Virdus Works (Pty) Ltd (Reg. No. 2018/585747/07)
Development Management Consultants and
Environmental Assessment Practitioners

VIRDUS
WORKS

NOTICE OF LAND DEVELOPMENT APPLICATION IN THE STELLENBOSCH MUNICIPAL AREA

Locality: Erf 2183, on Groenfontein Road and Portion 1 Farm 717 abutting it to the east.
Applicant: Dupré Lombaard, Virdus Works (Pty) Ltd, 77 Buitekring, Dalsig, STELLENBOSCH, 7600; Email: dupre.lombaard@virdus.com
Owner: Erf 2183 is municipal land. Ptn 1 is owned by Cadcor (Pty) Ltd, Phone: +27 83 653 2717, E-mail: charles@collins1969.com, Address: PO Box 643, Paardekraal, 1752
Stellenbosch Municipality reference number: LU 9820 and 12469
Application type:
Erf 2183:

1) Application in terms of Section 15(2)(d) of the Stellenbosch Municipal Land Use Planning By-Law, 2015, for a subdivision of Erf 2183 for the creation of a road with a reserve of 25m along the southern boundary of the property, approximately 2 600 m²; and
2) Application in terms of Section 15(2)(a) of the Bylaw, for a rezoning of the subdivided portion of Erf 2183 from Limited Use to Transport Zone II for a public road.

Ptn 1 Farm 717:

1) Application is made in terms of Section 15(2)(a) of the Stellenbosch Municipal Land Use Planning By-Law, 2015 to rezone Farm No. 717/1, Paarl Division from Agricultural Zone I to Subdivisional Area, in order to accommodate the following land uses:
    a. Portion A: Residential Zone II (± 0.75ha);
    b. Portion B: Transport Zone I (±0.468ha);
    c. Portion C: Industrial Zone I, Open Space Zone II (Private Open Space) and Transport Zone II (±6.5ha)
2) Application is made in terms of Section 15(2)(d) of the By-Law for the subdivision of Portion 1 of Farm No. 717, Paarl Division into 3 portions for the following land uses:
    a. Portion A: Residential Zone II (± 0.75ha);
    b. Portion B: Transport Zone I (±0.468ha)
    c. Portion C: Industrial Zone I, Open Space Zone II (Private Open Space) and Transport Zone II (±6.5ha)
3) Application is made in terms of Section 15(2)(o) of the By-Law for a Consent Use in order to accommodate warehousing as well as transport usage in terms of the Industrial Zone I;
4) Application is made in terms of Section 15(2)(b) of the By-Law for a departure to develop 25 units / ha in lieu of the 20 units / ha density applicable to group housing;
5) Application is made in terms of Section 15(2)(b) of the By-law for a departure to provide 30m² of communal open space per dwelling unit in lieu of the prescribed 80m² of communal open space per dwelling unit required;
6) Application is made in terms of Section 15(2)(b) of the By-Law for a departure to provide 20% of the gross floor space of the dwelling unit for outdoor open space in lieu of the prescribed 80m² of communal open space.

Notice is hereby given in terms of the said Bylaw that the above-mentioned application has been submitted to the Stellenbosch Municipality for consideration. The application is available for inspection on the Planning Portal of the Stellenbosch Municipal Website for the duration of the public

participation process at the following address: https://www.stellenbosch.gov.za/planning/documents/planning-notices/land-use-applications-advertisements. If the website or documents cannot be accessed, an electronic copy of the application can be requested from the Applicant.

Written comments, which must include the reference to the application, the name, contact details and physical address of the person to submit the comments, the reasons for the comments, and the interest of the person in the application, may be submitted in terms of Section 50 of the said Bylaw to the Applicant by electronic mail as follows: Dupré Lombaard, dupre.lombaard@virdus.com.

The comments must be submitted within 30 days from the date of this notice to be received on or before the closing date of **10 July 2021**. For any enquiries on the Application or the above requirements, or if you are unable to write and /or submit your comments as provided for, you may contact the Applicant for assistance at the e-mail address provided or telephonically at 082 895 6362 during normal office hours.

KENNISGEWING VAN GRONDONTWIKKELINGSAANSOEK IN DIE STELLENBOSCH MUNISIPALE AREA

Ligging: Erf 2183, op Groenfonteinweg en Gedeelte 1 Plaas 717 aanliggend Erf 2183 se oostekant.
Aansoeker: Dupré Lombaard, Virdus Works (Pty) Ltd, 77 Buitekring, Dalsig, STELLENBOSCH, 7600; E-pos: dupre.lombaard@virdus.com
Eienaar: Erf 2183 is munisipale grond. Ged 1 word besit deur Cadcor (Edms) Bpk, Foon: +27 83 653 2717, E-pos: charles@collins1969.com, Adres: Posbus 643, Paardekraal, 1752
Stellenbosch Munisipaliteit Verwysing: LU 9820 en 12469
Tipe aansoek:
Erf 2183:

3) Aansoek ingevolge Artikel 15(2)(d) van die Stellenbosch Munisipaliteit Verordening op Grondgebruikbeplanning, 2015, vir onderverdeling van Erf 2183 vir die skep van 'n pad met 'n reserwe van 25m op die suidelike grens van die eiendom, ongeveer 2 600 m²; en
4) Aansoek ingevolge Artikel 15(2)(a), vir 'n hersonering van die onderverdeelde gedeelte van Erf 2183 van Beperkte Gebruik na Vervoer Sone II vir 'n publieke straat.

Ptn 1 Farm 717:

7) Aansoek ingevolge Artikel 15(2)(a) van die Stellenbosch Munisipaliteit Verordening op Grondgebruikbeplanning, 2015 vir die hersonering van Gedeelte 1 van Plaas No. 717 van Landbou Sone I na Onderverdelingsgebied, vir die volgende gebruike:
   a. Gedeelte A: Residensiële Sone II (± 0.75ha);
   b. Gedeelte B: Vervoer Sone I (±0.468ha);
   c. Gedeelte C: Industriële Sone I, Oop Ruimte Sone II (Private Oop Ruimte) en Vervoer Sone II (±6.5ha).
8) Aansoek ingevolge Artikel 15(2)(d) van die Verordening vir die onderverdeling van Ged 1 van Plaas 717, in drie dele vir die volgende gebruike:
   a. Gedeelte A: Residensiële Sone II (± 0.75ha);
   b. Gedeelte B: Vervoer Sone I (±0.468ha);
   c. Gedeelte C: Industriële Sone I, Oop Ruimte Sone II (Private Oop Ruimte) en Vervoer Sone II (±6.5ha).
9) Aansoek ingevolge Artikel 15(2)(o) van die Verordening vir 'n Vergunningsgebruik ten einde pakhuise en vervoergebruike toe te laat onder Nywerheid Sone I;
10) Aansoek ingevolge Artikel 15(2)(b) van die Verordening vir 'n afwyking om 25 eenh / ha in plaas van 20 eenh / ha digtheid te ontwikkel as groepsbehuising;
11) Aansoek ingevolge Artikel 15(2)(b) van die Verordening vir 'n afwyking om 30m² gemeenskaplike oop ruimte per wooneenheid te skep in plaas van die voorgeskrewe 80m²;
12) Aansoek ingevolge Artikel 15(2)(b) van die Verordening vir 'n afwyking om 20% van die bruto vloerruimte van 'n wooneenheid te voorsien vir buite speel area in plaas van die voorgeskrewe 80m².

Kennis word hiermee gegee in terme van die genoemde Verordeninge dat bovermelde aansoek by die Stellenbosch Munisipaliteit ingedien is vir oorweging. Die aansoek is beskikbaar vir insae op die Beplannings Portaal van die Stellenbosch Munisipaliteit se Webtuiste vir die tydsduur van die publieke

deelname proses by die volgende adres: https://www.stellenbosch.gov.za/planning/documents/planning-notices/land-use-applications-advertisements. Indien die webtuiste of tersaaklike dokumente nie toeganklik is nie, kan die Aansoeker versoek word om 'n elektroniese kopie beskikbaar te stel.

Skriftelike kommentaar, wat besonderhede ten opsigte van die verwysings nommer van de aansoek, die name, fisiese adres en kontak besonderhede van die persoon wat die kommentaar lewer, die redes vir die kommentaar, en die belang van die persoon wat die kommentaar lewer in die aansoek, kan ingedien word in terme van Artikel 50 van genoemde Verordeninge aan die Aansoeker by wyse van elektroniese pos as volg: Dupré Lombaard, dupre.lombaard@virdus.com.

Die kommentaar moet binne 30 dae vanaf die datum van hierdie kennisgewing gestuur word en moet ontvang word voor of op die laaste dag van die sluitings datum van **10 Julie 2021**. Indien daar enige navrae op die aansoek of bovermelde vereistes vir die lewer van kommentaar is, of dit nie moontlik is om geskrewe kommentaar, of die kommentaar op die wyse te lewer soos voorsiening gemaak is nie, kan die Aansoeker geskakel word vir bystand by die vermelde elektroniese pos adres of telefonies by 082 895 6362 gedurende normale kantoor ure.

Virdus Works (Pty) Ltd (Reg. No. 2018/585747/07)
Development Management Consultants and
Environmental Assessment Practitioners

06 May 2021

The Director: Planning and Development
Stellenbosch Municipality
PO Box 17
STELLENBOSCH
7600

Per email: landuse.enquiries@stellenbosch.gov.za

Dear Sir

SUPPLEMENT OF THE LAND DEVELOPMENT APPLICATION FOR PORTION 1 OF PAARL FARM GROENFONTEIN NO. 717 AT KLAPMUTS (LU 9820)

The application is supplemented with the attached subdivisional area framework plan and the land use table inserted herein below.

It appears as if some officials are sensitive about the proposed light industrial use shown to the west of the Klapmuts River. A request was put to the applicant to amend the layout ad rather show residential use on the western side of the river, as all other land on the western side is residential. However, the landowner wishes to proceed with the applications (Erf 2183 for access and Ptn 1 of Farm 717 for the subdivisional area as shown) as submitted and supplemented herewith.

The application was initially discussed with the Spatial Planners in 2016 as per the attached minute of the pre-application meeting, and the planners did not object to the proposal. Moreover, all the land to the west of the river is not equal. There is a strong argument for the positive consideration of the light industrial use as shown, due to the nature of the proposed road through the property. It is clear from interaction with the engineers that a road of no less than 25m reserve width is going to be made a condition of development by the engineers. This road must also act as the services reserve, where water and sewer lines are situated. This future road will be the main entrance into the Klapmuts low income / subsidy housing development directly to the west of the property, and it will accordingly carry high volumes of traffic, pedestrians and public transport, mostly minibus taxis, which are not conducive to creating an attractive residential environment. The current and foreseeable future demand for land in the area is industrial. There are no vacant industrial properties in the town and on the other hand there are plenty of economic market residential erven that are vacant and undeveloped. The landowner therefore wishes to proceed with the application as submitted.

It should also be borne in mind that this application was first submitted in May 2019 and since then it has been amended on three occasions based on comment from the planning officials with each re-submission. At no stage in the past has anyone indicated that the zonings are not acceptable or that the application should be amended to show residential uses to the west of the river. The development further received heritage approval, environmental authorisation and all the specialist assessments for the development (engineering services, stormwater management plan, traffic impact assessment) were done on the basis of the proposed development framework after consultation with the officials

and none asked for an alternative. An amendment at this late stage will further delay the process and cause significant wasted expenditure.

A separate application was submitted for the road over Erf 2183 (LU 12469), based on the response received from the Directorate in this regard. Initially the application motivated for the road over Erf 2183 in the Ptn 1 Farm 717 (LU 9820) application, but on request of the officials the two were separated. The main application still refers to the road over Erf 2183 for access to Portion 1 and it shows on the plan of subdivision and joint layout plan. The two applications should therefore be administered together in a single public participation process.

The land use table for the layout plan is as follows:

Land use table: **Portion 1 of Farm Groenfontein No. 717, Paarl RD at Klapmuts**

Designation	Zoning	Use	Future erven	Area (m²)	Percentage area (%)
	Utility Services	Public and private road and transport facilities	4	10 866	15%
	Industrial	Warehousing, Industry, Business premises, Employee housing and internal roads	15	45 296	62%
	Conventional Residential	Group housing and internal roads	30	5 750	8%
	Private Open Space	Private open space	1	11 298	15%
Total area				**73 210**	**100%**

An urgent conclusion of the process will be appreciated.

Yours faithfully

DUPRÉ LOMBAARD

Designation	Zoning	Use	Number of future erven	Area (m²)	Percentage (%)
	Utility Services Zone	Public and private road / transport facilities	4	10 866	15
	Industrial Zone	Warehousing / Industry / Business premises / Employee housing / Services by internal private roads	15	45 286	62
	Conventional Residential	Group Housing / Serviced by internal private roads	30	5 750	8
	Private Open Space	Private open space	1	11 256	15
			50	73 218	100

Caveat
1. Any areas and dimensions are provisional and will be finalised at time of subdivision survey.
2. All levels are to be confirmed prior to construction.

Scale 1:1000 @ A1 | Date: August 2020 | Contours: N/A | System: WG 19

PROPOSED LAND DEVELOPMENT PLAN
GROENFONTEIN FARM
PORTION 1 OF FARM 717
PAARL

Revisions

Date	Detail	Date	Detail

Client

TN

Ref: PA717-1

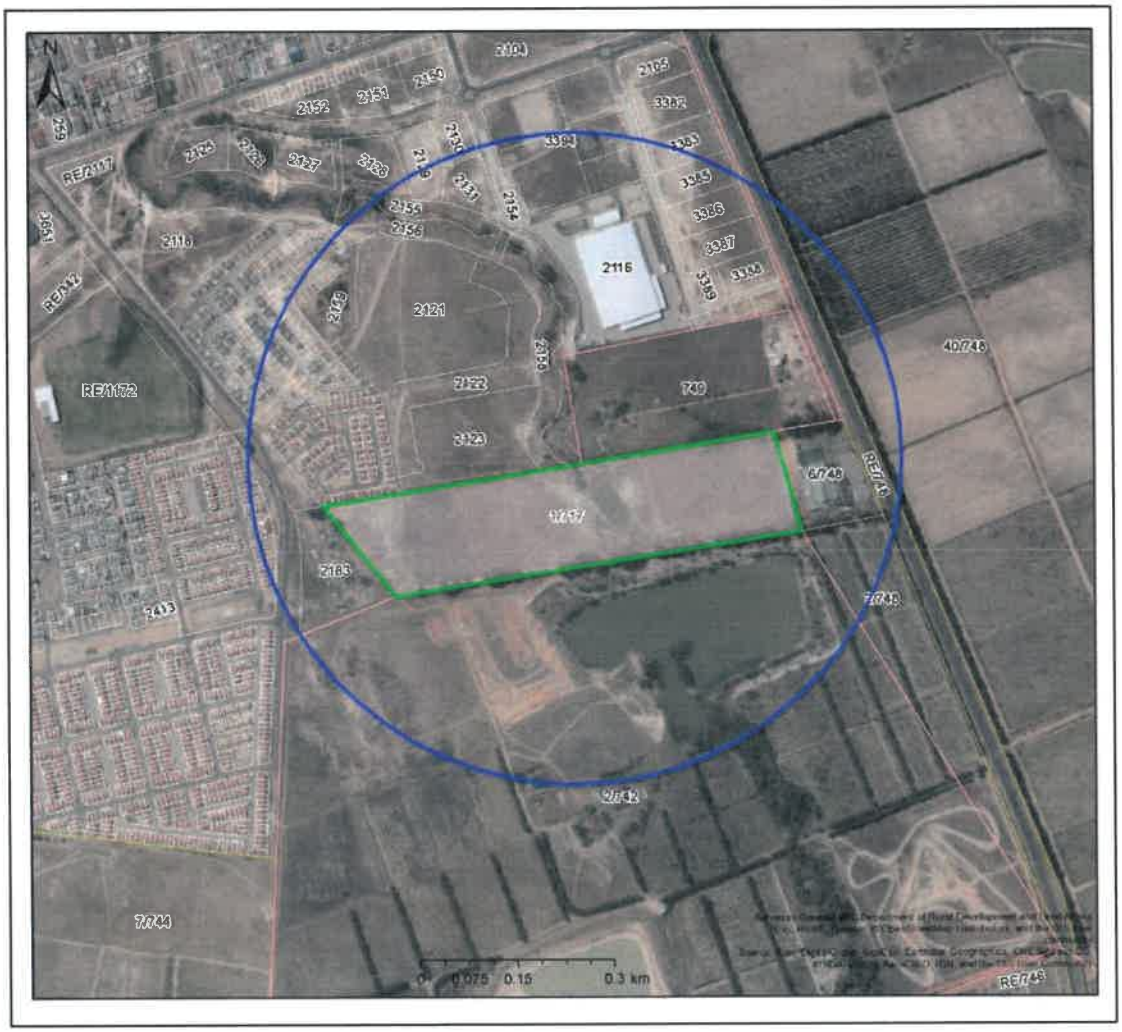
Dwg:PA717-1_PROPOSED LAND DEVELOPMENT PLAN_REV8

fbv
friedlaender, burger & vollmann

LAND DEVELOPMENT APPLICATION FOR:

REZONING TO SUBDIVISIONAL AREA OF

PORTION 1 OF PAARL FARM GROENFONTEIN NO. 717 AT KLAPMUTS



May 2019
Updated version – October 2019

CONTENT

Table of figures

ANNEXURE

EXECUTIVE SUMMARY

Owner:	Project Consultant:
Cadcor (Pty) Ltd, Reg. No. 1971 / 011663 / 07	**Mr Dupré Lombaard**
Represented by Mr Charles Collins	Virdus Works (Pty) Ltd Reg. No. 2018/585747/07
Cellular phone: +27 83 653 2717	Cellular phone: +27 82 895 6362
E-mail: charles@collins1969.com	E-mail: dupre.lombaard@virdus.com
Address: PO Box 643, Paardekraal, 1752	Address: 77 Buitekring, Dalsig, Stellenbosch, 7600, South Africa

Cadcor wishes to rezone the property (7,323ha) to subdivisional area. In broad, the development entails the rezoning and subdivision of the property, to create three broad areas. The proposal is to develop a mixed-use industrial estate with an access off the Groenfontein Road to the west, across Erf 2183, Klapmuts. It entails the rezoning to subdivisional area of the entire property to create the proposed three use areas, with access via an internal road with a turning circle as and where required depending on the demand for buildings / sites. Further internal subdivisions will occur later after conclusion of the rezoning process.

1. The river course will be retained as an open space as determined by the environmental authorisation application process which includes development within 32m of the water course.
2. The westernmost corner abutting the current informal settlement, approximately 7 000 m², will be retained for middle income housing (25 to 30 group housing or dwelling units).
3. On the western side of the river approximately 22 000m² of mixed-use development, focused on light industrial / warehousing with consent on erven between 2 000 and 4 000m² and on the eastern side of the river approximately 20 000m² of warehousing with consent and manufacturing on erven ranging between 5 000m² and 10 000m².

There are no buildings or structures on the property and only one badly damaged off-stream storage dam, previously used for irrigation purposes. The property is land locked and will be reliant on access from the Groenfontein Road in Klapmuts, across Erf 2813 and/or off the R44 across Portion 2 and 6 of Farm Bronkhorst No. 748 and a minor portion of Portion 2 of Paarl Farm Klapmutsrivier No. 742, if same is required to comply with the Klapmuts Roads Master Plan. This application does not include such access off the R44.

This is an application in keeping with Section 15 of the Stellenbosch Municipality Land Use Planning Bylaw, 2015. The application covers the following aspects:

(1) Application in terms of Section 15 (2) (a) a rezoning of land;
(2) Application in terms of Section 15 (2) (b) a permanent departure from the development parameters of the zoning scheme;
(3) Application in terms of Section 15 (2) (d) a subdivision of land that is not exempted in terms of Section 24; and
(4) Application in terms of Section 15 (2) (o) a consent use contemplated in the zoning scheme.

There are no title deed restrictions preventing the proposed land developments.

1. BACKGROUND

1.1 Introduction

The application deals with the proposed development of a new mixed-use development containing residential, light industrial, warehousing and manufacturing opportunities together with a central open space link along the river corridor at Klapmuts. It is referred to as Groenfontein, located approximately 1,5 km south of the centre of Klapmuts, off the Groenfontein Road and west of the R44, well within the urban edge on:

- Portion 1 (7,7 ha) of Farm Groenfontein No. 717, Paarl Division.

Figure 1: Groenfontein locality showing the site locality in green

The property is completely vacant and not used for agricultural purposes. It is inside of the urban area of Klapmuts as indicated on the Stellenbosch Spatial Development Framework 2013 and in the prior Klapmuts SDF 2007.

The development of industrial uses and opportunities at Klapmuts is determined in the Stellenbosch Integrated Development Plan (IDP) and Spatial Development Framework 2019 as being a priority and preferred use.

1.2 Broad proposal

The farm is vacant and unused, except for some unauthorised informal grazing of cattle that occurs thereon from time to time. It does not contain any buildings and the farm dam thereon was partially demolished by the previous owner. As is clear

from the topographical survey in Figure 2 below, a stream course passes through the centre of the site in a south – north direction.

The proposal is to develop a small residential component on the western part of the site and a mixed-use industrial estate with an access off the Groenfontein Road to the west, across Erf 2183, Klapmuts, where it has already been authorised.

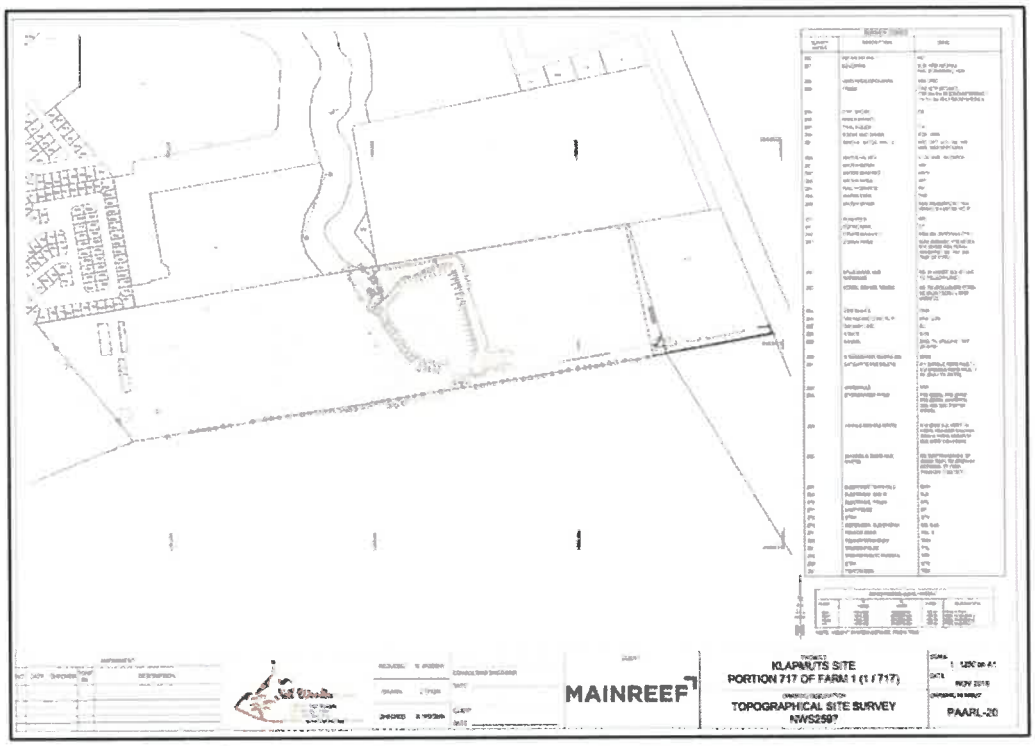


Figure 2: Site topographical survey showing extent of water course and physical features

The proposal entails the rezoning to subdivisional area of the entire property to create three use areas, with access via an internal road with a turning circle as and where required depending on the demand for buildings / sites. Further internal subdivisions will occur later after conclusion of the rezoning process. The river course will be retained as an open space as determined by the environmental authorisation application process which includes authorisation for development within 32m of the water course.

Portion A on the Proposed Land Development Plan (Annexure D): The westernmost corner abutting the current informal settlement on Erf 2183, approximately 7 000 m², will be retained for middle income housing (25 to 30 group housing or dwelling units), with access of the proposed 25m access road. The internal layout will be determined by the final developer of the residential component.

Portion B on the Proposed Land Development Plan (Annexure D): Approximately 500m² of land is proposed to be zoned and subdivided to align with the authorised road reserve across Erf 2183 and the Stellenbosch Roads Master Plan 2019, to provide access to the proposed mixed use light industrial development on Portion C.

Portion C on the Proposed Land Development Plan (Annexure D): On the western side of the river, approximately 22 000m² of mixed-use development, focused on light industrial / warehousing on erven between 2 000 and 4 000m² is proposed. On the eastern side of the river approximately 20 000m² of warehousing and manufacturing is proposed on erven ranging between 5 000m² and 10 000m², with access of the proposed internal road.

The river course, delineated with a 25m buffer either side of the stream, will be retained as a private open space, or as determined in the environmental authorisation application process which includes development within 32m of the water course. This open space will also function as storm water retention area, as detailed in the engineering services report.

Figure 3: Broad development framework for Portion 1 of Paarl Farm Groenfontein No. 717

2. LAND DEVELOPMENT APPLICATION AND AUTHORISATION

2.1 Development context

2.1.1 The subject Groenfontein property must be developed to its best potential, to align with the vision for Klapmuts as set out in the 2019 Stellenbosch Draft Spatial Development Framework (SDF). Herein the surrounding Klapmuts area is described as one of the three main

settlements in the Municipality, second only to Stellenbosch. "*Klapmuts is a significant new regional economic node within metropolitan area and spatial target for developing a "consolidated platform for export of processed agri-food products (e.g. inland packaging and "containerisation port") and "an inter-municipal growth management priority".*" At the same time the SDF highlights the fact that: "*Current planning initiatives have not addressed the economic generative opportunity associated with Klapmuts, its relationship with settlement opportunity for people close to work, and the associated opportunity to restructure Stellenbosch town as manufacturing concerns leave town in search of locations which better meet current business strategy and plans.*" This is clearly an indication of the need to significantly increase the intensity of use and to create employment opportunities on the available land, rather than to continue developing housing.

2.1.2 To achieve the above vision of the proposed development for Klapmuts on the property, the applications and authorisations as set out below are required. Moreover, the SDF promotes development for employment opportunities: "*To date, the settlement is characterized by residential use and limited commercial and work-related activity. Public sector resource constraints have prevented the infrastructure investment required to enable and unlock the full potential of the area for private sector economic development as envisaged in the GCM RSIF*" (Greater Cape Metro Regional Spatial Implementation Framework).

2.2 Land use planning / land development application

2.2.1 Application in terms of Section 15 (2) (a) a rezoning of land.

The property is zoned for Agricultural use, inside of the urban edge. It has no obvious agricultural potential or significance and was previously used for small lot cultivated grazing and pig farming. A rezoning to subdivisional area, to permit the following uses is proposed:

- Abutting the current informal settlement on Erf 2183, approximately 7 000 m² (approximately 10% of the property): Middle income housing (25 to 30 group housing or dwelling units) zoned Residential Zone II, at a density of no less than 25 units per hectare, with access of the proposed 25m access road on the southern property boundary. The internal layout will be determined by the final developer of the residential component. An internal open space of approximately 1 000m², Zoned Open Space Zone II will be desirable in the residential development.

- A public access road, connected to Groenfontein Road in Klapmuts, across Erf 2183, approximately 25m long and wide, on the southern boundary of the property: Zoned Transport Zone II.

- On the western side of the river, approximately 3ha (approximately 40% of the property): Mixed-use development, focused on light industrial / warehousing with a potential floor area of 22 000m² on erven between 2 000 and 4 000m², with access of the proposed internal road. Zoning: Industrial I use.

- On the eastern side of the river, approximately 2,6ha (approximately 35% of the property): Industrial uses consisting of warehousing and manufacturing with a floor area potential of 20 000m² is proposed on erven ranging between 5 000m² and 10 000m², with access of the proposed internal road. Zoning: Industrial I use.

- The river corridor, approximately 10% of the property is proposed as an internal green space corridor (roughly 0,7ha). Zoning: Open Space Zone II.

- The internal road will take up the remaining 5% of the property (roughly 0,5ha). Zoning: Transport Zone I.

2.2.2 Application for a permanent departure from the development parameters of the zoning scheme in terms of Section 15 (2) (b):

This departure applies specifically to the proposed residential component, which has the following zoning parameter limitations, from which departure is sought:

- *Density: as laid down by the council up to a maximum of twenty units per gross hectare or a 3:1 ratio with regard to the gross density of surrounding dwelling units, whichever permits smaller number of units.* A density of at least 25 units / hectare is proposed.

- *Communal open space: at least 80 m² per dwelling unit.* A maximum of 30m² communal open space is proposed.

- *Private outdoor space: at least 40% of the gross floor space of the unit concerned, in a form which shall not exceed a ratio of 2:1 (length to width).* A maximum of 20% private outdoor space is proposed, with no form ratio limitation.

2.2.3 Application for a consent use contemplated in the zoning scheme in terms of Section 15 (2) (o):

The Industrial Zone I primary uses do not include warehousing and transport usage. Warehousing as well as transport usage are important uses and functionally part of most recent industrial areas. Consent is sought for the establishment of such uses to be integrated into the development.

The application is for the above consent uses (warehouses and transport usage) to be approved permanently and subject to the normal development and land use parameters applicable to the Industrial I Zone.

2.2.4 Application in terms of Section 15 (2) (d) a subdivision of land:

Two immediate subdivisions are required for the development to proceed, leaving a remainder for the mixed-use industrial development that includes an open space corridor and internal road namely:

- Subdivision of approximately 500m² as public road for access purposes.
- Subdivision of approximately 7 000m² as residential development.

2.2.5 Title deed restrictions:

The title deeds applicable to the farm were scrutinised and the relevant title deed is attached together with the conveyancer's certificate in Annexure E. There are no restrictive title conditions that prevent the proposed land development.

2.3 Motivation

2.3.1 The Integrated Development Plan 2018 (IDP), including the municipal spatial development framework make specific provision for the establishment of industrial and other commercial uses at Klapmuts, to promote the diversification of the economic activities and to enhance the economic sustainability of the otherwise predominantly residential node.

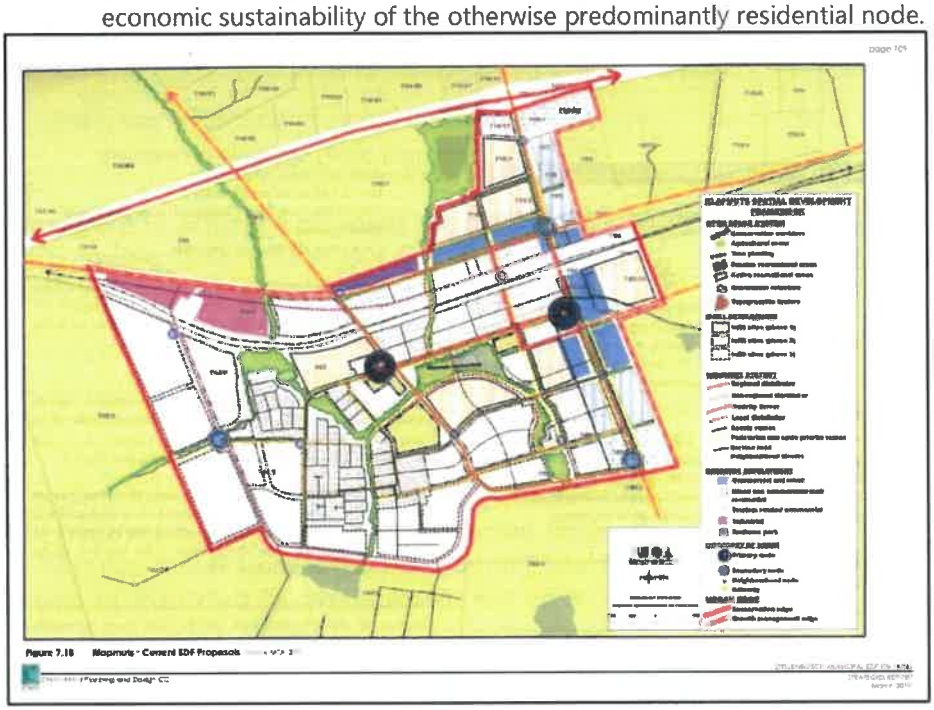


Figure 4: Existing Klapmuts SDF policy – mixed use commercial and residential

This application is in line with the provisions of both the regional and the municipal spatial planning strategies / policies. As is obvious from the inserted Figure 4 above, this part of Klapmuts has been proposed as a high intensity development area with an open space corridor along the river since 2007.

The potential of Klapmuts to "*accommodate enterprises requiring large landholdings and dependent on good intra- and inter-regional logistic networks*" is acknowledged in the 2019 Stellenbosch SDF. As stated above, Klapmuts is seen as a significant new regional economic node within metropolitan area and it has to accommodate the "*relocation of large industrial land users from Stellenbosch town*", to "*Actively support the regional locational advantages of Klapmuts to support economic development, job creation, and associated housing*" and "*the development of industries and employment generating enterprises related to manufacturing, logistics, and warehousing*".

