction companies to occur as far as possible for the construction of facilities.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Municipal area	Impacts felt at a municipal level	Regional	Impacts felt at a regional / provincial level
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	Very high	Natural and/ or social functions and/ or processes are majorly altered
Probability	Likely	The impact may occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of moderate significance. Post-mitigation, the significance will remain moderate.			
Cumulative impacts	N/A			

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Project phase	Operation			
Impact	**Socio-Economic: Sustainable Increase in GDP**			
Description of impact	Temporary increase in the country's GDP due to capital expenditure during the construction period			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• The project developer is to use locally sourced inputs where feasible in order to maximize the benefit to the economy.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Long term	Impact will last between 10 and 15 years	Long term	Impact will last between 10 and 15 years
Extent	Municipal area	Impacts felt at a municipal level	Municipal area	Impacts felt at a municipal level
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	Very high	Natural and/ or social functions and/ or processes are majorly altered
Probability	Likely	The impact may occur	Likely	The impact may occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

Project phase	Operation			
Impact	**Socio-Economic: Creation of Sustainable Employment Positions Nationally and Locally**			
Description of impact	Due to the operation, industry stimulation and employment opportunities, households could potentially experience better standards of living.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Organise local community meetings to advise the local labour on the project that is planned to be established and the jobs that can potentially be applied for, where feasible and or practical. Where feasible, effort must be made to employ locally to create maximum benefit for the communities.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Long term	Impact will last between 10 and 15 years	On-going	Impact will last between 15 and 20 years
Extent	Municipal area	Impacts felt at a municipal level	Municipal area	Impacts felt at a municipal level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Likely	The impact may occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Low	The resource is not irreparably damaged or is not scarce	Low	The resource is not irreparably damaged or is not scarce
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of a positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

ANNEXURE M

Project phase	Operation			
Impact	**Socio-Economic: Sustainable Increase in National and Local Government Revenue**			
Description of impact	Sustainable increase in national and local government revenue due to the operation of the industrial development and education facility			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Positive impact, no mitigation proposed.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Long term	Impact will last between 10 and 15 years	On-going	Impact will last between 15 and 20 years
Extent	Municipal area	Impacts felt at a municipal level	Regional	Impacts felt at a regional / provincial level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Probable	The impact has occurred here or elsewhere and could therefore occur	Likely	The impact may occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

Project phase	Operation			
Impact	**Socio-Economic: Increase in Education Supply in the Area**			
Description of impact	Due to the development of a new education facility in the area, the supply of available education facilities for the community of the region.			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• In order the maximise the impact of the education facility on the community, the facility can make use of e-learning for students that does not need to be physically present, in order to allow more students to be enrolled at the facility.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Long term	Impact will last between 10 and 15 years	On-going	Impact will last between 15 and 20 years
Extent	Regional	Impacts felt at a regional / provincial level	Regional	Impacts felt at a regional / provincial level
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Likely	The impact may occur	Almost certain / Highly probable	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - positive**		**Moderate - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of minor significance. Post-mitigation, the significance will be moderate.			
Cumulative impacts	N/A			

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Project phase	Operation			
Impact	**Socio-Economic: Increase in Industrially Zoned Property Supply in the Area**			
Description of impact	Due to the expansion of the industrial zone in the town, more properties will be available where industrial operations can occur			
Mitigatability	Low	Mitigation does not exist; or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Positive impact, no mitigation proposed.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Positive		Positive	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Permanent	Impact may be permanent, or in excess of 20 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	High	Natural and/ or social functions and/ or processes are notably altered
Probability	Almost certain/Highly Probable	It is most likely that the impact will occur	Almost certain/Highly Probable	It is most likely that the impact will occur
Confidence	High	Substantive, supportive data exists to verify the assessment	High	Substantive, supportive data exists to verify the assessment
Reversibility	Low	The affected environment will not be able to recover from the impact - permanently modified	Low	The affected environment will not be able to recover from the impact - permanently modified
Resource irreplaceability	Low	The resource is not irreparably damaged or is not scarce	Low	The resource is not irreparably damaged or is not scarce
Significance	**Major - positive**		**Major - positive**	
Comment on significance	Without mitigation, the impact will be of positive nature and of major significance. There would be no mitigation measures to be taken.			
Cumulative impacts	N/A			

Project phase	Operation			
Impact	**Visual: Negative Changes to the Sense of Place**			
Description of impact	Due to the development of a new industrial zone, new businesses, mainly businesses generating pollutants, the community's view, air and sound can potentially be compromised.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• The developer can put policies in place in order to minimise pollutants that are expelled by factories, to set time limits on when businesses can operate, to limit noise and			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Almost certain / Highly probable	It is most likely that the impact will occur	Likely	The impact may occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Medium	The resource is damaged irreparably, but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Without mitigation, the impact will be of a negative nature and of moderate significance. Post-mitigation, the significance will be minor.			
Cumulative impacts	N/A			

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Project phase	Operation			
Impact	**Degradation and erosion of aquatic habitats/watercourses due to increased stormwater discharge from the development.**			
Description of impact	Increased stormwater discharge has caused widespread erosion and degradation of watercourses throughout George. The effects can be clearly seen in HGM2, which has been severely eroded due to to headcut erosion caused by increased stormwater flows.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	Implementation of Sustainable Drainage Systems (SuDS) must be implemented with the objective of attenuating stormwater onsite and reducing volumes of stormwater input in watercourses			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Very high	Natural and/ or social functions and/ or processes are majorly altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	Moderate - negative		Minor - negative	
Comment on significance				
Cumulative impacts				

Project phase	Operation			
Impact	**Degradation and erosion of aquatic habitat/watercourses due to increased stormwater discharge from the development.**			
Description of impact	Increased stormwater discharge has caused widespread erosion and degradation of watercourses throughout George. The effects can be clearly seen in HGM2 which has been severely eroded due to head cut erosion caused by increased stormwater flows.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Implementation of Sustainable Drainage Systems (SuDS) must be implemented with the the objective of attenuating stormwater on each erf and reducing volumes of stormwater input in watercourses. • Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer. • All headwall outlets and associated erosion control structures (e.g. reno mattresses and gabions) must be inspected and maintained on a routine basis. Inspect reno mattress structures after heavy rains to see if any erosion around or below the mattress has taken place or if stones have been dislodged.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Very high	Natural and/ or social functions and/ or processes are majorly altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact

Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Operation			
Impact	**Aquatic: Degradation and erosion of aquatic habitat/watercourses due to increased stormwater discharge from the development.**			
Description of impact	Increased stormwater discharge has caused widespread erosion and degradation of watercourses throughout George. The effects can be clearly seen in HGM2 which has been severely eroded due to headcut erosion caused by increased stormwater flows.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Implementation of Sustainable Drainage Systems (SuDS) must be implemented on each erf by the end users with the objective of attenuating stormwater onsite and reducing volumes of stormwater input in watercourses. • All headwall outlets and associated erosion control structures (e.g. reno mattresses and gabions) must be inspected and maintained on a routine basis. Inspect reno mattress structures after heavy rains to see if any erosion around or below the mattress has taken place or if stones have been dislodged. • Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Very high	Natural and/ or social functions and/ or processes are majorly altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Operation			
Impact	**Aquatic: Degradation of watercourses caused by edge-effects associated with increased anthropogenic activity within and around the development area.**			
Description of impact	Degradation of watercourses as a result of increased edge effects, including water quality changes, increased litter, erosion and alien plant invasion associated with localised increase in the residential population.			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	• Maintain buffer areas around all watercourses. • An alien invasive plant management plan must be formulated and implemented to control existing and future invasions along watercourses adjacent to the development areas. • A waste management plan must be developed and implemented, and solid waste must be removed from the buffer areas (minimum once a month).			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	On-going	Impact will last between 15 and 20 years	On-going	Impact will last between 15 and 20 years
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Unlikely	Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur

Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate - negative**		**Negligible - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Operation			
Impact	**Terrestrial Biodiversity: Long-Term Stormwater Management Impacts on Vegetation Dynamics**			
Description of impact	• Stormwater infrastructure will alter hydrological patterns, affecting remnant fynbos patches. Changes in drainage may lead to localised waterlogging or excessive runoff, negatively impacting species composition.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• Design stormwater outlets to disperse water gradually, preventing concentrated runoff. • Conduct routine sediment control inspections to mitigate erosion risks • Implement erosion control and plant indigenous wetland-adapted species in affected zones • Soft landscaping along road edges and on road islands is preferred over hard landscaping, which aligns with SuDS measures. Soft landscaping are natural spaces around constructed areas with plants, where water can flow into. Hard landscapes are impermeable surfaces, such as pavements and concrete driveways.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Permanent	Impact may be permanent, or in excess of 20 years
Extent	Very limited	Limited to specific isolated parts of the site	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

Project phase	Operation			
Impact	**Continued Spread of Invasive Alien Species & Potential Litter Effects in Remnant Fynbos Patches & Disturbed Areas Around the Development**			
Description of impact	• Even post-construction altered soil conditions and increased human activity will continue to facilitate the establishment of invasive alien plants.			
Mitigatability	Medium	Mitigation exists and will notably reduce the significance of impacts		
Potential mitigation	• Follow a clear "Alien and Invasive Species Management Plan" (refer to the Garden Route District Municipality Invasive Species Monitoring, Control, and Eradication Plan as an example) • Establish and maintain indigenous buffer vegetation along the development's periphery. • Encourage industrial site tenants to adhere to landscaping guidelines that exclude invasive species.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Long term	Impact will last between 10 and 15 years
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	High	Natural and/ or social functions and/ or processes are notably altered	Moderate	Natural and/ or social functions and/ or processes are moderately altered

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Probability	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur	Certain / definite	There are sound scientific reasons to expect that the impact will definitely occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Medium	The resource is damaged irreparably but is represented elsewhere
Significance	**Moderate - negative**		**Minor - negative**	
Comment on significance	Agree with assessed significance.			
Cumulative impacts	Same as assessed impact, mitigation measures are appropriate.			

NO GO ALTERNATIVE

Project phase	No-Go			
Impact	**Retaining the status quo.**			
Description of impact	Possible effect to the landscape through no development of the property.			
Mitigatability	Low	Mitigation does not exist, or mitigation will slightly reduce the significance of impacts		
Potential mitigation	• Increased policing of the vacant ground to reduce illegal dumping, illegal cattle grazing and illegal land grabs.			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Permanent	Impact may be permanent, or in excess of 20 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Medium	Natural and/ or social functions and/ or processes are somewhat altered	Low	Natural and/ or social functions and/ or processes are not altered
Probability	Possible	There are sound scientific reasons to expect that the impact may occur.	Possible	There are sound scientific reasons to expect that the impact may occur.
Confidence	Medium	Some supportive data exists to verify the assessment	Low	Substantive supportive data doesn't exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Moderate to High - negative**		**Low - negative**	
Comment on significance	Without mitigation there is a possibility that the vacant land will be used for illegal activities, with the location to employment opportunities and water within the immediate locality. The is likely to degrade the existing, medium to low visual resources of the site and increase the financial burden on the Municipality from having to retrofit a formalised development layout onto a informal development settlement pattern. With mitigation and the increased policing of the vacant land, it is possible that the existing status quo can be retained. This offers Low – negative risks to local landscape resources.			
Cumulative impacts	Cumulative impacts are expected to be of High significance as should a land grab take place, the value of the adjacent industrial parks could decline. Views from the eastern residential areas would also be degraded with reduced access to Public Open Space along the river corridor.			

ANNEXURE M

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

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

Agriculture:
The site has no current agricultural production potential due to the limitations of its location, the occupation of the site by the development cannot change its agricultural production potential. The development will therefore have zero agricultural impact and is therefore assessed as acceptable by the agricultural specialist.

The overall conclusion of the agricultural compliance statement is that the proposed development is acceptable because it leads to no loss of future agricultural production potential.

The agricultural compliance statement confirms the medium sensitivity rating of the site by the screening tool because of the site's assessed agricultural production potential and current agricultural land use. It however disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6.

Although the climate and terrain may allow for viable crop production, other factors constrain the potential of the site to practically deliver agricultural produce and therefore limit its agricultural production potential. These factors include:

- Its location, which has been transformed by expanding urbanisation, leaves it surrounded largely by non-agricultural land uses.
- The fact that land use planning in the spatial development framework designates the site for non-agricultural use.

