OVERSTRAND MUNISIPALITEIT RESTANT ERF 243, BERGRYLAAN 10, NORTHCLIFF, HERMANUS: AANSOEK OM VERGUNNINGSGEBRUIK : WARREN PETTERSON PLANNING NAMENS OVERSTRAND MUNISIPALITEIT

Kragtens Artikel 47 en 48 van die Overstrand Munisipaliteit Gewysigde Verordening vir Munisipale Grondgebruikbeplanning, 2020 (Verordening) word hiermee kennis gegee van die volgende aansoeke van toepassing op Erf 243, Northcliff, naamlik:

Vergunningsgebruik
Aansoek ingevolge Artikel 16(2)(o) van die Verordening ten einde 'n 15m hoë transmissietoring op te rig.

Volle besonderhede rakende die voorstel is beskikbaar vir inspeksie gedurende weeksdae tussen 08:00 en 16:30 by die Departement: Stadsbeplanning, Patersonstraat 16, Hermanus.

Enige kommentaar op die voorstel moet skriftelik ingedien word in terme van Artikels 51 en 52 van die voorgeskrewe Verordening by die Munisipaliteit (Patersonstraat 16, Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) voor of op **22 Oktober 2021** met die naam, adres en kontakbesonderhede, belang in die aansoek sowel as redes vir die kommentaar aangedui. Telefoniese navrae kan gerig word aan die **Senior Stadsbeplanner, Me. H van der Stoep** by 028313 8900. 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.

Munisipale Bestuurder, Overstrand Munisipaliteit, Posbus 20, **HERMANUS**, 7200

Munisipale Kennisgewing Nr. 137/2021

OVERSTRAND MUNICIPALITY REMAINDER OF ERF 243, 10 MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS: APPLICATION FOR CONSENT USE: WARREN PETTERSON PLANNING ON BEHALF OF OVERSTRAND MUNICIPALITY

Notice is hereby given in terms of Sections 47 and 48 of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020 (By-Law) of the following applications applicable to Erf 243, Northcliff; namely:

Consent Use
Application in terms of Section 16(2)(o) of the By-Law to erect a 15m high transmission tower.

Full details regarding the proposal are available for inspection during weekdays between 08:00 and 16:30 at the Department : Town Planning at 16 Paterson Street, Hermanus.

Any written comments must be submitted to the Municipality (16 Paterson Street, Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) in accordance with the provisions of Sections 51 and 52 of the said By-law on or before **22 October 2021**, quoting your name, address and contact details, interest in the application and reasons for comment. Telephonic enquiries can be made to the **Senior Town Planner**, **Ms. H 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 to formulate their comment.

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

Municipal Notice No. 137/2021

UMASIPALA WASE-OVERSTRAND ISIZA ESISHEKILEYO 243, 10 MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS: ISICELO SEMVUME YOSETYENZISO: WARREN PETTERSON PLANNING EGAMENI LOMASIPALA WASE-OVERSTRAND

Isaziso sikhutshwa ngokwemiqathango samaCandelo 47 nelama-48 loMthetho kaMasipala oLungisiweyo woMasipala waseOverstrand ongokuSetyenziswa koMhlaba kaMasipala, 2020 (uMthetho kaMasipala) wezi zicelo zilandelayo ezisebanza kwiSiza 243, e-Northcliff; namely:

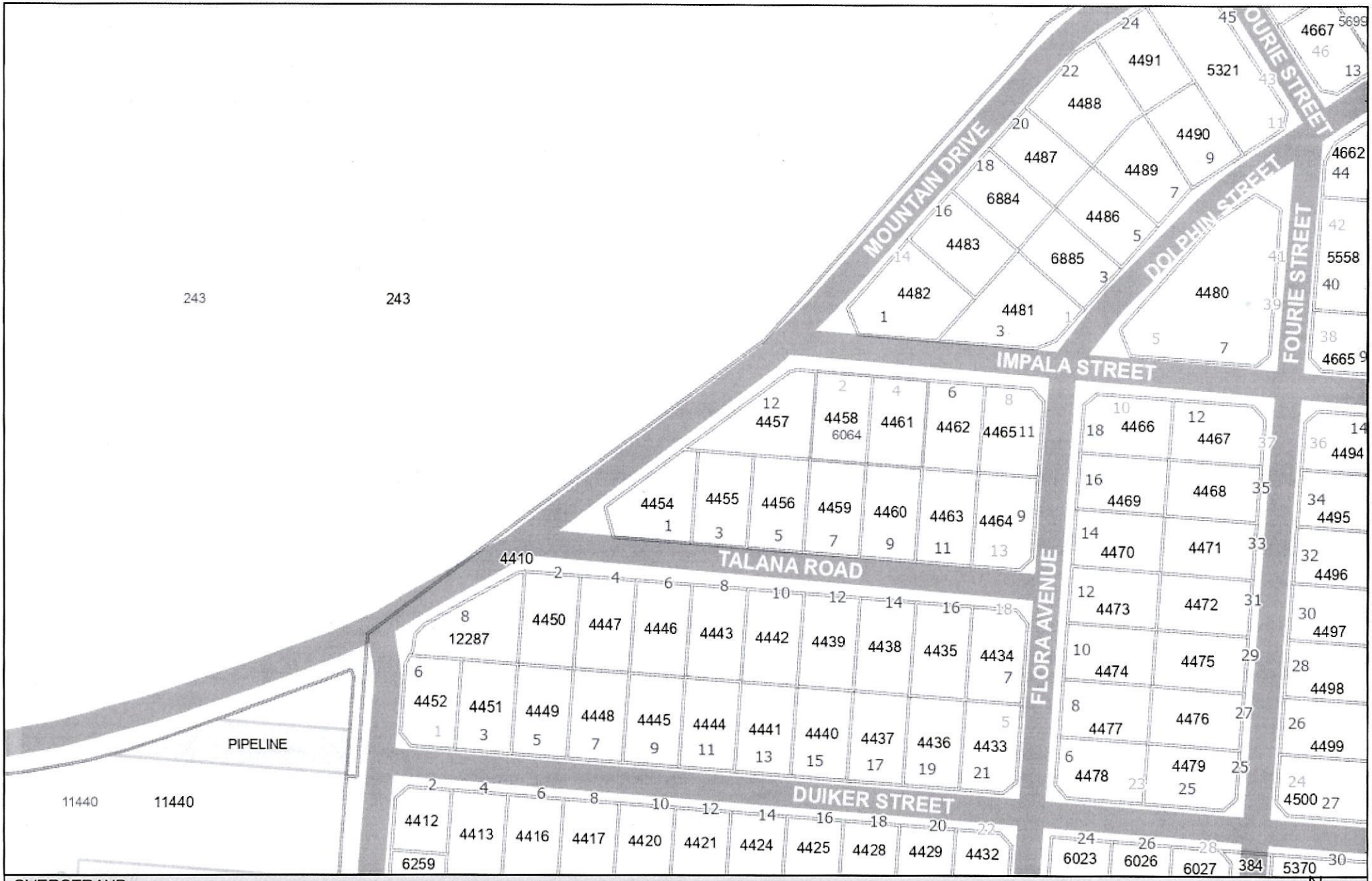
Yosetyenziso
Isicelo ngokweCandelo le-16 (2)(o) loMthetho kaMasipala sokwakha i-15m yokuhambisa okuphezulu

Iinkcukacha ezipheleleyo mayela nesi sindululo ziyafumaneka ukuze zihlolwe phakathi evekini phakathi kwentsimbi yesi-08:00 neye-16:30 kwiSebe: loCwangciso lweDolophu (16 Paterson Street, Hermanus.