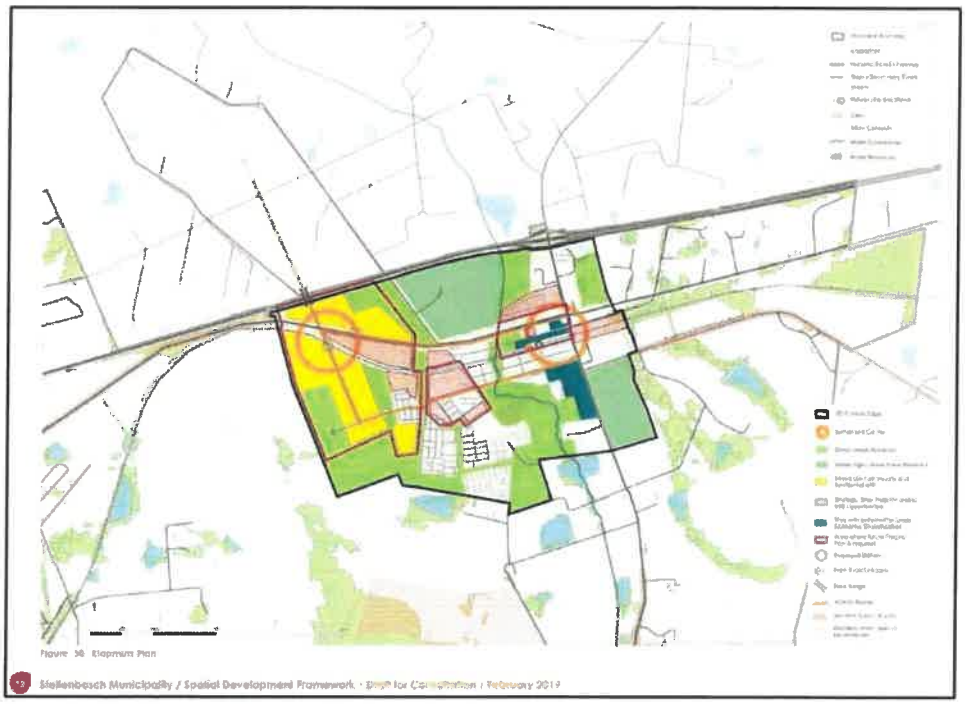


Figure 5: 2019 SDF proposals – site inside of urban edge but no use designation

2.3.2 The Provincial Spatial Development Framework (PSDF) and the supporting and complementary regional spatial development framework as contemplated in Section 18 of the Spatial Planning and Land Use Management Act, 2013 determine principles and the planning and development norms and criteria for economic related uses in the area. Nothing proposed herein contradicts any of the said development proposal, principles or guidelines.

2.3.3 The matters referred to in Section 42 of the Spatial Planning and Land Use Management Act, 2013 and the principles referred to in Chapter VI of the Western Cape Land Use Planning Act, 2014, with specific reference to spatial justice, spatial sustainability, efficiency and good administration have all been considered.

The proposed diversification of the local economic and residential opportunities through the granting of the application for rezoning, subdivision, departures and consent uses on the Groenfontein farm will improve the local environment in proximity of high-density urban developments along an intensively used road corridor where unemployment is high. Any other ratio of development, where housing becomes the predominant use of the property will only contribute to the skewed situation where residents must commute in search of economic opportunities.

Any other ratio of development, e.g. by requiring a larger proportion of housing, will exacerbate the current skewed patterns, where residential uses far exceed the economic uses providing much needed employment opportunities. To further ensure a direct integration of the proposed development with the existing town and the residential areas where unemployment is of the highest in the municipal area, access to the development is proposed off Groenfontein Road, rather than off the R44. If access is taken off the R44, then typically the development will turn its back on the local community and draw employees off the R44 as a movement corridor. Instead, the development faces onto the existing neighbourhoods and increases the opportunities for direct integration and pedestrian access. Residents in Klapmuts will be able to walk to the new industrial development via the link road over Erf 2183.

2.3.4 Engineering services and transport.

The proposed access road to the site from the Groenfontein Road is shown in the Stellenbosch Roads Master Plan (2019) as an essential link. Moreover, this access to the proposed development off Groenfontein Road, rather than off the R44, has already been authorised by the Department of Environmental Affairs and Development Planning (See Annexure J), with the approval of the Stellenbosch Municipality.

As stated above, it is important to integrate the proposed development with the existing land uses in Klapmuts. The proposed development will turn its back on the local community and draw employees off the R44 as a movement corridor if it is not integrated with the existing Klapmuts development and if it does not function as part thereof. The Roads Master Plan places a lot of emphasis on the need to upgrade the circulation inside of Klapmuts and to increase activity access, while the R44 is indicated as a mobility route, where access should be restricted. Residents in Klapmuts will benefit by the link road over Erf 2183, which as stated before, has already been authorised and planned.

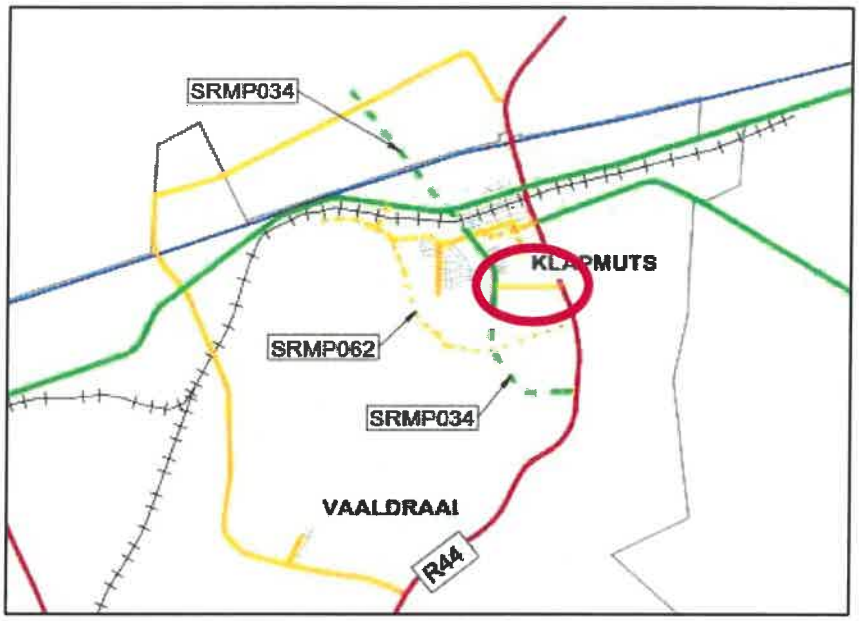


Figure 6: 2019 Roads Master Plan with the subject area in red oval showing connector

2.4 Environmental Management

The proposed development triggers an authorisation application in terms of the National Environmental Management Act, 1998, Act 107 of 1998 (NEMA).

An application in terms of this legislation has been submitted and the assessment of the property and the proposed development through a basic assessment process will inform the decision-maker (Annexure I).

Authorisation has already been granted for related infrastructure services, e.g. the road access over Erf 2183 and a sewer line to service the development from the abutting Braemar development, across the subject property (Annexure J).

2.5 Heritage

The proposed development required authorisation in terms of Section 38 of the National Heritage Resources Act, 1999, Act 25 of 1999, as the development entails an area larger than 5 000m² and rezoning of an area in excess of 1ha. The competent authority approved of the proposed development (Annexure C).

2.6 Engineering

2.6.1 A traffic statement is attached as Annexure F. The proposed development does not generate such volumes of traffic to warrant further assessment. Certain upgrading of the entrance roads is however required, as set out in the statement. The developer will pay the required development charges to share in the cost thereof on a pro-rata basis.

Road access further has to be aligned with the approved Roads Master Plan of the Municipality, which specifically requires the upgrading of Groenfontein Road, to better serve the public with access to the proposed developments in the area, not the least of which the schools on the abutting Braemar site, as well as new Class 4 road between the R44 and R101, Klapmuts (SRMP062 in Figure 6 above).

The developer will construct the access road over Erf 2183 and the relevant Portion B of the property at his cost.

2.6.2 Storm water, water and sewerage services are addressed in the attached report (Annexure G). The additional demand generated by the proposed development requires additional services infrastructure to be constructed and installed by the developer, in lieu of payment of development charges, where such storm water, water and sewerage infrastructure services will also accommodate the abutting developments, to which the relevant developers contribute through their development charges.

2.6.3 Solid waste is removed by the Municipality, which service will continue with significant increase in volume. Reusable waste will be recycled in keeping with the municipal systems and policy, while all other waste will be disposed of through the waste stream of the Municipality, funded through development charges.

2.6.4 Electrical services and capacity are sufficient to cater for the proposed development. All new services will be constructed by the developer at his cost (Annexure H).

3. CONCLUSION

The application for the rezoning of the property to subdivisional area is aligned to the Klapmuts development vision and can be approved. Consent use for warehousing and transport use mixed with the industrial use and permission to prioritise the industrial use, is in keeping with the strategic development vision and policy for Klapmuts, as set out in the Stellenbosch Municipality SDF 2019.

The provision of public access via a municipal road, off Groenfontein Road across Erf 2183, to be constructed by the developer, is aligned to the Roads Master Plan and has already been authorised in terms of NEMA. Linking the development to Klapmuts via the Groenfontein Road access promotes non-motorised transport for labour and increases the pedestrian and labour access to the development and requires minimal road infrastructure upgrading.

The application can be approved given its alignment with the higher order strategic planning policies and plans and the economic and employment benefits that would be derived therefrom, with significant investment by the developer.

LAND DEVELOPMENT APPLICATION FOR:

REZONING TO SUBDIVISIONAL AREA OF

PORTION 1 OF PAARL FARM GROENFONTEIN NO. 717 AT KLAPMUTS

May 2019
Updated version – October 2019

CONTENT

Table of figures

ANNEXURE

EXECUTIVE SUMMARY

Owner:	**Project Consultant:**
Cadcor (Pty) Ltd, Reg. No. 1971 / 011663 / 07	**Mr Dupré Lombaard**
Represented by Mr Charles Collins	Virdus Works (Pty) Ltd Reg. No. 2018/585747/07
Cellular phone: +27 83 653 2717	Cellular phone: +27 82 895 6362
E-mail: charles@collins1969.com	E-mail: dupre.lombaard@virdus.com
Address: PO Box 643, Paardekraal, 1752	Address: 77 Buitekring, Dalsig, Stellenbosch, 7600, South Africa

Cadcor wishes to rezone the property (7,323ha) to subdivisional area. In broad, the development entails the rezoning and subdivision of the property, to create three broad areas. The proposal is to develop a mixed-use industrial estate with an access off the Groenfontein Road to the west, across Erf 2183, Klapmuts. It entails the rezoning to subdivisional area of the entire property to create the proposed three use areas, with access via an internal road with a turning circle as and where required depending on the demand for buildings / sites. Further internal subdivisions will occur later after conclusion of the rezoning process.

1. The river course will be retained as an open space as determined by the environmental authorisation application process which includes development within 32m of the water course.
2. The westernmost corner abutting the current informal settlement, approximately 7 000 m², will be retained for middle income housing (25 to 30 group housing or dwelling units).
3. On the western side of the river approximately 22 000m² of mixed-use development, focused on light industrial / warehousing with consent on erven between 2 000 and 4 000m² and on the eastern side of the river approximately 20 000m² of warehousing with consent and manufacturing on erven ranging between 5 000m² and 10 000m².

There are no buildings or structures on the property and only one badly damaged off-stream storage dam, previously used for irrigation purposes. The property is land locked and will be reliant on access from the Groenfontein Road in Klapmuts, across Erf 2813 and/or off the R44 across Portion 2 and 6 of Farm Bronkhorst No. 748 and a minor portion of Portion 2 of Paarl Farm Klapmutsrivier No. 742, if same is required to comply with the Klapmuts Roads Master Plan. This application does not include such access off the R44.

This is an application in keeping with Section 15 of the Stellenbosch Municipality Land Use Planning Bylaw, 2015. The application covers the following aspects:

(1) Application in terms of Section 15 (2) (a) a rezoning of land;
(2) Application in terms of Section 15 (2) (b) a permanent departure from the development parameters of the zoning scheme;
(3) Application in terms of Section 15 (2) (d) a subdivision of land that is not exempted in terms of Section 24; and
(4) Application in terms of Section 15 (2) (o) a consent use contemplated in the zoning scheme.

There are no title deed restrictions preventing the proposed land developments.

1. BACKGROUND

1.1 Introduction

The application deals with the proposed development of a new mixed-use development containing residential, light industrial, warehousing and manufacturing opportunities together with a central open space link along the river corridor at Klapmuts. It is referred to as Groenfontein, located approximately 1,5 km south of the centre of Klapmuts, off the Groenfontein Road and west of the R44, well within the urban edge on:

- Portion 1 (7,7 ha) of Farm Groenfontein No. 717, Paarl Division.

Figure 1: Groenfontein locality showing the site locality in green

The property is completely vacant and not used for agricultural purposes. It is inside of the urban area of Klapmuts as indicated on the Stellenbosch Spatial Development Framework 2013 and in the prior Klapmuts SDF 2007.

The development of industrial uses and opportunities at Klapmuts is determined in the Stellenbosch Integrated Development Plan (IDP) and Spatial Development Framework 2019 as being a priority and preferred use.

1.2 Broad proposal

The farm is vacant and unused, except for some unauthorised informal grazing of cattle that occurs thereon from time to time. It does not contain any buildings and the farm dam thereon was partially demolished by the previous owner. As is clear

from the topographical survey in Figure 2 below, a stream course passes through the centre of the site in a south – north direction.

The proposal is to develop a small residential component on the western part of the site and a mixed-use industrial estate with an access off the Groenfontein Road to the west, across Erf 2183, Klapmuts, where it has already been authorised.

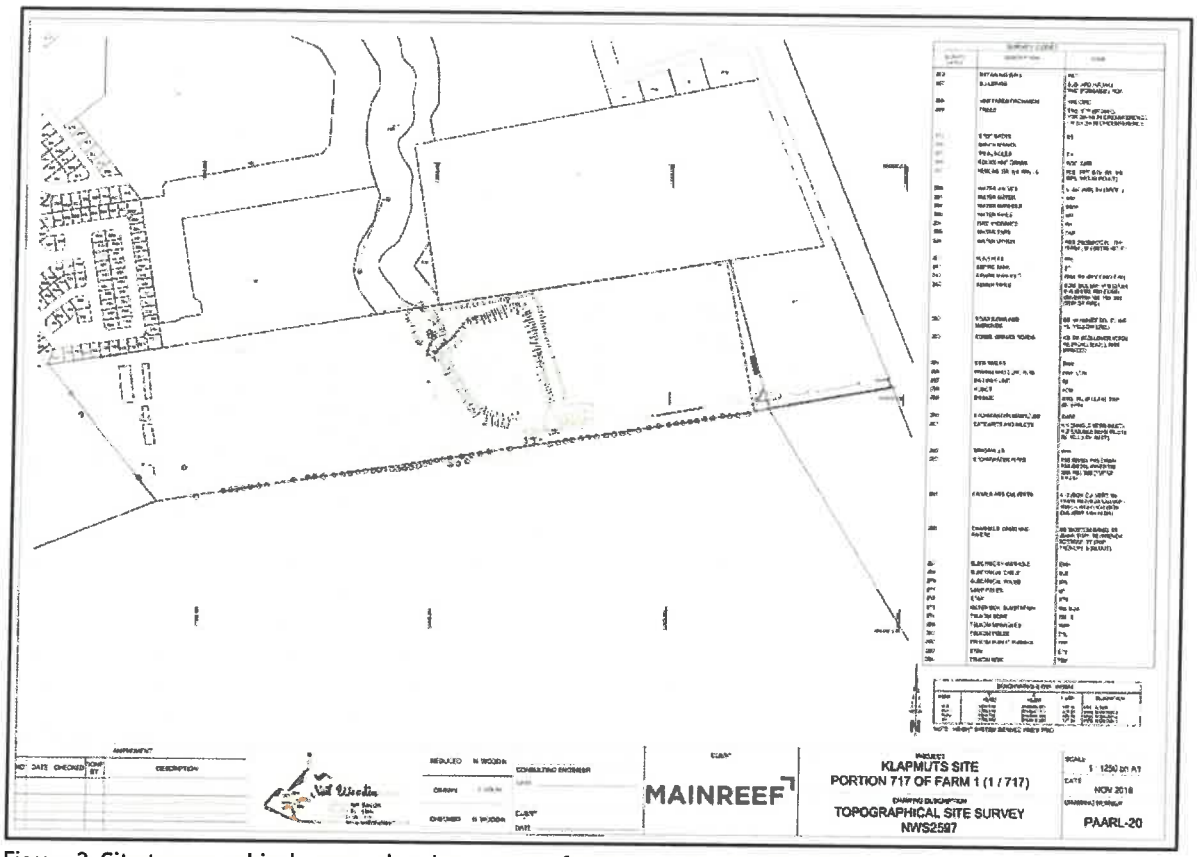


Figure 2: Site topographical survey showing extent of water course and physical features

The proposal entails the rezoning to subdivisional area of the entire property to create three use areas, with access via an internal road with a turning circle as and where required depending on the demand for buildings / sites. Further internal subdivisions will occur later after conclusion of the rezoning process. The river course will be retained as an open space as determined by the environmental authorisation application process which includes authorisation for development within 32m of the water course.

Portion A on the Proposed Land Development Plan (Annexure D): The westernmost corner abutting the current informal settlement on Erf 2183, approximately 7 000 m², will be retained for middle income housing (25 to 30 group housing or dwelling units), with access of the proposed 25m access road. The internal layout will be determined by the final developer of the residential component.

Portion B on the Proposed Land Development Plan (Annexure D): Approximately 500m² of land is proposed to be zoned and subdivided to align with the authorised road reserve across Erf 2183 and the Stellenbosch Roads Master Plan 2019, to provide access to the proposed mixed use light industrial development on Portion C.

Portion C on the Proposed Land Development Plan (Annexure D): On the western side of the river, approximately 22 000m² of mixed-use development, focused on light industrial / warehousing on erven between 2 000 and 4 000m² is proposed. On the eastern side of the river approximately 20 000m² of warehousing and manufacturing is proposed on erven ranging between 5 000m² and 10 000m², with access of the proposed internal road.

The river course, delineated with a 25m buffer either side of the stream, will be retained as a private open space, or as determined in the environmental authorisation application process which includes development within 32m of the water course. This open space will also function as storm water retention area, as detailed in the engineering services report.

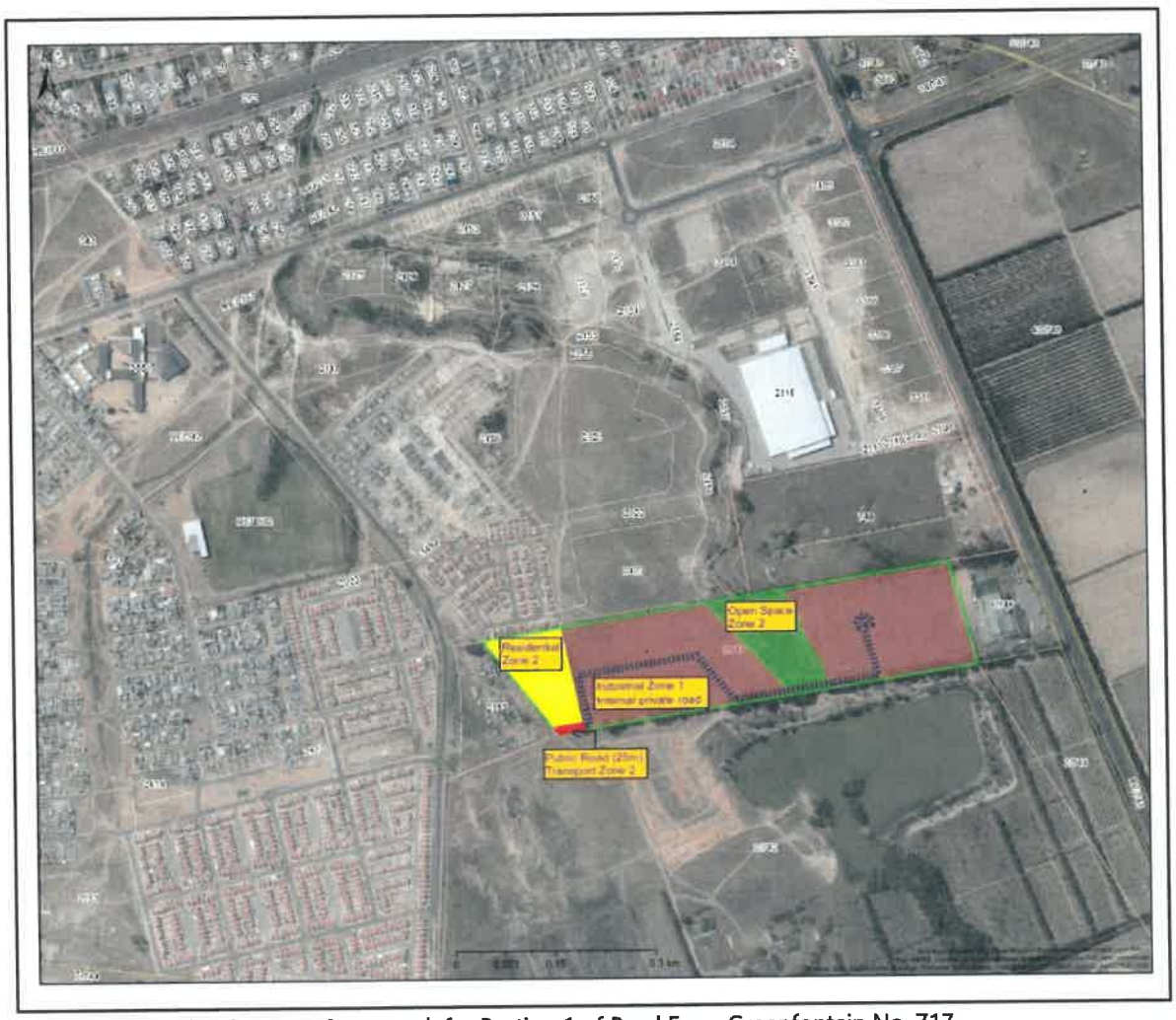


Figure 3: Broad development framework for Portion 1 of Paarl Farm Groenfontein No. 717

2. LAND DEVELOPMENT APPLICATION AND AUTHORISATION

2.1 Development context

2.1.1 The subject Groenfontein property must be developed to its best potential, to align with the vision for Klapmuts as set out in the 2019 Stellenbosch Draft Spatial Development Framework (SDF). Herein the surrounding Klapmuts area is described as one of the three main

settlements in the Municipality, second only to Stellenbosch. "*Klapmuts is a significant new regional economic node within metropolitan area and spatial target for developing a "consolidated platform for export of processed agri-food products (e.g. inland packaging and "containerisation port") and "an inter-municipal growth management priority"*." At the same time the SDF highlights the fact that: "*Current planning initiatives have not addressed the economic generative opportunity associated with Klapmuts, its relationship with settlement opportunity for people close to work, and the associated opportunity to restructure Stellenbosch town as manufacturing concerns leave town in search of locations which better meet current business strategy and plans.*" This is clearly an indication of the need to significantly increase the intensity of use and to create employment opportunities on the available land, rather than to continue developing housing.

2.1.2 To achieve the above vision of the proposed development for Klapmuts on the property, the applications and authorisations as set out below are required. Moreover, the SDF promotes development for employment opportunities: "*To date, the settlement is characterized by residential use and limited commercial and work-related activity. Public sector resource constraints have prevented the infrastructure investment required to enable and unlock the full potential of the area for private sector economic development as envisaged in the GCM RSIF*" (Greater Cape Metro Regional Spatial Implementation Framework).

2.2 Land use planning / land development application

2.2.1 Application in terms of Section 15 (2) (a) a rezoning of land.

The property is zoned for Agricultural use, inside of the urban edge. It has no obvious agricultural potential or significance and was previously used for small lot cultivated grazing and pig farming. A rezoning to subdivisional area, to permit the following uses is proposed:

- Abutting the current informal settlement on Erf 2183, approximately 7 000 m² (approximately 10% of the property): Middle income housing (25 to 30 group housing or dwelling units) zoned Residential Zone II, at a density of no less than 25 units per hectare, with access of the proposed 25m access road on the southern property boundary. The internal layout will be determined by the final developer of the residential component. An internal open space of approximately 1 000m², Zoned Open Space Zone II will be desirable in the residential development.

- A public access road, connected to Groenfontein Road in Klapmuts, across Erf 2183, approximately 25m long and wide, on the southern boundary of the property: Zoned Transport Zone II.

- On the western side of the river, approximately 3ha (approximately 40% of the property): Mixed-use development, focused on light industrial / warehousing with a potential floor area of 22 000m² on erven between 2 000 and 4 000m², with access of the proposed internal road. Zoning: Industrial I use.

- On the eastern side of the river, approximately 2,6ha (approximately 35% of the property): Industrial uses consisting of warehousing and manufacturing with a floor area potential of 20 000m² is proposed on erven ranging between 5 000m² and 10 000m², with access of the proposed internal road. Zoning: Industrial I use.

- The river corridor, approximately 10% of the property is proposed as an internal green space corridor (roughly 0,7ha). Zoning: Open Space Zone II.

- The internal road will take up the remaining 5% of the property (roughly 0,5ha). Zoning: Transport Zone I.

2.2.2 Application for a permanent departure from the development parameters of the zoning scheme in terms of Section 15 (2) (b):

This departure applies specifically to the proposed residential component, which has the following zoning parameter limitations, from which departure is sought:

- *Density: as laid down by the council up to a maximum of twenty units per gross hectare or a 3:1 ratio with regard to the gross density of surrounding dwelling units, whichever permits smaller number of units.* A density of at least 25 units / hectare is proposed.

- *Communal open space: at least 80 m² per dwelling unit.* A maximum of 30m² communal open space is proposed.

- *Private outdoor space: at least 40% of the gross floor space of the unit concerned, in a form which shall not exceed a ratio of 2:1 (length to width).* A maximum of 20% private outdoor space is proposed, with no form ratio limitation.

2.2.3 Application for a consent use contemplated in the zoning scheme in terms of Section 15 (2) (o):

The Industrial Zone I primary uses do not include warehousing and transport usage. Warehousing as well as transport usage are important uses and functionally part of most recent industrial areas. Consent is sought for the establishment of such uses to be integrated into the development.

The application is for the above consent uses (warehouses and transport usage) to be approved permanently and subject to the normal development and land use parameters applicable to the Industrial I Zone.

2.2.4 Application in terms of Section 15 (2) (d) a subdivision of land:

Two immediate subdivisions are required for the development to proceed, leaving a remainder for the mixed-use industrial development that includes an open space corridor and internal road namely:

- Subdivision of approximately 500m² as public road for access purposes.
- Subdivision of approximately 7 000m² as residential development.

2.2.5 Title deed restrictions:

The title deeds applicable to the farm were scrutinised and the relevant title deed is attached together with the conveyancer's certificate in Annexure E. There are no restrictive title conditions that prevent the proposed land development.

2.3 Motivation

2.3.1 The Integrated Development Plan 2018 (IDP), including the municipal spatial development framework make specific provision for the establishment of industrial and other commercial uses at Klapmuts, to promote the diversification of the economic activities and to enhance the economic sustainability of the otherwise predominantly residential node.

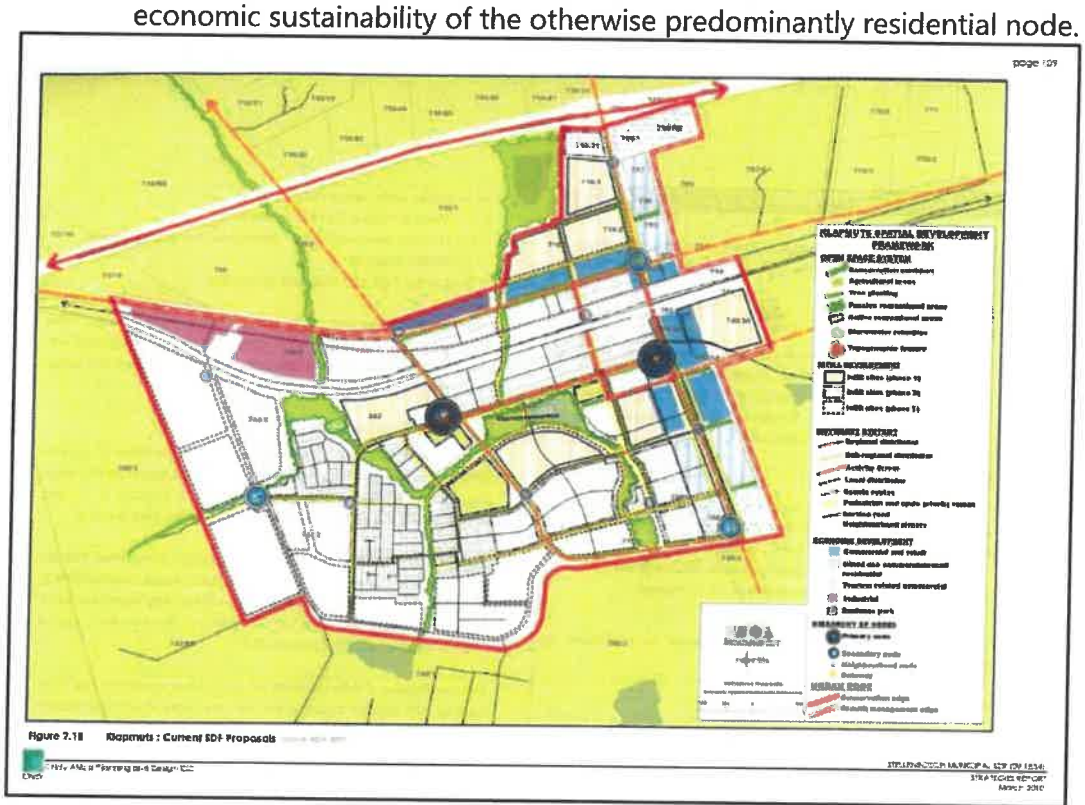


Figure 4: Existing Klapmuts SDF policy – mixed use commercial and residential

This application is in line with the provisions of both the regional and the municipal spatial planning strategies / policies. As is obvious from the inserted Figure 4 above, this part of Klapmuts has been proposed as a high intensity development area with an open space corridor along the river since 2007.

The potential of Klapmuts to "*accommodate enterprises requiring large landholdings and dependent on good intra- and inter-regional logistic networks*" is acknowledged in the 2019 Stellenbosch SDF. As stated above, Klapmuts is seen as a significant new regional economic node within metropolitan area and it has to accommodate the "*relocation of large industrial land users from Stellenbosch town*", to "*Actively support the regional locational advantages of Klapmuts to support economic development, job creation, and associated housing*" and "*the development of industries and employment generating enterprises related to manufacturing, logistics, and warehousing*".

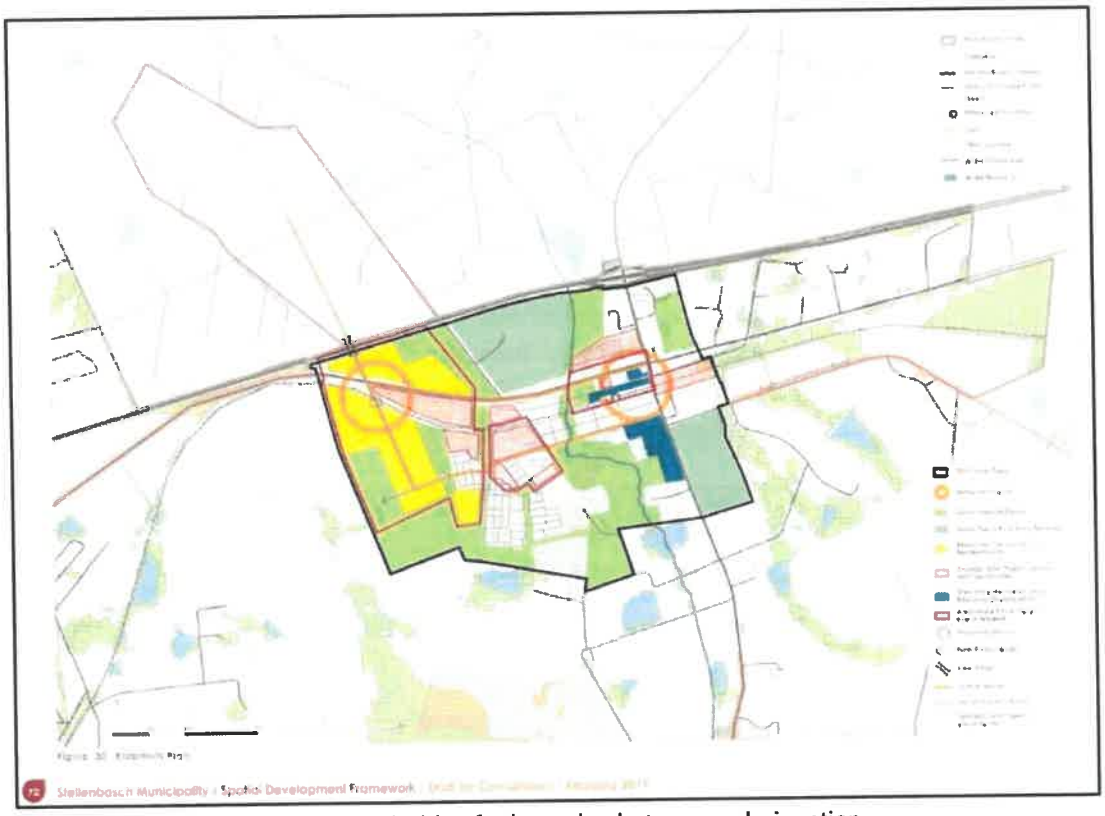


Figure 5: 2019 SDF proposals – site inside of urban edge but no use designation

2.3.2 The Provincial Spatial Development Framework (PSDF) and the supporting and complementary regional spatial development framework as contemplated in Section 18 of the Spatial Planning and Land Use Management Act, 2013 determine principles and the planning and development norms and criteria for economic related uses in the area. Nothing proposed herein contradicts any of the said development proposal, principles or guidelines.