For these reasons, the site will never be viably utilised for agricultural production and its potential is therefore assessed here as non-existent.

Animal:
The site sensitivity verification conducted on RE/Erf 464 has confirmed that the area has been heavily degraded due to past environmental and anthropogenic disturbances, including invasive plants, illegal dumping, and historical waste disposal activities. These factors have resulted in the significant transformation of natural habitats, making the site unsuitable for the SCC identified by the DFFE Screening Tool and public platforms. Although the DFFE Screening Tool initially indicated a HIGH sensitivity rating due to potential habitat for SCC to occur, the site inspection revealed a LOW sensitivity for the following reasons:

- This is attributed to the degraded condition of the site and the absence of suitable habitat for SCC's.
- The habitat of the Knysna Warbler (*Bradypterus sylvaticus*), which is present in the riparian thick vegetation along the Skaapkop River valley adjacent the proposed development area, will not be impacted as the proposed development footprint is located a significant distance from its suitable habitat.
- The observed faunal diversity during the site visit was notably low, indicating that the area is not functioning as a significant habitat for key faunal species.
- The development of the industrial zone surrounding the site has largely contributed to the decline of the sites ecological value. Industrial activities often lead to habitat destruction, pollution, and increased human encroachment, which impact the faunal diversity in surrounding areas.

The faunal specialist has made the following recommendations:

- Ensure that the suitable habitat of the Knysna Warbler along the Skaapkop River valley is preserved and buffered from any potential indirect impacts, such as noise, pollution, or increased human activity.
- Restrict development activities to the designated footprint area to prevent encroachment into surrounding areas and habitats of conservation concern.
- Incorporate green spaces with indigenous vegetation into the site plan. These spaces can serve as biodiversity refuges and help mitigate the ecological footprint of the development.
- Create buffer zones around sensitive areas, such as the wetland, to reduce the impact of construction activities. These buffers should include indigenous plants species and support local biodiversity.
- Install drainage systems that manage stormwater effectively, preventing contamination and erosion in the wetland.
- Implement a monitoring program during and after construction to track ecological changes and ensure compliance with environmental management plans. Use the data to adaptively manage the site to mitigate unforeseen impacts.

Aquatic:
The site is characterised by sensitive watercourses and wetlands adjacent to the site, including hydrogeomorphic unit 1 (HGM1), HGM2, HGM4, and HGM5, which have been compromised by historical and ongoing impacts mainly attributed to leaking sewage infrastructure and increased stormwater runoff. These factors have led to largely modified ecological states, emphasising the need for mitigation measures to prevent further degradation and improvement of ecosystem services.

The following mitigation measures have been recommended by the aquatic specialist:

- Install silt fences or sediment barriers around the perimeter of the construction site to trap sediment-laden runoff and prevent it from entering the surrounding watercourses.
- Do not clear vegetation outside the development area.
- The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffers.
- All stockpiles must be covered at the end of the day.
- Install temporary drainage controls such as swales or berms to manage runoff where necessary.
- Construct check dams or sediment basins for flooded construction areas to be drained into if need be, to trap sediment, and facilitate sediment settlement before runoff reaches the non-perennial drainage line.
- All bare areas should be revegetated with appropriate locally occurring species, to bind the soil and limit erosion potential.

- Topsoil should be removed and stored in a designated area separately from subsoil and away from construction activities. Topsoil should be reapplied where appropriate as soon as possible in order to encourage and facilitate rapid regeneration of the natural vegetation in cleared areas.
- Maintain buffer areas around HGM1, HGM2, HGM4, and HGM5 Figure 15. Buffers will remove sediment, organic matter, and other pollutants (nutrients, toxins and pathogens) from sheet flow and wastewater before they reach water bodies.
- Ensure that the site is clean of any packaging material, food containers, plastic bottles or any other solid waste products. An integrated waste management system must be followed during construction (e.g. recycling). All waste must be placed in skips on-site and around the construction sites and regularly removed from the site.
- All hazardous storage containers and storage areas must meet relevant SABS standards to prevent leakage and contamination of surface and groundwater.
- Implementation of Sustainable Drainage Systems (SuDS) must be implemented on each erf by the end user with the objective of attenuating stormwater onsite and reducing volumes of stormwater input in watercourses:
    - Rainwater harvesting tanks must be installed at all buildings.
    - Swales and detention ponds must be incorporated into the open space network to attenuate stormwater runoff, encourage infiltration and reduce the speed, energy and volumes at which stormwater is discharged from the site;
    - Use of permeable paving to encourage infiltration into the soil; and
    - Use of detention ponds and artificial wetlands to capture stormwater runoff and reduce the velocity of discharge from the site.
- Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.
- All headwall outlets and associated erosion control structures (e.g. reno mattresses and gabions) must be inspected and maintained on a routine basis. Inspect reno mattress structures after heavy rains to see if any erosion around or below the mattress has taken place or if stones have been dislodged.
- No stormwater may be directed into HGM2 without prior rehabilitation to address headcut erosion in the watercourse.
- Guidelines for residents must be drawn up which prohibit the dumping of hazardous materials into stormwater drains.

Archaeological:

According to the NID compiled by Perception Planning, the proposed development will not impact on any heritage resources of cultural significance and no further heritage-related studies would be required.

In response to the Notification of Intent to Develop, Heritage Western Cape responded that:
"You are hereby notified that, since there is no reason to believe that the proposed development of an industrial area on Erf 464 Portion Remainder, Metro Grounds Industrial Development, George will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay"

Socio-Economic:

The net positive impacts associated with the construction of the Proposed Project are expected to outweigh the net negative effects. The Project is also envisaged to have a positive stimulus on the local economy and employment creation, leading to the economy's diversification and a small reduction in the unemployment rate.

The proposed mixed-use industrial should therefore be considered for development. It should, however, be acknowledged that the negative impacts would be largely borne by the nearby developments and households residing on them, whilst the positive impacts will be distributed throughout both the local and national economies. Due to this imbalance, it is recommended that the mitigation measures suggested be strictly adhered to.

