OVERSTRAND MUNISIPALITEIT
ERF 4549, HOOFWEG 13, KLEINMOND: AANSOEK OM VERGUNNINGSGEBRUIK EN AFWYKING: WARREN PETTERSON PLANNING (nms KLEINMOND PROPERTY DEVELOPMENT CC)

Kragtens Artikels 47 en 48 van die Overstrand Munisipaliteit Gewysigde Verordening vir Munisipale Grondgebruikbeplanning, 2020 word hiermee kennis gegee van die onderstaande aansoeke van toepassing op Erf 4549, Kleinmond naamlik:

Vergunningsgebruik
Aansoek ingevolge Artikel 16(2)(o) van die Verordening om die bestaande transmissieapparaat op bogenoemde eiendom op te gradeer.

Afwyking
Aansoek ingevolge Artikel 16(2)(b) van die Verordening om die toelaatbare hoogtebeperking van 10,5 m te oorskry, om die 15m hoë transmissieapparaat te akkommodeer.

Besonderhede aangaande die voorstel lê ter insae gedurende weeksdae tussen 08:00 and 16:30 by die Departement: Stadsbeplanning te Patersonstraat 16, Hermanus en by die Kleinmond Biblioteek, Vyfdelaan, Kleinmond.

Enige kommentaar moet skriftelik ingedien word in terme van Artikels 51 en 52 van die bogenoemde Verordening aan die Munisipaliteit (Patersonstraat 16, Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) voor of op **20 Januarie 2023**, stipuleer u naam, adres, kontak besonderhede, belang in die aansoek en redes vir kommentaar. Telefoniese navrae kan gerig word aan die **Senior Stadsbeplanner, Me. Hanneen van der Stoep** by 028-3138900. Die Munisipaliteit mag weier om kommentare te aanvaar na die sluitingsdatum. Enige persoon wat nie kan lees of skryf nie kan die Departement Stadsbeplanning besoek waar hul deur 'n munisipale amptenaar bygestaan sal word ten einde hul kommentaar te formuleer.

DGI O'Neill, Munisipale Bestuurder, Overstrand Munisipaliteit, Posbus 20, **HERMANUS**, 7200

Munisipale Kennisgewing Nr. 167/2022

OVERSTRAND MUNICIPALITY
ERF 4549, 13 MAIN ROAD, KLEINMOND: APPLICATION FOR CONSENT USE AND DEPARTURE: WARREN PETTERSON PLANNING ON BEHALF OF KLEINMOND PROPERTY DEVELOPMENT CC

Notice is hereby given in terms of Sections 47 and 48 of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020 of the applications mentioned below applicable to Erf 4549, Kleinmond namely:

Consent Use
Application in terms of Section 16(2)(o) of the By-Law to upgrade the existing transmission apparatus on the above property.

Departure
Application in terms of Section 16(2)(b) of the By-Law to exceed the permissible 10,5m height restriction to accommodate the 15m high transmission apparatus.

Detail regarding the proposal is available for inspection during weekdays between 08:00 and 16:30 at the Department : Town Planning at 16 Paterson Street, Hermanus and at the Kleinmond Library, Fifth Avenue, Kleinmond.

Any written comments must be submitted in accordance with the provisions of Sections 51 and 52 of the said By-law to the Municipality (16 Paterson Street, Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) on or before **20 January 2023**, quoting your name, address, contact details, interest in the application and reasons for comments. Telephonic enquiries can be made to the **Senior Town Planner, Ms. Hanneen van der Stoep** at 028-313 8900. The Municipality may refuse to accept comment received after the closing date. Any person who cannot read or write may visit the Town Planning Department where a municipal official will assist them in order to formalize their comment.

DGI O'Neill, Municipal Manager, Overstrand Municipality, P.O. Box 20, **HERMANUS,** 7200

Municipal Notice No. 167/2022

UMASIPALA WASE-OVERSTRAND, ISIZA 4549, 13 MAIN ROAD, KLEINMOND: ISICELO SOKUSETYENZISWA NEMVUME NOKUSEKA: WARREN PETTERSON PLANNING (egameni le KLEINMOND PROPERTY DEVELOPMENT CC)

Isaziso sikhutshwe ngokwemqathango yeCandelo lama-47 nelama-48 loMthetho oYilwayo kaMasipala wase-Overstrand UMthetho kaMasipala woLungiso kuCwangciso lokuSetyenziswa koMhlaba kaMasipala, 2020 wezicelo ezichazwe ngezantsi zisebenza kwiSiza 4549, eKleinmond ezizezi

Imvume yokusetyenziswa
Isicelo ngokweCandelo le-16 (2) (o) loMthetho kaMasipala sokuphucula izixhobo zothumelo ezikhoyo kule propati ingasentla.