2.3.3 The matters referred to in Section 42 of the Spatial Planning and Land Use Management Act, 2013 and the principles referred to in Chapter VI of the Western Cape Land Use Planning Act, 2014, with specific reference to spatial justice, spatial sustainability, efficiency and good administration have all been considered.

The proposed diversification of the local economic and residential opportunities through the granting of the application for rezoning, subdivision, departures and consent uses on the Groenfontein farm will improve the local environment in proximity of high-density urban developments along an intensively used road corridor where unemployment is high. Any other ratio of development, where housing becomes the predominant use of the property will only contribute to the skewed situation where residents must commute in search of economic opportunities.

Any other ratio of development, e.g. by requiring a larger proportion of housing, will exacerbate the current skewed patterns, where residential uses far exceed the economic uses providing much needed employment opportunities. To further ensure a direct integration of the proposed development with the existing town and the residential areas where unemployment is of the highest in the municipal area, access to the development is proposed off Groenfontein Road, rather than off the R44. If access is taken off the R44, then typically the development will turn its back on the local community and draw employees off the R44 as a movement corridor. Instead, the development faces onto the existing neighbourhoods and increases the opportunities for direct integration and pedestrian access. Residents in Klapmuts will be able to walk to the new industrial development via the link road over Erf 2183.

2.3.4 Engineering services and transport.

The proposed access road to the site from the Groenfontein Road is shown in the Stellenbosch Roads Master Plan (2019) as an essential link. Moreover, this access to the proposed development off Groenfontein Road, rather than off the R44, has already been authorised by the Department of Environmental Affairs and Development Planning (See Annexure J), with the approval of the Stellenbosch Municipality.

As stated above, it is important to integrate the proposed development with the existing land uses in Klapmuts. The proposed development will turn its back on the local community and draw employees off the R44 as a movement corridor if it is not integrated with the existing Klapmuts development and if it does not function as part thereof. The Roads Master Plan places a lot of emphasis on the need to upgrade the circulation inside of Klapmuts and to increase activity access, while the R44 is indicated as a mobility route, where access should be restricted. Residents in Klapmuts will benefit by the link road over Erf 2183, which as stated before, has already been authorised and planned.

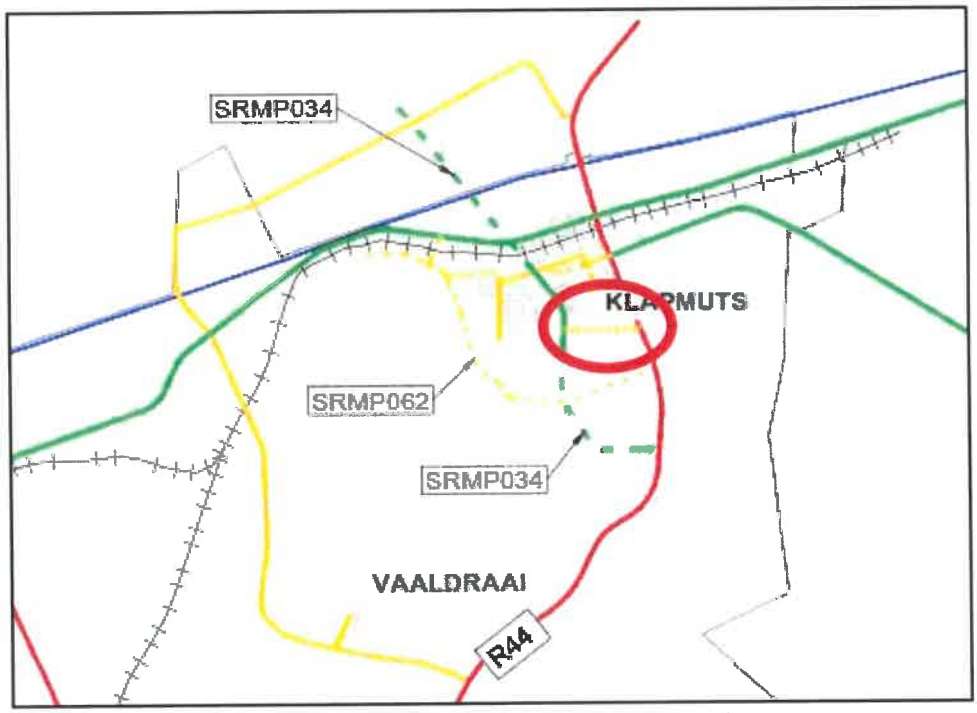


Figure 6: 2019 Roads Master Plan with the subject area in red oval showing connector

2.4 Environmental Management

The proposed development triggers an authorisation application in terms of the National Environmental Management Act, 1998, Act 107 of 1998 (NEMA).

An application in terms of this legislation has been submitted and the assessment of the property and the proposed development through a basic assessment process will inform the decision-maker (Annexure I).

Authorisation has already been granted for related infrastructure services, e.g. the road access over Erf 2183 and a sewer line to service the development from the abutting Braemar development, across the subject property (Annexure J).

2.5 Heritage

The proposed development required authorisation in terms of Section 38 of the National Heritage Resources Act, 1999, Act 25 of 1999, as the development entails an area larger than 5 000m² and rezoning of an area in excess of 1ha. The competent authority approved of the proposed development (Annexure C).

2.6 Engineering

2.6.1 A traffic statement is attached as Annexure F. The proposed development does not generate such volumes of traffic to warrant further assessment. Certain upgrading of the entrance roads is however required, as set out in the statement. The developer will pay the required development charges to share in the cost thereof on a pro-rata basis.

Road access further has to be aligned with the approved Roads Master Plan of the Municipality, which specifically requires the upgrading of Groenfontein Road, to better serve the public with access to the proposed developments in the area, not the least of which the schools on the abutting Braemar site, as well as new Class 4 road between the R44 and R101, Klapmuts (SRMP062 in Figure 6 above).

The developer will construct the access road over Erf 2183 and the relevant Portion B of the property at his cost.

2.6.2 Storm water, water and sewerage services are addressed in the attached report (Annexure G). The additional demand generated by the proposed development requires additional services infrastructure to be constructed and installed by the developer, in lieu of payment of development charges, where such storm water, water and sewerage infrastructure services will also accommodate the abutting developments, to which the relevant developers contribute through their development charges.

2.6.3 Solid waste is removed by the Municipality, which service will continue with significant increase in volume. Reusable waste will be recycled in keeping with the municipal systems and policy, while all other waste will be disposed of through the waste stream of the Municipality, funded through development charges.

2.6.4 Electrical services and capacity are sufficient to cater for the proposed development. All new services will be constructed by the developer at his cost (Annexure H).

3. CONCLUSION

The application for the rezoning of the property to subdivisional area is aligned to the Klapmuts development vision and can be approved. Consent use for warehousing and transport use mixed with the industrial use and permission to prioritise the industrial use, is in keeping with the strategic development vision and policy for Klapmuts, as set out in the Stellenbosch Municipality SDF 2019.

The provision of public access via a municipal road, off Groenfontein Road across Erf 2183, to be constructed by the developer, is aligned to the Roads Master Plan and has already been authorised in terms of NEMA. Linking the development to Klapmuts via the Groenfontein Road access promotes non-motorised transport for labour and increases the pedestrian and labour access to the development and requires minimal road infrastructure upgrading.

The application can be approved given its alignment with the higher order strategic planning policies and plans and the economic and employment benefits that would be derived therefrom, with significant investment by the developer.

ANNEXURE A: LOCALITY


N
5/716
27/716
1951
1380
2/736
RE/7/716
81
4
5/736
Klapmuts
2098
4/736
75
2
15
14
30
28
17
20
104
273
RE/1
18
58
22
25
328
23
24
RE/739
59
284
272
RE/741
2152
2151
2150
2125
2126
2127
2128
2129
2130
2131
342
3651
2118
RE/342
2159
2121
Bennetsville
RE/1172
RE/2/744
2123
2183
2414
5/742
2181
7/744
RE/742
1769
0
0.175
0.35
0.7


RE/741
RE/206
RE/231
RE/248
RE/2117
RE/342
RE/1172
342
3630
3651
2118
2125
2126
2127
2128
2129
2130
2131
2150
2151
2152
2154
2155
2156
2159
2121
2122
2123
2183
3493
2222
2413
2414
2181
932
7744
0
0.075
0.15
0.3 km

ONDERVERDELINGSKAART
Art. 24 (b), Wet No, 9 van 1927

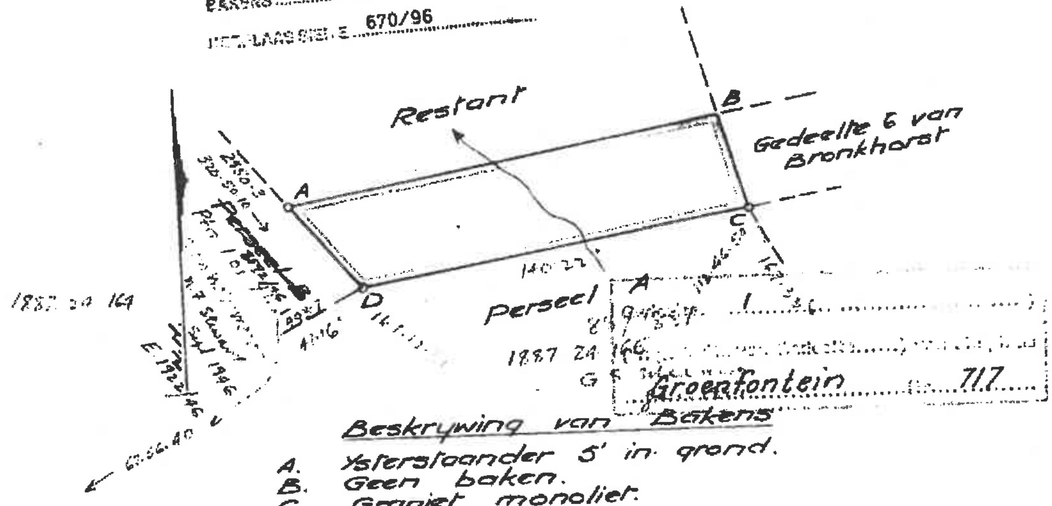
SYE Kaapse Voet		RIGTINGS-HOEKE		STELSEL L° 19° KO-ORDINATE y	x
				0·0	+1180000·0
AB	1872·1	260·42·10	A	+38330·5	+26365·7
BC	422·7	344·18·10	B	+36483·0	+26663·3
CD	1682·4	80·59·10	C	+36368·7	+27070·2
DA	475·0	140·47·50	D	+38030·3	+27333·8

L. G. No. 95/47

Goedgekeur.

w Landmeter-generaal.
-3 -5- 1947

BAKENS B
HET PLAAS STEL E 670/96



Beskrywing van Bakens
A. Ysterstaander 5' in grond.
B. Geen baken.
C. Graniet monoliet.
D. Hoekpaal.

750 0 750 1500 2250 Kaapse Voet
Skaal 1: 7500.

Die figuur A. B. C. D.

stel voor 8·5479 Morge grond, synde

GEDEELTE 1 (~~'n gedeelte van Gedeelte~~)

van die plaas GROENFONTEIN Nº

geleë in die Afdeling Paarl Provinsie Kaap die Goeie Hoop

Opgemeet in Oktober 1946 deur my

Landmeter.

Hierdie kaart is geheg aan Transport No. 14428 ten gunste van Samuel Joseph Bane. gedateer 25.7.47. Registrateur van Aktes.	Die oorspronklike kaart is No. 605/1886 geheg aan T/A 1886 - 34 - 148	L. G. Lêer No. S. 9151/5. M.S. No. E. 2536/46 Grondblad BH. CECB Stel. Q 7 - 51 Stel Q 7 51 717/1

ANNEXURE B: APPLICATION AUTHORISATION AND FORM

STELLENBOSCH
STELLENBOSCH • PNIEL • FRANSCHHOEK
MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

LAND USE PLANNING APPLICATION FORM 2017

(Section 15 of the Stellenbosch Municipal Land Use Planning By-Law (2015) and other relevant legislation)

KINDLY NOTE: Please complete this form using BLOCK letters and ticking the appropriate boxes.

PART A: APPLICANT DETAILS

First name(s)	**Dupré**				
Surname	**Lombaard**				
Company name *(if applicable)*	**Virdus Works (Pty) Ltd**				
Postal Address	**77 Buitekring, Dalsig, Stellenbosch**				
			Postal Code	**7600**	
Email	**dupre.lombaard@virdus.com**				
Tel		Fax		Cell	**082 895 6362**

PART B: REGISTERED OWNER(S) DETAILS *(If different from applicant)*

Registered owner(s)	**Cadcor (Pty) Ltd, Reg. No. 1971 / 011663 / 07**				
Physical address	**PO Box 643, Paardekraal**				
			Postal code	1752	
E-mail	**charles@collins1969.com**				
Tel	**+27 21 000 0000**	Fax		Cell	**+27 83 653 2717**

PART C: PROPERTY DETAILS *(in accordance with title deed)*

Erf / Erven / Farm No.	**717** Groenfontein	Portion(s) if Farm	Ptn 1	Allotment area	**Paarl, at Klapmuts**
Physical Address	**Between Groenfontein Road and R44, Klapmuts**				
Current Zoning	**Agriculture Zone 1**	Extent	**Approx 7,7** ha	Are there existing buildings?	No

Applicable Zoning Scheme	**LUPO Section 8 ZC**										
Current Land Use	**Agriculture - informal grazing by cattle from Klapmuts settlement, officially vacant / unused**										
Title Deed number and date	T	**T000080190/2016**									
Attached Conveyance's Certificate	(Y)	N	Any Restrictions ito the Attached Conveyance's Certificate? If yes, please list condition(s) as per certificate								
Are the restrictive conditions in favour of a third party(ies)?	Y	(N)	If Yes, list the party(ies):								
Is the property encumbered by a bond?	Y	(N)	If Yes, list the bondholder(s):								
Is the property owned by Council?	Y	(N)	If Yes, kindly attach a power of attorney from the Manager Property Management								
Is the building located within the historical core?	Y	N	Is the building older than 60 years?	Y	N	Is the application triggered by the National Heritage Resources Act, 1999 (Act 25 of 1999)[1]	Y	N	If Yes, kindly indicate which section are triggered and attached the relevant permit if applicable.		
Any existing unauthorized buildings and/or land use on the subject property(ies)?	Y	(N)	If yes, is this application to legalize the building / land use[2]?	Y	(N)						
Are there any pending court case(s) / order(s) relating to the subject property(ies)?	Y	(N)	Are there any land claim(s) registered on the subject property(ies)?	Y	(N)						

PART D: PRE-APPLICATION CONSULTATION

Has there been any pre-application consultation?	Y	(N)	If Yes, please attach the minutes of the pre-application consultation.

PART E: LAND USE PLANNING APPLICATIONS AND APPLICATION FEES PAYABLE

APPLICATIONS IN TERMS OF SECTION 15 OF THE STELLENBOSCH MUNICIPAL LAND USE PLANNING BY-LAW (2015)

Tick	Type of application: *Cost are obtainable from the Council Approved tariffs*[3]
X	15(2)(a) Rezoning of Land
	15(2)(b) a permanent departure from the development parameters of the zoning scheme
	15(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;
X	15(2)(d) a subdivision of land that is not exempted in terms of section 24, including the registration of a servitude or lease agreement;
	15(2)(e) a consolidation of land that is not exempted in terms of section 24;

[1] All applications triggered by section 38(1)(a)-(e) in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999) may not be processed without a permit issued by the relevant department

[2] No application may be submitted to legalize unauthorised building work and or land use on the property if a notice have been served in terms of Section 87(2)(a), and until such time a Section 91 Compliance Certificate have been issued in terms of the Stellenbosch Land Use Planning By-law (2015)

[3] http://www.stellenbosch.gov.za/documents/idp-budget/2017-2/4873-appendix-3-tariff-book-2017-2018/file

	15(2)(f) a removal, suspension or amendment of restrictive conditions in respect of a land unit;
	15(2)(g) a permission required in terms of the zoning scheme;
	15(2)(h) an amendment, deletion or imposition of conditions in respect of an existing approval;
	15(2)(i) an extension of the validity period of an approval
	15(2)(j) an approval of an overlay zone as contemplated in the zoning scheme;
	15(2)(k) an amendment or cancellation of an approved subdivision plan or part thereof, including a general plan or diagram ;
	15(2)(l) a permission required in terms of a condition of approval;
	15(2)(m) a determination of a zoning;
	15(2)(n) a closure of a public place or part thereof;
X	15(2)(o) a consent use contemplated in the zoning scheme;
	15(2)(p) an occasional use of land;
	15(2)(q) to disestablish a home owner's association
	15(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;
	15(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.
	15(2)(6) When the Municipality on its own initiative intends to conduct land development or an activity
	15(2)(l) Amendment of Site Development Plan
	15(2)(l) Compilation / Establishment of a Home Owners Association Constitution / Design Guidelines

OTHER APPLICATIONS		
	Deviation from Council Policies/By-laws;	R
	Other (specify) : _____	R
	TOTAL A:	**R**

PRESCRIBED NOTICE AND FEES** *(for completion and use by official)*

Tick	Notification of application in media	Type of application	Cost
	SERVING OF NOTICES	Delivering by hand; registered post; data messages	R
	PUBLICATION OF NOTICES	Local Newspaper(s); *Provincial Gazette*; site notice; Municipality's website	R
	ADDITIONAL PUBLICATION OF NOTICES	Site notice, public meeting, local radio station, Municipality's website, letters of consent or objection	R
	NOTICE OF DECISION	*Provincial Gazette*	R
	INTEGRATED PROCEDURES	T.B.C	R
		TOTAL B:	**R**
		TOTAL APPLICATION FEES* (TOTAL A + B)	**R**

**** Application fees that are paid to the Municipality are non-refundable and proof of payment of the application fees must accompany an application.***

***** The applicant is liable for the cost of publishing and serving notice of an application. Additional fees may become applicable and the applicant will be informed accordingly.***

BANKING DETAILS

Name:	Stellenbosch Municipality
Bank:	NEDBANK
Branch no.:	198765
Account no.:	1152271679
SWIFT	NEDSZAJJ
Payment reference: (Erf/Farm number)	.....

DETAILS FOR INVOICE	
Name & Surname/Company name (details of party responsible for payment)	**DUPRé LOMBAARD**
Postal Address	**77 BUITEKRING, DALSIG, STELLENBOSCH, 7600, SOUTH AFRICA**
Vat Number (where applicable)	

PART F: DETAILS OF PROPOSAL

	Building line encroachment	Street		From	m	To	m
		Street		From	m	To	m
		Side		From	m	To	m
		Side		From	m	To	m
		Aggregate side		From	m	To	m
		Rear		From	m	To	m
	Exceeding permissible site coverage			From	%	To	%
	Exceeding maximum permitted bulk / floor factor / no of habitable rooms			From		To	
	Exceeding height restriction			From	m	To	m
	Exceeding maximum storey height			From	m	To	m
	Consent/Conditional Use/Special Development To permit..... in terms of Section.....of the.....Zoning Scheme Regulations						
	Other (please specify)						

Brief description of proposed development / intent of application:

The proposal is to develop a mixed-use industrial estate with an access off the Groenfontein Road to the west, across Erf 2183, Klapmuts. It entails the rezoning to subdivisional area of the entire property to create three use areas, with access via an internal road with a turning circle as and where required depending on the demand for buildings / sites. Further internal subdivisions will occur later on after conclusion of the rezoning process. The river course will be retained as an open space as determined by the environmental authorisation application process which includes development within 32m of the water course, with industrial uses either side thereof and a residential component on the western side of the property.

PART G: ATTACHMENTS AND SUPPORTING INFORMATION AND DOCUMENTATION FOR LAND USE PLANNING APPLICATION

Complete the following checklist and attach all the information and documentation relevant to the proposal. Failure to submit all information and documentation required will result in the application being deemed incomplete.

Information and documentation required							
Ø	N		Power of attorney / Owner's consent if applicant is not owner	Y	N		Bondholder's consent (if applicable)
Ø	N		Resolution or other proof that applicant is authorised to act on behalf of a juristic person	Y	N		Proof of any other relevant right held in the land concerned
Ø	N		Written motivation pertaining to the need and desirability of the proposal	Ø	N		S.G. diagram / General plan extract (A4 or A3 only)
Ø	N		Locality plan (A4 or A3 only) to scale	Ø	N		Site development plan or conceptual layout plan (A4 or A3 only) to scale
Ø	N		Proposed subdivision plan (A4 or A3 only) to scale	Y	N		Proof of agreement or permission for required servitude
Ø	N		Proof of payment of application fees	Ø	N		Proof of registered ownership **(Full copy of the title deed)**
Ø	N		Conveyancer's certificate	Y	N		Minutes of pre-application consultation meeting (if applicable)
Ø	N	N/A	Consolidation plan (A4 or A3 only) to scale	Y	N	N/A	Land use plan / Zoning plan (A4 or A3 only) to scale
Y	N	N/A	Street name and numbering plan (A4 or A3 only) to scale	Y	N	N/A	1 : 50 / 1:100 Flood line determination (plan / report) (A4 or A3 only) to scale
Y	N	N/A	Landscaping / Tree plan (A4 or A3 only) to scale	Y	N	N/A	Home Owners' Association consent
Y	N	N/A	Abutting owner's consent	Ø	N	N/A	Services Report or indication of all municipal services / registered servitudes
Y	N	N/A	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)	Y	N	N/A	Proof of failure of Home owner's association
Y	N	N/A	Copy of original approval and conditions of approval	Ø	N	N/A	Any additional documents or information required as listed in the pre-application consultation form / minutes
Y	N	N/A	Proof of lawful use right	Y	N	N/A	Other (specify)
Ø	N	N/A	Required number of documentation copies				

PART H: AUTHORISATION(S) SUBJECT TO OR BEING CONSIDERED IN TERMS OF OTHER LEGISLATION

Y	N	If required, has application for EIA / HIA / TIA / TIS / MHIA approval been made? If yes, attach documents / plans / proof of submission etc.	Specific Environmental Management Act(s) (SEMA) (e.g. Environmental Conservation Act, 1989 (Act 73 of 1989)		
Y	N/A	Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)	Y	N/A	National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)
Y	N/A	Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)(SPLUMA)	Y	N/A	National Environmental Management: Waste Act, 2008 (Act 59 of 2008)
Y	N/A	Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations	Y	N/A	National Water Act, 1998 (Act 36 of 1998)
Y	N/A	Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA)	Y	N/A	Other (specify)
Y	N	Do you want to follow an integrated application procedure in terms of section 44(1) of the Stellenbosch Municipality Land Use Planning By-Law? If yes, please attach motivation.			

SECTION I: DECLARATION

I hereby wish to confirm the following :

1. *That the information contained in this application form and accompanying documentation is complete and correct.*
2. *I'm aware that it is an offense in terms of section 86(1)(e) to supply particulars, information or answers knowing the particulars, information or answers to be false, incorrect or misleading or not believing them to be correct.*
3. *I am properly authorized to make this application on behalf of the owner and that a copy of the relevant power of attorney or consent is attached hereto.*
4. *Where an agent is appointed to submit this application on the owner's behalf, it is accepted that correspondence from and notifications by the Municipality in terms of the by-law will be sent only to the agent and that the owner will regularly consult with the agent in this regard.*
5. *I confirm that the relevant title deed(s) have been read and that there are no restrictive title de restrictions, which impact on this application, or alternatively an application for removal/suspension or amendment forms part of this submission.*
6. *I confirm that I have made known all information relating to possible Land / Restitution Claims against the application property.*
7. *It is the owner's responsibility to ensure that approval is not sought for a building or land use which will be in conflict with any applicable law.*
8. *The Municipality assesses an application on the information submitted and declarations made by the owner or on his behalf on the basis that it accepts the information so submitted and declarations so made to be correct, true and accurate.*
9. *Approval granted by the Municipality on information or declarations that are incorrect, false or misleading may be liable to be declared invalid and set aside which may render any building or development pursuant thereto illegal.*
10. *The Municipality will not be liable to the owner for any economic loss suffered in consequence of approval granted on incorrect, false or misleading information or declarations being set aside.*
11. *Information and declarations include any information submitted or declarations made on behalf of the owner by a Competent Person/professional person including such information submitted or*

declarations made as to his or her qualification as a Competent person and/or registration as a professional.

12. *A person who provides any information or certificate required in terms of Regulation A19 of the National Building Regulations and Building Standards Act No 103 of 1977 which he or she knows to be incomplete or false shall be guilty of an offence and shall be prosecuted accordingly.*
13. *A person who supplies particulars, information or answers in a land use application in terms of the Stellenbosch Municipality Land Use Planning By-law knowing it to be incorrect, false or misleading or not believing them to be correct shall be guilty of an offence and shall be prosecuted accordingly.*
14. *The Municipality will refer a complaint to the professional council or similar body with whom a Competent Person/professional person is registered in the event that it has reason to believe that information submitted or declaration/s made by such Competent Person/professional person is incorrect, false or misleading.*

Applicant's signature: _____ Date: **30 March 2019**

Full name: **DUPRé LOMBAARD**

Professional capacity: **Applicant**

FOR OFFICE USE ONLY

Date received: _____

Received By: _____

LETTER OF AUTHORISATION / POWER OF ATTORNEY

(Requirement in terms of the Stellenbosch Land Use Planning Bylaw, 2015)

I CHARLES HENRY COLLINS / We,

....., ID.No. 6910209509086....., the undersigned representative(s) of the land owner(s) of Portion 1 of the Paarl Farm Groenfontein No. 717, located at Klapmuts, being: ....CADCOR..... (Pty) Ltd / Trust, Reg. no 1971/011663/07 confirm that permission and special power of attorney has been granted to Dupré Lombaard, to act on the behalf of the land owner to perform any act which he / she / it may be legally entitled to undertake to accomplish the following objectives and goals in terms of the above Bylaw:

To manage the project by coordinating all related studies, reports and applications, to prepare and submit applications for the authorisation of the following activities / land use / development in terms of the above Bylaw: Rezoning to subdivisional area, subdivision and development for mixed uses, primarily light industrial, of Portion 1 of Paarl Farm Groenfontein No. 717, including of related applications for authorisation in terms of the: Subdivision of Agricultural Land Act, 1970, Act 70 of 1970, National Environmental Management Act, 1998, Act 107 of 1998 and National Heritage Resources Act, 1999, Act 25 of 1999.

Contact details (physical address / phone / fax):

Physical address: 3 BERGBOSCH, DE BOSCH, STELLENBOSCH/
Postal address: PO BOX 12468, DIE BOORD, 7613
Telephone: 0836532717
Facsimile: 0865167165
Cellular: 0836532717
Email: charles@collins1969.com

CHARLES HENRY COLLINS
[Full Names]

[Full Names]

By my / our signature(s) I / we confirm that I / we have been fully authorised to act on behalf the above land owner (annex the applicable resolution or other proof of authorisation to act on behalf of a juristic person hereto),

05/12/2018.

CADCOR (PTY) LTD

REGISTRATION NUMBER: 1971/011663/07

PO BOX 12468
DIE BOORD
7613

3 BERGBOSCH
DE BOSCH
STELLENBOSCH
7600

DIRECTORS : CH COLLINS, HDB OLIVIER

RESOLUTION

Extracts from the minutes of a meeting of the directors of Cadcor (Pty) Ltd (Reg. No. 1971/011663/07) held at Stellenbosch the 4th of December 2018.

RESOLVED:

1. The person mentioned below in clause 2 below is hereby authorised to sign all documents required to submit applications for land use and development activities.

2 CHARLES HENRY COLLINS DIRECTOR
(Name in full) (Capacity) (Signature)

Only one signature will be required for the signing of all documents.

Certified a true extract of abovementioned resolution.

Signed at Stellenbosch on 4 December 2018.

Director
HDB Olivier

Director
CH Collins

RESOLUTION BY THE DIRECTORS OF CADCOR (PTY) LTD

A South African company with Registration Number 1971 / 011663 / 07

IT WAS RESOLVED THAT:

1. The Directors of the company hereby authorise **CHARLES HENRY COLLINS**, ID number **6902095097086**, as Director and Chief Executive Officer of the company to sign all documents, appointments and agreements, as may be required for the day to day management of the company, including but not limited to the company's land development applications for Portion 1 of the Paarl Farm No. 717 located at Klapmuts.

2. This includes the appointment and Power of Attorney in favour of Dupré Lombaard of Virdus Works (Pty) Ltd as project manager and all other consultants and specialists required for the achievement of the envisaged land development outcomes.

3. It further includes Power of Attorney to Dupré Lombaard of Virdus Works (Pty) Ltd (Reg. No. 2018/585747/07) as project manager to sign all applications and letters of appointment for all other consultants and specialists required for the achievement of the envisaged land development outcomes in keeping with approved budgets and programs.

Signed in Stellenbosch on 05 December 2018.

HENDRIK DE BRUIN OLIVIER (ID No. 6910085142085)
Director

CHARLES HENRY COLLINS (ID No. 6902095097086)
Director

ANNEXURE C: HERITAGE AUTHORISATION

REGISTERED POST

Our Ref:	HM/ CAPE WINELANDS/ DRAKENSTEIN/ KLAPMUTS/ FARM GROENFONTEIN 717/ PORTION 1
Case No.:	18071009AS0711E
Enquiries:	Lwazi Bhengu
E-mail:	Lwazi.Bhengu@westerncape.gov.za
Tel	021 483 9689
Date:	19 March 2019

iLifa leMveli leNtshona Koloni
Erfenis Wes-Kaap
Heritage Western Cape

Cadcor (Pty) Ltd
P.O. Box 643
1752

RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: FINAL
In terms of Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED MIXED USE DEVELOPMENT ON PORTION 1 OF FARM GROENFONTEIN 717, KLAPMUTS, SUBMITTED IN TERMS OF SECTION 38 (8) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 18071009AS0711E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 15 March 2019. This matter was discussed at the Heritage Officers meeting held on 18 March 2019.

You are hereby notified that since there is no reason to believe that the proposed mixed use development on Farm Groenfontein 717, Portion 1, Klapmuts, 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.

This letter does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

Yours faithfully

.....
Dr Mxolisi Dlamuka
Chief Executive Officer, Heritage Western Cape

ANNEXURE D: DEVELOPMENT FRAMEWORK AND SUBDIVISION PLANS


3590
3573
3589
3574
3588
3575
3587
3576
3586
3577
3585
3578
3584
3579
3583
3580
3582
3581
3614
3615
3616
3617
3618
3619
3620
3621
3622
3623
3624
3625
3626
3627
3448
3447
3446
3445
3444
3443
3442
3441
3456
3455
3454
3453
3452
3451
3450
3449
3293
3294
3295
3296
3297
3298
3299
3300
3301
3302
3303
3304
3305
3306
3307
3308
3309
3310
3311
3312
3313
3314
3315
3316
3317
3318
3319
3320
3321
3322
3323
3324
3325
3326
3327
3328
3329
3330
3331
3333
3334
3335
3336
3337
3338
3339
3340
3341
3342
3343
3344
3345
3346
3347
3348
3349
3350
3351
3352
3354
3355
3356
3357
3358
3359
3360
3361
3362
3363
3364
3365
3366
3367
3368
3369
3370
3371
3372
3373
3292
3291
3290
3289
3288
3286
3285
3284
3283
3280
3279
3277
3276
3275
3274
3273
3272
3271
3270
PORTION A

ANNEXURE E: CONVEYANCER'S CERTIFICATE AND TITLE DEED

STELLENBOSCH

CONVEYANCER CERTIFICATE

I/We Tasleema Rinquest

Practising at:

Vanderspuy attorneys, Cape Town

In respect of:

PORTION 1 OF THE FARM GROENFONTEIN 171 STELLENBOSCH MUNICIPALITY PAARL DIVISION

Hereby certify that a search was conducted in the Deeds Registry, regarding the said property (ies) (including both current and earlier title deeds/pivot deeds/deeds of transfer):

1. Stellenbosch Quitrents Vol 1 Folio 51
2. Deed of Transfer 145/1895
3. Deed of Transfer 5036/1896
4. Deed of Transfer 6811/1901
5. Deed of Transfer 8803/1902
6. Deed of Transfer 1931/1918
7.
8.

A. IDENTIFY RESTRICTIVE TITLE CONDITIONS (if any)

Categories		Are there deed restrictions (indicate below)		Title Deed and Clause number if restrictive conditions are found
1.	Use of land	Y	N x	
2.	Building lines	Y	N x	
3.	Height	Y	N x	
4.	Number of Dwellings	Y	N x	
5.	Bulk floor area	Y	N x	
6.	Coverage/built upon area	Y	N x	
7.	Subdivision	Y	N x	
8.	Servitudes that may be registered over or in favour of the property	Y	N x	
9.	Other Restrictive Conditions	Y	N x	

B. INDICATE AFFECTED PARTIES AS PER TITLE DEED (if any)

a.	Organ(s) of State that might have an interest in the restrictive condition	None
b.	A person whose rights or legitimate expectations will be affected by the removal/suspension/amendment of a restriction condition	None
c.	All persons mentioned in the deed for whose benefit the restrictive condition applies	None

C. PROCESS BY WHICH RELEVANT CONDITIONS WILL BE ADDRESSED

Application in terms of Section 15 of the Stellenbosch Municipal Land Use Planning By-Law (2015)	Notarial Deed of Cancellation (Submit Copy of Signed Agreement)	Action by way of court order (Submit Copy of the Court Order)	If Other, Please Specify

Signed at Cape Town (Place) on this 25 (Day) February (Month)

of 20 19

Full names and Surname: Tasleema Rinquest

Signature: .....