Naziphi na izimvo ezibhaliweyo mazingeniswe kuMasipala (16 Paterson Street Hermanus / (f) 0283132093 / (e) loretta@overstrand.gov.za) ngokuhambelana nezibonelelo zamaCandelo 51 nele 52 lalo Mthetho kaMasipala uchaziweyo ngomhla okanye ngaphambi komhla **wama-22 uOktobha 2021**, unike igama lakho, idilesi yakho kunye neenkcukacha zoqhagamshelwano, umdla wakho kwisicelo nezizathu zokubhala izimvo zakho. Imibuzo ngomnxeba ingatsalelwa **kuMcwangcisi oPhezulu**, **Nksk H. van der Stoep** kule nombolo 028-313 8900. UMasipala angala ukuzamkela izimvo ezifike emva komhla wokuvalwa. Nabani na ongakwaziyo ukufunda okanye ukubhala makaye kwiSebe loCwangciso lweDolophu apho igosa likamasipala liya kumncedisa azibhale izimvo zakhe.

UMlawuli kaMasipala, UMasipala wase-Overstrand, P.O. Box 20, **HERMANUS,** 7200

ISaziso sikaMasipala No. 137/2021



OVERSTRAND MUNICIPALITY

Locality Map

Remainder Erf 243, Northcliff

N

Date: 2021/08/16

TP: A Theart
(H Olivier)

OVERSTRAND MUNISIPALITEIT
16 APR 2021
OVERSTRAND MUNICIPALITY

Amended Motivation

PROPERTY DESCRIPTION:	**REMAINDER ERF 243, HERMANUS**
MUNICIPAL AREA:	**OVERSTRAND MUNICIPALITY**
APPLICATION:	**LOCAL AUTHORITY CONSENT USE APPLICATION TO PERMIT A TRANSMISSION TOWER**
SITE NAME:	**HERMANUS RESERVOIR**

APPLICANT:	**WARREN PETTERSON PLANNING**
ON BEHALF OF/ FOR	**VODACOM**
OWNER:	**OVERSTRAND MUNICIPALITY**
DATE:	**APRIL 2021**

WPP
TOWN AND REGIONAL PLANNING CONSULTANTS

vodacom

FILE NO: REM ERF 243 HMS
SCAN NO: HMS 243
COLLABORATOR NO: 1529201

TP 16 APR 2021

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

Overstrand Local Municipality
Town Planning Department
Hermanus
Magnolia Street
7200

3 September 2020 (Revised 1 April 2021)

Dear Sir/Madam

LOCAL AUTHORITY CONSENT USE APPLICATION IN ORDER TO PERMIT A TRANSMISSION TOWER ON REMAINDER ERF 243, HERMANUS.

Kindly find attached in this application, the motivation and relevant documentation regarding consent use application in terms of the zoning scheme to allow for the establishment of a transmission tower on Remainder Erf 243, Hermanus.

This proposal will be greatly beneficial for the inhabitants of Hermanus – which includes local businesses, and residents – as well as surrounding communities and commuters. This benefit relates to the fact that an improvement will be experienced in terms of network provision and coverage. In its end, this will enhance the level of health and safety (accessibility to emergency services e.g. ambulances, police, fire department etc.), social interaction (accessibility to social media e.g. Facebook, Instagram, Snapchat etc.) and economic efficiency (accessibility of businesses and individuals to faster, efficient and reliable internet and communication connectivity).

This application is by no means a careless act as health and environmental aspects are taken into consideration with associated proof that this development holds no threat for inhabitants and/or commuters.

Should the need arise for additional information, please do not hesitate to contact our office. We furthermore wish to thank you in advance for the positive consideration of this application.

Yours faithfully

Ruan Chipps
Candidate Planner (C/8778/2018)
WARREN PETTERSON PLANNING

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

TABLE OF CONTENTS

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

LIST OF FIGURES

LIST OF TABLES

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
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:	Remainder erf 243, Hermanus (here after referred to as the application site)
CLIENT:	Vodacom
APPLICANT:	Warren Petterson Planning
OWNER:	Overstrand Municipality
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
RBTS	Rooftop Base Telecommunication Station
TT	Transmission Tower
TI	Telecommunication Infrastructure
TOA	Top of Antenna
SG-DIAGRAM	Surveyor-General Diagram
SDF	Spatial Development Framework
IDP	Integrated Development Plan

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 purpose of erecting a 15m Transmission Tower.

A.2. DETAILS OF THE DEVELOPMENT AREA

Table 3 - Details of the Development Area

TITLE DEED DESCRIPTION	Remainder Erf 243, Hermanus, Overstrand Municipality, Division of Caledon, Province of the Western Cape
TITLE DEED NUMBER	T92094/2001
PROPERTY SIZE (m^2)	800 DUM
CURRENT ZONING	Open Space Zone 1
OWNER OF PROPERTY	Overstrand Municipality

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 a portion of land (Erf 243 – RE). It is further surrounded by other erven and the R43.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

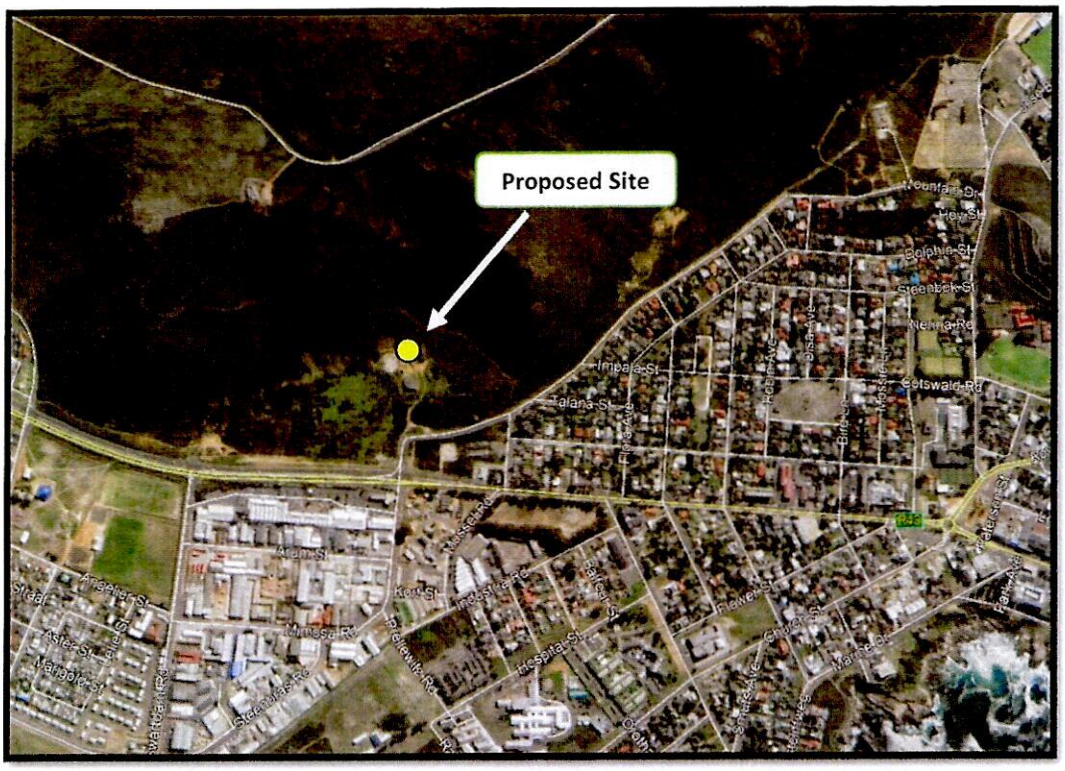


Figure 1 - Location of the Existing Transmission Tower on Erf 243-RE

B.2. CURRENT LAND USE AND ZONING

Table 4 - Current land use and zoning

CURRENT LAND USE	The land is currently utilised for vegetation, reservoirs and a small piece of land for a Transmission Tower
ZONING	Open Space Zone 1: Public Open Space

B.3. SURROUNDING AREA

The existing site is located on Erf 243-RE which is accessible from the R43 turning onto Mountain Drive and leads onto a gravel road towards the proposed site. Mountain drive connects with the R43 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
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

Suburbs/Towns near the property and within the surrounding area is Hermanus East which lies east. The other towns are a bit further away such as Hemel en Aarde which lies to the west, Sandbaai which lies south east and Zwelihle which lies south.