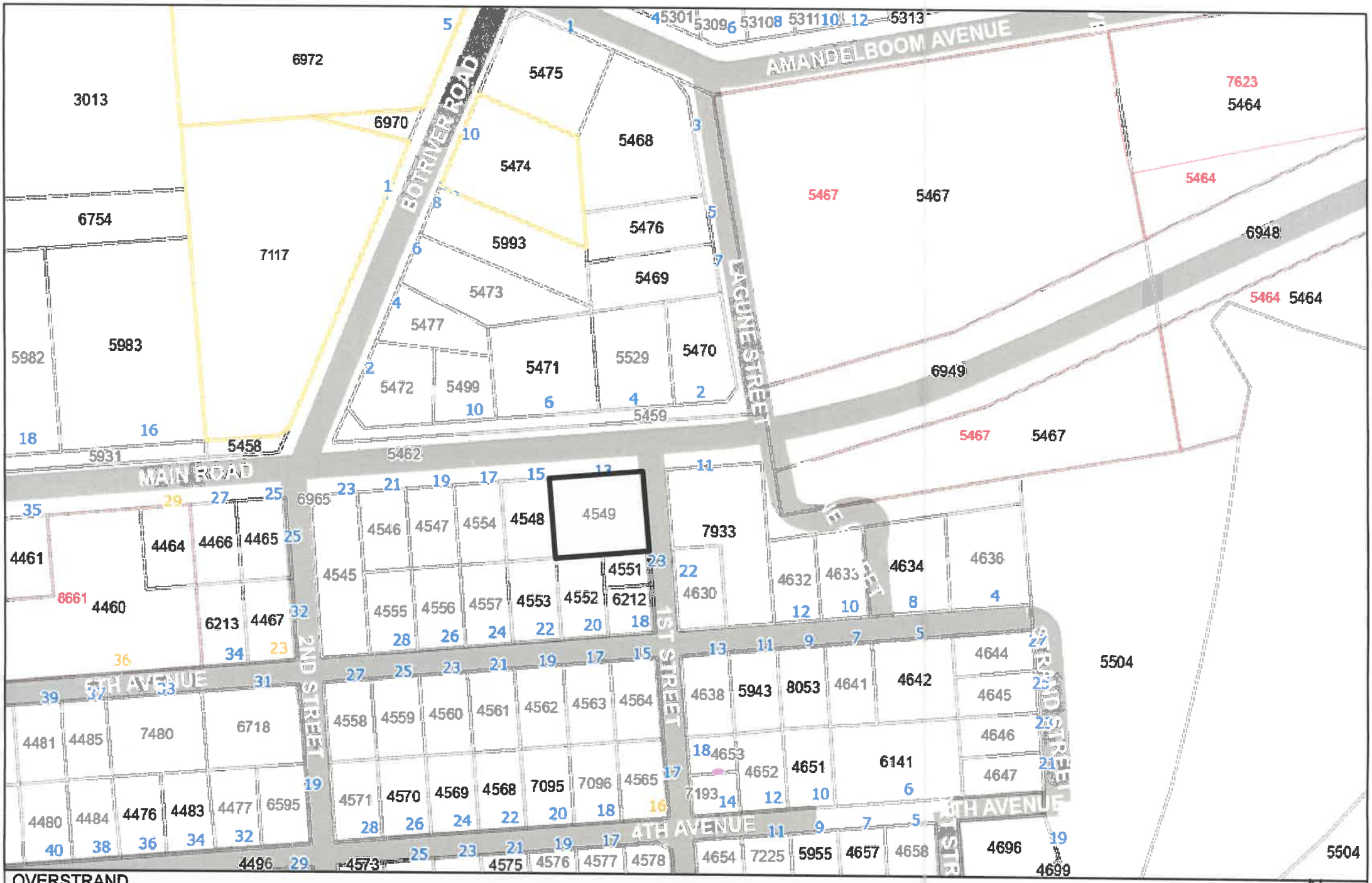
Isindululo
Isicelo ngokweCandelo 16 (2) (b) soku kulandelayo ukudlula kwisithintelo sokuphakama esili-10,5m ukuze kulungiselelwe izixhobo ezicetyiswayo zokuhambisa eziphakamileyo ezingama-15m.

Iinkcukacha eziphathelelene nesi sindululo ziyafumaneka ukuba zihlolwe kwiintsuku zaphakathi evekini, phakathi kwentsimbi ye-08:00 ukuya kweye-16:30 kwiSeba: loCwangciso lweDolophu 16 ePaterson Street, eHermanus kunye nakwiThala lwencwadi eKleinmond, Fifth Avenue, eKleinmond.

Naziphi na izimvo ezibhaliweyo mazingeniswe ngokuhambelana namaCandelo lama-51 nelama-52 oMthetho kaMasipala (16 Paterson Street, Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) ngomhla okanye ngaphambi komhla **wesi- 20 uJanuwari 2023**, unike igama lakho, idilesi, iinkcukacha ofumaneka kuzo, umdla wakho kwesi sicelo nezizathu zokuhlomla. Imibuzo ngomnxeba kungatsalelwa **kuMcwangcisi weDolophu, uNksz. Hanneen van der Stoep** kule nombolo yomnxeba 028-313 8900. UMasipala angala ukwamkela izimvo ezifike emva kosuku lokuvalwa. Nawuphi na umntu ongakwaziyo ukufunda okanye ukubhala angandwendwela iSebe lokuCwangciswa kweDolophu apho igosa likamasipala liza kumnceda ukuze ubhale izimvo zenu.

DGI O'Neill, UMlawuli kaMasipala, kuMasipala wase-Overstrand, P.O. Box 20, **HERMANUS,** 7200

Inombolo yeSaziso sikaMasipala 167/2022



OVERSTRAND MUNICIPALITY

Locality Map

Erf 4549 Kleinmond

N

Date: 2020/09/23

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

LIST OF DEFINITIONS AND ABBREVIATIONS

This section represents the definitions and abbreviations that will be found in this application.

DEFINITIONS:

Please note: *For the purpose of this application and its associated descriptions and motivation, and unless it appears otherwise in the text, the terms used herein are as follows:*

Table 1 - Definitions

PROPERTY:	Erf 4549-RE, Kleinmond
CLIENT:	Vodacom
APPLICANT:	Warren Petterson Planning
OWNER:	Kleinmond Prop Development CC
CONSENT USE	means the secondary use right that is permitted in terms of the provisions pertaining to a particular zone, only with the consent of the Council
DEPARTURE	means a permanent departure or a temporary departure (has the meaning assigned to it by Planning Law)
RESTRICTIVE CONDITION	means any condition registered against the title deed of land restricting the use, development or subdivision of land concerned, excluding servitudes creating real or personal rights
SURVEYOR-GENERAL	means the Surveyor-General as defined in the Land Survey Act

ABBREVIATIONS:

Please note: *For the purpose of this application and its associated descriptions and motivation, and unless it appears otherwise in the text, the terms used herein are as follows:*

Table 2 - Abbreviations

OZS	Overstrand Zoning Scheme
SPLUMA	Spatial Planning and Land Use Management Act, 2013
TA	Transmission Apparatus
TT	Transmission Tower
TI	Telecommunication Infrastructure
TOA	Top of Antenna
SG-DIAGRAM	Surveyor-General Diagram
SDF	Spatial Development Framework
IDP	Integrated Development Plan

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION A: BACKGROUND

A.1. THE APPLICATION

Application is hereby made for the following:

- ✓ **Consent Use provided for in the zoning scheme** in terms of Section 16 (2) (o) of the Overstrand Municipal Planning By-Law, 2020 for the upgrade of an existing Vodacom Transmission apparatus.

- ✓ **Permanent Departure provided for in the zoning scheme** in terms of Section 16(2) (b) of the Overstrand Municipal Planning By-Law, 2020 for the purpose of the relaxation of the height restrictions from 10.5m to 15m in order to allow for the abovementioned consent.

A.2. DETAILS OF THE DEVELOPMENT AREA

Table 3 - Details of the Development Area

TITLE DEED DESCRIPTION	Remainder Erf 4549-RE, Kleinmond, in the Municipality of Kleinmond, Division of Caledon, measuring 1190 square metres held by the transfer of deed T19906/1992
TITLE DEED NUMBER	T19906/1992
PROPERTY SIZE (m^2)	1190 m^2
CURRENT ZONING	Business Zone 2
OWNER OF PROPERTY	Kleinmond Prop Development CC

SECTION B: CONTEXTUAL INFORMANTS

The following section includes information relating to the locality, current land use, zoning and surrounding area.