TASLEEMA RINQUEST
CONVEYANCER
COMMISSIONER OF OATHS
4th FLOOR, 14 LONG STREET, CAPE TOWN

VANDERSPUY
CAPE TOWN
ATTORNEYS CONVEYANCERS NOTARIES

Tel: 021 419 3622

Email: tasleema@vdslaw.co.za

Cell: .....

320

Van Wyk Fouchee Incorporated
296 Main Road
Paarl
7646

Prepared by me

CONVEYANCER
WILLEM JACOBUS VANWYK

Fee endorsement		
	Amount	Office fee
Purchase price/Value.	R 9 690 000.00	R 2310.00
Mortgage capital Amount	R	R
Reason for exemption	Cat	Exempt i.t.o section Act

BC 000052230 / 2017

REGISTRAR

2017 -09- 26

VERBIND MORTGAGED

VIR FOR R 4 845 000.00

B000034687 / 2016

22 DEC 2016

REGISTRATEUR/REGISTRAR

DATA / VERIFY
07 FEB 2017
MURIE LORRAINE

VIR VERDERE ENDOSSEMENTE SIEN
FOR FURTHER ENDORSEMENTS SEE 4

T000080190 / 2016

DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT

ANTON LUTHER POSTHUMUS

appeared before me, REGISTRAR OF DEEDS at CAPE TOWN, the said appearer being duly authorised thereto by a Power of Attorney which said Power of Attorney was signed at PAARL on 14 NOVEMBER 2016 granted to him by

The Trustees for the time being of
THE ROBIN STREET TRUST
Registration number IT620/1987

DATA / CAPTURE
31 JAN 2017
PETYATYAMBA NOLUKO

GhostConvey 15.9.5.6

VERBIND MORTGAGED

VIR
FOR R 4845 000.00

B 000034688 /2016

02 DEC 2016

REGISTRATEUR/REGISTRAR

For Information Only

And the appearer declared that his said principal had, on 27 September 2016, truly and legally sold by Private Treaty, and that he, the said Appearer, in his capacity aforesaid, did, by virtue of these presents, cede and transfer to and on behalf of:

CADCOR PROPRIETARY LIMITED
Registration Number 1971/011663/07

or its Successors in Title or assigns, in full and free property

PORTION 1 OF THE FARM GROENFONTEIN NUMBER 717,
in the Stellenbosch Municipality,
Division of Paarl,
in the Western Cape Province

IN EXTENT 7,3216 (SEVEN COMMA THREE TWO ONE SIX) Hectares

FIRST TRANSFERRED by Deed of Transfer Number T14128/1947 with Diagram Number 95/1947 relating thereto and held by Deed of Transfer Number T64754/1996.

SUBJECT to the conditions referred to in Deed of Transfer Number T1931/1916 dated the 24th March 1916.

WHEREFORE the said Appearer, renouncing all rights and title which the said

The Trustees for the time being of
THE ROBIN STREET TRUST
Registration number IT620/1987

heretofore had to the premises, did in consequence also acknowledge them to be entirely dispossessed of, and disentitled to the same, and that by virtue of these presents, the said

CADCOR PROPRIETARY LIMITED
Registration Number 1971/011663/07

or its Successors in Title or assigns, now is and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the sum of R9 690 000,00 (NINE MILLION SIX HUNDRED AND NINETY THOUSAND RAND) .

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixed thereto.

THUS DONE and EXECUTED at the Office of the REGISTRAR OF DEEDS at CAPE TOWN on 2016 -12- 22

2016

q.q.

In my presence

REGISTRAR OF DEEDS

For Information Only

ANNEXURE F: TRAFFIC STATEMENT

Contact Address:
iCE Group (Stellenbosch),
P O Box 131,
Stellenbosch, 7599

Tel No: +27 (0) 21 880 0443
Fax No: +27 (0) 21 880 0390
e-mail: piet@icegroup.co.za

GROUP (Pty) Ltd.

Consulting Services
- Civil Engineering Service
- Roads
- Traffic Engineering

Contact Person: Piet van Blerk
Your Ref: Farm 717/1, Stellenbosch
Our Ref: iCE/S/1297

Date: 3 June 2019

Municipal Manager
Stellenbosch Municipality
PO Box 17
STELLENBOSCH
7599

Attention: Mr Nigell Winter

Sir

APPLICATION FOR SUBDIVISION AND REZONING OF FARM 717 PORTION 1, STELLENBOSCH: TRAFFIC IMPACT ASSESSMENT

This company was appointed to prepare a Traffic Impact Assessment (TIA) for the proposed development on Farm 717/1, Klapmuts, Stellenbosch.

1. BACKGROUND AND LOCALITY

The subject property is situated to the west of the Potbelly Pantry and to the east of Groenfontein Road, Klapmuts, Stellenbosch. See the attached ***Locality Plan***.

The Stellenbosch Municipality is planning some affordable/low-cost housing adjacent to the most western portion of the subject property, where informal housing currently exists. In keeping with the said potential development, it is proposed to develop a portion of the subject property in a similar manner.

A development proposal is currently being worked on for the adjacent (to the south) property, however, as far as could be established a formal application have not yet been submitted to Stellenbosch Municipality.

This TIA accompanies the Application for Subdivision and Rezoning of Farm 717/1, Klapmuts, Stellenbosch.

2. PROPOSED DEVELOPMENT

2.1 Proposed Development

As briefly mentioned above, it is the intention to develop a portion of the subject property in a similar manner as the adjacent affordable/low-cost housing development. The subject property will be subdivided into three portions, one of which will accommodate the river traversing the property, whilst the other two portions will consist of the following:

Western portion:	± 7 000 m² retained for middle income housing – 25 to 30 group housing units
Remainder:	± 22 000 m² Gross Leasable Area (GLA) mixed-use development (light industrial/warehousing), erven sized between 2 000 m² and 4 000 m²

Stellenbosch office:
Tel: 021 8800 443
Fax: 021 8800 390

Directors:
P.J.Van Blerk, PrEng.

iCE Group (Overberg) t/a
iCE Group (Stellenbosch)

Reg No: 2006/133238/23

± 20 000 m² GLA warehousing, erven sized between 5 000 m² and 10 000 m²

See the proposed subdivision on the attached ***Proposed Land Development Plan*** prepared by *Friedlaender, Burger & Volkmann Land Surveyors*.

2.2 Access to the Property

No formal access currently exists to the subject property. According to information, a 25 metre road reserve exists/will be created across the adjacent Erf 2183 (Municipal Land), to accommodate access to Groenfontein Road. Detail on access will be further discussed in *paragraph 4*.

3. TRAFFIC

3.1 Existing Traffic

Weekday peak hour traffic counts were conducted as previously discussed with your mr Nigell Winter. These counts were conducted at the following intersections on Tuesday, 14 May 2019 from 06h30 to 08h30 and again from 16h30 to 18h30:

1. R44/Stellengate Boulevard signalised intersection
2. Stellengate Boulevard/Simonsberg Business Park Access roundabout
3. Stellengate Boulevard/Merchant Street mini-circle
4. Groenfontein Road/Merchant Street intersection
5. Groenfontein Road/Street intersection

The peak hour traffic volumes derived from these counts are indicated in ***Figure 1*** attached.

3.2 Traffic Growth

Based on previous studies compiled in the area, and in accordance with the TMH17 *Typical Traffic Growth Rates* in average- to above average growth areas, an annual growth rate of 4% per annum was applied to the peak hour traffic along the R44. To account for possible traffic growth along the residential streets within Klapmuts, an annual growth rate of 2% per annum was applied.

In accordance with the requirements of WCG, a 5-year growth period was assessed. The existing 2019 peak hour volumes were therefore increased by the abovementioned annual growth rates for five (5) years to obtain the estimated 2024 peak hour volumes as indicated in ***Figure 2*** attached.

As mentioned in *paragraph 1* above, as far as could be established the adjacent development application has not yet been submitted. For the purpose of this report, the potential trip generation of the said development was therefore not taken into account.

3.3 Traffic Generation

Trip generation rates as contained in the TMH17 *South African Trip Data Manual* were used to calculate the peak hour traffic that can potentially be generated by the proposed development. The TMH17 suggests the following trip generation rates for the applicable land uses:

Warehousing & Distribution — 0,5 trips per 100 m² GLA (60/40 in/out split during the AM peak hour and 45/55 during the PM peak hour)

Industrial Area (Park)	0,8 trips per 100 m^2 GLA (70/30 in/out split during the AM peak hour and 25/75 during the PM peak hour)
Manufacturing	0,6 trips per 100 m^2 GLA (80/20 in/out spilt during the AM peak hour and vice versa during the PM peak hour)
Multi-Level Townhouses	0,75 trips per dwelling unit (25/75 in/out split during the AM peak hour and 70/30 during the PM peak hour)

Based on the above, the following peak hour trip generation can be expected:

	AM Peak Hour Trips			**PM Peak Hour Trips**		
	Total	**In**	**Out**	**Total**	**In**	**Out**
Residential (*30 units*)	23	6	17	23	16	7
Light Industrial (*22 000 m^2 GLA*)	176	123	53	176	44	132
Warehousing (*20 000 m^2 GLA*)	100	60	40	100	45	55
Total	**299**	**189**	**110**	**299**	**105**	**194**

3.4 Traffic Distribution

As mentioned in *paragraph 2* above, access will be obtained via Groenfontein Road. The vehicles to/from the proposed development was distributed to the road network along Groenfontein Road, Merchant Street and Stellengate Boulevard via the R44/Stellengate Boulevard intersection, at which the peak hour traffic was distributed in accordance with the existing directional split in traffic at the said intersection. See the distributed peak hour traffic volumes in ***Figure 3*** attached.

3.5 Traffic Analysis

Traffic analyses of the intersections were done by means of the Sidra Intersection 8.0 software. Service levels A to D are considered acceptable, with D the critical. In congested areas, service level E is also considered acceptable. The link volumes were analysed by means of the methods contained in the Highway Capacity Manual.

The intersections as listed in *paragraph 3.1* above, consist of lane layouts as follows (*aerial photos dated 2016*).

R44/Stellengate Boulevard intersection:

This intersection is currently signalised, with dedicated right-turn lanes on all approaches. See the photo below.

Photo 1 : Existing R44/Stellengate Boulevard intersection lane layout

Stellengate Boulevard/Simonsberg Business Park Access intersection:

This intersection is currently a roundabout with single circulating lane, and left-slip lane along Stellengate Boulevard towards the Business Park Access. See the photo below.

Photo 2 : Existing Stellengate Boulevard/Simonsberg Business Park Access intersection lane layout

Stellengate Boulevard/Merchant Street intersection:

This intersection is currently a mini-circle. See the photo below.

Photo 3 : Existing Stellengate Boulevard/Merchant Street intersection lane layout

Groenfontein Road/Merchant Street intersection:

This intersection is currently stop-controlled on the Groenfontein Road-approaches, with free-flow conditions along Merchant Street. The fourth leg to the intersection was constructed since the aerial photograph. The said road link provides access to the taxi rank recently implemented. See the photo below.

Photo 4 : Existing Groenfontein Road/Merchant Street intersection lane layout

Groenfontein Road/Street intersection:

This intersection is currently a T-intersection with stop-control on the side street-approach and free-flow conditions along Groenfontein Road. See the photo below. According to the future planning of the roads in the area (*Aecom plan no J01057-01-10-001-P-08*), a roundabout is proposed as the ultimate form of intersection control.

Photo 5 : Existing Groenfontein Road/Street intersection lane layout

3.5.1 Analysis of Existing and Estimated Peak Hour Volumes (excluding proposed development)

Link Volumes:

As indicated in ***Figure 1*** and ***Figure 2*** attached, the following link volumes (total two-way traffic) are experienced/expected:

	Existing AM/PM (***Fig 1***)	Estimated AM/PM (***Fig 2***)
R44 **north** of Klapmuts-Simondium Road	1 685 / 1 474	2 015 / 1 766
R44 **south** of Klapmuts-Simondium Road	1 387 / 1 146	1 671 / 1 383

The link volumes tabled above, indicate that the dualling of the R44 north of the Klapmuts-Simondium Road intersection (towards Old Paarl Road) will be required to accommodate the background traffic (estimated 2024 peak hour volumes). Based on the traffic growth rate applied, it is anticipated that the dualling of the section of the R44 south of the abovementioned intersection will be required within approximately nine (9) years' time (± year 2028).

It can thus be concluded that the dualling of the R44 north of its intersection with the Klapmuts-Simondium Road will be required to accommodate the 2024 background traffic.

R44/Stellengate Boulevard intersection:

During peak times, queuing is currently experienced at this intersection which seems to be as result of vehicles backed up from the R44/Old Paarl Road intersection.

According to the Sidra analyses, with independent signal phasing and timing, and assessing the intersection in isolation, acceptable service levels C and above are experienced during the existing AM and PM peak hours.

During the estimated peak hours, the Sidra analyses show similar service levels, however, the queuing on the shared through-left lane on the northern R44-approach doubles (to approximately 130 metres). Based on this, it is suggested that the

provision of a dedicated left-turn lane be considered on the northern R44-approach to the intersection. With the proposed turning lane in place, the queuing can be expected to subside.

Furthermore, it has been experienced during the PM peak hour, that left-turning vehicles from the R44 towards Stellengate Boulevard, utilise the existing shoulder along the R44 as result of the left-turn lane being a shared lane with the through movement. To address this, it is suggested that the provision of a dedicated left-turn lane on the southern R44-approach be considered

It can thus be concluded that to accommodate the background traffic at the R44/Stellengate Boulevard intersection, the provision of a dedicated left-turn lane on the northern R44-approach is considered necessary.

Stellengate Boulevard/Simonsberg Business Park Access intersection:

According to the Sidra analyses, acceptable service levels can be expected on all movements at this roundabout during the existing- and estimated AM and PM peak hours.

It can thus be concluded that, to accommodate the background traffic, no upgrades are considered necessary at the Stellengate Boulevard/Simonsberg Business Park Access intersection.

Stellengate Boulevard/Merchant Street intersection:

According to the Sidra analyses, acceptable service levels can be expected on all movements at this roundabout during the existing- and estimated AM and PM peak hours.

It can thus be concluded that, to accommodate the background traffic, no upgrades are considered necessary at the Stellengate Boulevard/Merchant Street intersection.

Groenfontein Road/Merchant Street intersection:

According to the Sidra analyses, acceptable service levels can be expected on all movements at this intersection during the existing- and estimated AM and PM peak hours.

It can thus be concluded that, to accommodate the background traffic, no upgrades are considered necessary at the Groenfontein Road/Merchant Street intersection.

Groenfontein Road/Street intersection:

According to the Sidra analyses, acceptable service levels can be expected on all movements at this roundabout during the existing- and estimated AM and PM peak hours.

It can thus be concluded that, to accommodate the background traffic, no upgrades are considered necessary at the Groenfontein Road/Street intersection.

3.5.2 Analysis of Expected Peak Hour Volumes (including proposed development)

The potential peak hour traffic generated by the proposed development (***Figure 3***) was added to the background traffic (***Figure 2***) to obtain the expected peak hour volumes (***Figure 4***).

Link Volumes:

As per ***Figure 4*** attached, the AM/PM link volumes anticipated along the R44 will be 2 199/1 958 north- and 1 750/1 462 south of the R44/Klapmuts-Simondium Road intersection. As mentioned with the background traffic volumes, the dualling of the section north will be required to accommodate the background traffic.

It can thus be concluded that no additional dualling of the R44 is considered necessary as result of the proposed development traffic.

R44/Stellengate Boulevard intersection:

With the layout as discussed with the background traffic (i.e. addition of a dedicated left-turn lane on the northern R44-approach), acceptable service levels C and above can be expected during the expected peak hours.

It can thus be concluded that no upgrades, additional to those suggested to accommodate the background traffic, are considered necessary at the R44/Stellengate Boulevard intersection as result of the addition of the proposed development traffic.

Stellengate Boulevard/Simonsberg Business Park Access intersection:

With the addition of the proposed development traffic, the acceptable service levels anticipated during the estimated peak hours can be expected to remain, with marginal increase in queuing and/or delays.

It can thus be concluded that no upgrades are considered necessary at the Stellengate Boulevard/Simonsberg Business Park Access intersection as result of the addition of the proposed development traffic.

Stellengate Boulevard/Merchant Street intersection:

With the addition of the proposed development traffic, the acceptable service levels anticipated during the estimated peak hours can be expected to remain, with marginal increase in queuing and/or delays.

It can thus be concluded that no upgrades are considered necessary at the Stellengate Boulevard/Merchant Street intersection as result of the addition of the proposed development traffic.

Groenfontein Road/Merchant Street intersection:

With the addition of the proposed development traffic, the acceptable service levels anticipated during the estimated peak hours can be expected to remain, with marginal increase in queuing and/or delays.

It can thus be concluded that no upgrades are considered necessary at the Groenfontein Road/Merchant Street intersection as result of the addition of the proposed development traffic.

Groenfontein Road/Street/Access intersection:

With the development of the subject property, a fourth leg will be added to this existing T-intersection. At this stage it is anticipated that a stop-controlled leg, similar to the opposite Street-approach, will initially be provided. With the said layout, acceptable service levels can be expected on all movements during the expected peak hours.

It can thus be concluded that, other than the addition of the access-approach to the Groenfontein Road/Street/Access intersection, no additional upgrades are considered necessary at the intersection as result of the proposed development traffic.

4. GEOMETRY

As previously mentioned, access to the subject property is proposed via Groenfontein Road, which is access via Merchant Street, Pickering Street and Stellengate Boulevard (from the R44 or Klapmuts-Simondium Road). According to information, the R44 is classified as a Class 2-road, whilst Groenfontein Road will ultimately function as a Class 3-road (when it is extended to link with the R44 to the south). Stellengate Boulevard and Merchant Street can be classified as Class 4-roads. Pickering Street is currently serving as link between Stellengate Boulevard and Merchant Street until such a time that Stellengate Boulevard is extended to line

up with Merchant Street at its intersection with Groenfontein Road. See a schematic layout in ***Diagram 1*** below:

Diagram 1 : Existing and future road network in vicinity of subject property (solid lines existing roads, broken lines future road links)

As indicated above, a future link between the R44 and Groenfontein Road is planned in the vicinity of the south eastern boundary of the subject property. It is not yet clear how the required road reserve of the planned road link will be accommodated, i.e. on the subject property and/or neighbouring properties. The position of the said road link will thus have to be addressed at Site Development Plan submission stage.

As previously mentioned, access to the subject property is proposed via Groenfontein Road. A section of the access road (between the subject property boundary and the Groenfontein Road road reserve) will traverse the adjacent Municipal property. It is proposed to provide the said section of road as close as possible to the southern property boundary – see the proposed layout below.

Diagram 2 : Proposed Access Road to Groenfontein Road (across Municipal property)

As previously mentioned, according to the current planning (*Aecom plan*), the intersection of the access to Groenfontein Road will ultimately be a roundabout (when Groenfontein Road is extended and/or dualled). It should thus be ensured that, when the road reserve required across the Municipal property is addressed, sufficient splays are provided to accommodate the said future intersection layout.

Detail on the internal roads is not yet available. This should be addressed with Site Development Plan submission.

Detail on refuse removal is not yet available. This should be addressed with Site Development Plan submission.

5. PARKING

Parking layouts are not yet available. Parking should be provided in line with the requirements of Stellenbosch Municipality. Parking will be addressed at Site Development Plan submission stage.

6. PUBLIC AND NON-MOTORISED TRANSPORT (NMT)

6.1 Public Transport

A taxi rank was recently constructed north of the Groenfontein Road/Merchant Street intersection, which is situated ± 700 metres from the proposed development access.

Formal public transport embayments exist at the R44/Stellengate Boulevard intersection, as well as along Stellengate Boulevard, Merchant Street and Groenfontein Road.

To accommodate the proposed development, as well as the immediate surrounding area, it is suggested that the provision of public transport embayments along Groenfontein Road at its intersection with the proposed access-intersection be considered.

6.2 Non-Motorised Transport

Sidewalks exist along at least one side of the roads leading up to the proposed development access from the R44 (along both sides of some roads in the area). Pedestrian crossings also exist across Groenfontein Road and Merchant Street, as well as at the roundabouts and signalised intersections in the area.

As mentioned in *paragraph 4* above, detail regarding the internal roads will be addressed at Site Development Plan submission stage. It should be ensured that pedestrian accommodation along and across the internal roads are also addressed at that stage.

Based on the above, it is not considered necessary to provide additional external pedestrian facilities to accommodate the proposed development.

7. CONCLUSIONS

The following can be concluded from the report:

1) That this TIA accompanies the application for subdivision and rezoning of Farm 717/1, situated to the west of the Potbelly Pantry and to the east of Groenfontein Road, Klapmuts, Stellenbosch;
2) That the development proposal includes middle income housing (25 to 30 units) on the western portion of the subject property, with the remainder proposed to consist of ± 22 000 m^2 GLA light industrial/warehousing and ± 20 000 m^2 GLA warehousing;
3) That access to the subject property is proposed to Groenfontein Road, via a proposed 25 metre road reserve across the adjacent Municipal property (Erf 2183);
4) That the proposed land uses will have the potential to generate 299 peak hour trips (189 in, 110 out during the AM peak hour and 105 in, 194 out during the PM peak hour);
5) That to accommodate the background traffic, it is suggested that the provision of a dedicated left-turn lane be considered at the R44/Stellengate Boulevard intersection along the northern R44-approach;
6) That to accommodate the proposed development traffic, the addition of the access-approach to its intersection with Groenfontein Road is considered necessary, which traverses the adjacent Municipal property;
7) That detail regarding the access layout, internal roads, refuse removal and parking will be addressed at Site Development Plan submission stage;
8) That a taxi rank exists ± 700 metres from the proposed development access and that formal public transport embayments exist at the R44/Stellengate Boulevard intersection, as well as along Stellengate Boulevard, Merchant Street and Groenfontein Road; and
9) That sidewalks exist along at least one side of the roads leading up to the proposed development access from the R44 (along both sides of some roads in the area), that pedestrian crossings also exist across Groenfontein Road and Merchant Street, as well as at the roundabouts and signalised intersections in the area, and that pedestrian accommodation along and across the internal streets should be addressed at Site Development Plan submission stage.

8. RECOMMENDATIONS

From the above the following are recommended:

1) That the provision of a dedicated left-turn lane be considered along the northern R44-approach to the R44/Stellengate Boulevard intersection;
2) That detail regarding the access layout, internal roads, refuse removal and parking be addressed at Site Development Plan submission stage; and
3) That public transport embayments along Groenfontein Road (outbound legs) at its intersection with the proposed access be considered.

As the proposed road upgrade under point 1) above is as result of the background traffic, and as the R44 is classified as a Class 2-road, it is the opinion that the cost of the proposed upgrade be offset against Development Contributions payable. As the Groenfontein Road is a Class 3-road, the cost of the public transport embayments suggested along Groenfontein Road should also be off-set against Development Contributions payable.

We trust that the Traffic Impact Assessment will be to your satisfaction and will gladly provide any additional information required on request.

Yours faithfully

Yolandi Obermeyer (B. Eng Civil)
iCE GROUP (STELLENBOSCH)

Piet van Blerk Pr. Eng
iCE GROUP (STELLENBOSCH)

Attachments

Locality Plan

Proposed Land Development Plan (*Friedlaender, Burger & Volkmann Land Surveyors*)

Figure 1 Existing AM/PM Peak Hour Traffic Volumes (Tuesday, 14 May 2019)

Figure 2 Estimated 2024 AM/PM Peak Hour Traffic Volumes (including annual traffic growth)

Figure 3 Distribution of Traffic Generated by Proposed Development

Figure 4 Expected 2024 AM/PM Peak Hour Traffic Volumes (including annual traffic growth and proposed development)

Posbus / PO Box 131
Stellenbosch 7599

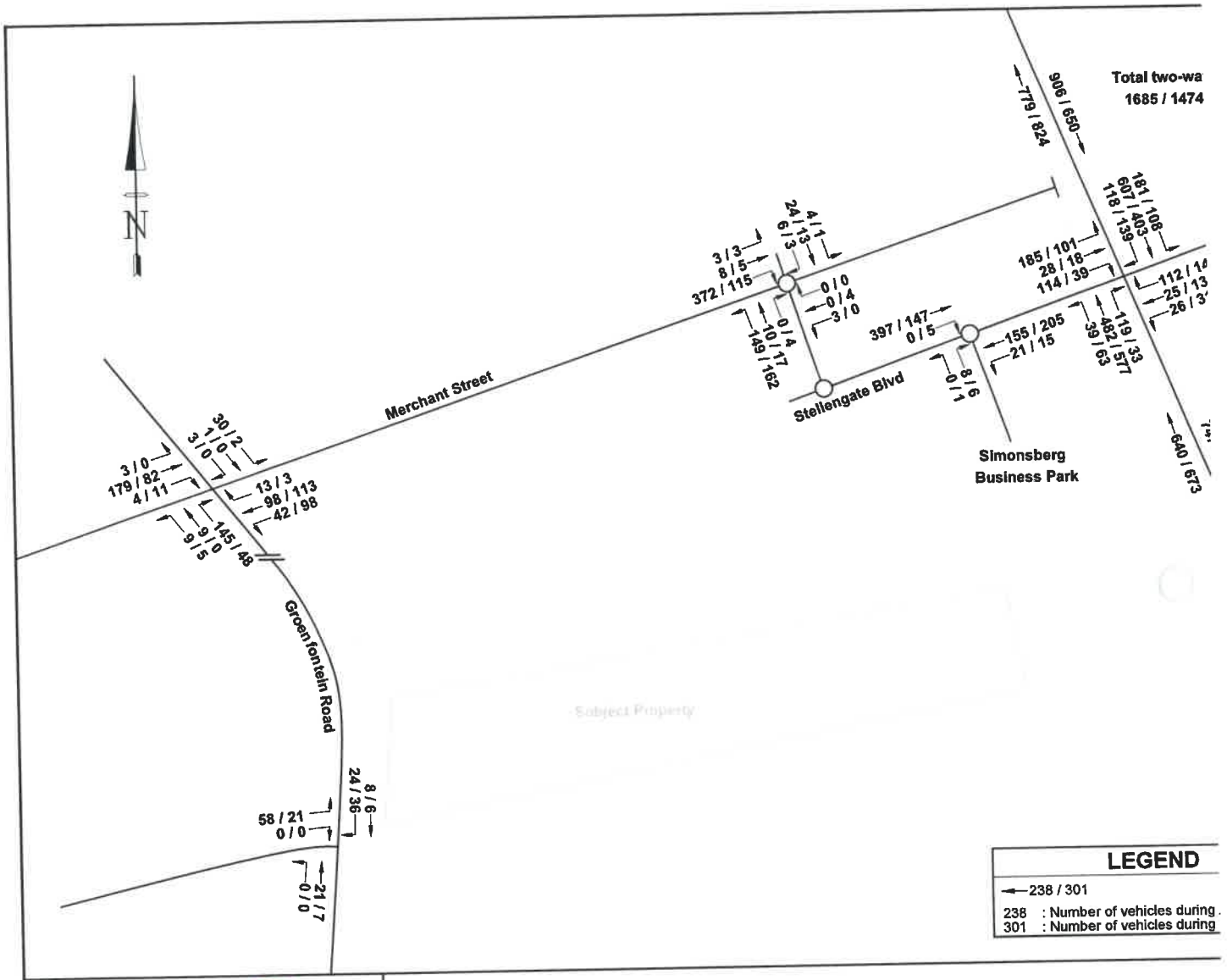
Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch 7600

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

GROUP (Pty) Ltd.

Locality Plan


3590
3589
3588
3587
3586
3585
3584
3583
3582
3573
3574
3575
3576
3577
3578
3579
3580
3581
3614
3615
3616
3617
3618
3619
3620
3621
3622
3623
3624
3625
3626
3627
3448
3449
3450
3451
3452
3453
3454
3455
3456
3441
3442
3443
3444
3445
3446
3447
3292
3293
3294
3295
3296
3297
3298
3299
3300
3301
3302
3303
3304
3305
3306
3307
3308
3309
3310
3311
3312
3313
3314
3315
3316
3317
3318
3319
3320
3321
3322
3323
3324
3325
3326
3327
3328
3329
3330
3331
3333
3334
3335
3336
3337
3338
3339
3340
3341
3342
3343
3344
3345
3346
3347
3348
3349
3350
3351
3352
3354
3355
3356
3357
3358
3359
3360
3361
3362
3363
3364
3365
3366
3367
3368
3369
3370
3371
3372
3373
3290
3291
3288
3289
3286
3285
3284
3283
3273
3272
3271
3274
3275
3270
3276
3279
3277
280
PORTION A



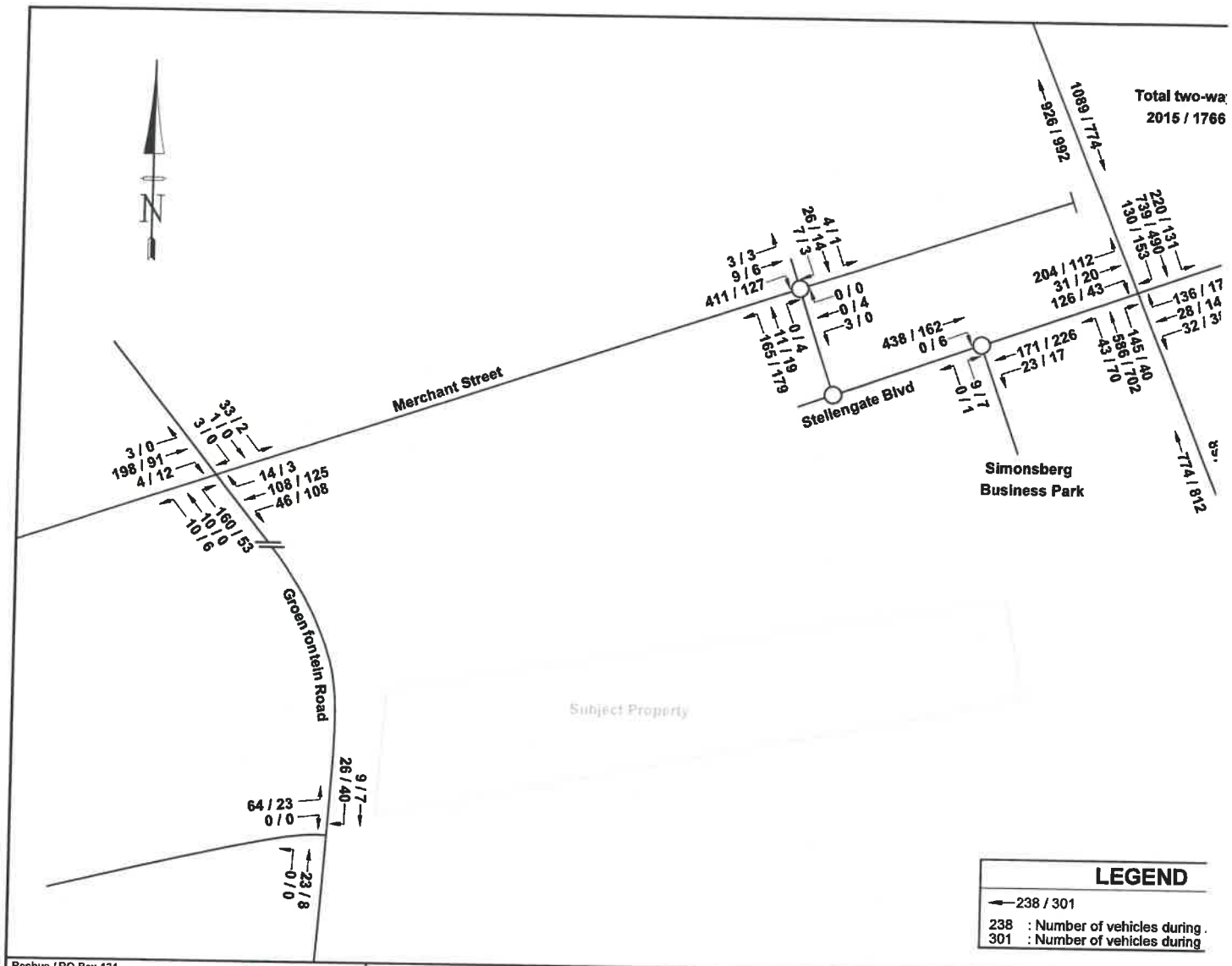
Posbus / PO Box 131
Stellenbosch 7599

Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

GROUP (Pty) Ltd.