The following impact mitigation measures have been recommended by the Socio-economic impact assessment:

- Ensure proper health and safety plans in place during the construction period to ensure safety on and around site during construction. Site watering (or use of appropriate dust suppressant) when required to reduce dust emitting from the construction site.
- Where feasible, effort must be made to employ local labour in order to create maximum benefit for the communities and limit in-migration. Train unemployed local community members with insufficient skills and increase absorption of local labour thereby decreasing in-migration.
- Provide public transportation service for workers in order to reduce congestion on roads. Partner with local municipalities and other prominent users of the local roads to upgrade them to meet the required capacity and intensity of the vehicles related to the planned construction activities. Transportation contractors must adhere to the road rules and regulations. Utilise only designated access routes & entrance/exits from the site. Implement appropriate signage & road safety measures at entrance/exit to the site and on site.

Terrestrial Biodiversity:

- The site assessment confirms that the Metro Grounds development is situated within a transformed landscape, with fynbos vegetation primarily restricted to valley slopes, which is largely outside of the Metro Grounds development plan extent. The site assessment on RE/464 was used to create a framework within which the majority of the vegetation on the site could be classified into transformed fields, while the remaining vegetation around the periphery was mainly classified as fynbos.
- The transformed grassy fields have very little ecological value. However, the fynbos vegetation persisting along the valley edges, especially along the western side of the site, exhibits significant biodiversity and ecological importance, supporting a variety of indigenous plant species, including *Drosera sp. nov. "cryptica"*, a potential species of conservation concern, and along the eastern slopes a *Muraltia* was found that might be *M. knysnaensis* (EN). The *Muraltia* identification is tricky and is currently being assessed at Compton Herbarium to definitively confirm if this is *M. ericoides* (LC) or *M. knysnaensis* (EN). Compton has commented that they are still busy with this identification (as at 17 April 2025).
- Historical aerial imagery shows that woody alien invasive species, particularly *Acacia mearnsii* (black wattle) and *Acacia melanoxylon* (blackwood), were widespread on the site from at least 2004 and were cleared between 2006 and 2017.

leaving the fynbos susceptible to reinvasion. Despite past clearing efforts, blackwood wattles have re-established in certain areas, particularly along the edges of the transformed fields. Other invasive species recorded include *Hakea sericea*, *Cenchrus clandestinus* (kikuyu grass), and *Datura stramonium* (jimsonweed).

- The transformed nature of the site means fire-dependent fynbos dynamics are disrupted, reducing the ability of fire-adapted species to regenerate. This current impact is difficult to mitigate, as fire management is highly unlikely to occur in this area.
- The industrial and residential developments surrounding the site (Lawaaikamp and George's industrial area) have isolated the remaining fynbos patches to the valley edges, reducing ecological connectivity and ecosystem resilience.

The following mitigation measures have been recommended by the Terrestrial Biodiversity Specialist:

- Implement an invasive alien plant control plan along the valley edges to the valley bottom prior to the commencement of vegetation clearance or construction.
- Development here should prioritise avoiding impacts on the sensitive fynbos and riparian areas by incorporating large buffers around valley edges
- Demarcate no-go high-sensitivity areas, especially around valley slopes where fynbos persists.
- Minimise soil disturbance and establish defined walking paths to prevent soil compaction during clearing.
- Implement dust suppression techniques and ensure proper waste disposal on-site.

Visual:

The finding of the Visual Assessment that the proposed development should be authorised with mitigation for the following reasons:

- High Positive for local planning within existing semi-industrial landscape context that has a High Visual Absorption Capacity.
- The development is suitably set back from sensitive vegetation.
- The 200m (avg.) buffer from the development to the receptors, would allow for some reduction in visual exposure to the proposed landscape change.
- Likely low sensitivity to landscape change from local residential receptors where the light-industrial area could afford employment opportunities.
- Economic benefits/ skills from the industrial/ education developments.

The following mitigation measures have been recommended by the Visual Impact Assessment:

- Dust management from wind and movement of vehicles.
- At the end of construction phase, the trees should be planted in accordance with best practice as specified in the EMP.
- Increased policing of the vacant ground to reduce illegal dumping, illegal cattle grazing and illegal land grabs.
- The contractor's laydown area and construction site should be fenced off with diamond mesh fencing/ green shade-cloth such that the fencing can be used to catch wind blow litter.

Civil Aviation:

- The sensitivities picked up by the DFFE screening toll relate to the Airports Company South Africa (ACSA) George Airport. There are several airspaces associated with the airport, which are not all detailed here as these are captured in the DFFE screening tool sensitivity.
- The very high, high and medium sensitivity ratings identified by the screening tool are a function of the project's proximity to the following aviation installations:
    - George ACSA Airport
    - FAGG Heli-square Helistop at George Airport
    - Titan Offshore Helistop
- The proximity of the above aviation installations was confirmed by the EAP via desktop investigation.
- The project does not pose significant risks to civil aviation as the development will not introduce any obstacles taller than those already present on site and in adjoining industrial areas. As a result, no further investigations are deemed necessary.

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

The following specialist mitigation measures will be included in the EMPr:

- Careful stockpiling of topsoil so that this can be used in landscaping/ tree planting and restoration of impacted areas post construction.
- Management of wind-blown dust, as well as dust from moving vehicles should be carried out such that this does not become a nuisance factor for the surrounding residential residents.
- The contractor's laydown area should not be located within view of the N2 Highway.
- The contractor's laydown area and construction site should be fenced off with diamond mesh fencing/ green shade-cloth such that the fencing can be used to catch wind blow litter. The fence line should be checked every week for litter.
- Security fencing should be steel mesh fencing with electric wiring above if required. The fencing should be black in colour and not exceed 2.4m in height.
- The project developer should use locally sourced inputs where feasible in order to maximize the benefit to the local economy. Sub-contracting of local construction companies to occur as far as possible for the construction of facilities.
- The project developer is to use locally sourced inputs where feasible in order to maximize the benefit to the economy.
- Ensure proper health and safety plans in place during the construction period to ensure safety on and around site during construction. Site watering (or use of appropriate dust suppressant) when required to reduce dust emitting from the construction site.
- Ensure proper 24/7 security is patrolling the construction sites, as well as controlled access.
- The developer can put policies in place in order to minimise pollutants that are expelled by factories, to set time limits on when businesses can operate, to limit noise.
- Maintain buffer areas around HGM1, HGM2, HGM4, and HGM5. Buffers will remove sediment, organic matter, and other pollutants (nutrients, toxins and pathogens) from sheet flow and wastewater before they reach water bodies.
- Install temporary drainage controls such as swales or berms to manage runoff where necessary.
- Avoid constructing the road across the wetland area and the upper reaches of the non-perennial drainage line.
- Install silt fences or sediment barriers around the perimeter of the construction site to trap sediment-laden runoff and prevent it from entering the surrounding watercourses.
- Do not clear vegetation outside the development area.