B.1. LOCALITY

The property within the Overberg District is located on Erf 4549-RE, Kleinmond. It is further surrounded by other erven and the R44 which serves as the main road.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

Figure 1 - Location of the VC RBTS on Erf 4549-RE, Kleinmond

B.2. CURRENT LAND USE AND ZONING

Table 4 - Current land use and zoning

CURRENT LAND USE	The land is currently utilised for business purposes.
ZONING	Business Zone 2

B.3. SURROUNDING AREA

The RBTS/TA site is located on Erf 4549-RE, Kleinmond which is accessible from the R44 (Main Road) and 1st Street. The R44 (Main Road) forms a road network with other streets in the surrounding area.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

The surrounding erven close to the Erf 4549-RE Kleinmond is mostly residential and business zoned. There is a shopping centre approximately 130m North West and Kleinmond beach is approximately 310m South West.

Suburbs/Towns within the surrounding area is **Betty's Bay** which lies west. The other towns are a bit further away such as Fisherhaven and Hawston which lies to the east (Via R43).

The surrounding land uses in the area of the existing RBTS site are predominantly utilised for Business along the main road (R44). Other land uses found in the surrounding area are Business Zone 2, Residential Zone 1, Special Zone, Community Zone 1, Authority Zone and Open Space Zone 2 (See Figure 2 below).

Figure 2 - Surrounding Land uses adjacent to the RBTS site

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION C: DEVELOPMENT PROPOSAL

C.1. APPLICATION SPECIFICATIONS

The client, Vodacom, wishes to apply for a consent use and permanent departure application in terms of Section 16 (2) (o) and (2) (b) of the Overstrand Municipal Planning By-Law, for the continued use/upgrading of an existing Vodacom transmission apparatus on Erf 4549-RE, Kleinmond.

C.1.1 Development Concept

The application comprises the following proposed development parameters:

- ✓ Existing Vodacom Antennae to be removed.
- ✓ 3 Antennae (2.7m Penta antenna) to be mounted on new proposed 8m pole (same position as existing antennae) – wall mounted in order to modernise the site.
- ✓ Existing Vodacom room on 1st floor.
- ✓ Existing MTN Antennae on an 8m pole.
- ✓ Existing MTN room.

The total area of the VC RBTS is 9m², including the equipment containers. The main purpose of the RBTS is to provide the network coverage (3G/4G and LTE services) for the area of Kleinmond.

C.2. UTILITY SERVICES

Electricity for the RBTS will be obtained from the available and existing on-site electrical supply to the property. Advances in technology (telecommunication related equipment) enable the RBTS/TA to utilise less electricity.

Access to the existing RBTS/TA will be obtained from the existing entrance to the property off the R44 (main road).

The existing use of RBTS/TA will have no impact on the external engineering services (Water Networks), on transport or traffic related considerations, or on the biophysical environment. There is no impacts on conservation areas (See figure 3 and 4 below). Erf 4549-RE is part of the Heritage Area graded as 3C but falls outside the Heritage Protection Overlay Zone (Figure 3). Visual impact along the scenic route is explained in more detail in the VIA report done by Enviro Works.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

Figure 3 - Heritage Map

Figure 4 - Environmental Map

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

C.3. ENVIRONMENTAL REGULATIONS

Environmental and social sustainability are regulated by *The National Environmental Management Act (Act 107 OF 1998) (NEMA) - published in Government Notice No. R546.* When read together with the National Environmental Management Act Regulations Listing Notice 3 of 2014 (promulgated 08 December 2014), an Environmental Impact Assessment (EIA) or Environmental Authorization (EA) is only applicable in the following circumstances:

The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower:

i) is to be placed on a site not previously used for this purpose; and

ii) will exceed 15 meters in height

But excluding attachments to existing buildings and masts on rooftops.

The requirements in the Western Cape are defined in NEMA Listing Notice 3 of 2014:

In Western Cape:

i) All areas outside urban areas; or

ii) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas.

The proposed development does not constitute a listed activity as the application is for a RBTS. An Environmental Authorization (EA) is therefore not required.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION D: POLICY AND LEGISLATION

D.1. OVERSTRAND MUNICIPALITY LAND USE SCHEME, 2020

In terms of Chapter 16.10.23, applications for the installation of Transmission Apparatus (TA) shall, to the satisfaction of the Municipality, incorporate the following:

(a). Site Development Plan which clearly illustrates the proposal in the context of the existing landscape and receiving environment, with reference to application guidelines as may be incorporated in the application form;

Please refer to sheet 2 of 5 of the drawings dated 11/11/2019 (Drawing No: 3140-D-002) and WPP site plan drawing dated – 09-03-2021.

(b). Telecommunication Apparatus Infrastructure Plan (indicating but not limited to the following, namely dimensioned plans showing detail of TA, graphic illustration of the proposed facility, elevation details, proposed materials and colours, screening or fencing)

Please refer to sheet 2 of 5 of the drawings dated 11/11/2019 (Drawing No: 3140-D-002) and WPP site plan drawing dated – 09-03-2021. See figure 14 and Annexure G.

(c). Site Development Plan & Telecommunication Apparatus Infrastructure Plan to be accompanied by a report detailing the motivation for the selected site, how the siting and design of the facility responds to the SDP;

Please refer to Section C and E of the motivation report.

(d). Motivation report to be accompanied by relevant proof pertaining to need and desirability (demand & technical requirements);

Please refer to Section E.2.1 of the motivation report.

(e). Application to satisfactorily demonstrate to the AO / MPT that all alternatives to the site itself have been explored within a 1km radius of the subject property;

Please refer to Section E.2.2 of the motivation report.

(f). Minimum of two alternative sites and design options to be considered;

No alternatives were considered as the existing site will be modernised/upgraded. Vodacom furthermore already has infrastructure installed on the existing TA on Erf 4894 Kleinmond.

(g). Zoning and land use map to accompany application, that shall also indicate all areas of heritage or environmental significance, if applicable;

Please refer to Figures 1, 2, 3 and 4

(h). Visual Impact Assessment prepared by a suitably qualified professional, if required by the municipality, that shall incorporate mitigation measures limiting visual impact;

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

A Visual Impact Assessment was conducted in July 2022 by Enviro Works relating to the TA position as mentioned in this motivation. The VIA stated that the visual impact will be moderate:

"It must be noted that the visual impact will be moderate and permanent from the residential dwellings situated along Amandelboom Avenue. Taking the aforementioned in account the visual impact within the short distance zone will be moderate. Within the short to medium distance zone a low visual impact will occur towards the northeast due to the low VAC of the study area. The highest visual exposure will occur from Photo Position 21 situated at kilometre one point four (km 1.4) and the residential dwellings surrounding it and as such the visual impact will be permanent to residents".

(j). Statement demonstrating that the installation complies with the applicable health and safety standards.

Please refer to Annexure E that forms part of the application.

D.2. SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013

This application complies with the land development principles (Chapter 2, SPLUMA, 2013) as referred to in section 42 of the *Spatial Planning Land Use Management Act, 2013* (Act 16 of 2013) (SPLUMA).