The surrounding land uses in the area of the proposed site are predominantly utilised for open space in Hermanus West. Other land uses found in the surrounding area are Business Zone 3, Transport Zone 2, Open Space Zone 2, Residential Zone 1: Single Residential, Community Zone 1 and Industrial Zone 1: General Industry (See Figure 2 below).

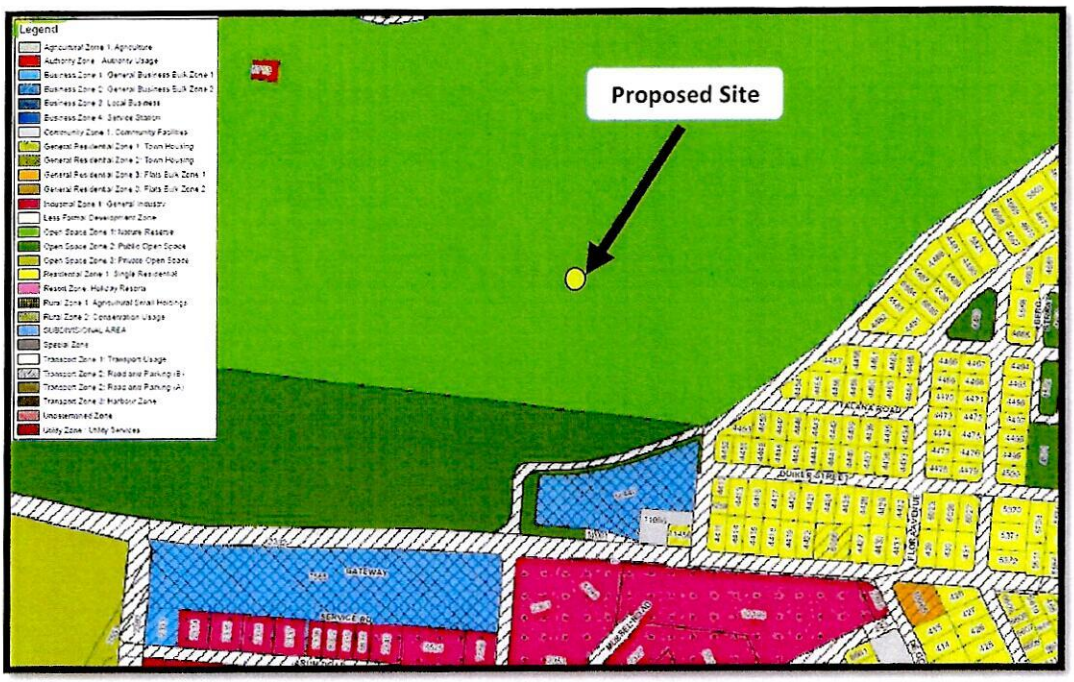


Figure 2 - Surrounding Land uses adjacent to the proposed site

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION C: DEVELOPMENT PROPOSAL

C.1. APPLICATION SPECIFICATIONS

The client, Vodacom, wishes to apply for consent use in terms of Section 16 (2)(o) of the Overstrand Municipal Planning By-Law, 2020 in order to erect a 15m TT.

C.1.1 Development Concept

The application comprises the following proposed development parameters:

- ✓ A 15m Lattice Mast (Transmission tower)
- ✓ 3 x 3 - sector antennas attached to the mast,
- ✓ Microwave dishes attached to the mast, and
- ✓ 3 x Equipment containers, which will be locked at all times

The total area of the TT will be 96m², including the equipment containers. The main purpose of the proposed transmission tower is to improve the network coverage (3G and LTE services) for the various service providers (MTN, Vodacom, Cell C and Telkom Mobile). The transmission tower furthermore connects to the surrounding existing network, including, Zwelihle, Westcliff and Hermanus, which reduces poor signal areas when leaving the coverage radius of an existing transmission tower.

C.2. UTILITY SERVICES

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

Access to the proposed TT will be obtained from the existing entrance to the property found along the southern/ eastern boundary of the property, situated adjacent to Mountain Drive. Mountain Drive connects to the Main Road (R43) and Mimosa Street to the south and Talana Street as well as Impala Street to the east. All these roads forms a road network between all the erven in Hermanus.

The proposed use will have no impact on the external engineering services, on transport or traffic related considerations, or on the biophysical environment.

C.3. ENVIRONMENTAL REGULATIONS

An application was lodged with the Department of Environmental Affairs and Development Planning (refer to Annexure F) to confirm that environmental authorization is not required. Feedback was given and no environmental authorization is needed as no listed activity of the EIA Regulations are triggered.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION D: POLICY AND LEGISLATION

D.1. 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.
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.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

D.2. OTHER POLICIES AND LEGISLATION

Other policies and legislative frameworks include: Integrated Development Plan (2017/18 – 2021/22), and the Spatial Development Framework (SDF), 2006.

D.2.1. 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.2.2. 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.

Hermanus is divided into three parts known as Hermanus West, Hermanus Central and Hermanus East. The proposed transmission tower is on Erf 243 Northcliff and falls under Hermanus Central. Hermanus Central is seen as the busy part as it mostly consist out of businesses along the R43 (Main road) (MSDF, 2020: 85).