Existing AM/PM Peak Hour Traffic Volumes (Tuesday, 1



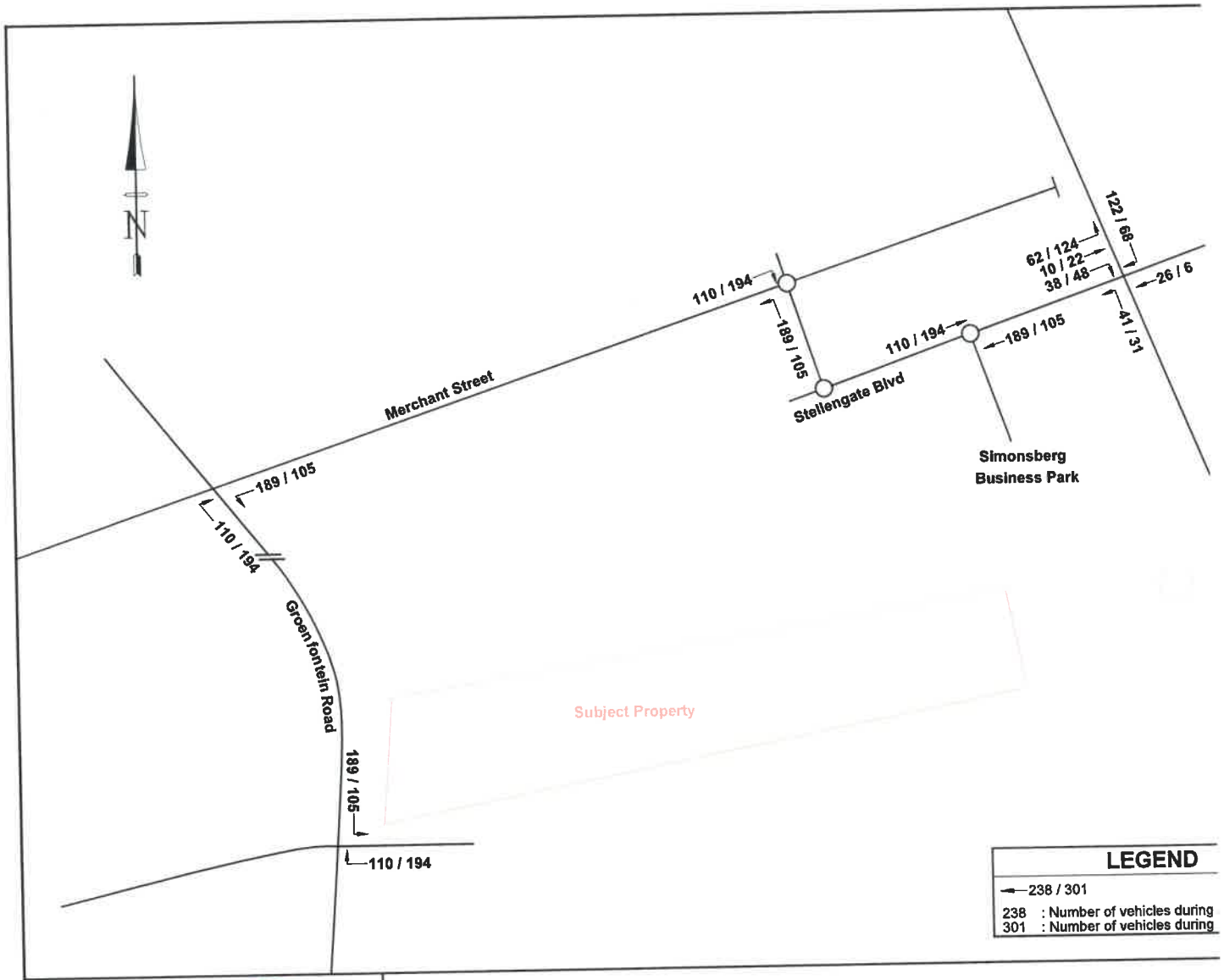
Posbus / PO Box 131
Stellenbosch 7599

Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

GROUP (Pty) Ltd.

Estimated 2024 AM/PM Peak Hour Traffic Volun (including annual traffic growth)



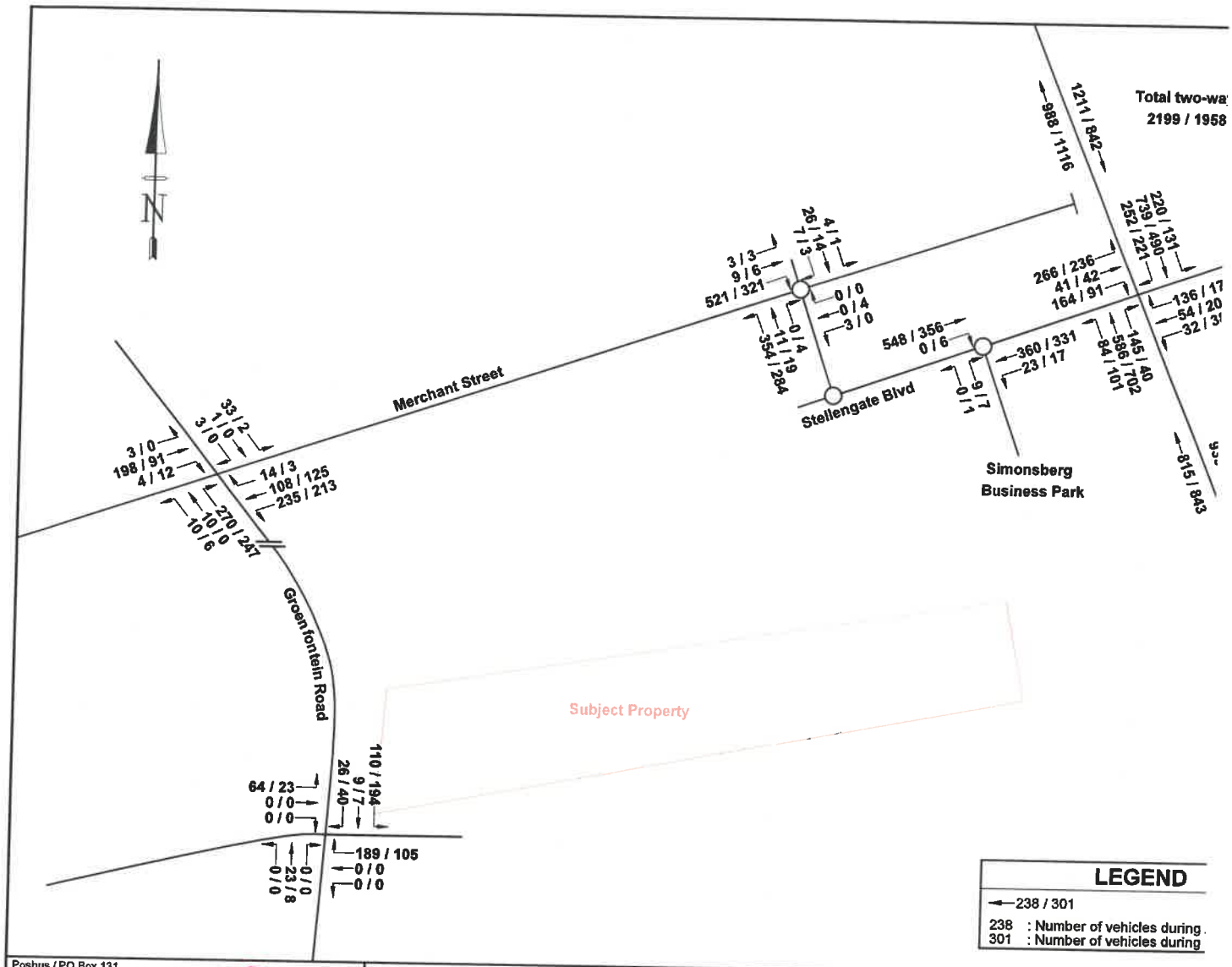
Posbus / PO Box 131
Stellenbosch 7599

Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

GROUP (Pty) Ltd.

Distribution of Traffic Generated by Proposed Devel



Posbus / PO Box 131
Stellenbosch 7599

Time Square Unit 8
9 Electron Street
Techno Park
Stellenbosch

Tel. : 021 - 880 0443
Faks / Fax : 021 - 880 0390
e-pos / e-mail : piet@icegroup.co.za

GROUP (Pty) Ltd.

Expected 2024 AM/PM Peak Hour Traffic Volum
(including annual traffic growth and proposed devel

ANNEXURE G: ENGINEERING SERVICES REPORT (CIVIL)

africa

head office
Suite 5, 1rst Floor, UDS House,
22 Gardner Williams Avenue,
Paardevlei, Somerset West

PO Box 50487
V&A Waterfront
8002

T +27 (0)21 851 7188
F +27 (0)86 523 8227
cobus@udsafrica.co.za

enquiries
Cobus Louw 082 493 3263

Managing Member:
A Khan PrEng

Associates:
JW Wessels PrEng
Danielle Coetzee PrLArch
Pieter Albertse PrEng
S Hartman PrEng
JN Louw PrCPM

Reg no. 2003/043709/23

urban development solutions

Date: 16 May 2019

Our ref: UDS233/Klapmuts/reports02.doc

ATTENTION: Mr Dupré Lombaard

Virus Works (Pty) Ltd
77 Buitekring
Dalsig
STELLENBOSCH
7600

Dear Sir,

PORTION 1 OF PAARL FARM GROENFONTEIN NO. 717, KLAPMUTS: CIVIL ENGINEERING SERVICES REPORT

The proposed development entails the rezoning and subdivision of the entire property, to create a 0,75 ha residential zone 2, and a 6,52 ha mixed use industrial zone 1. An open space of approximately 0.95 ha will be included in the industrial zone.

This report summarizes the current situation with regards to the provision of basic civil engineering services to the development.

Site Location and Description

The site is located about 1 km south of the Klapmuts town centre. The property of approximately 7,3 ha is undeveloped and is vegetated with grass. The property is bounded by Farm 2/742 along the southern boundary, a developing industrial area along the northern boundary, a housing development along the western boundary and a commercial development along the eastern boundary.

The ground slopes gently (approximately 1:45 to 1:65) towards the Klapmuts River running from south to north through the centre of the the property.

Design Standards of New Services

Design of services will be in accordance with the "Guidelines for the provision of engineering services and amenities in residential townships", the UTG7 publication "Geometric Design of Urban Local Residential Streets", and is also to satisfy the standards and requirements of the local authority.

Construction of the services will be specified to be in accordance with SANS 1200.

Civil Engineering Services Required
The various internal services and their connections to the existing services are described in the subsections that follow.

WATER
The annual average daily demand for the proposed development is calculated at 148,5 kl/d with a fire flow criteria (moderate risk) of 25 l/s at 10 m pressure.

The master planning indicated that the proposed development area should be accommodated in the existing Klapmuts Lower reservoir zone. The connection to the existing system should be done on the existing 200mm diam pipe west of the development as shown on Figure 1 attached.

The minimum requirements to accommodate the proposed development in the existing water system are the master plan items SKW1.1, SKW1.2 & SKW1.12 in order to improve network conveyance to the proposed development, and the link services items SKW1.4, SKW1.7 & SKW1.8 to connect to the proposed development to the existing water network. (the required upgradings are shown on Figure 1 attached).

The existing reservoir volume available at the Klapmuts Lower reservoir is sufficient to accommodate the proposed development.

SEWER
The peak day dry weather flow for the proposed development is calculated as 103,9 kl/d.

The development falls within the existing Klapmuts Pumping Station (PS 2) drainage area. The recommended position for the sewer connection for the proposed development is at the existing 200 mm diam outfall sewer to the north of the development, as shown on Figure 2 attached.

The existing system has sufficient capacity to accommodate the proposed development, however a 185 m x 200 mm diam link sewer will be required in order to connect the proposed development to the existing sewer system (the proposed pipeline is schematically shown as item SKS1.2 on Figure 2 attached).

STORMWATER
The site drains towards the Klapmuts River running through the centre of the site, and the run-off from the proposed development will be discharged into this stream. A detention facility will be constructed at the low point of the property to ensure that the post development quantity of stormwater from the site will be limited to that of the current undeveloped site.

ROADS
Access to the proposed development will be provided from the existing main road in the adjacent residential township.

The internal roads and parking areas will consist of a combination of premix and paved surfaces.

BULK EARTHWORKS
No major bulk earthworks are envisaged.

CONCLUSION
The existing bulk water and sewer systems have adequate storage and treatment capacities to accommodate the proposed development. However, the water distribution system must be upgraded, and water and sewer link service must be provided.

Once the required upgrading of the water system and link services have been implemented, the proposed development will be feasible in terms of the capacity of the existing civil engineering services.

Yours Faithfully
UDS AFRICA

JW Wessels Pr.Eng

179

X 374320

Y 11400

Titel-Title	Skaal-Scale	Datum-Date
CIVIL SERVICES LAYOUT	1:1000	MAY 2019
	Tekening Nr.-Drawing No.	
	UDS 233-CS	
	Wysiging Amendment: A	

ANNEXURE H: ENGINEERING SERVICES REPORT (ELECTRICAL)

DM CONSULTING ENGINEERS
www.dmce.co.za

CAPE TOWN
Office 110, The Cliffs 2, Niagara Street, Tyger Falls Boulevard, BELLVILLE, 7530
P. O. Box 3125, Durbanville, 7551

TEL: +27(0) 21 914 1004/1097
FAX: +27(0) 86 720 5906
ADMIN: officect@dmce.co.za

KLERKSDORP
61 Ametis Street, Wilkoppies, 2570
P. O. Box 7381, Flamwood, 2572

TEL: +27 (0) 18 468 2950/6.
FAX: +27 (0) 86 558 0452
ADMIN: info@dmce.co.za

ELECTRICAL INFRASTRUCTURE

KLAPMUTS NO 717

ESKOM SUPPLY AUTHORITY

ENGINEERING SERVICES REPORT

31/01/2019

DIRECTORS: DEREK MÜLLER Pr Eng MSAIEE * PIERRE TERBLANCHÉ Pr PMSA, GCC (ELECTRICAL)

CESA ECSA SAIEE

1) Introduction

1.1) General

- DMCE has been commissioned by **VIRDUS** to report on the Electrical Infrastructure for **GROENFONTEIN FARM at KLAPMUTS.**

Figure 1: Location of site.

- Terms of Reference (T.O.R) was collected from VIRDUS. (Proposed Layout drawing)

1.2) Comments on Terms of Reference (T.O.R)

The T.O.R refers specifically for a report on the electrical infrastructure for developing Groenfontein farm at Klapmuts.

- Bulk Incoming Electrical Supply-, the point of supply.
- CT/VT metering unit.
- Electrical Distribution Systems.

1.3) Project Team

- Mr. Derek Muller
- Mr. CP Labuschagne

2) Project Appreciation

2.1) Bulk Services-:

- **Incoming Electrical Supply- Authority: Eskom**

A 11kV bulk connection consisting of a radial underground/overhead 11kV MV feed from Eskom is required. The connection will enter the area from the northern side. Details of the exact scope of work will follow after the formal application is submitted to Eskom.

This bulk connection will be metered by a CT/VT unit at 11kV on the site boundary.

The take-off point will be positioned at the location indicated with a X in figure 2.

Figure 2: Location of take-off point.

2.2) Internal Services-:

- Electrical Distribution Systems

- Proposed Method

Cabling from the take-off point will be done by means of underground cables to the different units within the designated area / subdivided sections. An electrical centre of mass will be determined after the preliminary design stage.

- Low Voltage Electrical Distribution System

- Proposed Method

The low voltage network will comprise of low voltage cables installed in trenches to sub distribution boards throughout the proposed development. The sub-distribution boards will supply the user with the required loads as well as metering for each user. The meters that will be installed will enable the landlord to grant his users the choice of having a prepaid option.

2.3) Financial Analysis-:

The load is estimated to be 600kVA for phase 1 with a possibility of increasing to 1.5MVA for phase 2.

An estimate of the system costs are as follows:

	High Voltage DX Network	High Voltage DX Substation	MV line	CT/VT Unit
Cost (R/kVA)	R 605.00	R 758.00	-	-
Total Cost (R)	R 363 000.00	R 454 800.00	R 300 000.00	R 280 000.00

The total capital cost for incoming supply up to Eskom metering point is R1 397 000 (VAT excluded) for Phase 1.

The DX Network and DX Substation cost was confirmed by Pieter du Preez of Eskom. This will increase after July 2019 by approximately 10%.

The MV line and CT/VT unit costs are high level estimates.

3) Conclusion

The following can be concluded from the report:

- The total final capacity required from Eskom is 1.5MVA. This capacity was confirmed by Mzwa Monakali from Eskom.
- The bulk incoming supply from Eskom will be metered by means of a CT/VT meter on the stand boundary. The internal medium voltage distribution will be done and owned by the development.
- The detailed MV and LV distribution system will be designed after the designated area details have been determined and confirmed by means of a subdivision layout.
- An estimation of the total cost for the incoming supply is **R1 397 000.00** excl. VAT, for phase 1.

COMPILED BY:

RUAN HORAK

B. ENG ELECTRICAL & ELECTRONIC

PROJECT ENGINEER

CHECKED BY:

DEREK MULLER

PR. ENG

MANAGING DIRECTOR

ANNEXURE I: ENVIRONMENTAL REPORT

Western Cape Government
Environmental Affairs and Development Planning

NOTICE OF INTENT
to submit an application in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the 2014 Environmental Impact Assessment Regulations; and/or the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), and/or the National Exemption Regulations.

Form Number NOI 12/2014

December 2014

(For official use only)	
DEA&DP Reference Number:	
EIA Reference Number:	
Date Received by Department:	
Date Received by Component:	
Application fee amount:	
Specific Fee Reference Number:	
Application fee paid on:	

PROJECT TITLE

THE PROPOSED MIXED-USE DEVELOPMENT ON PORTION 1 OF FARM GROENFONTEIN NO. 717, KLAMPUTS, WESTERN CAPE.

PRE-APPLICATION CONSULTATION

The information submitted with this Notice of Intent will allow for the Department to provide informed guidance to a proponent and Environmental Assessment Practitioner (EAP) on the process to be followed as well as to confirm the application fee and provide a specific fee reference number. Please also indicate whether the intention is to request a pre-application consultation meeting with the Department:

Do you intend to request a pre-application consultation meeting with the Department?	**YES**	~~NO~~

Note the following:

1. An application for Environmental Authorisation/Amendment lapses if the applicant fails to meet any of the timeframes prescribed in terms of the 2014 EIA Regulations. If authorisation is required from a number of different authorities, the authorities might also require that an integrated process be followed. As such, it is recommended that the proponent and EAP approach the Department prior to submission of an application for guidance on the process to be followed by submitting this **Notice of Intent** form to the Department. The Department will respond in writing and provide guidance on the process to be followed, confirm the application fee to be paid and provide a specific fee reference number.
2. The content of the Department's Circular EADP 0028/2014 on the "One Environmental Management System" and the EIA Regulations (dated 9 December 2014) must be taken into account when completing this Notice of Intent.
3. This form is current as of **December 2014**. It is the responsibility of the Applicant / Environmental Assessment Practitioner ("EAP") to ascertain whether subsequent versions of the form have been released by the Department.
4. An **application fee is applicable to an application for Environmental Authorisation and an application for Amendment (refer to section 1 on page 3)**.
5. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The tables may be expanded where necessary.
6. The use of "not applicable" in the form must be done with circumspection. The more comprehensive the information provided to the Department, the more informed the guidance by the Department will be.
7. Unless protected by law all information contained in, and attached to this application, will become public information on receipt by the Department. Upon request, the applicant/EAP must provide any interested and affected party with the information contained in or submitted with this form.
8. This form must be submitted to the Department at the details provided below. **If this Notice of Intent relates to an intended application for Waste Management Licence, this Notice of Intent must also be submitted for the attention of the Director: Waste Management (tel: 021 483 2756 and fax: 021 483 4425) at the same postal address as the Cape Town Office.**

DEPARTMENTAL DETAILS

CAPE TOWN OFFICE: REGION 1 (City of Cape Town & West Coast District)	**CAPE TOWN OFFICE: REGION 2 (Cape Winelands District & Overberg District)**	**GEORGE OFFICE: REGION 3 (Central Karoo District & Eden District)**
Applications and requests for specific fee reference numbers must be sent to the following details: Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 1) at: Tel: (021) 483-5829 Fax (021) 483-4372	Applications and requests for specific fee reference numbers must be sent to the following details: Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 2) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 2) at: Tel: (021) 483-5842 Fax (021) 483-3633	Applications and requests for specific fee reference numbers must be sent to the following details: Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530 Registry Office 4th Floor, York Park Building 93 York Street George Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 874-2423

View the Department's website at http://www.westerncape.gov.za/dept/eadp for the latest version of this document.

1. FEES

- A proponent must pay a fee for the processing of environmental impact assessment applications as set out in the Fee Regulations[1] published in terms of sections 24(5) and 44(1) of the National Environmental Management Act, 1998 (Act No. 107 of 1998). A fee of **R2 000** is applicable to an application which must be subjected to Basic Assessment and an application for amendment of an Environmental Authorisations, and a fee of **R10 000** is applicable to an application which must be subjected to Scoping and Environmental Impact Reporting.

- **An applicant is excluded from having to pay the application fee if:**

    - The activity is a community based project funded by a government grant; or

    - The applicant is an organ of State.

- Where an applicant is **not required** to pay a fee, the applicant must inform the Department in writing by attaching proof thereof and a motivation to the application form.

Department of Environmental Affairs and Development Planning banking details:

Bank:	**Nedbank**
Branch Code:	**145209**
Account Number:	**145 204 5003**
Type of Account:	**Current Account**
Status:	**Tax exempted**

- **NB: Your specific fee reference number MUST be used as a deposit reference when making a payment.**

- You are required to complete the information in the ***Request for a specific fee reference number*** form attached to this form as Appendix 1 and submit the form to the Department as directed. Once a specific fee reference number has been obtained from the Department, it must be inserted into the application form and proof of payment attached when the application form is submitted to the Department. An application may not be submitted without the specific fee reference number and proof of payment. The Department will respond to a request for a specific fee reference number in writing.

- If there is uncertainty as to the application process that must be followed (particularly if a **Waste Management Licence** is also required), the Department should be approached for guidance prior to submission of the application.

- In the event that any **refunding of fees paid is required**, the "BAS Entity Maintenance" form must be completed, which can be obtained from the Department. Any refund must first be confirmed with the Department.

- Please refer to the national guideline *Guidance Document on the Fee Regulations* (April 2014), obtainable from http://www.environment.gov.za/legislation/guidelines for more information.

[1] Government Notice No. 141 published in Government Gazette No. 37383 on 28 February 2014 refers.

2. BACKGROUND INFORMATION

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1 (City of Cape Town & West Coast District)	CAPE TOWN OFFICE: REGION 2 (Cape Winelands District & Overberg District)	GEORGE OFFICE: REGION 3 (Central Karoo District & Eden District)
Name of proponent:	Cadcor (Pty) Ltd		
RSA Identity/ Passport Number:			
Name of contact person for applicant (if other):	Dupré Lombaard		
RSA Identity/ Passport Number:			
Company/ Trading name (if any):	Cadcor (Pty) Ltd		
Company Registration Number:	1971/011663/07		
Postal address:	P.O. Box 643		
	Paardekraal	Postal code: 1752	
Telephone:		Cell: 083 6532717	
E-mail:	Dupre.lombaard@virdus.com	Fax:	
Company of Environmental Assessment Practitioner (EAP):	Guillaume Nel Environmental Consultants		
EAP name:	Heloise Groenewald		
Postal address:	P.O. Box 2632		
	Paarl	Postal code: 7620	
Telephone:	(021) 870 1874	Cell: -	
E-mail:	guillaume@gnec.co.za / hdp@gnec.co.za	Fax: (021) 870 1873	
EAP Qualifications:	MSc En Man (PUK), B(Hons) EN Man (US), B Geography (US), Certificate-Environmental Law (PUK), Certificate – EIA (PUK), Certificate– EMS 14000 (PUK), Certificate– Air Quality Management (PUK), Certificate– Environmental Auditing (SABS). Guillaume Nel has sixteen years relevant experience as an Environmental Assessment Practitioner.		
EAP Registrations/Associations:	SAATCA Certified Environmental Auditor, No. (EMA 375) (2003)		
Name of landowner:	**Same as applicant**		
Name of contact person for landowner (if other):			
Postal address:			
		Postal code:	
Telephone:		Cell:	
Name of Person in control of the land:	**Same as applicant**		
Name of contact person for person in control of the land:	**Same as applicant**		
Postal address:			
Telephone:			
E-mail:			

Note: In instances where there is more than one landowner or person in control of the land, a list of landowners/persons in control of the land, with their contact details, must be attached to the back of this form.

Municipality in whose area of jurisdiction the proposed activity will fall:	Stellenbosch Municipality	
Contact person:	Bernabe de la Bat	
Postal address:	P.O. Box 17	
	Stellenbosch	Postal code: 7600
Telephone	(021) 808 8161	Cell: -
E-mail:	Bernabe.DeLaBat@stellenbosch.gov.za	Fax: -

Note: In instances where there is more than one Municipality involved, please attach a list of Municipalities, with their respective contact details, to the back of this form.

Property location of all proposed sites:	The site is located just off the R44, behind Potbelly Coffee Shop and Bakery within the Klapmuts area.		
Farm/Erf name(s) & number(s) (including portion) of all proposed sites:	Portion 1 of Farm Groenfontein No. 717, Paarl.		
Property size(s) (m^2) of all proposed sites:	7.32ha		
Development footprint size(s) in m^2:	The proposed mixed use development will amount to approximately 5.56ha in size.		
SG Digit code(s) of all proposed sites:	C05500000000071700001		
Coordinates of all proposed sites: Latitude (S)	**33°**	**48'**	**23.75"**
Longitude (E)	**18°**	**52'**	**22.75"**

Note: Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94 WGS84 co-ordinate system. Where numerous properties/sites are involved (e.g. linear activities), you may attach a list of property descriptions and street addresses to this form.

Street address of all proposed sites:	R44, Klapmuts		
Magisterial District or Town:	Stellenbosch		
Closest City/Town:	Klapmuts	Distance	**<1 (km)**
Current zoning of all proposed sites:	The site is currently zoned for agriculture.		

Note: In instances where more than one zoning is applicable, attach a list or map of the properties that indicates their respective zoning to this form.

Is a rezoning application required?	**YES**	~~NO~~
Is a consent use application required?	~~YES~~	**NO**
Locality map:	A locality map must be attached to the application form, as an Appendix. The scale of the locality map must be at least 1:50 000. For linear activities 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 include 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; • the prevailing wind direction; and • GPS co-ordinates (Indicate the position of the proposed activity with the latitude and	

	longitude at the centre point for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should be to at least three decimal places. The projection that must be used in all cases is the WGS-84 spheroid in a national or local projection)
Landowner(s) Consent:	If the applicant is not the owner or person in control of the land on which the activity is proposed to be undertaken, he/she must obtain written consent from all landowners or persons in control of the land (of the site and all alternative sites). The written consent must be attached to Application for Environmental Authorisation. See Appendix 1 to the Application for Environmental Authorisation Form. **Note:** The consent of the landowner or person in control of the land is not required for: a) linear activities; b) an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource; or c) strategic integrated projects ("SIPs") as contemplated in the Infrastructure Development Act, 2014 (Act No. 23 of 2014).
Project Plan (e.g. Gantt chart)	A project schedule should be submitted as an Appendix, and include milestones for: • public participation (dates for advertisements, workshops and other meetings, obtaining comment from organs of state including state departments); • the commencement of parallel application processes required in terms of other statutes and where relevant, the alignment of these application processes with the EIA process; • the submission of the key documents (e.g. Application Form, Basic Assessment Report, Scoping Reports, EIA Reports and Environmental Management Programmes). **Note:** • All the above dates must take into account the statutory timeframes for authority responses that are stipulated in the 2014 NEMA EIA Regulations. • Possible appeals may impact on project timeframes/milestones. • Regulation 45 states that *"An application in terms of these Regulations lapses, and a competent authority will deem the application as having lapsed, if the applicant fails to meet any of the time-frames prescribed in terms of these Regulations, unless extension has been granted in terms of regulation 3(7)."* It is recommended that the Department be approached for guidance on the process to be followed, prior to submitting an application.

3. PROJECT DESCRIPTION

3.1 Will the proposed application be subjected to Basic Assessment?	**YES**	NO
3.2 Will the proposed application be subjected to Scoping and EIR?	YES	**NO**

3.3 Provide a detailed description of the proposed project, its associated infrastructure, and the availability of bulk services. A clear, accurate and comprehensive description will obviate any requests for additional information by the Department.

Background

The proposed development site is located just off the R44, within the Klapmust area. The property is also situated approximately 2km South from the N1 highway and boasts a total area of approximately 7.32 ha in extent. The farm has historically been used for agricultural activities.

In the past few years, the area of Klapmuts has undergone some major changes in terms of residential, commercial and industrial transformation. Historically the region has been predominately used for agricultural purposes. Although the area still contains numerous agricultural activities, the rise in residential and commercial activities has undeniably grown.

With a large portion of the area already being transformed; Cadcor (Pty) Ltd (*hereinafter referred to as the applicant)* proposes to develop on Portion 1 of Farm Groenfontein No. 717. The property is surrounded by residential developments to the North and West, with industrial and retail to the North and East, and agriculture to the South.

The proposed development site has historically been used for agricultural purposes; however, the site has

not recently been actively utilised for agricultural purposes. The site is currently vacant with the Klamputs River flowing through the property in a South to North direction. There is also a dilapidated dam situated on the property. The entirety of the proposed development site has been vacant for several years (Please refer to addendum B for the current state of the site). The proposed development will entail combination of residential, commercial and light industrial sections. This will result in a mixed use development, which will be in line with the surrounding developments.

Guillaume Nel Environmental Consultants (GNEC) have been appointed by the applicant to facilitate the Environmental Impact Assessment (EIA) process for the mixed use development on Portion 1 of Farm Groenfontein No. 717.

Proposed Development

As previously mentioned the site will be used for a mixed use development, which will entail the development of middle income housing, a light industrial area and numerous warehouses. The site is currently zoned for agriculture, thus the site will be rezoned and subdivided into the abovementioned mixed use sections. The Klapmuts River flows through the property in a South to North direction. The river course will be retained as an open space and rehabilitated as part of the proposed development. The proposed development will consist of 4 broad areas. The development will exist of the following:

- The West corner of the site will be retained for middle income housing approximately 7000m^2 in size where 25 to 30 units will be established.
- Adjacent to the river on the Western side, approximately 22 000m^2 of mixed use (light industrial) will be established.
- East of the river, approximately 20 000m^2 of warehousing will be established.
- A road reserve will be developed on the south of the proposed development site. The access road will partly be located on Farm Groenfontein No. 1/717 and partly on Farm Klapmustrivier No. 2/742.

Freshwater

As stated above, the Klapmuts river flows through the proposed development site in a South to North direction. The development of a dam within the river flow has resulted in the river being altered from its natural state. The proposed development will result in the river course being retained as a detention pond. Furthermore, the river course will also be rehabilitated and upgraded as part of the development. A dam is also located on the adjacent (South) property that flows into the dam located on the proposed development site.

Vegetation

Vegetation on the site is mapped to have historically supported Swartland Alluvium Fynbos (FFa3) and Swartland Granite Renosterveld (FRg2), both being classified as critically endangered vegetation. Note should be made that due to the site previously being used for agricultural activities, the entirety of the site has been altered from its natural state. Currently, there are no natural vegetation located on the site. However, there are some alien vegetation present on site. (Please refer to Addendum B- Site Photos).

Critical Biodiversity Area (CBA)

The proposed site has portions within the site boundary mapped as being a CBA area; however during a site visit it was evident that no indigenous vegetation is present on the property. The Klapmuts River has also been altered from its natural state through the development of dams within the riverbed and is

therefore not considered to be environmentally sensitive. **Heritage** It is not expected that the proposed development will have an impact on Heritage Resources. The proposed development will be in line with the surroundings, it is therefore not expected that the mixed use development will have any significant visual impacts. It is therefore not expected that the mixed use development will have an impact on any Heritage Resources.

3.4 Is the activity to be applied for:		
3.4.1 a linear activity?	~~YES~~	**NO**
3.4.2 an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource?	~~YES~~	**NO**
3.4.3 a strategic integrated projects ("SIPs) as contemplated in the Infrastructure Development Act, 2014 (Act No. 23 of 2014)?	~~YES~~	**NO**

3.5 Waste, effluent and emission management

3.5.1 Solid waste management

(i) Will the activity produce any solid waste (including rubble) during the construction or operational phases?	**YES**	~~NO~~	~~UNCERTAIN~~
(ii) If YES, will it feed into a municipal waste stream?	**YES**	~~NO~~	~~UNCERTAIN~~
(iii) If NO to (ii) above, describe the types of solid waste and how each will be treated / disposed of.			
N/A			

3.5.2 Effluent

(i) Will the activity produce sewage and or any other effluent?	**YES**	~~NO~~	~~UNCERTAIN~~
(ii) If YES, will the sewage / effluent be treated and/or disposed of in a municipal system?	**YES**	~~NO~~	~~UNCERTAIN~~
(iii) If NO to (ii) above, briefly describe the nature of the sewage / effluent and how it will be treated and/or disposed of:			
N/A			

3.5.3 Emissions into the atmosphere

(i) Will the activity produce emissions that will be disposed of into the atmosphere?	~~YES~~	**NO**	~~UNCERTAIN~~
(ii) If YES, describe the emissions in terms of type and concentration and how it will be treated/mitigated:			
N/A			

3.6 Water Use

Please indicate the source(s) of water for the activity by highlighting the appropriate box (es)

Municipal	~~Water board~~	~~Groundwater~~	~~River, Stream, Dam or Lake~~	~~Other - Seawater~~	~~The activity will not use water~~

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate	
the volume that will be extracted per month:	Not known at this stage

Please provide proof of assurance of water supply eg. Letter of confirmation from municipality / water board, yield of borehole – **N/A**		
Does the activity require a water use permit / licence from the National Water Act?	**YES**	~~NO~~
If YES, describe:		
The proposed development will entail the rehabilitation of the Klapmuts River located on the property. A retention pond will be developed and therefore application will be made for a water use permit.		