Table 5 - Compliance of application with Principles 7a-7e of SPLUMA, 2013

	HOW DOES THIS APPLICATION COMPLY WITH THIS PRINCIPLE?
Principle 7a:* *Spatial Justice	In a broader sense, spatial justice refers to an intentional incorporation of spatial (geographical) aspects. This refer to the fair and equally distributed services and enhanced accessibility of these services. The aim of this proposal is to provide excellent communication service to the inhabitants of an area.
Principle 7b:* *Spatial Sustainability	Spatial sustainability is an explicit concept which describe the relations between environmental, economic and socio-cultural facets related to a societal environment. Enhanced signal in an area will promote all three the dimensions of sustainability (economic, social and environmental facets). Economically, businesses in the area will benefit from enhanced connectivity. The social facet is addressed as more people will have access to emergency services (e.g. Healthcare, Police, Fire response etc.). The third dimension (Environmental facets) will be promoted as the sensible placement of telecommunication base stations and the possibility of co-location will limit the amount of base stations should there be sufficient signal in an area.
Principle 7c:* *Spatial Efficiency	Spatial efficiency relates to the concept of minimum distance to be travelled between a specific location and intended destination. RBTS and TT is placed in an area (optimally situated between planned and existing stations) with a reason. This reason is to incorporate various factors (e.g. number of users, quality of service etc.) when considering the placement in order to promote effectiveness and is not merely placed by random.

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

Principle 7d: Spatial Resilience	Spatial resilience can be defined as the ability of a region to withstand possible arising shocks (e.g. economic crisis, social disruptions etc.). However, RBTS and TT will be a service that will always be necessary. In a state of crisis, communication plays an integral role in a societal environment.
Principle 7e: Good administration	This installation will be lawful and reasonable, following an equal and fair public participation process in order to incorporate the views and opinions of all relevant parties.

D.3. OTHER POLICIES AND LEGISLATION

Other policies and legislative frameworks include: Integrated Development Plan (2017/18-2021/22), and the Spatial Development Framework (SDF), 2020.

D.3.1. Five-Year Integrated Development Plan (2017/18 - 2021/22)

Telecommunications form a critical part of our everyday lives, what most people don't realise, is that it also plays a vital role in times of crisis. As stipulated in the Overstrand Municipality's IDP (2017/18 & 2021/22), the disaster management coordinator forms part of the JOC (Joined Operations Centre) and one of his main tasks are to (page 262 of the Overstrand IDP 2017/18 – 2021/22):

- **Establish and maintain required telecommunications links**
- **Establish and maintain a resources database**
- **Coordinate all communication to and from incidents**

It is clear from the items listed above; telecommunications infrastructure forms a vital part of the municipality's Disaster Management Plan.

D.3.2. Municipal Spatial Development Framework, 2020

This application is in line with the spatial development principles as set out in the Overstrand SDF, 2020, as it strives to improve urban efficiency, and align planned growth with infrastructure. As a result, connectivity is enhanced on local, national and international level as stipulated in the SDF, 2020.

The MSDF 2020 of the Overstrand Municipality also emphasises that population growth is taking place within the Municipal Area. Table 2.7 on page 25 of MSDF 2020 shows and projects a slight increase each year in the population for Kleinmond (Figure 3 below). With an increase in population, there is a need to provide adequate coverage to consumers. Please see Figure 9-11 below explaining cellular infrastructure.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

	Rooiels	Pringle Bay	Bettys Bay (Plus Silver Sands 2001)	Kleinmond	Fisherhaven	Hawston	Greater Hermanus	Stanford	Greater Gansbaai	Pearly Beach
2016	164,0	942,2	1711,5	6766,7	867,0	8886,7	45188,9	5615,2	16842,4	1202,1
2017	176,1	973,3	1786,8	6793,8	899,1	9064,4	48419,3	5794,9	17655,8	1237,0
2018	189,1	1005,4	1865,4	6821,0	932,4	9245,7	51955,0	5980,4	18509,4	1272,8
2019	203,1	1038,6	1947,5	6848,3	966,9	9430,6	55825,4	6171,7	19405,4	1309,8
2020	218,2	1072,8	2033,2	6875,6	1002,6	9619,2	60062,4	6369,2	20345,9	1347,7
2021	234,3	1108,2	2122,7	6903,1	1039,7	9811,6	64700,9	6573,0	21333,1	1386,8
2022	251,7	1144,8	2216,1	6930,8	1078,2	10007,8	69779,4	6783,4	22369,3	1427,0
2023	270,3	1182,6	2313,6	6958,5	1118,1	10208,0	75339,9	7000,5	23457,0	1468,4
2024	290,3	1221,6	2415,4	6986,3	1159,5	10412,1	81428,6	7224,5	24598,9	1511,0
2025	311,8	1261,9	2521,7	7014,3	1202,4	10620,4	88096,1	7455,6	25797,6	1554,8
2026	334,8	1303,6	2632,6	7042,3	1246,9	10832,8	95397,8	7694,2	27056,0	1599,9
2027	359,6	1346,6	2748,4	7070,5	1293,0	11049,4	103394,7	7940,4	28377,1	1646,3
2028	386,2	1391,0	2869,4	7098,8	1340,8	11270,4	112153,2	8194,5	29764,1	1694,1
2029	414,8	1436,9	2995,6	7127,2	1390,5	11495,8	121746,7	8456,8	31220,3	1743,2
2030	445,5	1484,4	3127,4	7155,7	1441,9	11725,7	132255,2	8727,4	32749,1	1793,7
2031	478,5	**1533,3**	3265,0	7184,3	1495,2	**11960,3**	143766,7	9006,7	**34354,4**	**1845,8**

Table 2.7: Population growth rate (MPBS: 2019)

Figure 5 - Population Growth in Overstrand

It is also noted that a desktop survey was done in 2019 on the vacant land in the Kleinmond area. There were a total of 250 vacant residential erven identified. The total amount 336 additional people will need to be accommodated from 2019-2031. (MSDF, 2020: 75). The housing need therefore links with population growth as mentioned above, meaning there will be increase in cellular users, stating the importance of the proposed upgraded/modernisation transmission apparatus that will provide coverage.