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

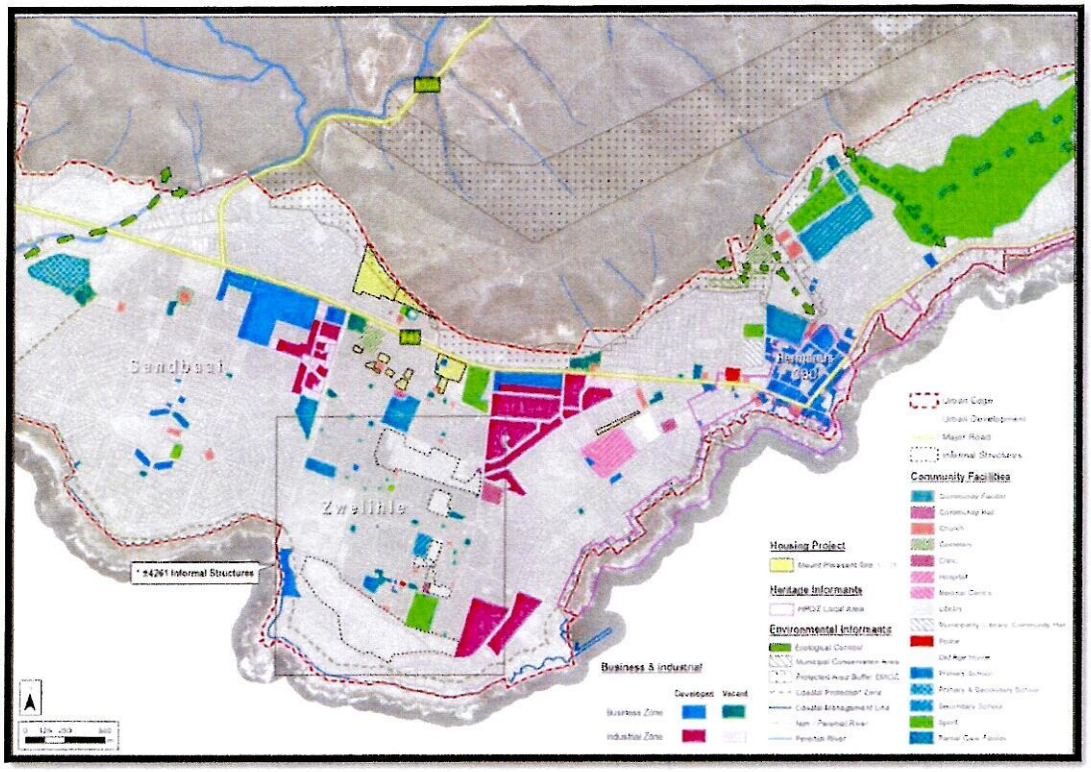


Figure 3 - Business Zonings along the R43 - Hermanus Central

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 that the population number for the Greater Hermanus is increasing between 2016 – 2031 (See Figure 4 below which shows Table 2.7 of MSDF). With an increase in population, there is a need to provide adequate coverage to consumers and to meet any future capacity demands. 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
F: (086) 537 9187
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 4 - Table 2.7 on page 25 of the MSDF, 2020

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 transmission tower is situated within an open space zone in Northcliff surrounded by business zones and residential zones, therefore showing the importance that coverage must be provided to these zones. To emphasise the importance of the proposed transmission tower, one can refer to that many people are working from home during the Covid-19 pandemic, therefore the network capacity is more.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

SECTION E: DEVELOPMENT MOTIVATION

Please read together with previous sections in this application. Consent use in terms of the zoning scheme is applied for in order to allow for the erection of a TT 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. Due to factors including densification, urbanisation and influx of seasonal guests especially over festive seasons and holidays, in a tourist attractive place like the Hermanus, poor network coverage (related to both voice and data) is experienced. Vodacom identified several positions in the area that need to be equipped with base stations to alleviate the pressure and to cater for the ever-increasing demand.