3.7 Power Supply

3.7.1 Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

The surrounding area's Eskom supply network. It is proposed that the mixed use development will be supplied by the same source.

3.7.2 If power supply is not available, where will power be sourced from?

N/A

3.8 Land use description

3.8.1 Describe the current land use of the proposed site(s) for the activity

The property is currently vacant with an artificial dam being located on the site; forming part of the Klapmuts River. The site has historically been used for agricultural purposes, but has been vacant for several years.

3.8.2 Describe the surrounding land uses

The surrounding properties located to the North and East are utilised for related commercial purposes; with a number of properties located to the North and West of the property being utilised for residential housing. Furthermore there are warehouses located to the North of the site. The property is located within the Cape Winelands administrative region.

3.9 Groundcover

Highlight the types of groundcover present on the site.

~~Indigenous vegetation – good condition~~	~~Indigenous vegetation with scattered aliens~~	~~Indigenous vegetation with heavy alien infestation~~	~~Veld dominated by alien species~~	~~Gardens~~	Other
~~Sport field~~	~~Cultivated land~~	~~Paved surface~~	~~Building or other structure~~	**Bare soil**	

4.ACTIVITIES THAT WILL BE APPLIED FOR

All activities listed in GN No. R. 983, GN No. R. 984 and GN No. R. 985 that are associated with the proposed project must be provided below.

Activity No(s):	Provide the relevant **Basic Assessment Listed Activity(ies)** as set out in **Listing Notice 1** (GN No. R. 327)
12	The development of- (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding: (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 10 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads or road reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.

28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.
Activity No(s):	Provide the relevant **Basic Assessment Listed Activity(ies)** as set out in **Listing Notice 3** (GN No. R. 324)
N/A	
Activity No(s):	Provide the relevant **Scoping and EIR Listed Activity(ies)** as set out in **Listing Notice 2** (GN No. R. 325)
N/A	
Activity No(s):	Provide the relevant **Category A Waste Management Activity(ies)** as set out in **List of Waste Management Activities** (GN No. R. 921)
N/A	
Activity No(s):	Provide the relevant **Category B Waste Management Activity(ies)** as set out in **List of Waste Management Activities** (GN No. R. 921)
N/A	

Note:

- A Scoping and Environmental Impact Reporting (S&EIR) process must be followed for all the activities (NEMA Listed Activities and/or Waste Management Activities) if any of the activities must be subjected to S&EIR.
- Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. Environmental Authorisation must be obtained prior to commencement with each applicable listed activity. If a specific listed activity is not included in an Environmental Authorisation, an application for amendment or a new application for Environmental Authorisation will have to be submitted.

OTHER APPLICATIONS

5.1 Intended Application for Exemption

Note: An application for Exemption from provisions of NEMA and the EIA Regulations must be submitted on a separate Exemption Application Form. An application for Exemption from a provision of NEM: WA must be made as part of the application for a Waste Management Licence.

Please provide a description (including the relevant NEMA provision or EIA Regulation number(s)for which exemption will be applied for:
N/A

5.2 Intended Applications in terms of the National Environmental Management Act ("NEMA") & specific environmental management Acts ("SEMAs")

Does the proposed project require an application for a waste management license in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)? **Note:** Ensure that the correct application fees have been paid (refer to section 1 above).	~~YES~~	**NO**
If yes, has an application been submitted to the licensing authority?	~~YES~~	~~NO~~
Does the proposed project require an application for a water use license in terms of the National Water Act, 1998 (Act No. 36 of 1998)?	**YES**	~~NO~~
If yes, has an application been submitted to the licensing authority?	~~YES~~	**NO**
Does the proposed project require an application for an Atmospheric Emission License in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)?	~~YES~~	**NO**
If yes, has an application been submitted to the licensing authority?	~~YES~~	~~NO~~
Does the proposed project require an application in terms of the National Environmental Management: Integrated Coastal Management Act (NEM: ICMA)?	~~YES~~	**NO**
If yes, has an application been submitted to the relevant competent authority?	~~YES~~	~~NO~~
If yes, provide more details of the application submitted/to be submitted in terms of the NEM: ICMA:		
N/A		

Note: If an Environmental Authorisation is required in terms of the 2014 NEMA EIA Regulations as well as a Waste Management Licence in terms of the Waste Act, 2008 and/or an Atmospheric Emission Licence in terms of the NEM: AQA, 2004, then separate application forms in terms of the applicable legislation must be completed and submitted simultaneously to the relevant competent authorities for these licences, but a single EIA process must be undertaken.

5.3 Heritage Impact Assessment

Please be advised that every application for Environmental Authorisation including an application for a Waste Management Licence, must include, where applicable the investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act.

Please further be advised that if section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is applicable to your proposed development, then you are requested to submit the Notice of Intent form developed by Heritage Western Cape to Heritage Western Cape and attach a copy to this form. If Heritage Western Cape requires that a Heritage Impact Assessment will be required, the Heritage Impact Assessment must be undertaken as one of the specialist studies of the EIA process to be undertaken in terms of the 2014 NEMA EIA Regulations.

Section 38 of the Act states as follows:

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Does the proposed development constitute the undertaking of any of the categories of development set out in Section 38(1) of the National Heritage Resources Act?	**YES**	~~NO~~
If yes, please explain:		
A Notice of Intent to Develop (NID) will be submitted to Heritage Western Cape to confirm that no heritage resources will be impacted upon by the proposed development. The proposed development will result in change of character of the site, these changes will exceed 5 000m^2. Furthermore, application will be made for the rezoning of the site from agriculture to a mixed use development, with the total of the development exceeding 10 000m^2.		

If the proposed development does constitute the undertaking of any of the categories of development set out in Section 38(1) of the National Heritage Resources Act, has a Notice of Intent been submitted to Heritage Western Cape?	~~YES~~	**NO**
A Notice of Intent to Develop will be submitted to Heritage Western Cape (HWC) in due course. However, it is not expected that the proposed development will have an impact on Heritage Resources.		

Note: A copy of the Notice of Intent submitted to Heritage Western Cape must be submitted with this form.

5.4 Intended Applications in terms of other legislation

Is any permission, licence or other approval required in terms of any other legislation? (Please tick)	**YES**	~~NO~~

If yes, please complete the table below:

Type of approval required (List the applicable legislation & approval required):	Name of the authority responsible for administering the applicable legislation	Application submitted (Yes / No)	Status of application (e.g. pending/ granted/ refused)
Water Use Licence	Department of Water and Sanitation	No	N/A
Record of Decision	Heritage Western Cape	No	N/A

6. PLANNING CONTEXT

Is the activity permitted in terms of the property's existing land use rights?	~~YES~~	**NO**	Please explain

The property is currently zoned for Agricultural Use, with the entirety of the property historically being used for agricultural purposes. The mixed use development will require the rezoning of the proposed site in order for the development to be in line with the land use rights. An application will be submitted for the rezoning of the proposed development site to ensure that the development will be in line with the property's land use right.

Will the activity be aligned with the following:			
The Provincial Spatial Development Framework (PSDF)	**YES**	~~NO~~	Please explain

The Provincial Spatial Development Framework (PSDF) of the Western Cape aims to establish a coherent framework for the Province's urban and rural areas relating to spatial planning. The Western Cape PSDF takes the following spatial principles into account:

1. Spatial Justice;
2. Sustainability and Resilience;
3. Spatial Efficiency;
4. Accessibility; and
5. Quality and Liveability.

The proposed mixed use development supports spatial justice, with the residential development retained for middle income housing. The development of light industrial units and warehousing will result in job creation within the community. Those working and living within the area will have shorter travel time and be less dependent on public transport.

The proposed development will also support the other principals such as "quality and liveability", through the development of a safe housing and working environment. It is therefore that the development will be in line with the Provincial Spatial Development Framework through the core principles of the PSDF.

The edge of the built environment for the area	~~YES~~	**NO**	Please explain

The subject property is located outside of the urban area. The entirety of the development site has historically been used for agricultural activities. The site has however not been used for this purpose for many years. The proposed development site is currently vacant, with the Klapmuts River flowing through the property. There is also an old dam situated on the site. Furthermore, the property is surrounded by residential and commercial developments; therefore the proposed development will be supported by the surrounding land uses.

The Integrated Development Plan of the Local Municipality	**YES**	~~NO~~	Please explain

One of the aims of Stellenbosch Municipality Integrated Development Plan of (2017- 2022) is "exploring new ways of working and living together". The proposed mixed use development will result in job creation within close proximity to residential developments. The increase in population within the Western Cape has resulted in a higher demand for housing and rising pressure on public transport infrastructures. Implementation of this project will result in assisting the local and provincial government to meet their long term development goals while lessening the current pressure on public transport.

The proposed development will therefore be in line with the priorities of Stellenbosch Municipality's IDP.

The Spatial Development Framework of the Local Municipality	**YES**	~~NO~~	Please explain

Stellenbosch's Spatial Development Framework emphasises the principle of "Inclusive Economic Growth", which entails sustainable communities for all. The proposed development will result in job creation along with sustainable housing for the middle income community.

The mixed use development will furthermore result in commercial component being in close proximity to future and current residential homes thereby facilitating an increasing in employment opportunities with easy access. This will reduced the pressure on surrounding transport infrastructure by limiting new vehicular trip.

Furthermore, the Spatial Development Framework also supports "Car Free Living" and "Optimal land use" with will all be achieved by the proposed development.

Therefore, the proposed operations are in line with the Spatial Development Framework of the Local Municipality.

An Environmental Management Framework (EMF)	YES	**NO**	Please explain
N/A			
Any other Plans	~~YES~~	**NO**	Please explain
N/A			
Are any Amendments of the above-mentioned required?	~~YES~~	**NO**	Please explain.
N/A			
Will the proposed development lie within coastal public property, the coastal protection zone, or coastal access land as defined in terms of the NEM: ICMA, 2008?	~~YES~~	**NO**	Please explain.
N/A			

7. PUBLIC PARTICIPATION

7.1 Public participation process

The person conducting the public participation process must fulfil the requirements outlined in Chapter 6 of the 2014 NEMA EIA Regulations and must take into account any applicable guidelines published in terms of Section 24J of NEMA, the Department's Circular EADP 0028/2014 on the *"One Environmental Management System" and the EIA Regulations* (dated 9 December 2014) as well as any other guidance provided by the Department. Note that the public participation requirements are applicable to all proposed sites.

Please highlight the appropriate box below to indicate the public participation process that has been or will be undertaken to give notice of the application to all potential interested and affected parties, including exemptions that have been/will be applied for:

1. In terms of regulation 41 of the EIA Regulations, 2014 -			
(a) 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 -			
(i) the site where the activity to which the application relates is or is to be undertaken; and	YES	~~EXEMPTION~~	
(ii) any alternative site	YES	~~EXEMPTION~~	
(b) giving written notice, in any manner provided for in section 47D of the NEMA, to –			
(i) 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;	YES	~~EXEMPTION~~	~~N/A~~
(ii) 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;	YES	~~EXEMPTION~~	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	~~EXEMPTION~~	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	~~EXEMPTION~~	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	~~EXEMPTION~~	
(vi) any other party as required by the Department;	YES	~~EXEMPTION~~	~~N/A~~
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	~~EXEMPTION~~	
(ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	~~EXEMPTION~~	~~N/A~~
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	~~YES~~	~~EXEMPTION~~	N/A
(e) 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.	YES	~~EXEMPTION~~	~~N/A~~
If you have indicated that "EXEMPTION" applies to any of the above, then a separate Application for Exemption must be submitted.			
2. The NEM: AQA and NEM:WA requires that a notice must be placed in at least two newspapers.			
If applicable, have/will an advertisement be placed in at least two newspapers?	~~YES~~	~~NO~~	
If "NO", then an application for exemption from the requirement must be applied for.			

Note: It is no longer possible to obtain permission to deviate from the requirements to give notice to potential interested and affected parties. Unless exemption has been granted from a particular requirement, the requirement must be met. If an application for exemption is refused, the requirement in question must be met.

7.2 Public participation undertaken prior to the submission of this Notice of Intent

Where public participation in terms of Regulations 40(3) and 41 was undertaken prior to submission of this Notice of Intent, please provide a summary of the steps followed to date.
N/A

7.3 List of State departments consulted/to be consulted

Provide a list of all the State departments that will be/have been consulted, including the name and contact details of the relevant official.
DEA&DP: Land Management Region 2
Department of Water and Sanitation
Department of Agriculture
CapeNature
Heritage Western Cape
Stellenbosch Municipality: Environmental Management

Note: A State department consulted in terms of Section 24O(2) of NEMA and Regulations 3(4) and 43(2) must within 30 days from the date of the Department's request for comment, submit such comment in writing to the Department. The applicant/EAP is therefore required to inform this Department in writing when the Basic Assessment Report / Scoping Report / Environmental Impact Assessment Report is submitted to the relevant State Departments. Upon receipt of this confirmation, this Department will in accordance with Section 24O (2) & (3) of the NEMA (as amended), inform the relevant State Departments of the commencement date of the 30 day commenting period.

8. DECLARATIONS

8.1 THE APPLICANT

Note: Duplicate this section where there is more than one applicant.

I....., in my personal capacity or duly authorized thereto hereby declare/affirm all the information submitted or to be submitted as part of the application is true and correct, and that I:

- am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment Regulations ("EIA Regulations") in terms of NEMA (Government Notice No. R. 982 refers) and any relevant specific environmental management act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- appointed the environmental assessment practitioner, where applicable, which meets all the requirements in terms of regulation 13 of GN No. R 982 to act as independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and specialist, where applicable, and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the NEMA EIA Regulations, 2014 and other environmental legislation including but not limited to –
    - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
    - costs incurred in respect of the undertaking of any process required in terms of the regulations;
    - costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
    - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
    - the provision of security to ensure compliance with applicable management and mitigation measures;
- am responsible for complying with conditions that may be attached to any decision(s) issued by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of NEMA EIA Regulations, 2014 other environmental legislation;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible in terms of the NEMA EIA Regulations, 2014 and any specific environmental management act; and
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to an appeal being decided in terms of the NEMA Regulations, 2014.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the applicant:

Name of company:

Date:

8.2 THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) (WHERE APPLICABLE)

I Heloise Groenewald, as the appointed environmental assessment practitioner ("EAP") hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another EAP that meets the general requirements set out in Regulation 13 have been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- in terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant, the specialist (if any), the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application;
- have ensured/will ensure that information containing all relevant facts in respect of the application was/will be distributed or was/will be made available to interested and affected parties and the public and that participation by interested and affected parties was/will be facilitated in such a manner that all interested and affected parties were/will be provided with a reasonable opportunity to participate and to provide comments;
- have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the Department in respect of the application;
- have ensured/will ensure the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- have kept/will keep a register of all interested and affected parties that participate/d in the public participation process; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the EAP must be attached.

Signature of the environmental assessment practitioner:

Guillaume Nel Environmental Consultants

Name of company:

Date:

8.3 THE REVIEW ENVIRONMENTAL ASSESSMENT PRACTITIONER (REAP) (WHERE APPLICABLE)

I ....., as the appointed review environmental assessment practitioner ("REAP") hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent, other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- in terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have reviewed/will review all the work undertaken by the EAP;
- have disclosed/will disclose, to the applicant, the EAP, the specialist (if any), the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the review EAP must be attached.

Signature of the review environmental assessment practitioner:

Name of company:

Date:

8.4 THE SPECIALIST (WHERE APPLICABLE)

Note: Duplicate this section where there is more than one specialist.

I ....., as the appointed specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist that meets the general requirements set out in Regulation 13 have been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant, the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application;
- have ensured/will ensure that information containing all relevant facts in respect of the application was/will be distributed or was/will be made available to interested and affected parties and the public and that participation by interested and affected parties was/will be facilitated in such a manner that all interested and affected parties were/will be provided with a reasonable opportunity to participate and to provide comments;
- have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the Department in respect of the application;
- have ensured/will ensure the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- have kept/will keep a register of all interested and affected parties that participate/d in the public participation process; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the review specialist must be attached.

Signature of the specialist:

Name of company:

Date:

8.5 THE REVIEW SPECIALIST (WHERE APPLICABLE)

I ....., as the appointed review specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent, other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have reviewed/will review all the work undertaken by the specialist;
- have disclosed/will disclose, to the applicant, the EAP, the specialist (if any), the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the review specialist must be attached.

Signature of the review specialist:

Name of company:

Date:

APPENDIX 1 REQUEST FOR A SPECIFIC FEE REFERENCE NUMBER

A: Applicant's details:

Name:
ID Number:
Residential Address:
Postal Address:
Telephone no.: Cellular no.:
Facsimile no.: Email address:

Note: Please duplicate where there is more than one applicant:

B: Provide a brief description of the proposed project:

C: Indicate the process to which the application must be subjected:

The applicable listed activities to be applied for are (list the respective activity numbers):

Basic Assessment:	Activity Number	Scoping & EIR:	Activity Number	NEM: Waste Act:	Activity Number
Listing Notice 1		Listing Notice 2		Category A	
Listing Notice 3				Category B	

The process to which the proposed application is to be subjected is (tick the relevant box):

Basic Assessment:		Scoping and EIR:		Non-substantive Amendment		Substantive Amendment	

D: Application Fee:

Indicate the fee to be paid:

Application Fee	

Note: The Department will confirm the amount to be paid. Where permission has been granted for a combined application to be submitted as contemplated in Regulation 11, the fee payable in terms of the application in question must be confirm with the Department prior to submission of the application.

E: Departmental region within which the application will be administered (tick the relevant box):

CAPE TOWN OFFICE: REGION 1 (City of Cape Town & West Coast District) Fax: (021) 483 4372		CAPE TOWN OFFICE: REGION 2 (Cape Winelands District & Overberg District) Fax : (021) 483 3633		GEORGE OFFICE: REGION 3 (Central Karoo District & Eden District) Fax: (044) 874 2423	

I, Carina Nel (applicant's full name), herewith request the Department to provide me with a specific fee reference number in order that I may make payment of the application fee. I am fully aware of my responsibility to ensure that the correct fee is paid and that proof of such payment must be attached to my application form. I further confirm that the information I have provided herein is true and correct.

_____ 07-08-2017
Applicant's signature Date

(For official use only)

Captured by : _____ Date received: _____ Date captured: _____

EIA Process (tick) : Basic Assessment (R2 000) Scoping and EIR (R10 000) Joint EIA/WML Category A (R2 000) Category B (R10 000) Amendment (R2 000)

Amount to be paid: _____ Specific fee reference number: _____

Process and amount approved by Control EO: _____ _____
Name Signature

THIS FORM MUST BE FAXED TO THE RELEVANT REGION REFLECTED IN THE DEPARTMENTAL DETAILS ABOVE
THE APPLICATION FEE MUST BE MADE INTO THE DEPARTMENTAL BANKING ACCOUNT USING THE SPECIFIC FEE REFERENCE NUMBER.

Report

PORTION 1 OF FARM 717 AND SUBDIVISION OF ERF 1336, GROENFONTEIN FARM, KLAPMUTS

FLOODLINE REPORT

Prepared for:

Cadcor (Pty) Ltd
P.O Box 643
Paardekraal
1752

Prepared by:

Graeme McGill consulting

Tel: 021 976 0386
Mobile: 082 550 9108
Fax: 086 517 6574
graeme@mcgillconsulting.co.za

Report No.: MC306-0
Revision: 1
Date: 2019-12-13

CONTENTS

PORTION 1 OF FARM 717
AND
SUBDIVISION OF ERF 1336, GROENFONTEIN, KLAPMUTS

FLOODLINE REPORT

1. SCOPE

Graeme McGill Consulting was appointed to determine the 1:50 and 1:100-year floodlines for the Klapmuts River on Portion 1 of Farm 717 and on the subdivision of Erf 1336 in Klapmuts. The total contributing sub-catchment area is 10.091 km²

The locality of the development site is shown in Figure 1.

FIGURE 1: LOCALITY OF THE PROPOSED DEVELOPMENT SITES: PORTION 1 OF THE FARM 717 AND SUBDIVISION OF ERF 1336, KLAPMUTS

The study comprised the following:

FLOOD HYDROLOGY

- Determination of flow peaks for return periods of 1:50 year and 1:100 year, calculated using standard hydrological methods namely, Rational Method, Standard Design Flood Method, HEC-HMS using the SCS Runoff Method and Maximum Regional Flood Factor Method.

RIVER HYDRAULICS

- Acquisition of survey of the development site which includes the Klapmuts River and the Tributary River.
- Modelling the Klapmuts River and the Tributary River using the water surface profile software package HEC-RAS 5.0.7. The required inputs are from field observations, the survey data, any constraints and the peak flows, for floods of 1:50 and the 1:100 year return intervals.
- Computation of water surface profiles, energy grades and flow velocities.
- Determination of floodlines and demarcating these in plan on drawings.

2. DATA ACQUISITION

2.1 SITE INSPECTION

Portion 1 of the Farm 717 is bounded by erf 2183 on the west, Portion 2 of Farm 742 on the south, Portion 6 of the Farm 748 on the east and erf 1336 on the north. The total site area is 7.27 ha.

Erf 1336 is bounded by a relatively newly constructed road on the west, by Portion 1 of Farm 717 on the south, by Adam Tas Street (R44) on the east and by Merchant Street on the north. The total site area is 39.22 ha.

The existing site conditions consist mainly of open veld, with grass cover with some bushes and trees. The top soil consists mainly of sandy material.

FIGURE 2: SOIL LAYERS ON SITE

The development site has been used for cattle grazing. The site has plenty of domestic waste scattered on the site and in the Klapmuts River itself. In the centre of the development site is an existing berm, which varies in height between 1m – 2m.

The Klapmuts River flows in a meandering path from the south of the development site in a northernly direction towards Merchant Street. The river is overgrown with reeds and grass throughout the channel. Waste has been dumped in certain sections of the Klapmuts River.

There is a tributary stream flowing from the western side, which joins the Klapmuts River approximately 70m from Merchant Street. The tributary flows under the newly constructed road through a 1,8m x 1,2 concrete box culvert.

The Klapmuts River exits erf 1336 via a Ø2m steel corrugated pipe, which flows underneath Merchant Street. The pipe daylights downstream, in a grassed channel through the existing properties.

2.2 TOPOGRAPHICAL SURVEY

To determine the extent of the larger external sub-catchments, a topographical survey with 5m contours was generated from the Surveyor General's Office. Refer to Annexure A for catchment layout.

A topographical survey of the development site and the adjacent streets with 0,5m contours was carried out by Joubert and Brink Surveyors in December 2006. It was noted that this survey shows the condition before the road along the western boundary was constructed. According to GoogleEarth the road was constructed in 2011.

A topographical survey was also carried out for Portion 1 of Farm 717 with 0,5m contours by Neil Wooden Surveys in November 2016. The cadastral boundaries for the area were also provided by Neil Wooden Surveys. Refer to drawing MC306-C401.

3. FLOOD PEAK DETERMINATION

3.1 METHODOLOGY

Three sub-catchments have been identified which contributes discharge to the Klapmuts River and the Tributary River, at the development site. The run-off from these catchments was modelled for a range of recurrence intervals using the HEC-HMS software with the SCS run-off coefficient option. The Rational Method, Standard Design Flood Method (SDF) and Regional Maximum Flood Method (RMF) were also used as checks.

3.2 CATCHMENT

The extent of each sub-catchment is shown in Annexure A. The sub-catchment parameters are provided in Table 1.

TABLE 1: SUB-CATCHMENT SUMMARY

CATCHMENT	AREA (km²)	Lc (m)	AVERAGE SLOPE	CONTRIBUTING RIVER
SC1	8.58	6511	2.16%	Klapmuts River
SC2	1.51	2824	9.83%	Tributary River
SC3	0.69	2403	6.56%	Tributary River

3.3 STORM RAINFALL

The City of Cape Town commissioned the University of KwaZulu-Natal to investigate the likely effect of climate change on storm intensities in the Western Cape. The recommendation from this investigation was that an increase of 15% over the existing IDF curves be allowed for. This was accepted by the City and a set of point storm rainfall depths has been prepared for a one minute by one-minute grid covering the Western Cape.

Four rainfall grid points were used. Figure 3 shows the positions and coordinates of the point in relation to the catchment areas.

The average rainfall from the four grid point locations have been selected for the peak flow analysis and the final weighted point rainfall figures are set out in Table 2.

TABLE 2: WEIGHTED POINT STORM RAINFALL DEPTHS EXTRACTED FROM CITY OF CAPE TOWN DESIGN GRID INCORPORATING A CLIMATE CHANGE FACTOR

RETURN PERIOD (YR)	EVENT DURATION/RAINFALL (mm) (INC CC FACTOR)							
	10 min	30 min	60 min	120 min	240 min	360 min	720 min	1440 min
0.5	4.5	7.6	10.5	14.6	18.6	21.6	27.6	35.4
1	6.3	10.7	14.8	20.5	26.2	30.3	38.8	49.7
2	8.2	13.9	19.2	26.5	33.8	39.1	50.1	64.1
5	10.7	18.1	24.9	34.4	44.0	50.9	65.1	83.3
10	12.4	21.0	29.0	40.0	51.2	59.2	75.8	97.0
20	14.2	24.1	33.2	45.8	58.6	67.7	86.7	110.9
50	16.6	28.3	39.0	53.7	68.7	79.4	101.7	130.2
100	18.6	31.6	43.6	60.1	76.8	88.8	113.6	145.5

NOTES:
These data are for storm depths from points 33°49' S 18°52' E
33°50' S 18°53' E
33°51' S 18°53' E
33°50' S 18°52' E

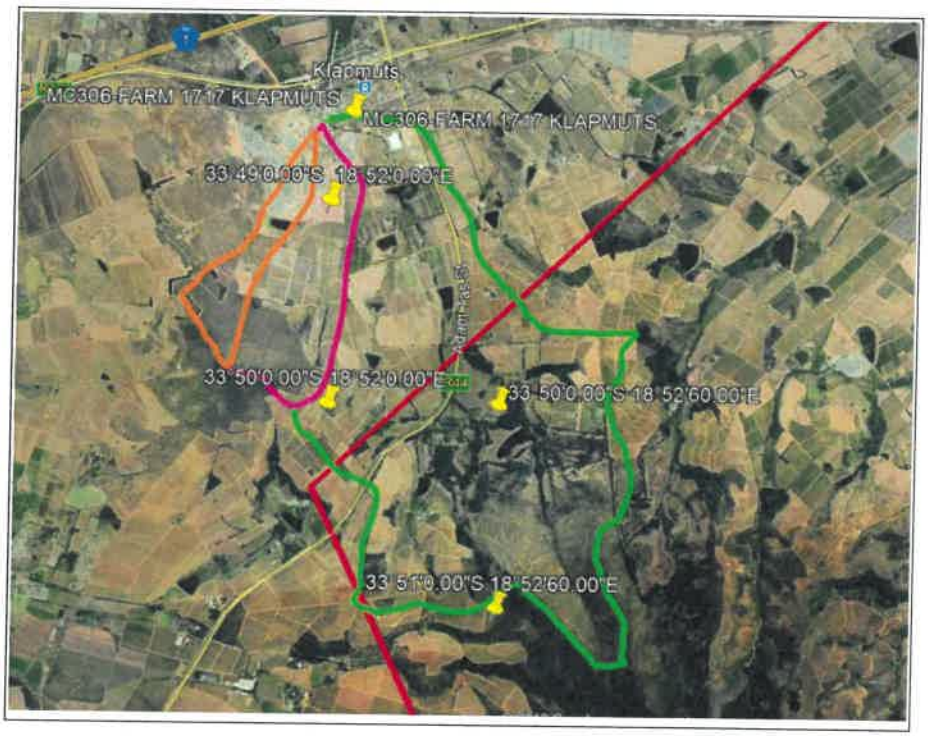


FIGURE 3: STORM RAINFALL GRID POSITIONS

3.4 PEAK RUNOFF ANALYSIS

The flow peaks were computed using the SCS method in the HEC-HMS model. Checks were done using four other standard methods, and it was concluded that the HEC-HMS results were most applicable. The results for sub-catchments 1,2, 3 and the total catchment are summarised in Tables 3-6 and compared in Figures 4-7, respectively.

TABLE 3: PEAK FLOW ANALYSIS RESULT SUMMARY FOR SC 1 (KLAPMUTS)

RI (YEARS)	HEC-HMS: SCS	RATIONAL METHOD	STANDARD DESIGN FLOOD METHOD	EMPIRICAL - Midgley & Pitman	EMPIRICAL - KOVACS
10	36.4	19.9	29.4	48.7	
20	44.8	24.1	39.9	61.1	
50	56.6	29.8	55.2	79.9	61.9
100	66.2	35.1	67.6	93.9	81.7

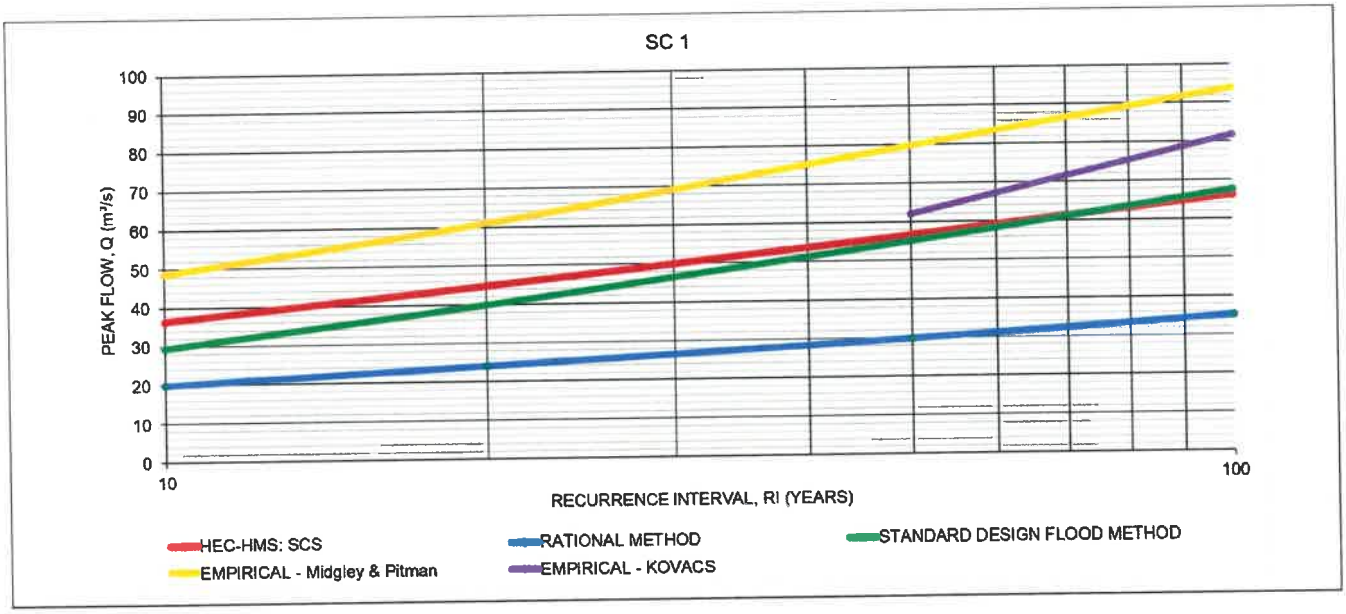


FIGURE 4: PEAK FLOW COMPARISON FOR SC 1 (KLAPMUTS RIVER)

TABLE 4: PEAK FLOW ANALYSIS RESULT SUMMARY FOR SC 2 (TRIBUTARY)

RI (YEARS)	HEC-HMS: SCS	RATIONAL METHOD	STANDARD DESIGN FLOOD METHOD	EMPIRICAL - Midgley & Pitman	EMPIRICAL - KOVACS
10	15	7.6	12.1	19.7	
20	18.4	9.1	16.4	24.7	
50	23.1	11.2	22.7	32.3	34.3
100	26.9	13.1	27.8	38.0	45.3

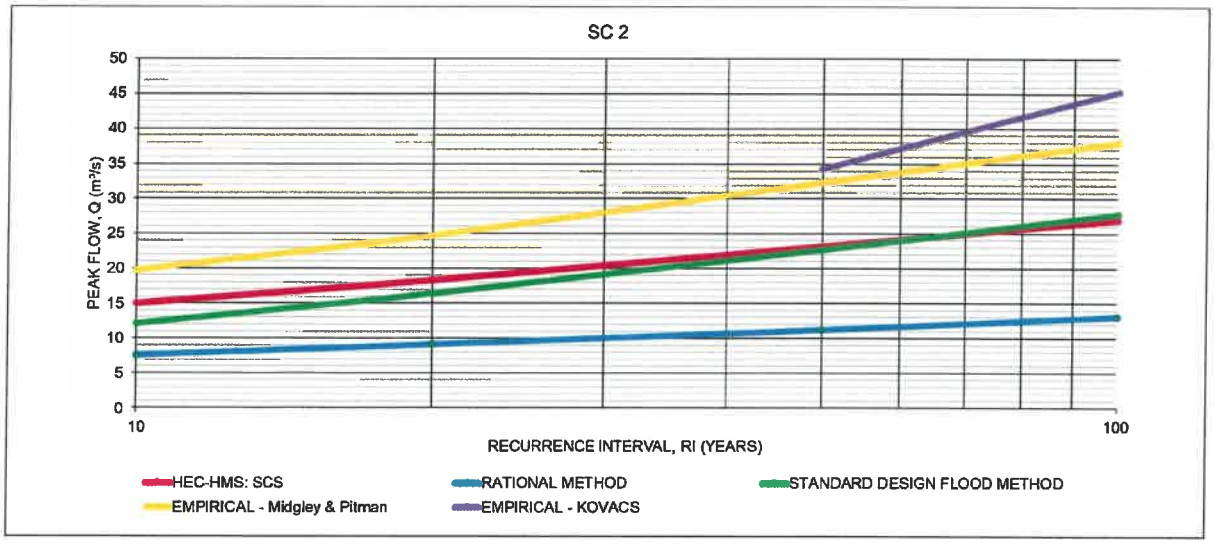


FIGURE 5: PEAK FLOW COMPARISION FOR SC 2 (TRIBUTARY RIVER)