Cellular infrastructure also contribute to the economic growth within municipal area. This is seen on page 35 of MSDF 2020 where the Communication sector has achieved strong annual growth and contributing to the GVA in Overstrand. The above on economic growth can be emphasised that the proposed upgraded transmission apparatus is situated within a business bulk zone in Kleinmond. This makes the proposed upgrade RBTS important as it will provide coverage to all surrounding businesses and other parts where residential units are found.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION E: DEVELOPMENT MOTIVATION

Please read together with previous sections in this application. Consent Use and Permanent Departure application in terms of the zoning scheme, is applied for the continued use/upgrading of an existing Vodacom transmission apparatus on Erf 4549-RE, Kleinmond that should be supported based on the following grounds:

E.2.1. Need and Desirability

In a modern-day society, the dependency on communicative technology becomes increasingly higher. This is due to the society's utilisation of more mobile devices and more than one device per household which mainly relies on internet connectivity (e.g. smartphones, portable computers, tablets/iPads etc.). These devices are used for multiple purposes including socialisation, business related uses and accessibility to important emergency services. Vodacom is taking steps to ensure the continuous use/ modernisation of existing RBTS/TA (Upgraded) in key areas such as Kleinmond. This proposed upgraded RBTS provides an essential service to the surrounding community by ensuring an acceptable level of service to the surrounding area.

The existing network strength brought by the continued use of RBTS/TA will aid local businesses and can unlock growth potential which will have a positive economic impact. Residents, businesses and commuters will have a more secure connection to emergency services and armed response which will have a huge social impact. See figure 6-8 below which shows the current coverage of Vodacom in Kleinmond, showing the importance why the existing/upgrade/modernisation RBTS/TA must continue. The upgrade will help with the network capacity by providing efficient coverage to surrounding area, especially that many people are working from home during the Covid – 19 pandemic.

Please note that Figure 6 and 7 are existing Freestanding Base Telecommunication Stations /TA. The Kleinmond Site (Erf 5462) on the hill (Figure 6). This TA with antenna covers a large area due to its height. By comparing all three coverage maps the two other sites (PPK Kleinmond – Erf 4894 and Kleinmond Strand – Erf 4549-RE) do not cover the whole western side of Kleinmond, therefore showing the importance of Kleinmond Site on the hill.

Figure 7 illustrates the coverage for PPK Kleinmond site (Erf 4894). This site is more central and assists the other two existing TA (Kleinmond Site – Erf 5462 and Kleinmond Strand – Erf 4549-RE) with all coverage and capacity demands in Kleinmond.

Figure 8 illustrates the coverage of site Kleinmond Strand (Erf 4549-RE). This rooftop/TA assists with providing coverage to Kleinmond when entering from an eastern direction on the main road. The modernisation of the site will ensure that good coverage/capacity are kept the same in order to provide a good network to all Vodacom customers.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