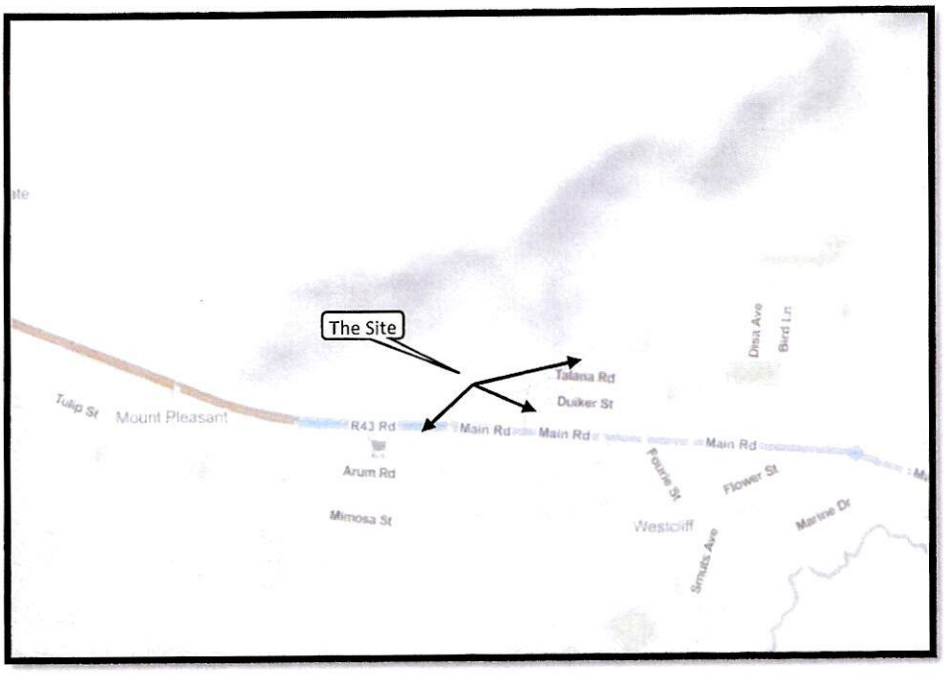


Figure 5 - Vodacom Network Coverage Map - Advanced LTE

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

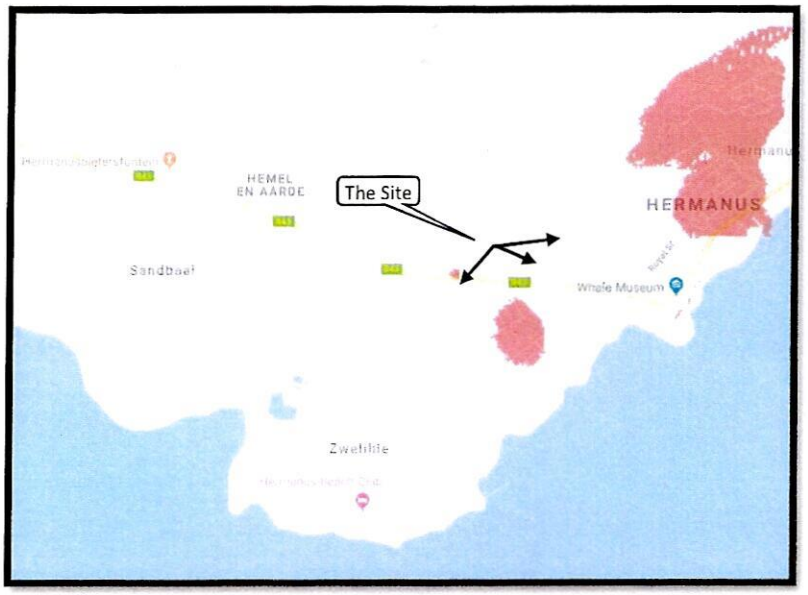


Figure 6 - MTN Network Coverage Map - LTE

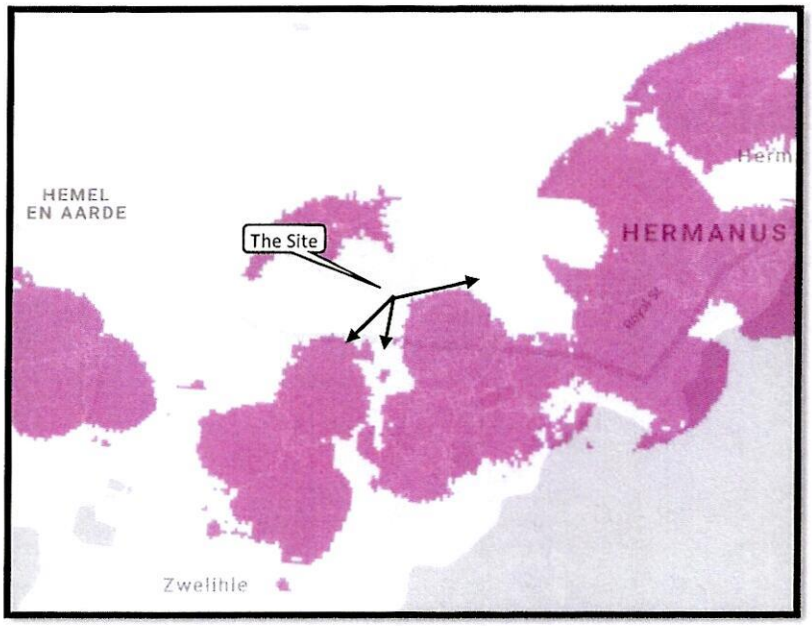


Figure 7 - Cell C Network Coverage Map - Fixed 4G/LTE

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

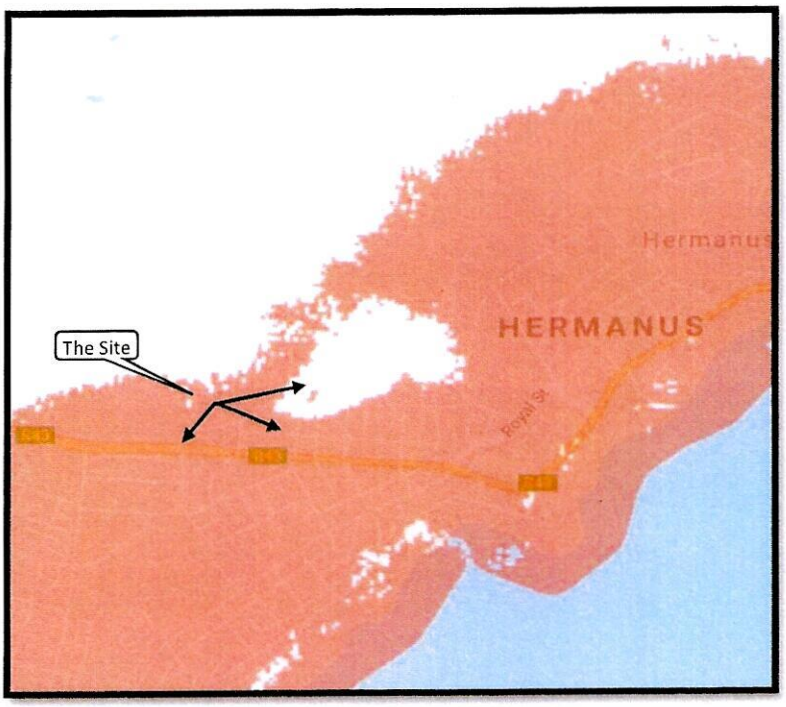


Figure 8 - Telkom Mobile Network Coverage Map - 3G

Figures 5-8 illustrate the current Advanced, Fixed LTE and 3G coverage in Hermanus. It should be noted that these areas have very limited Advanced, Fixed LTE and 3G coverage for certain service providers. Therefore, a TT as proposed in this application will increase the amount of coverage in this area.

The increase in network strength brought by the proposed TT will aid the 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.

The mix of land uses range from open space, residential, industrial to business use. The proposed base station will not interfere with the current use of the property and there are no negative impacts on the surrounding land uses and environment. No trees need to be removed to build the base station and no buildings with heritage value will be affected.

The proposed base station/ transmission tower is needed for the following reasons: (See direction of the arrows for coverage – figure 5-8)

- Provides coverage to the east for the residents (See direction of the arrows for coverage)
- Coverage + Capacity is needed due to that many people work from home during Covid-19 pandemic.
- Provides coverage to the south where the shopping mall is across the main road. The shopping mall attracts a lot of people.
- Provides coverage to the main road and other existing road network.
- With the coverage maps provided above, other service providers can co-locate.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

- Hermanus is a tourist attraction place and gets an influx of seasonal guests over festive seasons, meaning that there is demand for capacity in order to provide efficient coverage.
- The proposed lattice mast is situated close by to support the capacity of the surrounding area and where coverage is needed.
- Due to elevation reasons a 15m mast is required on the end of the mountain compare to a higher mast of 25m within the other zonings close by.

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:

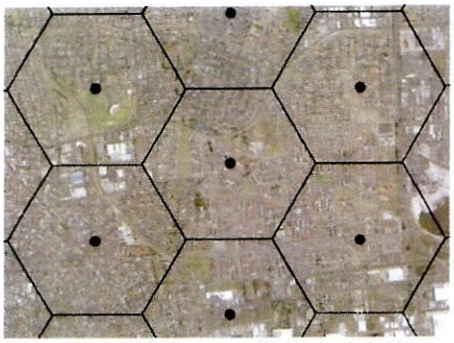


Figure 9 - Initial Coverage (Cell) provided by Telecommunication Base Stations

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

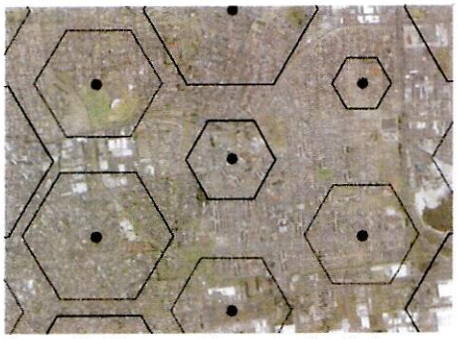


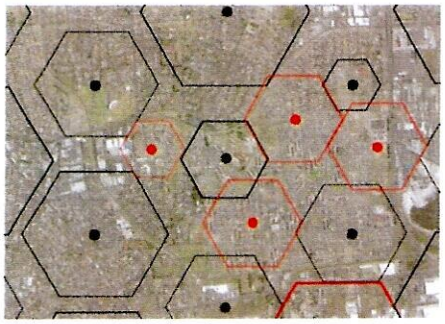
Figure 10 - Coverage decreases due to increase in network users - cell size decreases

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.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za



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

Figure 11 - Additional telecommunication base stations required to fill the gaps

Locations for telecommunication infrastructure are primarily chosen within areas where a need exists for coverage (refer to Figure 10-11).

The need for coverage is however not the only determining factor when identifying a possible position for a telecommunication base station. 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
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