6.2 REZONING AND SUBDIVISION OF REMAINDER ERF 464, GEORGE

- The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffers.
- Construct check dams or sediment basins for flooded construction areas to be drained into
- if need be, to trap sediment, and facilitate sediment settlement before runoff reaches the non-perennial drainage line.
- All bare areas should be revegetated with appropriate locally occurring species, to bind the soil and limit erosion potential.
- Topsoil should be removed and stored in a designated area separately from subsoil and away from construction activities. Topsoil should be reapplied where appropriate as soon as possible in order to encourage and facilitate rapid regeneration of the natural vegetation in cleared areas.
- Implement a preventative maintenance system to ensure that work vehicles are maintained in an acceptable condition. This would involve routinely checking vehicles for leaks before construction begins; and not allowing vehicles with significant leaks to operate or be repaired within the construction site. Ideally, vehicle maintenance and washing occurs in garages and wash facilities, not on active construction site.
- Place generators in drip trays during use to ensure that no fuel leakages seep into the soil.
- Sanitary facilities should be provided for all construction personnel during the construction phase, placed outside the regulatory buffer zone.
- Hazardous chemicals and stockpiles must be stored on bunded surfaces with runoff control measures in place.
- Implementation of Sustainable Drainage Systems (SuDS) must be implemented on each erf by the end user to attenuate stormwater onsite and reducing volumes of stormwater input in watercourses:
    - Rainwater harvesting tanks must be installed at all buildings.
    - Swales and detention ponds must be incorporated into the open space network to
    - attenuate stormwater runoff, encourage infiltration and reduce the speed, energy
    - and volumes at which stormwater is discharged from the site;
    - Use of permeable paving to encourage infiltration into the soil; and
    - Use of detention ponds and artificial wetlands to capture stormwater runoff and
    - reduce the velocity of discharge from the site.
- Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.
- All headwall outlets and associated erosion control structures (e.g. reno mattresses and gabions) must be inspected and maintained on a routine basis. Inspect reno mattress structures after heavy rains to see if any erosion around or below the mattress has taken place or if stones have been dislodged.
- No stormwater may be directed into HGM2 without prior rehabilitation to address headcut erosion in the watercourse.
- Stormwater outlets located along the eastern boundary of the development area must also consider the proposed Rand Street extension which is also planned along the eastern boundary of the development.
- Guidelines for residents must be drawn up which prohibit dumping of hazardous materials into stormwater drains.
- Implement an invasive alien plant control plan along the valley edges to the valley bottom prior to the commencement of vegetation clearance or construction. Prioritize clearing of invasive species in high-sensitivity areas before site disturbance.
- Conduct plant rescue operations for species of conservation concern before site clearing in areas that will be affected by stormwater infrastructure.

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

N/A

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

The proposed development will impact the surrounding communities in the following way:

- Due to the development of a new industrial zone, there will be generation of pollutants and dust which might affect the air quality of the surrounding areas.
- There will an alteration of the landscape through its transformation from an urban undetermined open space to an industrial nature which results in visual intrusion to sensitive receptors. There will also be a permanent change to the landscape.
- Due to the development of a new education facility in the area, the supply of available education facilities for the community of the region.
- Due to the operation, industry stimulation and employment opportunities, households could potentially experience better standards of living.

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

The Western Cape is vulnerable to climate change and impacts are already being increasingly felt in many parts of the province. These projected climate change impacts translate into threats for human lives and health, communities and livelihood.

According to DEADP, the Western Cape will be affected by climate change in the following ways:

- Decrease in rainfall
- Increased severity of drought
- Higher average temperature
- Increased intensity of extreme events
- Increase in flooding and storm surges
- Alien vegetation reduces viability of ecosystems
- Increase in coastal impacts
- Fewer cold and frost days
- Increased fire risk

Climate change has been incorporated into the proposed development in the following ways:

- Rainwater harvesting tanks will be taken into consideration for the proposed development.
- The proposed development is not located within any flood lines; this therefore reduces the risk of flooding within the development area.
- George Municipality has an alien invasive species management plan. This management plan will be used to manage the invasive alien species on the proposed development site.

- The proposed development is located more than 20km from the coastline.
- The end user must consider the implementation of Sustainable Drainage Systems (SuDS) with the objective of attenuating stormwater onsite and reducing volumes of stormwater input in watercourses.
- No fires are to be lit outside of a facility designed to contain fires. The adequacy and positioning of these structures must be determined in consultation with the ECO. This will reduce the risk of fires.

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

There are no conflicting recommendations from the specialists.

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

The findings from the specialist have been in the formation of the mitigation measures in the EMPr.

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

The identified impacts will be minimised, rectified and reduced through measures included in the EMPr which aims to minimise The negative impacts associated with the development.

The mitigation hierarchy allows for successive steps in the once the previous step has been exhausted, the desired outcome of applying the mitigation hierarchy is to ensure that there is no loss of biodiversity, negativity impacts and risks are avoided. The mitigation hierarchy was applied in the following manner for the proposed project:

Avoidance: the proposed development/mining should first attempt to avoid or prevent negative impacts on biodiversity and ecosystem services by exploring alternative development types, locations, scales, layouts, and the siting of development/mining components:

A protective buffer zone was applied to watercourses potentially affected by development activities. Buffer zones are defined as a strip of land with a use, function or zoning specifically designed to act as barriers between human activities and sensitive water resources with the aim of protecting these water resources from adverse negative impacts. These buffers will be maintained to avoid direct impacts to the water resources.