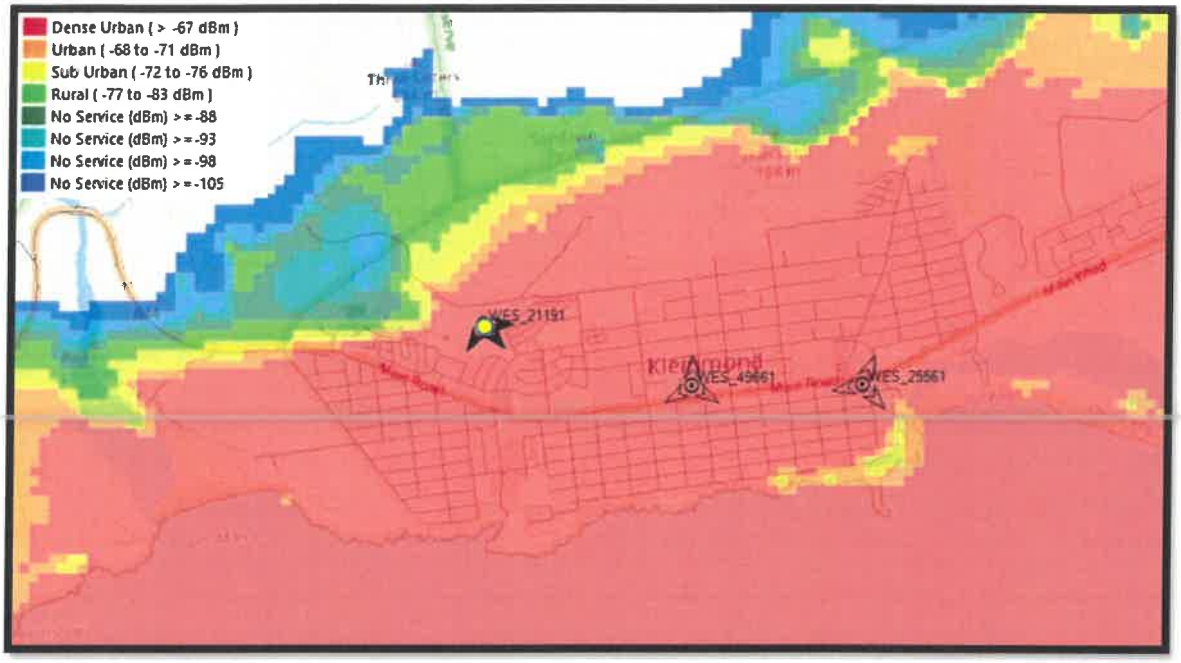


Figure 6 - Kleinmond site on the hill - VC Coverage

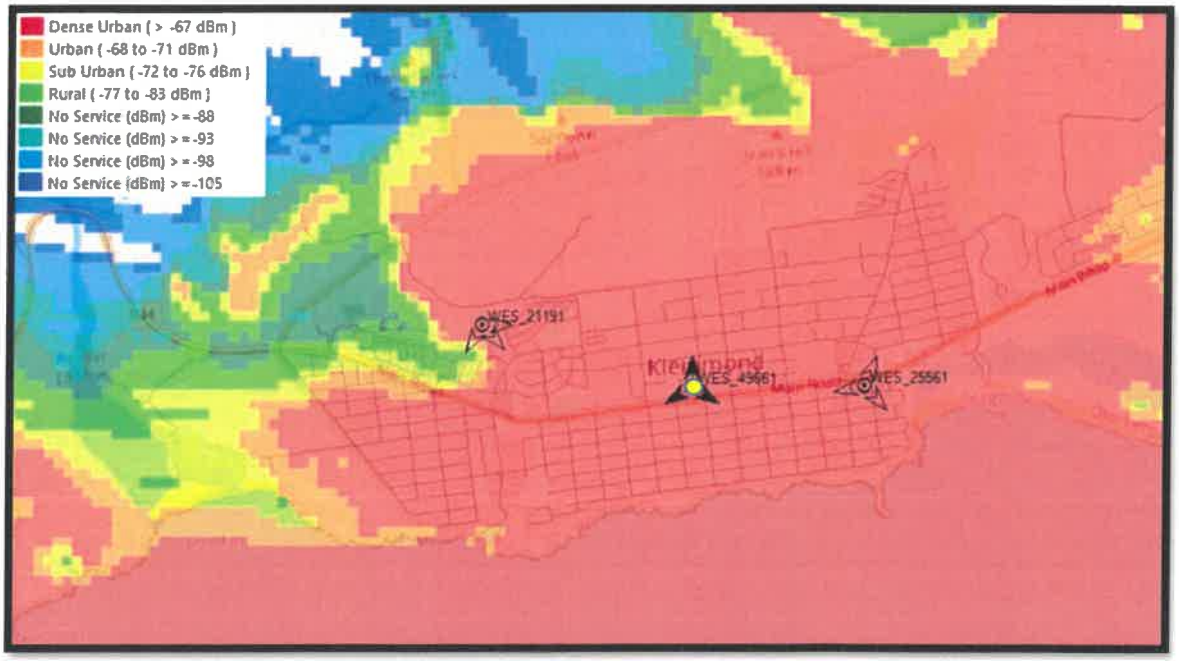


Figure 7 - PPK Kleinmond Site - VC Coverage

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

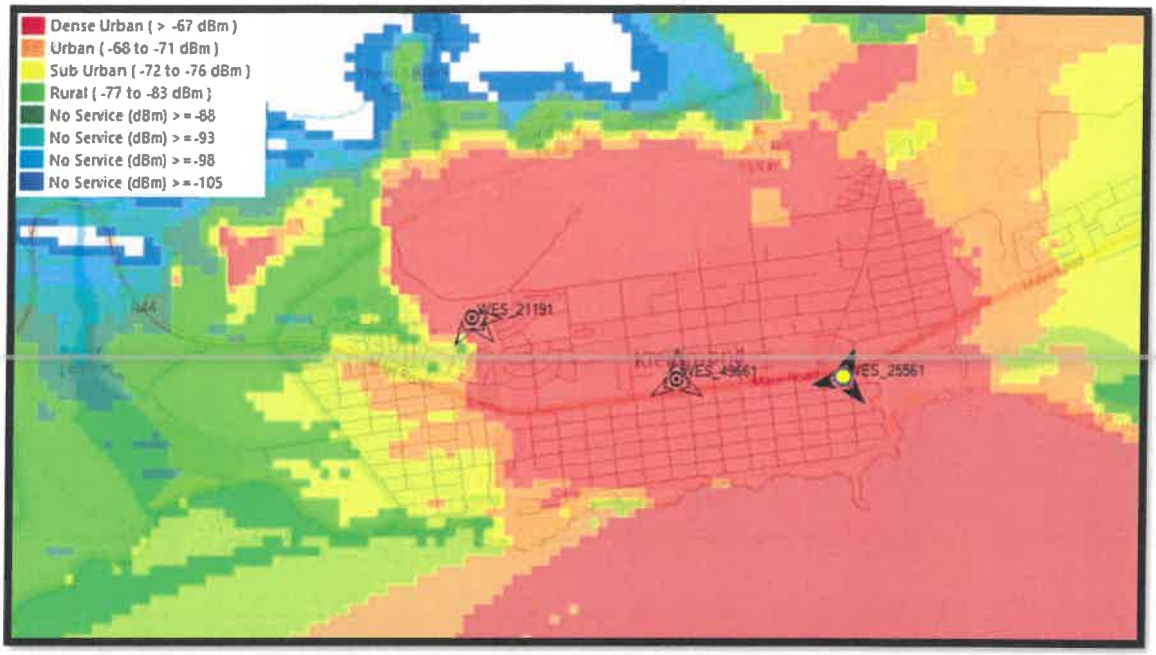


Figure 8 - Erf 4549-RE Kleinmond Strand site - VC Coverage

The mix of land uses range from business zones to residential. The existing/upgrade RBTS will not interfere with the current use of the property and there are no negative impacts on the surrounding land uses and environment.

E.2.2. Choice of site

As an increase in the number of users occurs, the area which is covered by the existing network decreases, leading to poorer network coverage. Figures 9-11 strive to explain how the need for an increase in cellular infrastructure evolves in a typical urban area.

Cellular infrastructure explained:

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

Figure 9 - Initial Coverage (Cell) provided by Telecommunication Base Stations

Figure 9 is an illustration of optimum network and data coverage. This is explained by envisioning the octagonal shape of a honeycomb (cells).

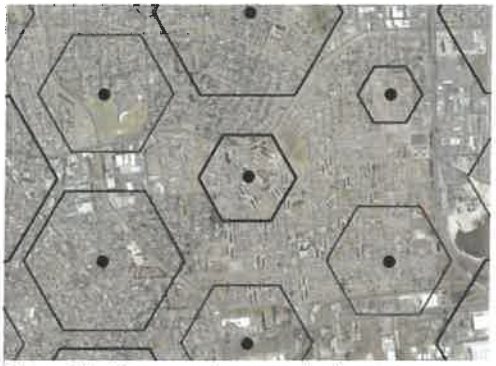


Figure 10 - Coverage decreases due increase in network users - cell size decreases

As network users increase, the cells shrink which leads to gaps within this network of cells. This leads to dropped calls, weak/ limited signal and the failure to access the latest technologies in communication innovations.

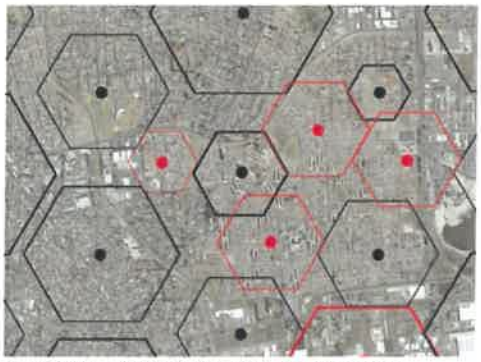


Figure 11 - Additional Telecommunications Base Stations required to fill the gaps

Gaps between cells require new/additional telecommunication base stations to be placed in these gaps to retain good network coverage

Locations for telecommunication infrastructure are primarily chosen within areas where a need exists for coverage (refer to Figure 9-10).

The need for coverage is however not the only determining factor when identifying a possible position for a telecommunication base station/ RBTS. Other determining factors include altitude, zoning and the visual impact of the proposed base station. Distance away from existing base stations in the surrounding area is also an influencing factor.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

Figure 12 - 500m and 1km radius of the existing site and surrounding base stations

Please note that there is one other telecommunication base stations/ TA within/between the 500m and 1km radius of the existing RBTS (Figure 12). PPK Kleinmond (Erf 4894) is approximately 870m away. Considering the information in Figure 6-8 above the need for the modernising the existing Vodacom RBTS /TA is clear.

Alternative sites have not been considered for this proposal as the existing site will be modernized.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

E.2.3. Site characteristics

Special consideration is given to geographical aspects so that each base station is positioned to ensure optimum functionality. This reduces the number of base stations necessary to provide an optimal network. At the same time, special attention is also given to ensure that there is minimal impact on the local, social, physical, natural and visual environments.