TABLE 5: PEAK FLOW ANALYSIS SUMMARY FOR SC 3 (TRIBUTARY)

RI (YEARS)	HEC-HMS: SCS	RATIONAL METHOD	STANDARD DESIGN FLOOD METHOD	EMPIRICAL - Midgley & Pitman	EMPIRICAL - KOVACS
10	6.5	3.5	5.4	10.8	
20	7.9	4.2	7.4	13.6	
50	10	5.1	10.2	17.8	26.3
100	11.6	5.9	12.5	20.9	34.8

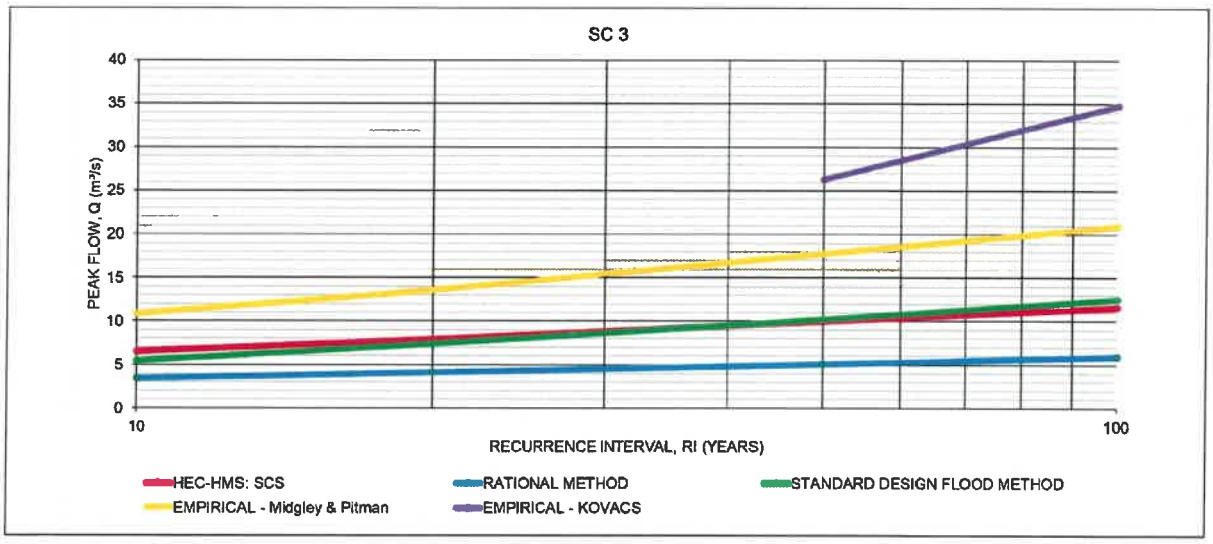


FIGURE 6: PEAK FLOW COMPARISION FOR SC 3 (TRIBUTARY RIVER)

TABLE 6: PEAK FLOW ANALYSIS RESULTS SUMMARY FOR TOTAL CATCHMENT

RI (YEARS)	HEC-HMS: SCS	RATIONAL METHOD	STANDARD DESIGN FLOOD METHOD	EMPIRICAL - Midgley & Pitman	EMPIRICAL - KOVACS
10	41.6	25.9	36.9	58.5	
20	51.0	31.2	50.2	73.3	
50	64.3	38.5	69.3	95.9	66.9
100	75.2	45.3	85.0	112.8	88.3

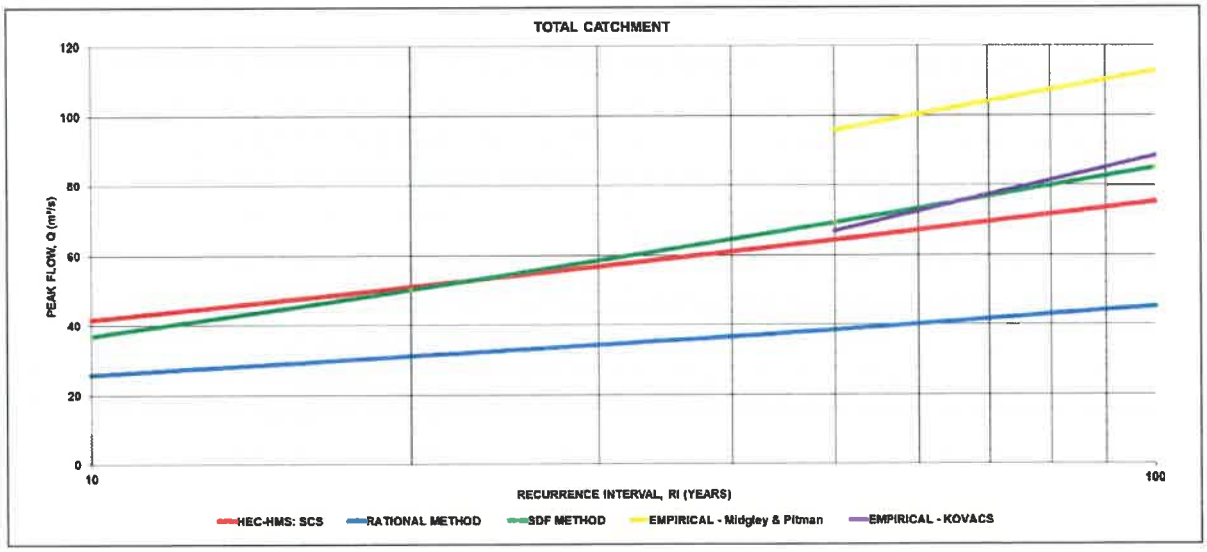


FIGURE 7: PEAK FLOW COMPARISION FOR THE TOTAL CATCHMENT

4. FLOODLINES

The software package HEC-RAS (Ver 5.0.7) was used to compute the water surface profiles for the 1:50 and 1:100-year recurrence intervals.

The upstream and downstream boundary conditions were deemed to be the normal depth as defined by the river grade at the upper and lower cross-sections respectively.

The estimated Manning roughness coefficients, based on field inspections, for the Klapmuts River and the Tributary River are given in Tables F.1 to F.3, respectively in Annexure F.

The results of the water surface profiles analyses for the Klapmuts and Tributary rivers are contained in Tables F.4 to F.6, respectively in Annexure F. From these results the floodline energy levels have been plotted on the accompanying drawing MC306-C401.

5. CHANNEL IMPROVEMENTS

To improve the existing floodline conditions on the development site, the Klapmuts River and the Tributary River adjacent to the western boundary road, would need to be cleaned out and formalised (refer to Table 7 below) to allow for a larger water surface flow area within the channel.

To improve the floodlines along the Tributary River, a berm could also be constructed along the western boundary (at the existing road) to prevent any spilling over onto the development site.

At the downstream end of the development site, the existing Ø2m corrugated pipe culvert could also be enlarged to allow more flow through the culvert, which will drop the existing floodline levels on the development site.

In Table 7 below, is a summary of the proposed channels which have been calculated to contain the peak 1:100 year flow. The channels have been calculated with1(H):3(V) side slopes and a Manning's n value of 0,030.

TABLE 7: PROPOSED FORMALISED CHANNEL SUMMARY – PRELIMINARY SIZES

RIVER PORTION	BASE WIDTH (m)	TOP WIDTH (m)	FLOW DEPTH (m)	TOTAL DEPTH (m)	SLOPE
KLAPMUTS U/S	10.0	17.69	1.48	1.92	0.90%
KLAPMUTS D/S	15.0	21.68	1.28	1.67	0.90%
TRIBUTARY	3.0	10.83	1.51	1.96	1.83%

6. CONCLUSIONS

This river investigation examined the reach conditions for a section of the Klapmuts River and the Tributary River.

Using the point storm rainfall depths for the investigation area extracted from City of Cape Town design grid incorporating a climate change factor (Table 2) the flow peaks for the 1:50 and 1:100 year could be determined by using standard methods, results for each are in Annexures B to F.

The peak flows as determined by the HEC-HMS software (using the SCS method) were selected for the analysis (Tables 3 to 6, and Annexure B).

Modelling of the Klapmuts River and the Tributary River was done by using the water surface profile software package HEC-RAS. The water surface results and floodlines are given on drawing MC306-C401 and in Annexure F.

It has been noted that subsequent to the 2006 survey of the site, the road along the western border has been constructed and a branch of the Tributary River has been moved to the western side of the western boundary road. As the survey did not cover these changes, recommendations have been made to check and upgrade that channel if necessary.

GA McGill Pr Eng

GRAEME McGILL CONSULTING CC

ANNEXURE A: SUB-CATCHMENT LAYOUT DRAWING

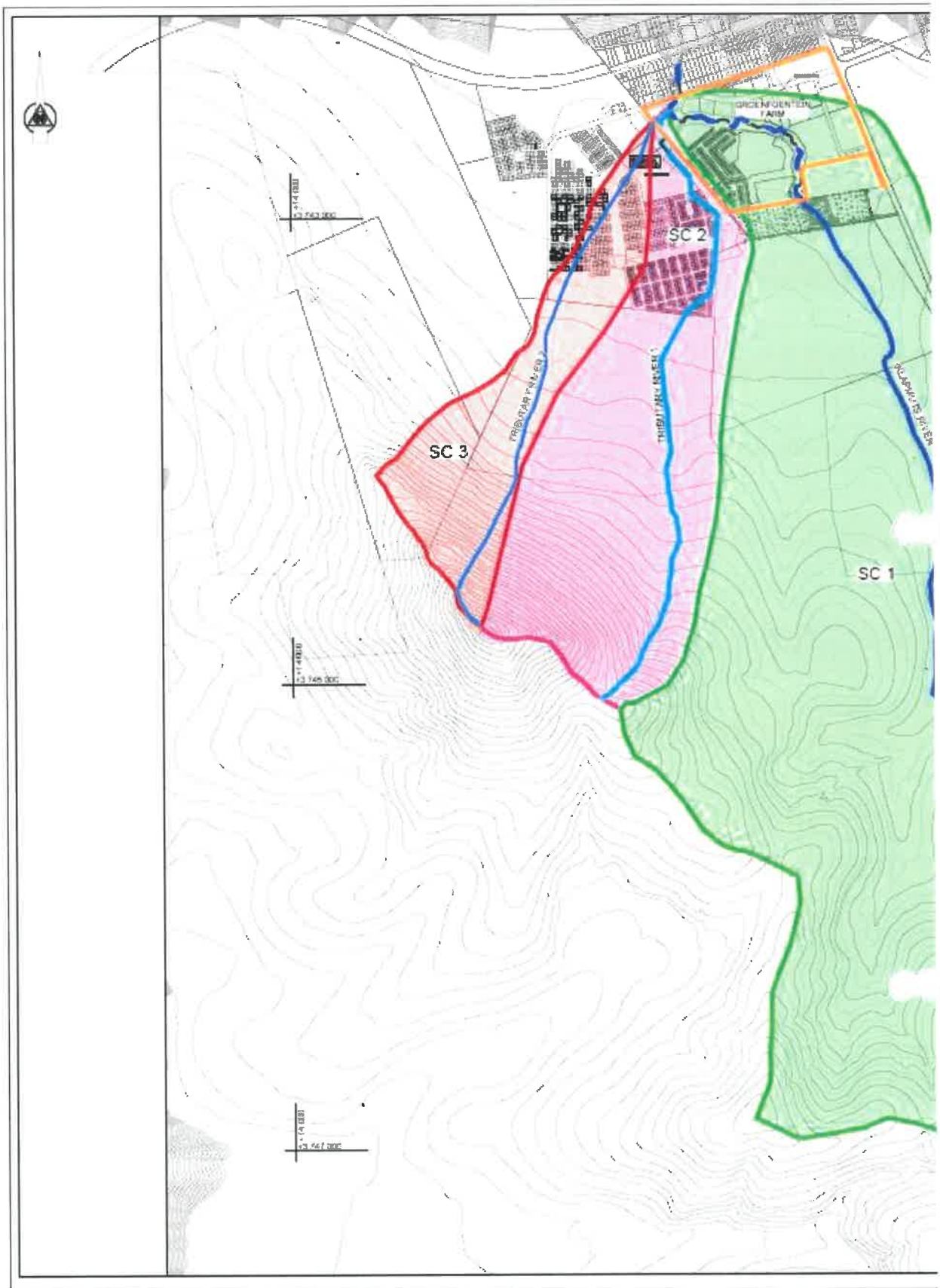


FIGURE A.1: SUB-CATCHMENT LAYOUT PLAN

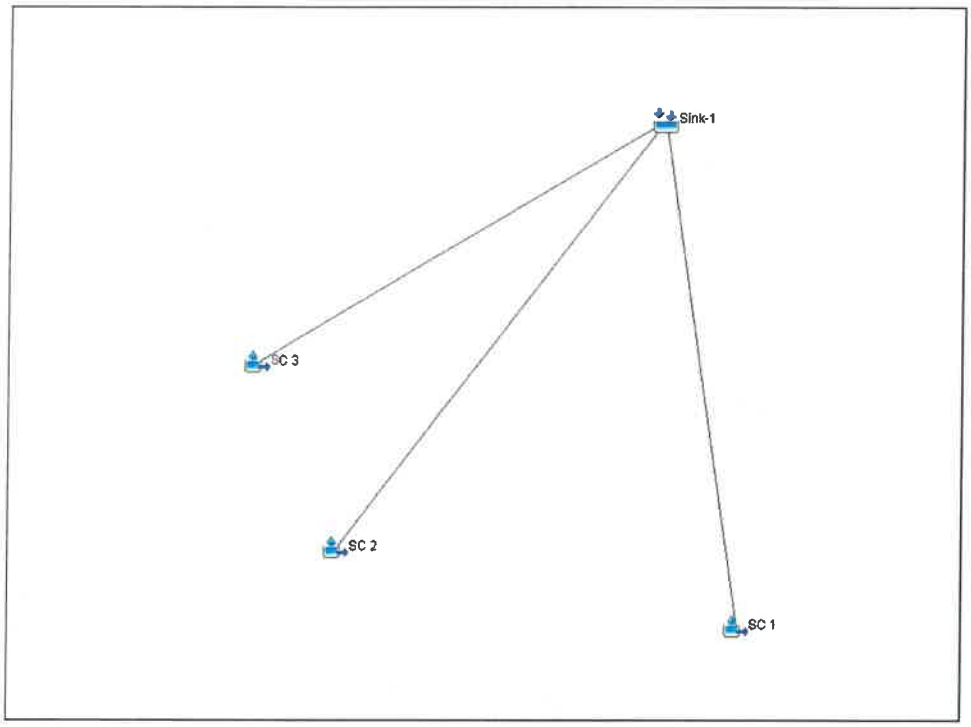


FIGURE A1: HEC-HMS MODEL LAYOUT

Project: MC306 Simulation Run: 10YR

Start of Run: 04Apr2016, 12:00
End of Run: 06Apr2016, 12:00
Compute Time: 12Dec2019, 14:46:13

Basin Model: MC306
Meteorologic Model: 10YR
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Hydrologic

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
SC 1	8.5910	36.4	05Apr2016, 00:55	51.21
SC 2	1.5098	15.0	05Apr2016, 00:12	52.78
SC 3	0.6944	6.5	05Apr2016, 00:13	52.88
Sink-1	10.7952	41.6	05Apr2016, 00:53	51.54

FIGURE A2: 1:10 YEAR HEC-HMS FLOW RESULTS

Project: MC306 Simulation Run: 20YR

Start of Run: 04Apr2016, 12:00
End of Run: 06Apr2016, 12:00
Compute Time: 12Dec2019, 14:46:48

Basin Model: MC306
Meteorologic Model: 20YR
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Hydrologic

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
SC 1	8.5910	44.7	05Apr2016, 00:55	62.69
SC 2	1.5098	18.3	05Apr2016, 00:12	64.43
SC 3	0.6944	7.9	05Apr2016, 00:13	64.54
Sink-1	10.7952	51.0	05Apr2016, 00:53	63.05

FIGURE A3: 1:20 YEAR HEC-HMS FLOW RESULTS

Project: MC306 Simulation Run: 50YR

Start of Run: 04Apr2016, 12:00
End of Run: 06Apr2016, 12:00
Compute Time: 12Dec2019, 14:47:15

Basin Model: MC306
Meteorologic Model: 50YR
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Hydrologic

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
SC 1	8.5910	56.5	05Apr2016, 00:55	79.20
SC 2	1.5098	23.1	05Apr2016, 00:12	81.15
SC 3	0.6944	10.0	05Apr2016, 00:13	81.25
Sink-1	10.7952	64.3	05Apr2016, 00:53	79.60

FIGURE A4: 1:50 YEAR HEC-HMS FLOW RESULTS

Project: MC306 Simulation Run: 100YR

Start of Run: 04Apr2016, 12:00
End of Run: 06Apr2016, 12:00
Compute Time: 12Dec2019, 14:47:44

Basin Model: MC306
Meteorologic Model: 100YR
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Hydrologic

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
SC 1	8.5910	66.1	05Apr2016, 00:55	92.64
SC 2	1.5098	26.9	05Apr2016, 00:12	94.73
SC 3	0.6944	11.6	05Apr2016, 00:13	94.84
Sink-1	10.7952	75.2	05Apr2016, 00:52	93.08

FIGURE A5: 1:100 YEAR HEC-HMS FLOW RESULTS

ANNEXURE C: RATIONAL METHOD RESULTS

RATIONAL METHOD 2

Scenario	EXISTING CONDITIONS		
Description of catchment	KLAPMUTS MOUNTAINS - SC 1		
River detail	KLAPMUTS RIVER		
Calculated by	DL FERBUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	8.581	km2	Days of thunder per year (FIG 3.12)	5	days/year
Longest watercourse (L)	6.51	km	Weather Service station)	NA	
Average slope (S_{av})	0.02	m/m	Weather Service number)	NA	
Dolomite area (D_x)	0%	%	**Area distribution factors**		
Mean annual precipitation (MAP)	753.75	mm	Rural (α)	Urban (β)	Lakes (γ)
2-year return period rainfall (M) (ANNEX C3.1)	50	mm	0.99	0.01	0.0

Rural				**Urban**			
Surface slope	**%**	**Factor**	**C_x**	**Description**	**%**	**Factor**	**C_2**
Vleis and pans (<3%)	0%	0.03	0.00	**Lawns**			
Flat areas (3% to 10%)	80%	0.08	0.06	Sandy, flat (<2%)	5%	0.10	0.01
Hilly (10% to 30%)	20%	0.16	0.03	Sandy, steep (>7%)	0%	0.20	0.00
Steep areas (>30%)	0%	0.26	0.00	Heavy soil, flat (<2%)	0%	0.17	0.00
Total	100%	0.53	0.10	Heavy soil, steep (>7%)	0%	0.35	0.00
Permeability	**%**	**Factor**	**C_P**	**Residential areas**			
Very permeable	5%	0.04	0.00	Houses	80%	0.50	0.40
Permeable	30%	0.08	0.02	Flats	0%	0.70	0.00
Semi-permeable	65%	0.16	0.10	**Industry**		0.8	
Impermeable	0%	0.26	0.00	Light industry	0%	0.80	0.00
Total	100%	0.54	0.13	Heavy industry	0%	0.90	0.00
Vegetation	**%**	**Factor**	**C_v**	**Business**			
Thick bush and plantation	5%	0.04	0.00	City centre	0%	0.95	0.00
Light bush and farm-lands	50%	0.11	0.06	**Suburban**	0%	0.70	0.00
Grasslands	45%	0.21	0.09	Streets	15%	0.95	0.14
No vegetation	0%	0.28	0.00	Maximum flood	0%	1.00	0.00
Total	100%	0.64	0.15	**Total (C_2)**	100%		0.55
C1 Total			0.38				

Time of concentration (Tc)

Overland flow		Defined watercourse	
r			
$T_c = 0.604\left(\frac{rL}{\sqrt{S_{av}}}\right)^{0.467}$		$T_c = \left(\frac{0.87L^2}{1000S_{av}}\right)^{0.385}$	
0.00	hours	1.23	hours

Notes:
73.68617017

Dolomite Reduction Factors	**Factor, Dfactor**	**Dfactor x Cs%**
Vleis and Pans (slopes <3%)	0.10	0.00
Flat Areas (3 to 10%)	0.20	0.16
Hilly (10 to 30%)	0.35	0.07
Steep Areas (slopes > 30%)	0.50	0.00
Total		0.23

2. Run-off coefficient

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**Max**
Run-off coefficient, C_1 ($C_1 = C_S + C_P + C_V$)	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Adjusted for dolomitic areas, C_D ($= C_1(1 - D_x) + C_1D\%(\sum(D_{factor} \times CS\%))$)	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Adjustment factor for initial saturation, F_1 (fig 3.20/21 or Table 3C.5)	0.75	0.80	0.85	0.90	0.95	1.00	1.00
Adjusted run-off coefficient, C_T ($= C_D \times F_1$)	0.28	0.30	0.32	0.34	0.36	0.38	0.38
Combined run-off coefficient C_T ($= \alpha C_T + \beta C_2 + \gamma C_3$)	0.29	0.30	0.32	0.34	0.36	0.38	0.38

3. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**Max**
Point rainfall (mm), P_T (CoCT design rainfall)	21.0	27.3	31.8	36.3	42.6	47.7	47.7
Point intensity (mm/hour), P_T ($= P_T/T_C$)	17.09	22.21	25.89	29.58	34.71	38.81	38.81
Area reduction factor, ARF (fig 3.14 or eqn 3.36)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Average intensity (mm/hour), I_T ($= P_T \times ARF_T$)	17.09	22.21	25.89	29.58	34.71	38.81	38.81
Peak flow (m^3/s) $Q_T = \frac{C_T I_T A}{3.6}$	11.64	16.11	19.94	24.10	29.82	35.07	35.07

RATIONAL METHOD 2

Scenario	EXISTING CONDITIONS		
Description of catchment	KLAPMUTS MOUNTAINS - TOTAL CATCHMENT		
River detail	KLAPMUTS RIVER		
Calculated by	DL FERBUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	10.091	km2	Days of thunder per year (FIG 3.12)	5	days/year
Longest watercourse (L)	6.51	km	Weather Service station)	NA	
Average slope (S_{av})	0.02	m/m	Weather Service number)	NA	
Dolomite area (D_x)	0%	%	**Area distribution factors**		
Mean annual precipitation (MAP)	753.75	mm	Rural (α)	Urban (β)	Lakes (γ)
2-year return period rainfall (M) (ANNEX C3.1)	50	mm	0.98	0.02	0.0

Rural				**Urban**			
Surface slope	**%**	**Factor**	**C_s**	**Description**	**%**	**Factor**	**C_2**
Vleis and pans (<3%)	0%	0.03	0.00	**Lawns**			
Flat areas (3% to 10%)	78%	0.08	0.06	Sandy, flat (<2%)	5.00%	0.10	0.01
Hilly (10% to 30%)	22%	0.16	0.04	Sandy, steep (>7%)	0.75%	0.20	0.00
Steep areas (>30%)	0%	0.26	0.00	Heavy soil, flat (<2%)	0.00%	0.17	0.00
Total	100%	0.53	0.10	Heavy soil, steep (>7%)	0.00%	0.35	0.00
Permeability	**%**	**Factor**	**C_p**	**Residential areas**			
Very permeable	5.00%	0.04	0.00	Houses	80.00%	0.50	0.40
Permeable	28.50%	0.08	0.02	Flats	0.00%	0.70	0.00
Semi-permeable	65.75%	0.16	0.11	**Industry**			
Impermeable	0.75%	0.26	0.00	Light industry	0.00%	0.80	0.00
Total	100%	0.54	0.13	Heavy industry	0.00%	0.90	0.00
Vegetation	**%**	**Factor**	**C_v**	**Business**			
Thick bush and plantation	5.0%	0.04	0.00	City centre	0.00%	0.95	0.00
Light bush and farm-lands	48.5%	0.11	0.05	Suburban	0.00%	0.70	0.00
Grasslands	46.5%	0.21	0.10	Streets	14.25%	0.95	0.14
No vegetation	0.0%	0.28	0.00	Maximum flood	0.00%	1.00	0.00
Total	100%	0.64	0.15	**Total (C_2)**	100%		0.54
C_1 Total			0.38				

Time of concentration (T_C)

Overland flow		Defined watercourse	
r			
$T_c = 0.604\left(\frac{rL}{\sqrt{S_{av}}}\right)^{0.467}$		$T_c = \left(\frac{0.87L^2}{1000S_{av}}\right)^{0.385}$	
0.00	hours	1.23	hours

Notes:
73.68817017

Dolomite Reduction Factors	**Factor, Dfactor**	**Dfactor x Cs%**
Vleis and Pans (slopes <3%)	0.10	0.00
Flat Areas (3 to 10%)	0.20	0.16
Hilly (10 to 30%)	0.35	0.08
Steep Areas (slopes > 30%)	0.50	0.00
Total		0.23

2. Run-off coefficient

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**Max**
Run-off coefficient, C_1 ($C_1 = C_s + C_p + C_v$)	0.383	0.38	0.38	0.38	0.38	0.38	0.38
Adjusted for dolomitic areas, C_D ($= C_1(1 - D_x) + C_1 D_x \%(\sum(\text{Dfactor} \times Cs\%))$)	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Adjustment factor for initial saturation, F_t (fig 3.20/21 or Table 3C.5)	0.75	0.80	0.85	0.90	0.95	1.00	1.00
Adjusted run-off coefficient, C_T ($= C_D \times F_t$)	0.29	0.31	0.33	0.34	0.36	0.38	0.38
Combined run-off coefficient C_T ($= \alpha C_T + \beta C_2 + \gamma C_3$)	0.29	0.31	0.33	0.35	0.37	0.39	0.39

3. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**Max**
Point rainfall (mm), P_T (CoCT design rainfall)	21.0	27.3	31.8	36.3	42.6	47.7	47.7
Point intensity (mm/hour), P_T ($= P_T/T_C$)	17.09	22.21	25.89	29.58	34.71	38.81	38.81
Area reduction factor, ARF (fig 3.14 or eqn 3.36)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Average intensity (mm/hour), I_T ($= P_T \times ARF_T$)	17.09	22.21	25.89	29.58	34.71	38.81	38.81
Peak flow (m^3/s) $Q_T = \frac{C_T I_T A}{3.6}$	14.03	19.40	23.96	28.93	35.77	42.03	42.03

ANNEXURE D: STANDARD DESIGN FLOOD (SDF) METHOD RESULTS

SDF METHOD

Scenario	EXISTING CONDITIONS		
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - SC 1		
River detail	KLAPMUTS RIVER		
Calculated by	DL FEBRUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	8.581	km²	Time of Concentration Tc $T_c = \left(\frac{0.871 L^3}{1000 S_{av}}\right)^{0.385}$	1.23	hours
Longest watercourse (L)	6.51	km			
Average slope (Sav)	0.0216	m/m			
SDF basin (Fig 3.25)	17		Time of concentration, t (= 60Tc)	74	minutes
2-year return period rainfall (M)	45	mm	Days of thunder per year (Table 3B.1)	1	days/year

TR102 n-day rainfall data

Weather Service station	ELANDSPOORT		Mean annual precipitation (MAP)	500	mm
Weather Service station no.	84 558		Coordinates		

Duration (days)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
1 day							
2 days							
3 days							
7 days							

2. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Point precipitation depth (mm), Pt,T	11.07	18.68	24.43	30.19	37.80	43.55	49.31
Area reduction factor (%), ARF	100%	100%	100%	100%	100%	100%	100%
Average intensity (mm/hour), IT	9.02	15.21	19.90	24.58	30.78	35.46	40.15

3. Run-off coefficients

Calibration factors	C2 (2-year return period) (%)	40	C100 (100-year return period) (%)	80

Return period (years)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Return period factors (YT) (TABLE 3.13)	0.00	0.84	1.28	1.64	2.05	2.33	2.58
Run-off coefficient (CT), $C_T = \frac{C_2}{100} + \left(\frac{Y_T}{2,33}\right)\left(\frac{C_{100}}{100} - \frac{C_2}{100}\right)$	0.40	0.54	0.62	0.68	0.75	0.80	0.84
Peak flow (m³/s) $Q_T = \frac{C_T I_T A}{3,6}$	8.6	19.7	29.4	39.9	55.2	67.6	80.7

SDF METHOD

Scenario	EXISTING CONDITIONS		
Description of catchment	TRIBUTARY RIVER U/S TO SITE D/S - SC 2		
River detail	TRIBUTARY RIVER		
Calculated by	DL FEBRUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	1.510	km²	Time of Concentration Tc $T_c = \left[\frac{0.87L^2}{1000S_{av}}\right]^{0.385}$	0 36	hours
Longest watercourse (L)	2 82	km			
Average slope (Sav)	0 0983	m/m			
SDF basin (Fig 3.25)	17		Time of concentration, t (= 60Tc)	22	minutes
2-year return period rainfall (M)	45	mm	Days of thunder per year (Table 3B.1)	1	days/year

TR102 n-day rainfall data

Weather Service station	ELANDSPOORT		Mean annual precipitation (MAP)	500	mm
Weather Service station no.	84 558		Coordinates		

Duration (days)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
1 day							
2 days							
3 days							
7 days							

2. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Point precipitation depth (mm), Pt,T	7.59	12.80	16.74	20.68	25.89	29.83	33.78
Area reduction factor (%), ARF	100%	100%	100%	100%	100%	100%	100%
Average intensity (mm/hour), It	21.05	35.50	46.44	57.38	71.84	82.77	93.71

3. Run-off coefficients

Calibration factors	C2 (2-year return period) (%)	40	C100 (100-year return period) (%)	80

Return period (years)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Return period factors (YT) (TABLE 3.13)	0.00	0.84	1.28	1.64	2.05	2.33	2.58
Run-off coefficient (CT), $C_T = \frac{C_2}{100} + \left(\frac{Y_T}{2,33}\right)\left(\frac{C_{100}}{100} - \frac{C_2}{100}\right)$	0.40	0.54	0.62	0.68	0.75	0.80	0.84
Peak flow (m³/s) $Q_T = \frac{C_T I_T A}{3,6}$	3.5	8.1	12.1	16.4	22.7	27.8	33.1

SDF METHOD

Scenario	EXISTING CONDITIONS		
Description of catchment	TRIBUTARY RIVER U/S TO SITE D/S - SC 3		
River detail	TRIBUTARY RIVER		
Calculated by	DL FEBRUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	0.694	km²	Time of Concentration Tc $T_c = \left(\frac{0.87L^3}{1000S_m}\right)^{0.385}$	0.37	hours
Longest watercourse (L)	2.40	km			
Average slope (Sav)	0.0656	m/m			
SDF basin (Fig 3.25)	17		Time of concentration, t (= 60Tc)	22	minutes
2-year return period rainfall (M)	45	mm	Days of thunder per year (Table 3B.1)	1	days/year

TR102 n-day rainfall data

Weather Service station	ELANDSPOORT		Mean annual precipitation (MAP)	500	mm
Weather Service station no.	84 558		Coordinates		

Duration (days)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
1 day							
2 days							
3 days							
7 days							

2. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Point precipitation depth (mm), Pt,T	7.67	12.95	16.93	20.92	26.19	30.18	34.17
Area reduction factor (%), ARF	100%	100%	100%	100%	100%	100%	100%
Average intensity (mm/hour), IT	20.64	34.82	45.54	56.27	70.45	81.18	91.90

3. Run-off coefficients

Calibration factors	C2 (2-year return period) (%)	40	C100 (100-year return period) (%)	80

Return period (years)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Return period factors (YT) (TABLE 3.13)	0.00	0.84	1.28	1.64	2.05	2.33	2.58
Run-off coefficient (CT), $C_T = \frac{C_2}{100} + \left(\frac{Y_T}{2,33}\right)\left(\frac{C_{100}}{100} - \frac{C_2}{100}\right)$	0.40	0.54	0.62	0.68	0.75	0.80	0.84
Peak flow (m³/s) $Q_T = \frac{C_T I_T A}{3,6}$	1.6	3.7	5.4	7.4	10.2	12.5	14.9

SDF METHOD

Scenario	EXISTING CONDITIONS		
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - TOTAL CATCHMENT		
River detail	KLAPMUTS RIVER		
Calculated by	DL FEBRUARY	**Date**	2019-12-04

1. Physical characteristics

Size of catchment (A)	10 091	km²	Time of Concentration Tc $T_c = \left(\frac{0.87L^2}{1000S_{av}}\right)^{0.385}$	1 23	hours
Longest watercourse (L)	6 51	km			
Average slope (Sav)	0 0216	m/m			
SDF basin (Fig 3.25)	17		Time of concentration, t (= 60Tc)	74	minutes
2-year return period rainfall (M)	45	mm	Days of thunder per year (Table 3B.1)	1	days/year

TR102 n-day rainfall data

Weather Service station	ELANDSPOORT	Mean annual precipitation (MAP)	500 mm
Weather Service station no.	84 558	Coordinates	