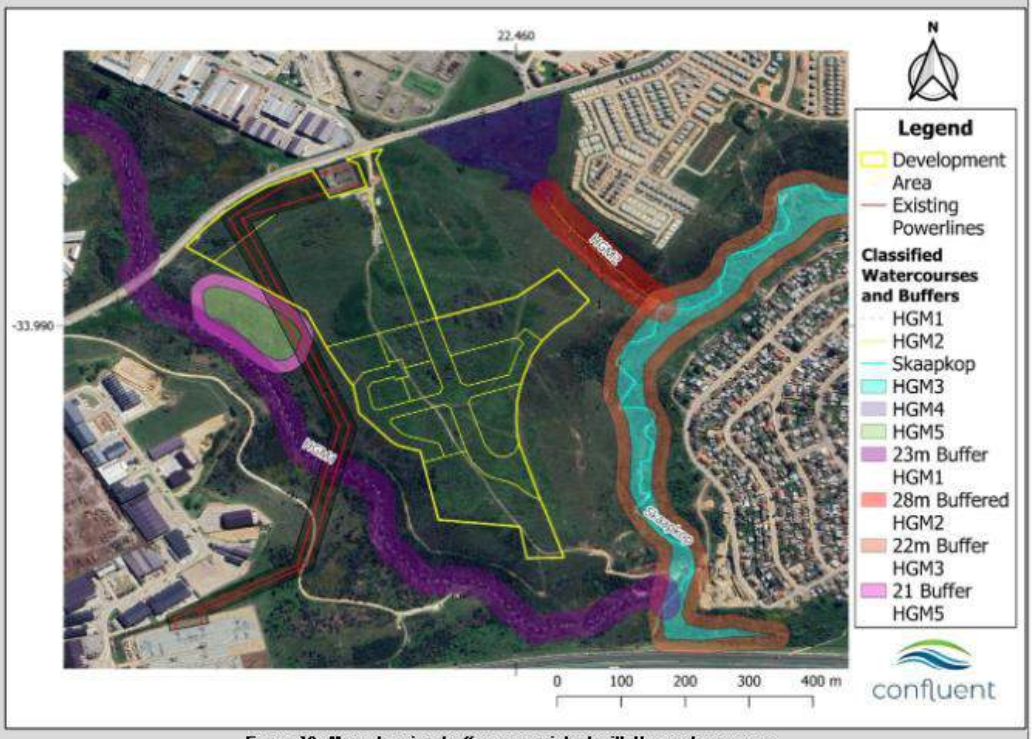

Figure 13: Map showing buffers associated with the watercourses

Minimisation and rehabilitation: when avoidance is not possible, efforts must be made to minimise negative impacts and to rehabilitate or remediate affected areas to reduce residual impacts

The site layout has been amended and changed since the submission of the NOI. The sensitive vegetation outside of the proposed development site has been largely avoided. The original layout was approximately 19.99ha, which was amended to largely avoid sensitive areas. The amended layout is now approximately 18.55ha in size.

Compensate/ Offsetting: residual impacts that remain after minimisation and rehabilitation must be compensated for through biodiversity offsets. Offsets are designed to counterbalance these residual impacts by providing measurable conservation outcomes that ensure the overall biodiversity value is maintained or enhanced.

ANNEXURE M

The majority of the proposed development area is excluded from the 2017 BSP, with only some sections around the periphery of the earmarked site falling within mapped critical biodiversity areas (CBAs) and Ecological Support Areas (ESAs).

In the 2023 updated BSP, the majority of the SDP is not considered as CBA1 areas. According to the Biodiversity Specialist these new CBA1 areas are incorrectly mapped, and this has been bought to the attention of Cape Nature, as the vegetation is transformed with no natural remaining vegetation.

According to the terrestrial biodiversity specialist, the residual impact of the development, i.e., the negative impacts that remain after mitigation, was assessed to be a minor negative. To ensure that the residual impact scenario is true, both under the development and no-go scenarios, mitigation measures must be followed.

The development footprint largely avoids the most sensitive areas, and with adherence to best-practice ecological management (including phased development, ongoing alien clearing, and active rehabilitation), the overall residual impact is expected to be minor and acceptable.

ANNEXURE M

SECTION J: GENERAL

Environmental Impact Statement

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

The key findings of the EIA are as follows:

Aquatic

- The proposed development site is located adjacent sensitive watercourses and wetlands; therefore, mitigations measure will need to be implemented to reduce the development impacts on the watercourses. Avoiding buffer zones and the promotion of sustainable development practices will ensure the long-term integrity of these aquatic systems.
- The proposed development will risk an increase in erosion due to clearance of vegetation.
- The development footprint has been amended to avoid the identified sensitive aquatic features.

Animals:

- The proposed development area has been heavily degraded to past environmental and anthropogenic disturbances, including invasive plants, illegal dumping, and historical waste disposal activities. These factors have resulted in the significant transformation of natural habitats, making the site unsuitable for the SCC identified by the DFFE Screening Tool and public platforms.
- The observed faunal diversity during the site visit was notably low, indicating that the area is not functioning as a significant habitat for key faunal species.
- The development of the industrial zone surrounding the site has largely contributed to the decline of the sites ecological value.

Terrestrial Biodiversity

- The Metro Grounds development is situated within a transformed landscape, with fynbos vegetation primarily restricted to valley slopes, which is largely outside of the Metro Grounds development plan extent.
- The fynbos vegetation persisting along the valley edges, especially along the western side of the site, exhibits significant biodiversity and ecological importance, supporting a variety of indigenous plant species, including Drosera sp. nov. "cryptica", a potential species of conservation concern, and along the eastern slopes a Muraltia was found that might be *M. knysnaensis* (EN). The *Muraltia* identification is tricky and is currently being assessed at Compton Herbarium to definitively confirm if this is *M. ericoides* (LC) or *M. knysnaensis* (EN). Compton has commented that they are still busy with this identification (as at 17 April 2025).

Agricultural

- The medium sensitivity rating of the site by the screening tool because of the site's assessed agricultural production potential and current agricultural land use. It however disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6.

Socio-economic

- The proposed development has raised several potential socioeconomic impacts, both positive and negative. According to the socio-economic specialist, there are no major concerns or issues from a socioeconomic standpoint that would hinder the development.