This site was selected for several reasons, namely:

- It is situated optimally between planned and existing sites,
- There is a huge demand by cellular users in this area and the surrounding base stations are unable to provide an acceptable level of coverage to the area, modernising the site will ensure that acceptable level of coverage to area is achieved.
- It is accessible to contractors during construction and maintenance,
- The proposal and location of the base station is the best solution to the ensure acceptable coverage is provided to the area with the least negative impacts,
- The proposal is secure due to its locality, and
- Most importantly it will serve the Kleinmond area.
- The business zone on erf 4549-RE ensured that the co-location took place, meaning other service providers (MTN) has also a pole with their antenna on site that provides 3G, 4G and Fixed LTE coverage towards their customers.

It is important to note that the nature of such development is dependent on a "willing landlord" scenario. The theoretically best position is determined by the radio engineers and the closest properties that adhere to the above guidelines are targeted. Often several properties are targeted before a willing landlord is discovered that terms can be agreed with.

E.2.4. Visual Impact

Vodacom has currently three antenna at the site, while the MTN antennae is on a pole. Vodacom wants to resemble the same method that MTN used in order to reduce visual impact on erf 4549-RE (See figure 13). The visual impact of the above site is therefore argued to be acceptable as it is policy complaint as other service providers have co-located on the roof.

TOWN AND REGIONAL PLANNING CONSULTANTS

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

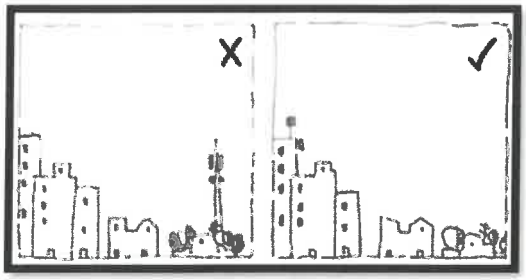


Figure 13 - Masts designed to encourage co-location

Figure 14 - Superimposition of Proposed Vodacom RBTS

The proposed VC RBTS in figure 14 shows the superimposition. A Visual Impact Assessment report has been submitted to the municipality. There is one other site within a 1km radius. The visual impact will be minimum in the sense that this is the only RBTS/TA site as you come in Kleinmond via the main road (R44). Vodacom's proposed RBTS/TA will be situated at the back making the visual impact less as it is further away from the road. MTN's RBTS is also more towards the back of the building. The point

Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

of view from your car will be less visible as the driver will have to focus on the road and attention will be drawn toward the businesses adjacent to main road.

E.2.5. Health concerns

There has been increasing public concern about health risks associated with cellular communication. Current scientific research is yet to produce conclusive evidence suggesting adverse health effects associated with, working with or living close to cellular technology. Although antennae and base stations emit radio waves, their frequency is not considered high enough to pose a health risk. Antennae mounted on towers, masts or any other structures are usually substantially elevated above ground level, and as radio waves are emitted at this level thereby further reducing the amount of radiation at ground level. Furthermore, regular tests regarding the compliance to safety regulations add to reducing the health risk factor.

South Africa's Department of Health has published EMF exposure limit guidelines. These are based on guidelines endorsed by the ICNIRP (International Commission on Non-Ionising Radiation Protection), an independent scientific organization established in 1992. Emissions from the base stations and antennae comply with these guidelines.

In a statement made by the Department of Health dated 8 September 2020 on the Health Effects of base stations states the following:

"Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects"

"A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use"

There are no conclusive studies linking emissions at these levels to any health effects and scientific research that may reveal such a link is ongoing. The steps taken by the cellular communication companies to ensure the safety of the public against any possible harmful emissions, along with the above facts, concerns about health issues can be allayed.

TOWN AND REGIONAL PLANNING CONSULTANTS

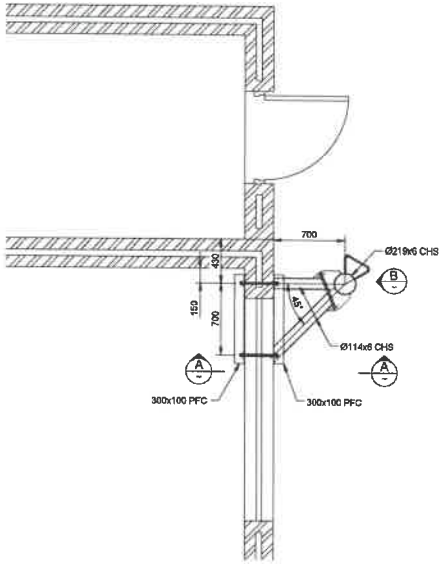
Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
C: (073) 012 6124
E: ruan@wpplanning.co.za

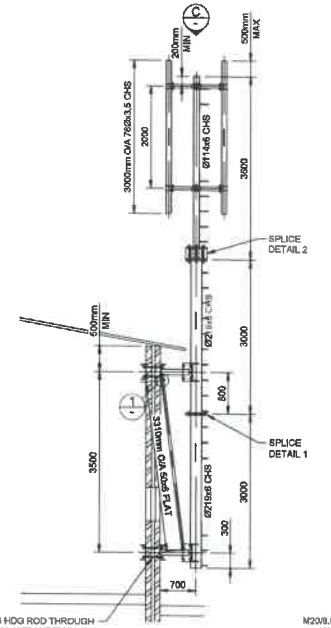
SECTION F: CONCLUSION

This consent use and permanent departure application in terms of the zoning scheme for the continued/upgrade of an existing RBTS/TA on erf 4549-RE, Kleinmond, will provide an essential and sort after service to the surrounding community, businesses and commuters. This application is in line with the current policy and legislation on a local level. Policy and legislation are mainly focused on the Spatial Planning and Land Use Management Act, 2013. Furthermore, this application is in compliance with the Integrated Development Plan (2017/18 – 2021/22), and Spatial Development Framework (MSDF), 2020.

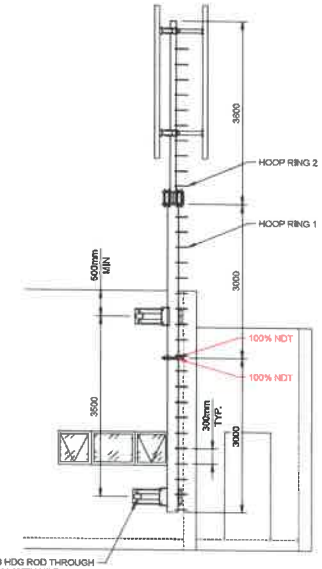
We trust that this application will meet your requirements and will receive your positive consideration.