Duration (days)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
1 day							
2 days							
3 days							
7 days							

2. Rainfall

Return period (years), T	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Point precipitation depth (mm), PtT	11.07	18.68	24.43	30.19	37.80	43.55	49.31
Area reduction factor (%), ARF	100%	100%	100%	100%	100%	100%	100%
Average intensity (mm/hour), IT	9.02	15.21	19.90	24.58	30.78	35.46	40.15

3. Run-off coefficients

Calibration factors	C2 (2-year return period) (%)	40	C100 (100-year return period) (%)				80
Return period (years)	**2**	**5**	**10**	**20**	**50**	**100**	**200**
Return period factors (YT) (TABLE 3.13)	0.00	0.84	1.28	1.64	2.05	2.33	2.58
Run-off coefficient (CT), $C_T = \frac{C_2}{100} + \left(\frac{Y_T}{2,33}\right)\left(\frac{C_{100}}{100} - \frac{C_2}{100}\right)$	0.40	0.54	0.62	0.68	0.75	0.80	0.84
Peak flow (m³/s) $Q_T = \frac{C_T I_T A}{3,6}$	10.1	23.2	34.6	47.0	64.9	79.5	94.9

ANNEXURE E: REGIONAL MAXIMUM FLOOD (RMF) METHOD RESULTS

EMPIRICAL METHOD

Scenario	EXISTING CONDITIONS					
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - SC 1					
River detail	KLAPMUTS RIVER					
Calculated by	DL FEBRUARY		**Date**	2019/12/05		
Physical characteristics						
Size of catchment (A)	8.58	km²	Veld type (Fig 3.16)			2
Longest watercourse (L)	6.51	km	Catchment parameter (C) $C=\frac{A\sqrt{S}}{LL_c}$ with regard to reaction time			0.060
Length to catchment centroid (LC)	3.25	km				
Average slope (Sav)	0.022	m/m	Kovacs region (Fig 3.28 and Table 3.15)			3
Mean annual rainfall (P) (Fig 3.7)	753.75	mm				
Return period (years), T	$Q_T=0.0377K_TPA^{0.6}C^{0.7}$		**10**	**20**	**50**	**100**
Constant value for KT (Table 3C.8)			0.83	1.04	1.36	1.60
Peak flow (m³/s), QT based on Midgley & Pitman			48.7	61.1	79.9	93.9
Peak flow (m³/s), QRMF based on Kovacs (Table 3C.9)	145.38					
Return period (years), T			**50**	**100**	**200**	
QT/QRMF ratios (Table 3D.1)			0.426	0.562	0.692	
Peak flow (m³/s), based on QT/QRMF ratios			61.9	81.7	100.6	

EMPIRICAL METHOD

Scenario	EXISTING CONDITIONS					
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - SC 2					
River detail	TRIBUTARY RIVER					
Calculated by	DL FEBRUARY		**Date**	2019/12/05		
Physical characteristics						
Size of catchment (A)	1.51	km²	Veld type (Fig 3.16)			2
Longest watercourse (L)	2.82	km	Catchment parameter (C) $C=\frac{A\sqrt{S}}{LL_c}$ with regard to reaction time			0.118
Length to catchment centroid (LC)	1.42	km				
Average slope (Sav)	0.098	m/m	Kovacs region (Fig 3.28 and Table 3.15)			3
Mean annual rainfall (P) (Fig 3.7)	753.75	mm				
Return period (years), T	$Q_T=0.0377K_TPA^{0.6}C^{0.7}$		**10**	**20**	**50**	**100**
Constant value for KT (Table 3C.8)			0.83	1.04	1.36	1.60
Peak flow (m³/s), QT based on Midgley & Pitman			19.7	24.7	32.3	38.0
Peak flow (m³/s), QRMF based on Kovacs (Table 3C.9)	80.52					
Return period (years), T			**50**	**100**	**200**	
QT/QRMF ratios (Table 3D.1)			0.426	0.562	0.692	
Peak flow (m³/s), based on QT/QRMF ratios			34.3	45.3	55.7	

EMPIRICAL METHOD

Scenario	EXISTING CONDITIONS					
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - SC 3					
River detail	TRIBUTARY RIVER					
Calculated by	DL FEBRUARY		**Date**	2019/12/05		
Physical characteristics						
Size of catchment (A)	0.69	km²	Veld type (Fig 3.16)			2
Longest watercourse (L)	2.40	km	Catchment parameter (C) $C=\frac{A\sqrt{S}}{LL_c}$ with regard to reaction time			0.061
Length to catchment centroid (LC)	1.21	km				
Average slope (Sav)	0.066	m/m	Kovacs region (Fig 3.28 and Table 3.15)			3
Mean annual rainfall (P) (Fig 3.7)	753.75	mm				
Return period (years), T	$Q_T=0.0377K_TPA^{0.6}C^{0.7}$		**10**	**20**	**50**	**100**
Constant value for KT (Table 3C.8)			0.83	1.04	1.36	1.60
Peak flow (m³/s), QT based on Midgley & Pitman			10.8	13.6	17.8	20.9
Peak flow (m³/s), QRMF based on Kovacs (Table 3C.9)	61.84					
Return period (years), T			**50**	**100**	**200**	
QT/QRMF ratios (Table 3D.1)			0.426	0.562	0.692	
Peak flow (m³/s), based on QT/QRMF ratios			26.3	34.8	42.8	

EMPIRICAL METHOD

Scenario	EXISTING CONDITIONS				
Description of catchment	KLAPMUTS RIVER U/S TO SITE D/S - TOTAL CATCHMENT				
River detail	KLAPMUTS RIVER				
Calculated by	DL FEBRUARY		**Date**	2019/12/05	
Physical characteristics					
Size of catchment (A)	10.09	km²	Veld type (Fig 3.16)		2
Longest watercourse (L)	6.51	km	Catchment parameter (C) with regard to reaction time $C=\frac{A\sqrt{S}}{LL_c}$		0.070
Length to catchment centroid (LC)	3.25	km			
Average slope (Sav)	0.022	m/m	Kovacs region (Fig 3.28 and Table 3.15)		3
Mean annual rainfall (P) (Fig 3.7)	753.75	mm			

Return period (years), T	$Q_T = 0.0377K_T P A^{0.6} C^{0.2}$	**10**	**20**	**50**	**100**
Constant value for K_T (Table 3C.8)		0.83	1.04	1.36	1.60
Peak flow (m^3/s), Q_T based on Midgley & Pitman		55.5	69.5	90.9	106.9
Peak flow (m^3/s), Q_{RMF} based on Kovacs (Table 3C.9)	153.61				
Return period (years), T		**50**	**100**	**200**	
QT/QRMF ratios (Table 3D.1)		0.426	0.562	0.692	
Peak flow (m^3/s), based on QT/QRMF ratios		65.4	86.3	106.3	

ANNEXURE F: HEC-RAS WATER PROFILE RESULTS

TABLE F.1: MANNING n VALUES FOR KLAPMUTS RIVER U/S

RIVER STATION	LEFT BANK	CHANNEL	RIGHT BANK
1190	0.045	0.036	0.045
1150	0.045	0.036	0.045
1088	0.045	0.036	0.045
1050	0.045	0.036	0.045
1000	0.045	0.036	0.045
950	0.045	0.036	0.045
900	0.045	0.036	0.045
850	0.045	0.036	0.045
810	0.045	0.036	0.045
750	0.045	0.036	0.045
704	0.045	0.036	0.045
650	0.045	0.036	0.045
618	0.045	0.036	0.045
550	0.045	0.036	0.045
500	0.045	0.036	0.045
450	0.045	0.036	0.045
400	0.045	0.036	0.045
350	0.045	0.036	0.045
290	0.045	0.036	0.045
246	0.045	0.036	0.045

TABLE F.2: MANNING n VALURES FOR KLAPMUTS RIVER D/S

RIVER STATION	LEFT BANK	CHANNEL	RIGHT BANK
200	0.045	0.036	0.045
159	0.045	0.036	0.045
144	0.045	0.036	0.045
130	0.045	0.036	0.045
100	0.045	0.036	0.045
50	0.045	0.036	0.045
0	0.045	0.036	0.045

TABLE F.3: MANNING n VALUES FOR TRIBUTARY RIVER

RIVER STATION	LEFT BANK	CHANNEL	RIGHT BANK
150	0.04	0.036	0.04
100	0.04	0.036	0.04
50	0.04	0.036	0.04
7	0.04	0.036	0.04
0	0.04	0.036	0.04

TABLE F.4: MANNING n VALUES FOR PORTION 1 OF FARM 717

RIVER STATION	LEFT BANK	CHANNEL	RIGHT BANK
163	0.045	0.036	0.045
130	0.045	0.036	0.045
100	0.045	0.036	0.045
80	0.045	0.036	0.045
45	0.045	0.036	0.045
1	0.045	0.036	0.045

TABLE F.5: EXISTING CONDITIONS OF KLAPMUTS U/S RIVER WATER SURFACE LEVELS

RIVER STATION	1:50 YEAR			1:100 YEAR		
	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)
1190	56.60	173.82	174.44	66.20	173.94	174.59
1150	56.60	173.54	173.72	66.20	173.67	173.86
1088	56.60	172.76	173.21	66.20	172.89	173.35
1050	56.60	172.48	172.63	66.20	172.55	172.73
1000	56.60	172.01	172.26	66.20	172.07	172.34
950	56.60	171.20	171.29	66.20	171.32	171.42
900	56.60	171.04	171.17	66.20	171.15	171.30
850	56.60	170.48	170.86	66.20	170.58	170.98
810	56.60	170.25	170.30	66.20	170.31	170.37
750	56.60	169.95	170.15	66.20	170.01	170.21
704	56.60	167.48	169.03	66.20	167.54	169.10
650	56.60	167.36	167.55	66.20	167.41	167.61
618	56.60	166.88	166.92	66.20	166.99	167.03
550	56.60	166.82	166.83	66.20	166.93	166.95
500	56.60	166.79	166.80	66.20	166.90	166.91
450	56.60	166.75	166.77	66.20	166.87	166.89
400	56.60	166.73	166.74	66.20	166.85	166.86
350	56.60	166.55	166.69	66.20	166.66	166.81
290	56.60	166.43	166.54	66.20	166.51	166.65
246	56.60	166.37	166.47	66.20	166.45	166.56

TABLE F.6: EXISTING CONDITIONS OF KLAPMUTS D/S RIVER WATER SURFACE LEVELS

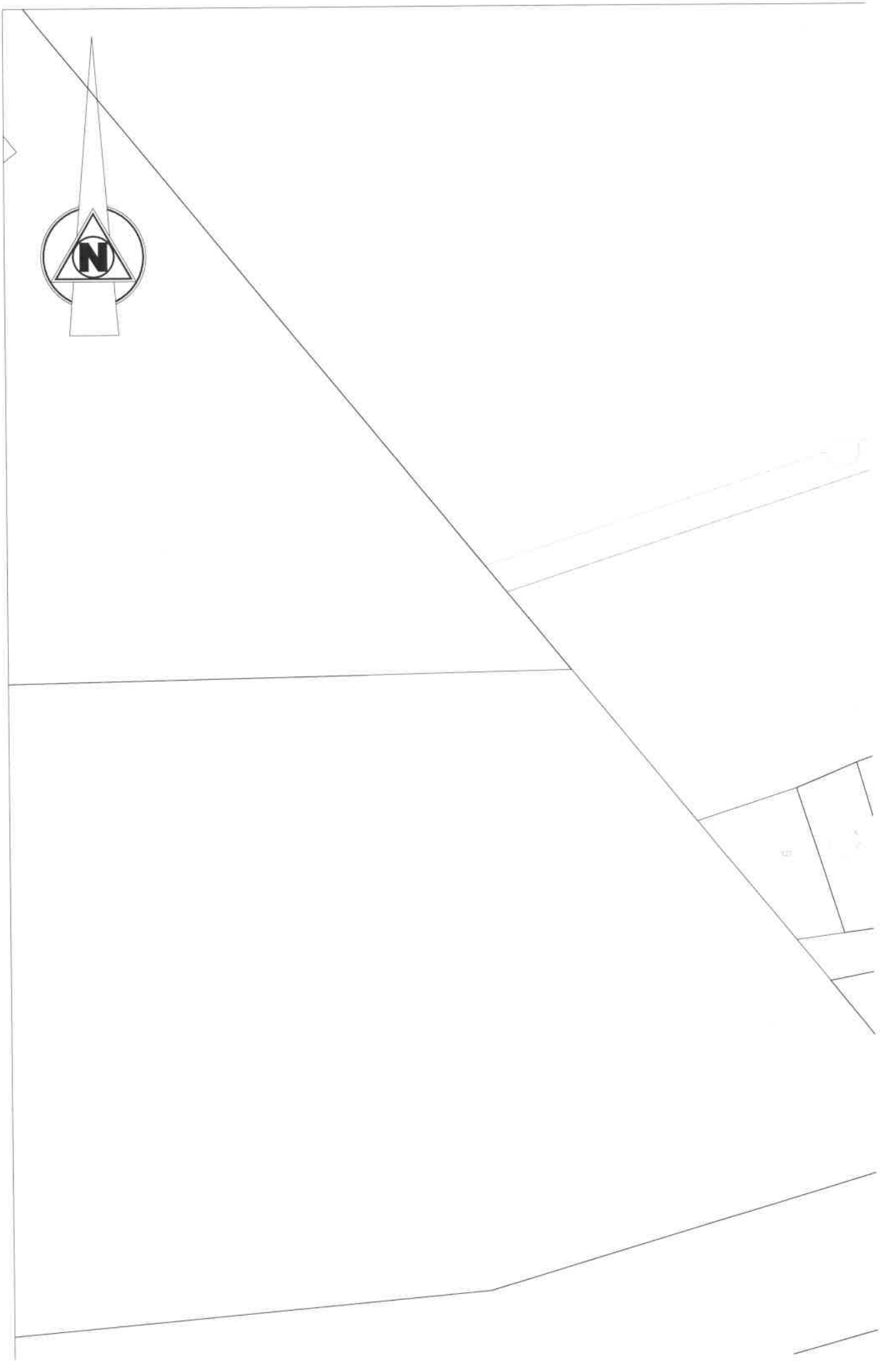
RIVER STATION	1:50 YEAR			1:100 YEAR		
	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)
200	64.30	166.39	166.42	75.20	166.47	166.51
159	64.30	166.33	166.40	75.20	166.40	166.48
144	Culvert					
130	64.30	165.28	165.97	75.20	165.78	166.10
100	64.30	163.59	165.13	75.20	163.64	165.53
50	64.30	163.43	164.01	75.20	163.58	164.20
0	64.30	162.36	163.08	75.20	162.43	163.25

TABLE F.7: EXISTING CONDITIONS OF TRIBUTARY RIVER WATER SURFACE LEVELS

RIVER STATION	1:50 YEAR			1:100 YEAR		
	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)
360	23.10	171.06	171.46	26.90	171.12	171.54
300	23.10	169.75	170.15	26.90	169.77	170.21
250	23.10	169.66	169.67	26.90	169.72	169.73
200	23.10	169.66	169.66	26.90	169.72	169.72
171	33.10	169.66	169.66	38.50	169.71	169.72
165	Culvert					
159	33.10	168.01	168.32	38.50	168.11	168.44
100	33.10	167.24	167.66	38.50	167.34	167.79
50	33.10	165.94	166.61	38.50	166.00	166.75
5	33.10	166.40	166.42	38.50	166.49	166.51

TABLE F.8: EXISTING CONDITIONS FOR KLAPMUTS RIVER ON PORTION 1 OF FARM 717

RIVER STATION	1:50 YEAR			1:100 YEAR		
	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)	FLOW (m^3/s)	W.S. ELEV. (RLm)	E.G. ELEV. (RLm)
163	56.60	176.08	176.81	66.20	176.16	176.96
130	56.60	174.64	175.51	66.20	174.70	175.65
100	56.60	175.07	175.09	66.20	175.23	175.25
80	56.60	175.07	175.09	66.20	175.23	175.24
45	56.60	175.04	175.07	66.20	175.20	175.23
1	56.60	174.34	174.90	66.20	174.51	175.08


N

ANNEXURE J: ENVIRONMENTAL AUTHORISATION FOR ROAD LINK OVER ERF 2183

Virdus Works (Pty) Ltd (Reg. No. 2018/585747/07)
Development Management Consultants and
Environmental Assessment Practitioners

29 November 2019

The Director: Planning and Development
Stellenbosch Municipality
PO Box 17
STELLENBOSCH
7600

Dear Sir

RESPONSE TO COMMENT ON LAND DEVELOPMENT APPLICATION: PORTION 1 OF PAARL FARM GROENFONTEIN NO. 717 AT KLAPMUTS (LU 9820)

This response is submitted on behalf of Cadcor (Pty) Ltd Reg. No. 1971 / 011663 / 07, the applicant for the rezoning of Portion 1 of Paarl Farm Groenfontein No. 717 to subdivisional area for purposes of establishing a mixed-use industrial estate and residential dwellings along the western edge of the property. It focuses on the comment regarding road access and traffic issues as contained in your letter of 02 October 2019.

Attached hereto are annexures of importance to the application and access to the proposed development:

1) Annexure 1: Environmental authorisation bundle for Braemar portions of Portion 2 of the Farm Klapmuts River No. 742 and Erf 2183, Klapmuts (DEA&DP Ref. 16/3/3/1/B4/23/1038/16);
2) Annexure 2: Approval bundle for Portion 6 of Farm Bronkhorst, No. 748, Klapmuts (Potbelly);
3) Annexure 3: Extract (Klapmuts) of the approved Stellenbosch Municipality Roads Master Plan; and
4) Annexure 4: Approval bundle Simonsberg Industrial Estate (Erven 2106 to 2110, 2113 to 2115, 2117, 2118, 2133 to 2142, 2166, 2167 Klapmuts).

Access from the Groenfontein Road for mixed use developments has already been authorised (see EA bundle for Braemar - Annexure 1), inclusive of the access road over Erf 2183, Klapmuts, which is a municipal property. This access is aligned to the approved roads master plan (see SM RMP extract - Annexure 3). InterActive Town and Regional Planning commented on the environmental authorisation application, indicating that access to the Farm Heen-en-Weer No. 749 should be provided over the Cadcor property. There are however no north-south master plan items in the Klapmuts RMP and any such accesses would have to be established by consultation between abutting owners. It needs to be pointed out that Farm 749 abuts the Simonsberg Industrial Estate, where road access provision has been made through the estate in the relevant development approvals (see clause 48 of Engineering Services Memo from Vincent Harris (26/11/2014)) in Annexure 4.

Cadcor acknowledges that it must allow for the development of the roads as set out in the roads master plan and has planned the development accordingly. The proposed CADCOR development does not generate such volumes of traffic to warrant further assessment of access off the R44

according to the ICE TIA for the development. Certain upgrading of the entrance roads is however required, as set out in the ICE TIA. The developer will pay the required development charges to share in the cost of the road upgrading on a pro-rata basis. The road upgrading proposals are aligned to those for Braemar in Annexure 1.

Road access further has to be aligned with the approved Roads Master Plan of the Municipality, which specifically requires the upgrading of Groenfontein Road, to better serve the public with access to the proposed developments in the area, not the least of which the schools on the abutting Braemar site, as well as a new Class 4 road between the R44 and R101, Klapmuts (SRMP062 in the tables and Figure 8.1 of Annexure 3). Mr Johan Fullard, the Manager: Roads and Stormwater of the Municipality acknowledged that the RMP applies to the area in consultation with undersigned.

The developer will construct the access road over Erf 2183 and the relevant Portion B of the property at his cost, to establish access to the proposed Cadcor mixed use light industrial development on the subject property, while providing for an appropriate road reserve along the southern (Braemar) boundary, to cater for the proposed link road between Groenfontein and the R44, as envisaged in the Potbelly approval (Annexure 2).

There is therefore sufficient access provision for the development of Farm 749 through the Simonsberg Industrial Estate. Should the owners wish to rather negotiate an access over the Cadcor property (Portion 1 of Farm No. 717), then the owners should negotiate same on a commercial basis with the owner, as the master plans do not provide for such access.

Should the Western Cape Department of Transport and/or the Stellenbosch Municipality require the development of the link road between the R44 and Groenfontein Road, the authorities should commence the planning, design and authorisation processes, as the access and road provision affects numerous properties over which the applicant (Cadcor) does not have jurisdiction. It is only able to rely on a 10metre servitude access over Portion 6 of Farm No. 748 (Annexure 2), which servitude agreement the owner refuses to sign for the time being. This servitude was however a condition of the purchase of the property and failure by the current owners to sign the agreement could lead to legal action. The access was also a condition of the approval of the rezoning of the property. A 10m wide access over Potbelly is not sufficient for access to the proposed Cadcor mixed use development, hence reliance on the approved road over Erf 2183.

Yours faithfully

DUPRÉ LOMBAARD

ANNEXURE 1

Western Cape Government
Environmental Affairs and Development Planning

Directorate: Development Management (Region 2)

REFERENCE: 16/3/3/1/B4/23/1038/16
ENQUIRIES: BERNADETTE OSBORNE
DATE OF ISSUE: 24-04-2017

The Board of Directors
Breamer Farm Development (Pty) Ltd
PO Box 12356
Die Boord
7613

Attention: Mr Etienne du Toit

Tel: (028) 514 3441
Fax: (086) 455 0942

Dear Sir

APPLICATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014: THE PROPOSED BREAMER FARM MIXED USE DEVELOPMENT ON PORTIONS OF PORTION 2 OF THE FARM KLAPMUTS RIVER NO. 742 AND ERF NO. 2183, KLAPMUTS.

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.

2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014, you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.

3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) S van der Merwe (Stellenbosch Municipality) Fax (021) 887 1874
(2) P de Villiers (Cornerstone Environmental Consultants (Pty) Ltd) Fax (021)4252174

2nd Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 3679/4349 Fax: +27 21 483 3633
E-mail: Bernadette.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp

Western Cape Government
Environmental Affairs and Development Planning

Directorate: Development Management
(Region 2)

REFERENCE: 16/3/3/1/B4/23/1038/16
NEAS REFERENCE: WCP/EIA/0000172/2016
ENQUIRIES: BERNADETTE OSBORNE
DATE OF ISSUE: 24.04.2017

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE BREAMER FARM MIXED USE DEVELOPMENT ON PORTIONS OF PORTION 2 OF THE FARM KLAPMUTS NO. 742 AND ERF NO. 2183, KLAPMUTS.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the preferred Layout Alternative 1, described in the Basic Assessment Report ("BAR"), dated January 2016.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Board of Directors
Breamer Farm Development (Pty) Ltd
% Etienne du Toit
PO Box 12356
DIE BOORD
7613

Tel: (028) 5143441
Fax: (086) 455 0942

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**"

B. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activity/Project Description
Government Notice No. R. 327 of 7 April 2017 - **Activity Number: 24** ***The development of a road—*** *(i) for which on environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or* ***(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;*** *but excluding a road—* *(a) which is identified and included in activity 27 in Listing Notice 2 of 2014;* *(b) where the entire rood falls within an urban area; or* *(c) which is 1 kilometre or shorter.*	The development includes the construction of roads which would exceed the threshold.
Government Notice No. R. 327 of 7 April 2017 – **Activity Number: 28** ***Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:*** *(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or* ***(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;*** *excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.*	The site was previously used for agricultural purposes.
Government Notice No. R. 327 of 7 April 2017 – **Activity Number: 45** ***The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure—*** ***(i) has an internal diameter of 0,36 metres or more;*** *or* *(ii) has a peak throughput of 120 litres per secand or more; and* ***(a) where the facility or infrastructure is expanded by more than 1000 metres in length; or*** ***(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more;*** *excluding where such expansion—*	The development includes the expansion of existing bulk infrastructure which would exceed the threshold.

(aa) relates to transportation of water or storm water within a road reserve or railway line reserve; or *(bb) will occur within an urban area.*	
Government Notice No. R. 327 of 7 April 2017 – **Activity Number: 46** ***The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure—*** ***(i) has an internal diameter of 0,36 metres or more;*** *or* *(ii) has a peak throughput of 120 litres per second or more; and* ***(a) where the facility or infrastructure is expanded by more than 1000 metres in length; or*** ***(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more;*** *excluding where such expansion—* *(aa) relates to the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes within a road reserve or railway line reserve; or* *(bb) will occur within an urban area.*	The development includes the expansion of existing bulk infrastructure which would exceed the threshold.
Government Notice No. R. 324 of 7 April 2017 – **Activity Number: 15** ***The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010.*** ***in the Western Cape:*** ***i. Outside urban areas,*** *or* *ii. Inside urban areas in:* *(aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010;* *(bb) A protected area identified in terms of NEMPAA, excluding conservancies; or* *(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority.*	Erf No. 2183, undetermined zone, which is municipal land will be transformed and incorporated into the development.

The abovementioned list is hereinafter referred to as **"the listed activities"**.

The holder is herein authorised to undertake the following development that includes the listed activities as it relates to the development:

- Approximately 317 housing units (subsidy, town and group housing)
- Two schools, one a primary school and the other a secondary school;
- A light industrial area, where a new warehouse facility for storage will be constructed;

- Public and private roads;
- Open space areas;
- Associated bulk infrastructure will be expanded to accommodate the development and a ring feed 11 KV power line will be constructed that will link to the existing municipal infrastructure; and
- Access will be obtained off the R44 via Stellengate Boulevard and the extension of Groenfontein road, which has recently been extended.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on portions of Portion 2 of Farm Klapmuts River No. 742 and Erf No. 2183, Paarl, at the following co-ordinates:

Portion 2 of Farm Klapmuts River No. 742, Paarl:
33° 48' 58.76" South
18° 52' 14.81" East

Erf No. 2183, Paarl:
33° 48' 53.43" South
18° 52' 7.76" East

The SG digit codes are:
Portion 2 of Farm Klapmuts River No. 742, Paarl: C05500000000074200002
Erf No. 2183, Paarl: C05500040000218300000

Refer to Annexure 1: Locality Plan and Annexure 2: Site Plan.

The above is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Assessment Practitioner:

The Board of Directors
Cornerstone Environmental Consultants (Pty) Ltd
% Mr Pieter de Villiers
PO Box 12606
DIE BOORD
7613

Cell: (083) 243 0994
Fax: (086) 435 2174

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to Layout Alternative 1 in the BAR dated January 2017 on the site as described in Section C above.

2. The Environmental Authorisation is valid for a period of **five years** from the date of issue within which commencement must occur.

3. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.

4. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

5. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities.

   5.1 The notice must make clear reference to the site details and EIA Reference number given above.

   5.2 The notice must also include proof of compliance with the following conditions described herein:

   Conditions: 6, 10 and 16

Notification and administration of appeal

6. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–

   6.1 notify all registered Interested and Affected Parties ("I&APs") of –
   6.1.1 the decision reached on the application;
   6.1.2 the reasons for the decision as included in Annexure 3;
   6.1.3 the date of the decision; and
   6.1.4 the date when the decision was issued.

   6.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;

   6.3 draw the attention of all registered I&APs to the manner in which they may access the decision;

   6.4 provide the registered I&APs with the:
   6.4.1 name of the holder (entity) of this Environmental Authorisation,
   6.4.2 name of the responsible person for this Environmental Authorisation,
   6.4.3 postal address of the holder,
   6.4.4 telephonic and fax details of the holder,
   6.4.5 e-mail address, if ony, of the holder,
   6.4.6 contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the

event that an appeal is lodged in terms of the 2014 National Appeals Regulations (as amended)

7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

Management of activity

8. The draft or Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.

9. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

10. The holder must appoint a suitably experienced environmental control officer ("ECO"), before commencement of any land clearing or construction activities to ensure compliance with the EMPr and the conditions contained herein.

11. A copy of the Environmental Authorisation, EMPr, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request.

12. Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

13. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr and submit Environmental Audit Reports to the Competent Authority. The Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).

    The holder must undertake an environmental audit (quarterly for the duration of the construction phase) and submit Environmental Audit Reports to the Competent Authority (once every six months during the construction phase). The final Environmental Audit Report must be submitted to the Competent Authority (six months after operation commenced).

    The holder must, within 7 days of the submission of the report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

Specific Conditions

14. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

    Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; shipwrecks; and/or graves or unmarked human burials including grave goods and/or associated burial material.

15. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.

16. A 32 metre buffer zone must be demarcated between the development, the two artificial storage dams and the Klapmuts River before commencement of construction activities and must be maintained.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.

2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.

3. If the holder does not commence with a listed activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.

4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 must be submitted.

    Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr, other than those mentioned above, must be done in accordance with Regulations 35 to 37 of GN No. R. 982 of 4 December 2014 or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority–

   1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
   1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision. –

2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–

   2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
   2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.

3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.

4. The appeal and the responding statement must be submitted to the address listed below:

By post:	Western Cape Ministry of Local Government, Environmental Affairs and Development Planning Private Bag X9186 CAPETOWN 8000
By facsimile:	(021) 483 4174; or
By hand:	Attention: Mr Jaap de Villiers (Tel: 021 483 3721) Room 809 8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to Jaap.DeVilliers@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

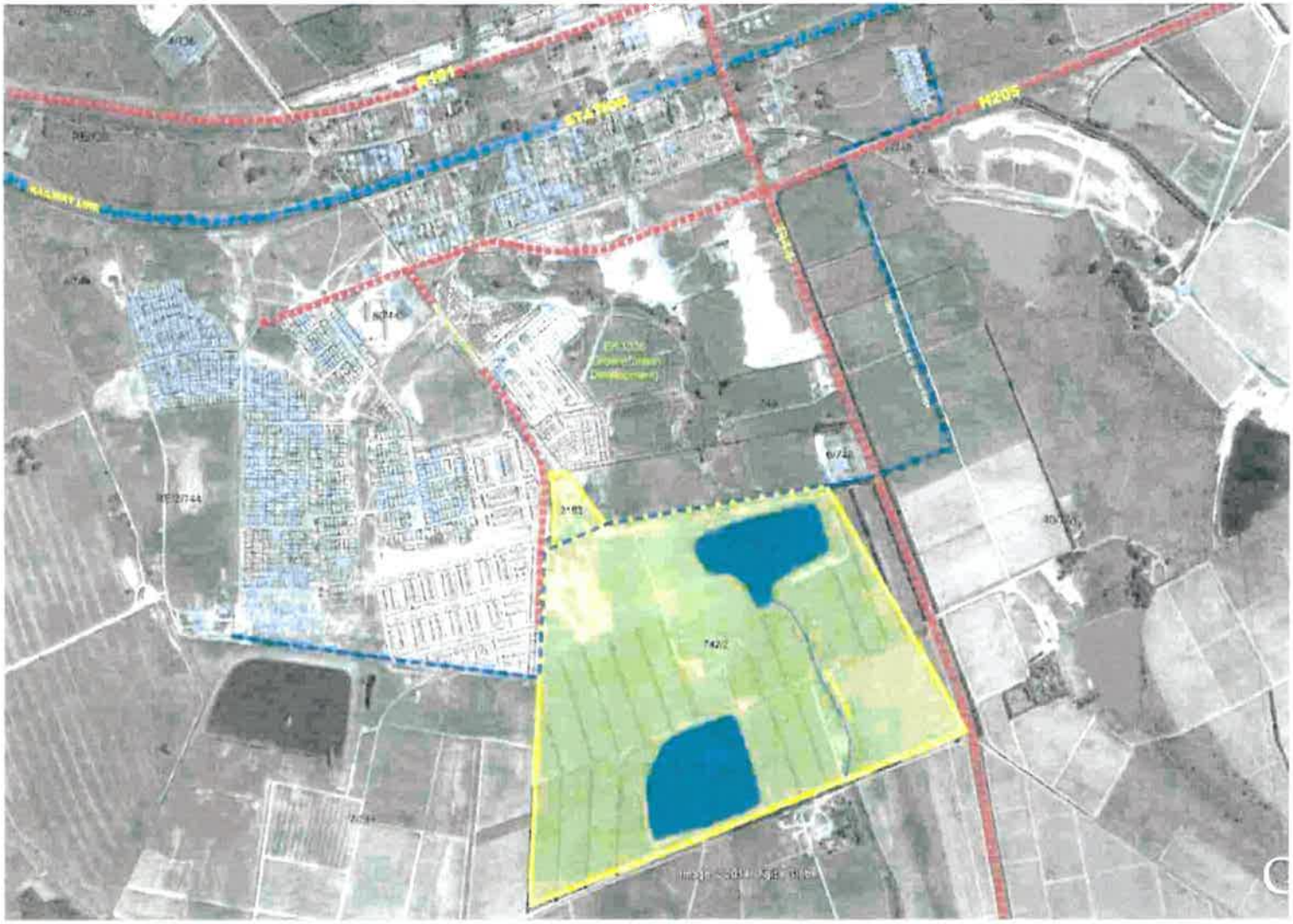
Your interest in the future of our environment is appreciated.

Yours faithfully

MR. HENRI FORTUIN
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)

DATE OF DECISION: 24-4-17

CC: (1) P. de Villiers (Cornerstone Environmental Consultants) Fax: (086) 435 2174
(2) S. van der Merwe (Stellenbosch Municipality) Fax: (021) 886 6899



Notation:

N

The drawing is the property of TV1 Architects and Town Planners (Pty) Ltd and copyright is reserved

TV1 Architects and Town Planners

Portion 2 of Farm 742 and Erf 2183, Klapmuts

Drawn:	Checked:	Date:	Scale:
WH	MW	09/02/2015	NTS (A2)

Project no: P3193 Revision no.: 1

Drawing: Locality Map Plan no.: 1