Visual

- The visual impact of the proposed development is rated as medium, where it is expected that visual and scenic resources of the N2 Highway would be marginally affected to some extent by the intensification of the industrial landscape along this section of the higher.
- The extent of the visual impacts will be local. The proposed landscape change would essentially be contained by the higher terrain to the north and by the built nature of the surrounding areas.

Civil Aviation

- This infill development is located adjacent to existing industrial areas, and future above-ground structures are not expected to protrude above those in adjoining industrial areas (which are closer to the airport) or the existing overhead powerlines already present on the site, and the development will thus not introduce any new risks to civil aviation infrastructure or installations.

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

Please see Appendix B2 for a full-size map that superimposes the proposed development and the environmental sensitivities.

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

Positive:

- An increase in employment opportunities during construction and operation.
- Increase in Industrially Zoned Property Supply in the Area.
- Increase in Education Supply in the Area, as the proposed infill development includes an education facility.
- Sustainable increase in national and local government revenue due to the operation of the industrial development and education facility.
- Creation of Sustainable Employment Positions Nationally and Locally.
- Temporary increase in the country's GDP due to capital expenditure during the construction period.
- There will be an increased contribution to skills development during the construction of the proposed development. The proposed education facility will also contribute to the development and enhancement of the skills of young people in George.

Negative:

- An increase in traffic due to construction vehicles and heavy vehicles could create short-term disruptions and safety hazards for current road users.
- An impact on the demographics of the area as a result of in-migration in response to job opportunities will occur.
- Increase of erosion due to the clearance of vegetation during the construction phase.

- Contamination of watercourses by solid waste and chemical pollutants caused by construction activities. Intensification of the industrial landscape within the George.
- Degradation of watercourses caused by edge-effects associated with increased anthropogenic activity within and around the development area. Alteration of the landscape through its transformation from a rural to an industrial nature.

A summary of the positive and negative impact of the proposed Metro Grounds development has been summarised in Table 8 below.

Table 8: Summary of impacts associated with the Metro Grounds Development

Aspect	Impact	Pre-mitigation	Post-mitigation
Construction			
Visual	Intensification of the industrial landscape within the George	Minor (-)	Minor (-)
Aquatic	Increase in erosion due to the clearance of vegetation during the construction phase	Minor (-)	Negligible (-)
	Contamination of watercourses by solid waste and chemical pollutants caused by construction activities	Minor (-)	Negligible (-)
Socio-Economic	Increased production	Minor (+)	Moderate (+)
	Increase in GDP	Minor (+)	Moderate (+)
	Contribution to Skills Development	Minor (+)	Moderate (+)
	Temporary Increase in Household Earnings	Minor (+)	Moderate (+)
	Sustainable increase in national and local government revenue	Minor (+)	Minor (+)
	Temporary Increase in Employment	Minor (+)	Moderate (+)
	Negative Change to the Sense of Place	Minor (-)	Negligible (-)
	Temporary Increase in Social Conflicts with the Influx of People	Minor (-)	Negligible (-)
	Impact on Economic and Social Infrastructure	Minor (-)	Negligible (-)
	Safety and Security	Minor (-)	Negligible (-)
Terrestrial Biodiversity	The Increased Risk of Invasive Plant Species Proliferation in Sensitive Fynbos Habitat Over Time.	Moderate (-)	Minor (-)
	Loss and Further Fragmentation of Garden Route Granite Fynbos due to e.g., Stormwater Infrastructure, Occurring in Sensitive Fynbos	Moderate (-)	Minor (-)
	Increased Negative Edge Effects Leading to Biodiversity Loss due to Construction Activities Occurring Close-by Remnant Fynbos Patches	Minor (-)	Minor (-)
Operation			
Visual	Alteration of the landscape through its transformation from a rural to an industrial nature	Moderate (-)	Moderate (+)
Aquatic	Degradation and erosion of aquatic habitats/watercourses due to increased stormwater discharge from the development	Moderate (-)	Minor (-)
	Degradation of watercourses caused by edge effects associated with increased anthropogenic activity within and around the development area	Moderate (-)	Negligible (-)
Socio-Economic	Sustainable Increase in Production	Moderate (+)	Moderate (+)
	Sustainable Increase in GDP	Minor (+)	Moderate (+)
	Creation of Sustainable Employment Positions Nationally and Locally	Minor (+)	Moderate (+)
	Sustainable Increase in National and Local Government Revenue	Minor (+)	Moderate (+)
	Increase in Education Supply in the Area	Minor (+)	Moderate (+)
	Increase in Industrially Zoned Property Supply in the Area	Major (+)	Major (+)
	Negative Changes to the Sense of Place	Moderate (-)	Minor (-)
Terrestrial Biodiversity	Long-Term Stormwater Management Impacts on Vegetation Dynamics	Moderate (-)	Minor (-)
	Continued Spread of Invasive Alien Species & Potential Litter Effects in Remnant Fynbos Patches & Disturbed Areas Around the Development	Moderate (-)	Minor (-)
No-Go			
Visual	Retaining the status quo	Moderate-High (-)	Low (-)
Terrestrial Biodiversity	The Increased Risk of Invasive Plant Species Proliferation in Sensitive Fynbos Habitat Over Time.	Minor (-)	Minor (-)
	Loss and Further Fragmentation of Garden Route Granite Fynbos due to e.g., Stormwater Infrastructure, Occurring in Sensitive Fynbos	Negligible (-)	Negligible (-)
	Increased Negative Edge Effects Leading to Biodiversity Loss due to Construction Activities Occurring Close-by Remnant Fynbos Patches	Negligible (-)	Negligible (-)
	Long-Term Stormwater Management Impacts on Vegetation Dynamics	Minor (-)	Minor (-)

	Continued Spread of Invasive Alien Species & Potential Litter Effects in Remnant Fynbos Patches & Disturbed Areas Around the Development	Moderate (-)	Minor (-)

Recommendation of the Environmental Assessment Practitioner ("EAP")

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

All mitigation measures and recommendations provided by the specialists are included in the EMPr. The outcomes of the mitigation measures which have been included in the EMPr include:

Construction Phase:

- Conduct plant and animal rescue operations for species of conservation concern before site clearing in areas that will be affected by stormwater infrastructure.
- Plant trees to mitigate the visual impacts from the N2 and improve scenic quality. Refer to the George Municipality's Tree Planting Specification (latest at the time to be source from GM by ECO).
- Soil loss is related to the length of time that soils are exposed prior to rehabilitation or stabilisation. Therefore, the gap between construction activities and rehabilitation should be minimised. Phased construction and progressive rehabilitation, where practically possible, are therefore important elements of the erosion control strategy.
- Install silt fences or sediment barriers around the perimeter of areas where earthmoving activities are taking place to trap sediment-laden runoff and prevent it from entering the surrounding watercourses.
- Do not clear vegetation outside the development area.
- The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffers of wetlands/watercourses.
- All stockpiles must be covered at the end of the day.
- Implement dust management from wind and movement of vehicles.
- Install temporary drainage controls such as swales or berms to manage runoff where necessary.
- All materials used during construction must follow the best practice guidelines set out for each product by the manufacturer.
- Check weather reports ahead and prepare the site when high rainfall is predicted. Discontinue any on the site during rainfall.
- Construct check dams or sediment basins for flooded construction areas to be drained, if need be, to trap sediment, and facilitate sediment settlement before runoff reaches the non-perennial drainage line.
- All bare areas should be revegetated with appropriate locally occurring species, to bind the soil and limit erosion potential.
- Topsoil should be removed and stored in a designated area separately from subsoil and away from construction activities. Topsoil should be reapplied where appropriate as soon as possible in order to encourage and facilitate rapid regeneration of the natural vegetation in cleared areas.
- Maintain buffer areas around HGM1, HGM2, HGM4, and HGM5. Buffers will remove sediment, organic matter, and other pollutants (nutrients, toxins and pathogens) from sheet flow and wastewater before they reach water bodies.
- The project developer should use locally sourced inputs where feasible in order to maximize the benefit to the local economy. Sub-contracting of local construction companies to occur as far as possible for the construction of facilities.
- In order to maximise the positive impact, it is suggested that the project company provide training courses for employees where feasible to ensure that employees gain as much as possible from work experience. Facilitate the transfer of knowledge between experienced employees and the staff. Perform a skills audit to determine the potential skills that could be sourced in the area.
- Site watering (or use of appropriate dust suppressant) when required to reduce dust emitting from the construction site.
- Where possible and practical, provide public transportation service for workers in order to reduce congestion on roads. Potentially partner with local municipalities and other prominent users of the local roads to upgrade them to meet the required capacity and intensity of the vehicles related to the planned construction activities. Transportation contractors must adhere to the road rules and regulations. Utilise only designated access routes & entrance/exits from the site. Implement appropriate signage & road safety measures at entrance/exit to the site and on site.
- Ensure proper 24/7 security is patrolling the construction sites, as well as controlled access.
- Should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay.
- Minimize soil disturbance and establish defined walking paths to prevent soil compaction during clearing.

Operational Phase:

- Implementation of Sustainable Drainage Systems (SuDS) on each erf by the end user, with the objective of attenuating stormwater onsite and reducing volumes of stormwater input in watercourses.
- Maintain all buffers around the watercourses.
- Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.
- All headwall outlets and associated erosion control structures (e.g. reno mattresses and gabions) must be inspected and maintained on a routine basis. Inspect reno mattress structures after heavy rains to see if any erosion around or below the mattress has taken place or if stones have been dislodged.
- Stormwater outlets located along the eastern boundary of the development area must also consider the proposed Rand Street extension which is also planned along the eastern boundary of the development.
- Planting of street trees as per the specifications of the George Municipality's tree planting guideline.
- A waste management plan must be developed and implemented, and solid waste must be removed from the buffer areas (minimum once a month).
- Security lights are to be angled downwards to avoid disturbance to adjoining residents and businesses. Illumination of the buildings must consider the possible distraction glare might have on motorists.
- Conduct routine sediment control inspections to mitigate erosion risks.

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

There are no conditional findings.

ANNEXURE M

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

Based on the information provided in preceding sections, this report, it is the reasoned opinion of the EAP that the proposed development should be authorised and will bring the following benefits:

- Increase in education facilities in the area, the proposed development includes an educational zone.
- There will be an increase in national and local government revenue as the proposed project is an industrial development.
- There will be an improved standard of living for benefiting households due to the operation, industry stimulation and employment opportunities, households could potentially experience better standards of living.
- The negative impacts of the proposed development on the environment are mitigable and the impacts are acceptable.
- The positive impacts of the proposed development outweigh the negative impacts.

The development will have a minor impact on the environment overall, taken mitigation measures into account. The development footprint largely avoids the key sensitive areas, and with adherence to best-practice ecological management (including phased development, ongoing alien clearing, and active rehabilitation), the overall residual impact is expected to be minor and within acceptable levels.

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

It is assumed that the information on which this report is based (project information as well as existing information) is correct, factual and truthful.

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

1. Construction should commence within five years from the date of authorisation.
2. Construction should be concluded at least ten **(10)** years from commencement.
3. Construction Completion Statement on handover of the site back to the applicant.

Water

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

Where possible, non-potable water will be used for construction purposes.

Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

Refuse removal will be dealt with once a week, as applicable to all the current residential areas in the George Municipal area.

Residents will be encouraged to follow the George Municipality recycling programme:

- BLUE bags are for non-soiled recyclable materials, including plastic, paper, cardboard, glass, etc.
- GREEN bags are for green waste, including organic kitchen waste such as fruit and vegetable peels, as well as garden waste, including grass cuttings, leaves, etc. No soil is allowed in the green bag.
- BLACK bags are for "wet" waste, things that cannot be recycled.

Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

The largest saving in energy requirement lies in making the best possible use of construction labour for tasks that do not specifically require electrical machinery. This will have the added advantage of reducing noise and air pollution generated on-site.

- The use of renewable energy means for the building phase.
- It is proposed that generators be used to augment the existing Eskom power supply during construction. Energy-efficient appliances and lightbulbs will be used where practically possible.
- Energy-efficient lights in the buildings and daylight-saving lights save up to 15% electricity.
- Train business owners and educational staff in energy-wise practices, such as switching off lights.