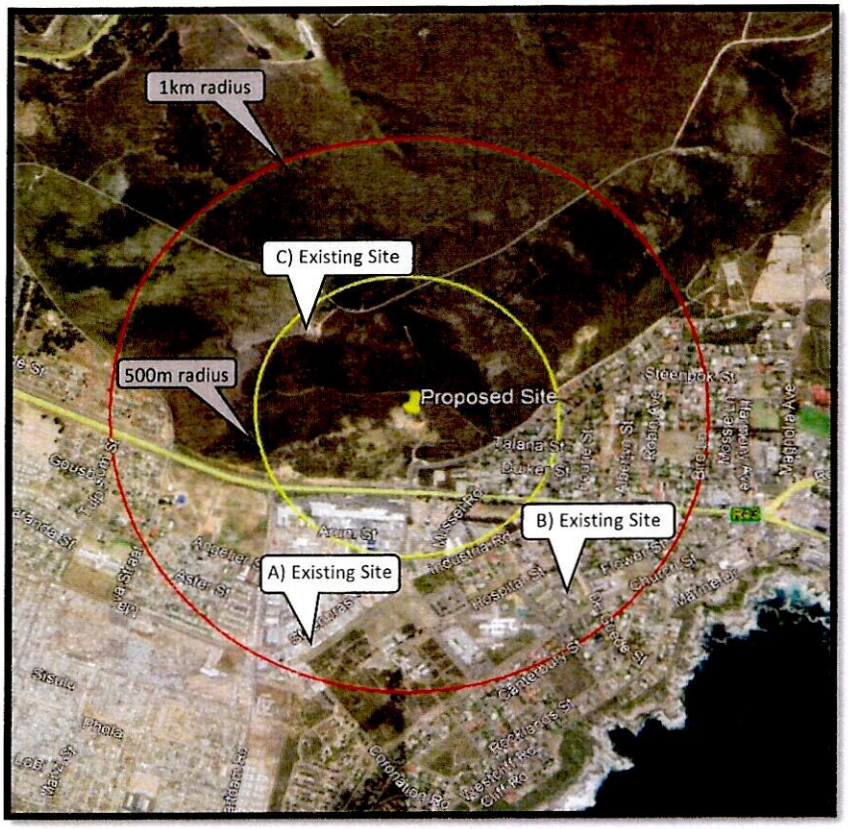


Figure 12 - 500m and 1Km radius of the proposed site and surrounding base stations

Table 5 - Existing Surrounding Base Stations

	Mast	Site location	Distance	Lack of sufficiency
A	Lattice Mast	Steenbras Road	+/- 916m	Failure to provide for the necessary coverage necessity due to distance away from proposed mast
B	Rooftop Base Telecommunication Station	De Goede Street	+/-1 900m	Failure to provide for the necessary coverage necessity due to distance away from proposed mast
C	Lattice and Monopole Mast	Rotary Way	+/-445m	Failure to provide for the necessary coverage necessity due to distance away from proposed mast and needed coverage area which is east.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

Considering the information in Figure 12 and Table 5 the need for the proposed TT is clear. Existing TI are not sufficient to provide coverage as the closest TBS is approximately 445m away from the proposed TT, but fails to provide coverage for the needed area which more than approximately 500m away.

Alternative sites were considered during the initial stages of the proposal but this option is deemed the most acceptable option in terms of visual impact and based on the requirements of the network providers, contractors and land owner.

Alternative sites considered:

Option 1- Erf 11440 was considered as an alternative and is zoned Business Zone 3. However this alternative can work but visual impacts may be severe. The elevation will also play big role as the erf is slightly against a slope.

Option 2- Erf 243 is zoned Open Space Zone 3 (only a certain portion). This alternative will also have severe visual impact from the main road (R43). The erf is also used for community sport purposes.

Option 3- Remainder erf 243 is zoned as Open Space Zone 1. The property is owned by the Overstrand municipality and was approached by Vodacom to lease a portion by the reservoir. This is the best alternative for the proposed TT. Visual impacts will be less and no residential properties is in close proximity from the proposed TT. No vegetation will be removed as the proposed TT is placed on an open piece of soil where human activities are taking place for example there is vehicular access to the reservoir. The proposed TT will provide the needed coverage and it can be used for co-location by other service providers (see coverage maps above).

Option 4- Erf 12199 was considered as an alternative and is zoned Industrial Zone 1. The industrial zone is a perfect option to propose a transmission tower, however it may have more visual impacts than the proposed position on Erf 243-RE Northcliff.

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

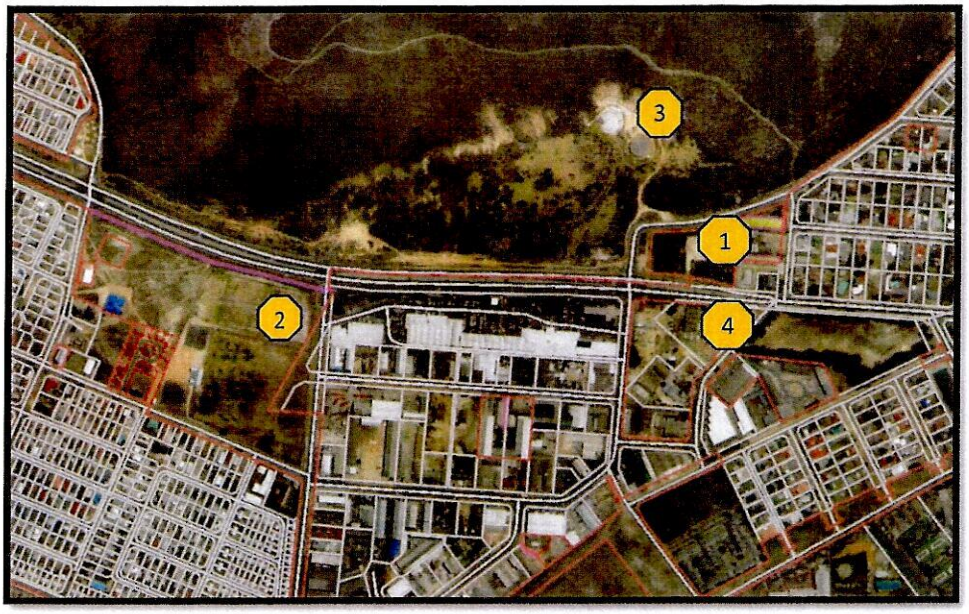


Figure 13 - Alternatives considered

E.2.3. Visual Impact

The proposed TT will create an opportunity for other service providers to co-locate, as other structures of this height are limited in this area. The proposed TT is policy compliant and reduces visual impact.