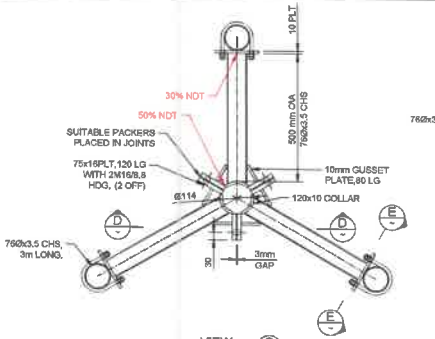
LAYOUT
SCALE 1:25



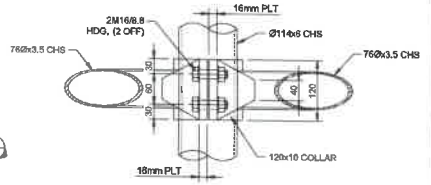
SECTION A
SCALE 1:50



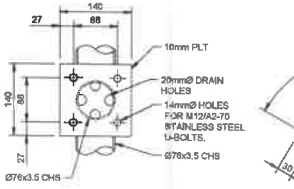
VIEW B
SCALE 1:50



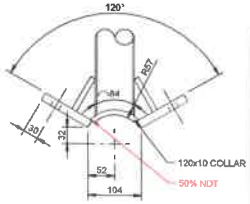
VIEW C
SCALE 1:10



SECTION D
SCALE 1:5

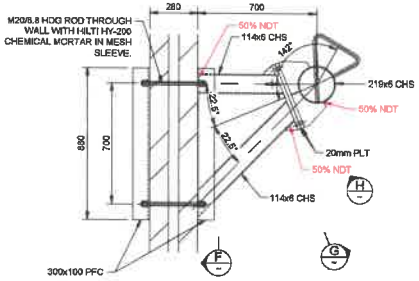


SECTION E
SCALE 1:5

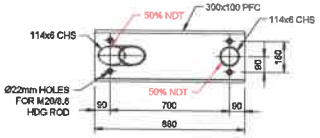


COLLAR CLAMP DETAIL
SCALE 1:5

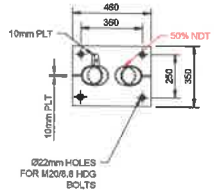
F
G



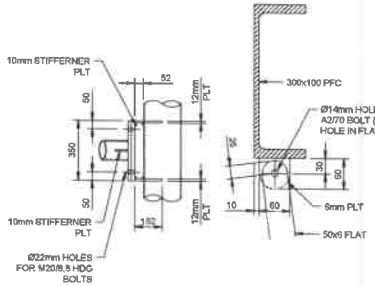
BOTTOM SUPPORT
SCALE 1:15



SECTION F
SCALE 1:15

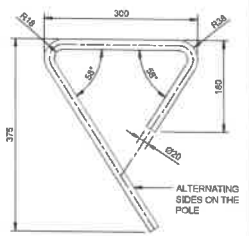


SECTION G
SCALE 1:15

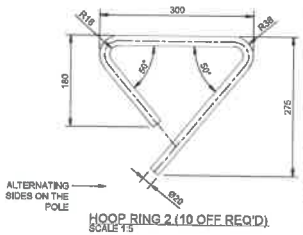


VIEW H
SCALE 1:15

DETAIL 1
SCALE 1:5



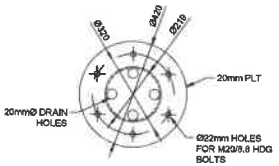
HOOP RING 1 (20 OFF REQ'D)
SCALE 1:5



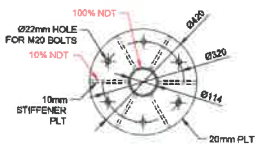
HOOP RING 2 (10 OFF REQ'D)
SCALE 1:5

ALL FASTENERS TO HAVE NUTS & LOCK NUTS

VISUAL ON ALL WELDS NOT SPECIFIED

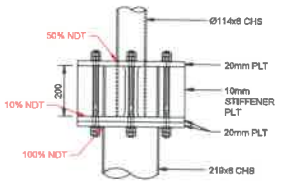


SPLICE DETAIL 1
SCALE 1:10



SPLICE DETAIL 2
SCALE 1:10

J



VIEW J
SCALE 1:10

EQUIPMENT ALLOWED
MAXIMUM CAPACITY OF Ø114 POLE

- 3 x PENTABAND ANTENNAS (80020 892 VO1)
- 8 x RADIOS
- 1 x Ø600 DISH, MAX HEIGHT 3m FROM TOP SUPPORT

STEELWORK NOTES (UNLESS OTHERWISE STATED)

1. ALL WORK TO BE ACCORDING TO SANS 2001-CS1 & SANS 1921-1.
2. ALL STEELWORK TO BE GRADE 350WA OR GRADE S355JR.
3. ALL STEELWORK TO BE GALVANIZED. THE HOT DIP GALVANIZED COATING SHALL CONFORM IN EVERY RESPECT TO THE STANDARDS CONTAINED IN THE SOUTH AFRICAN NATIONAL STANDARDS, SANS 121 (ISO 1461:2009)
4. ALL BOLTS TO BE M20/8.8 HOT-DIP GALVANIZED, IN 22mmØ HOLES.
5. STEEL CONTRACTOR TO SUPPLY ALL NUTS & WASHERS FOR ANCHOR BOLTS
6. ALL WELDS TO BE 6mm CONTINUOUS FILLET.
7. ALL SPLICE WELDS TO BE FULL PENETRATION WELDS.
8. CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE.
9. CONTRACTOR TO PROVIDE A FULL SET OF SHOP DETAILED DRAWINGS FOR APPROVAL BY ENGINEER PRIOR TO COMMENCING WITH FABRICATION.
10. CONTRACTOR TO PROVIDE A COPY OF THE MILL CERTIFICATES FOR ALL STEEL USED IN THE STRUCTURE, TO THE ENGINEER, PRIOR TO COMMENCING WITH FABRICATION.

MERLICON
Multi-disciplined Engineering Consultants
TEL: (012) 985-7105 FAX: (012) 985-5815
E-MAIL: merlicon@telkosa.net

LOCATION
34°20'24.45" S
19°2'2.33" E

AUTOCAD FILE NO: M1058-S-017~A
PAGE SIZE: A1

PROJECT: AIRSCALE PHASE 3

CLIENT: vodacom

TITLE:
KLEINMOND STRAND
SUPPORT STRUCTURE

APPROVED BY PROF. ENG: Prof Eng K.C.JENSEN (Reg.No.880239)
SCALE: AS SHOWN

DRAWING NO: M1058-S-017
REV: A

REVISIONS

No:	DATE	DESCRIPTION	DRAWN BY	CHECK BY	DESIGN ENG'R	DISPL ENG'R	PROJ ENG'R	PROJ MNG'R	CLIENT
A	05/03/2020	ISSUED FOR APPROVAL	KS	SvN	SvN				

REVISIONS

No:	DATE	DESCRIPTION	DRAWN BY	CHECK BY	DESIGN ENG'R	DISPL ENG'R	PROJ ENG'R	PROJ MNG'R	CLIENT

REFERENCES

DRAWING NO:	DESCRIPTION