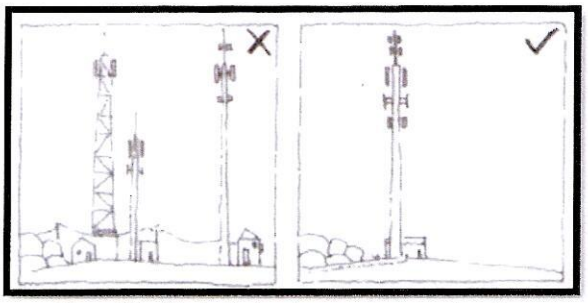


Figure 14 - Masts design to encourage co-location

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

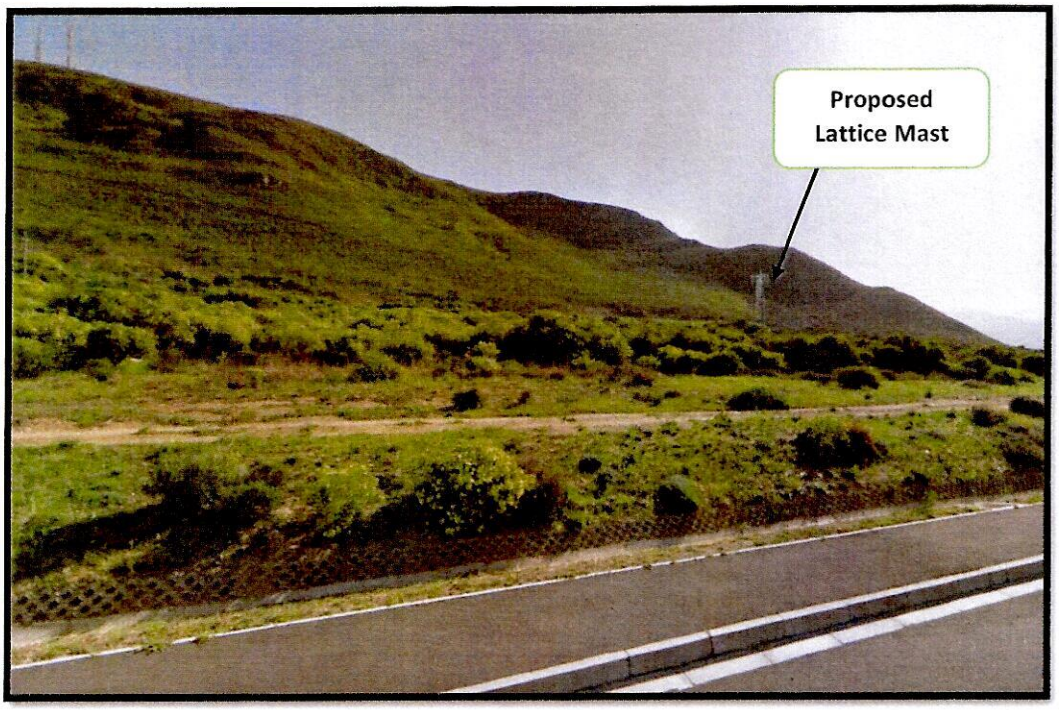


Figure 15 - Superimposition of a Proposed Lattice Mast on Erf 243-RE Northcliff (Via R43 - Entering Hermanus)

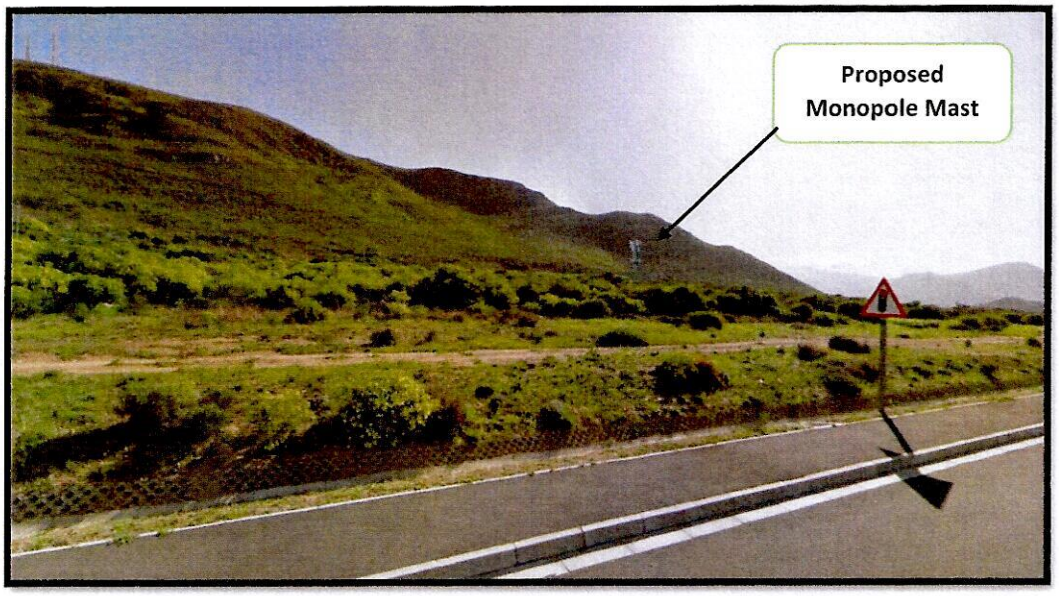


Figure 16 - Superimposition of a Proposed Monopole Mast on Erf 243-RE Northcliff (Via R43 - Entering Hermanus)

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

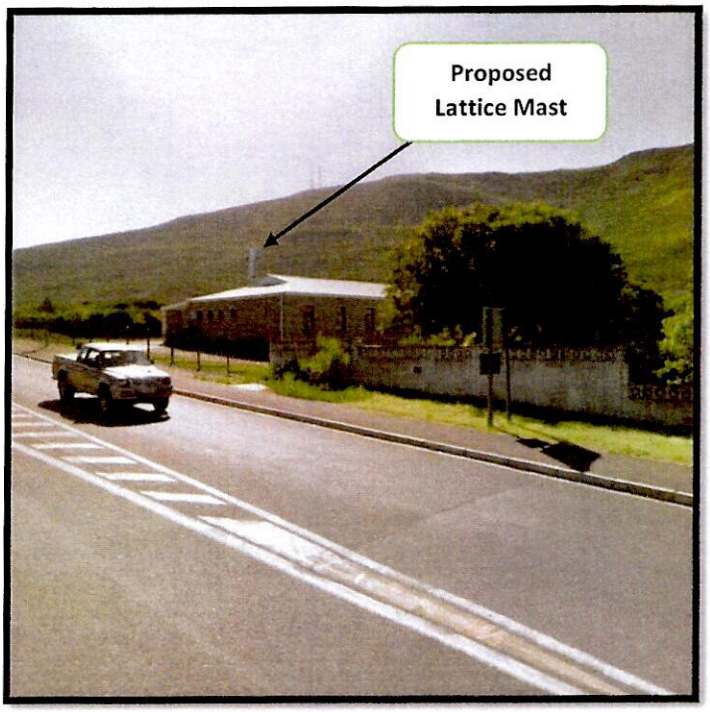


Figure 17 - Superimposition of a Proposed Lattice Mast on Erf 243-RE Northcliff (Via R43 towards Cape Town direction)

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

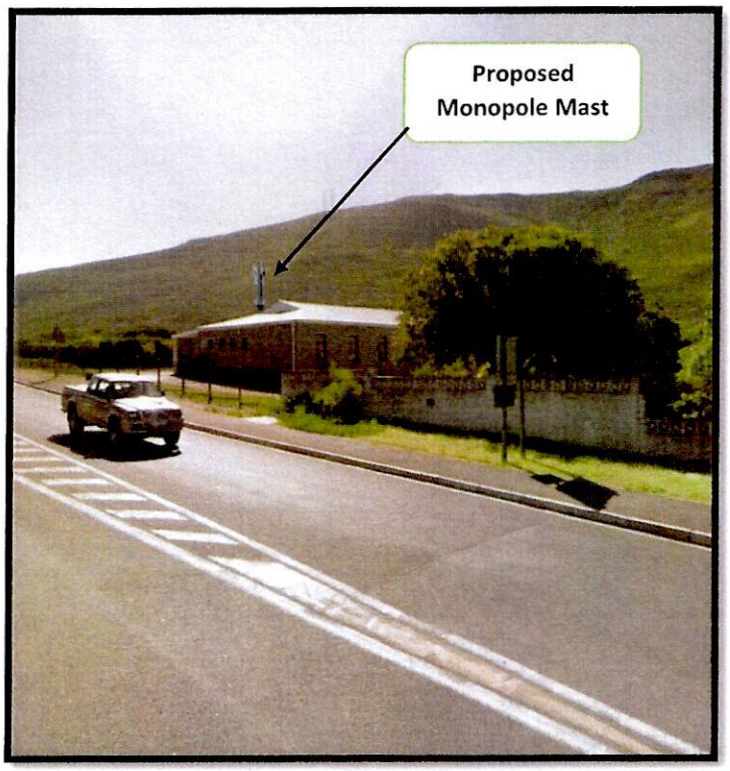


Figure 18 - Superimposition of the Proposed Monopole Mast on Erf 243-RE Northcliff (Via R43 towards Cape Town direction)

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

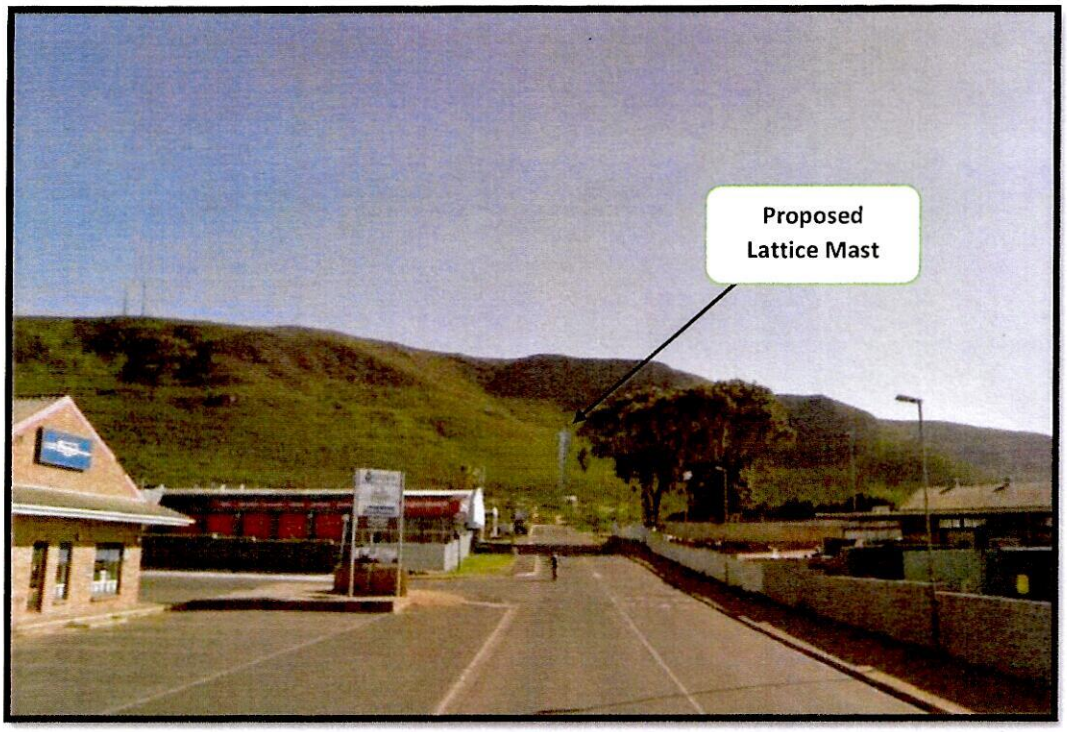


Figure 19 - Superimposition of a Proposed Lattice Mast on Erf 243-RE (View from Mimosa Street)

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

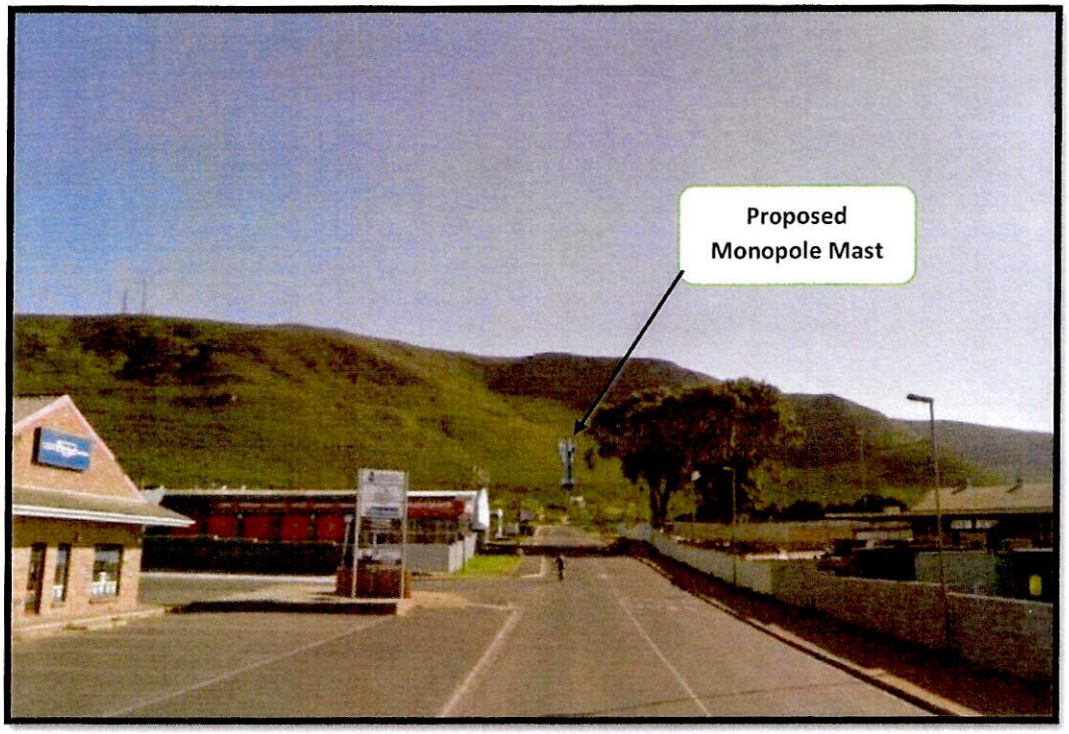


Figure 20 - Superimposition of a Proposed Monopole Mast (View from Mimosa Street)

Based on figure 15 – 20, showing two mast designs on Erf 243-RE Northcliff, we of opinion that the lattice mast design will be the best. This is due that it is see-through than the monopole mast design.

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:

TOWN AND REGIONAL PLANNING CONSULTANTS

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

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

"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

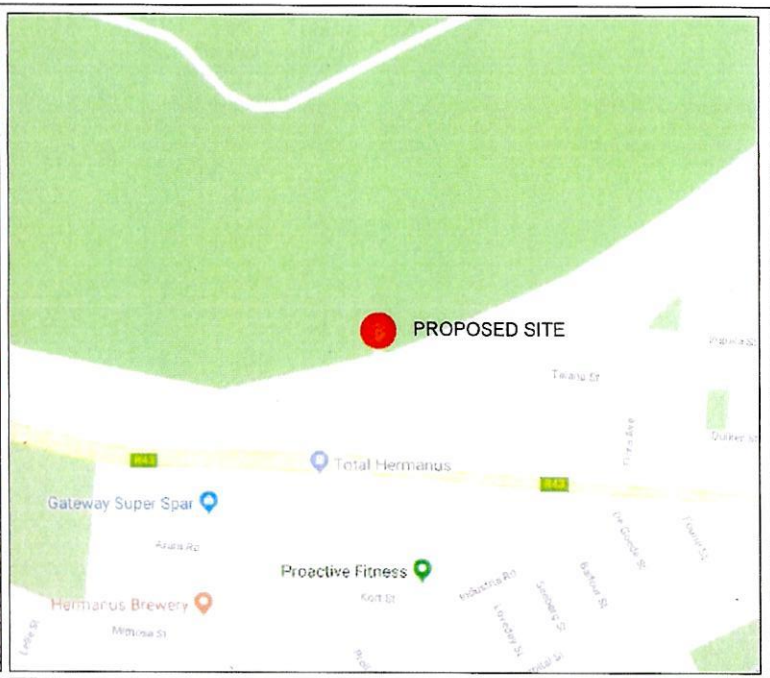
Warren Petterson Planning
P.O. Box 152
Century City
7446

T: (021) 552 5255
F: (086) 537 9187
C: (073) 012 6124
E: ruan@wpplanning.co.za

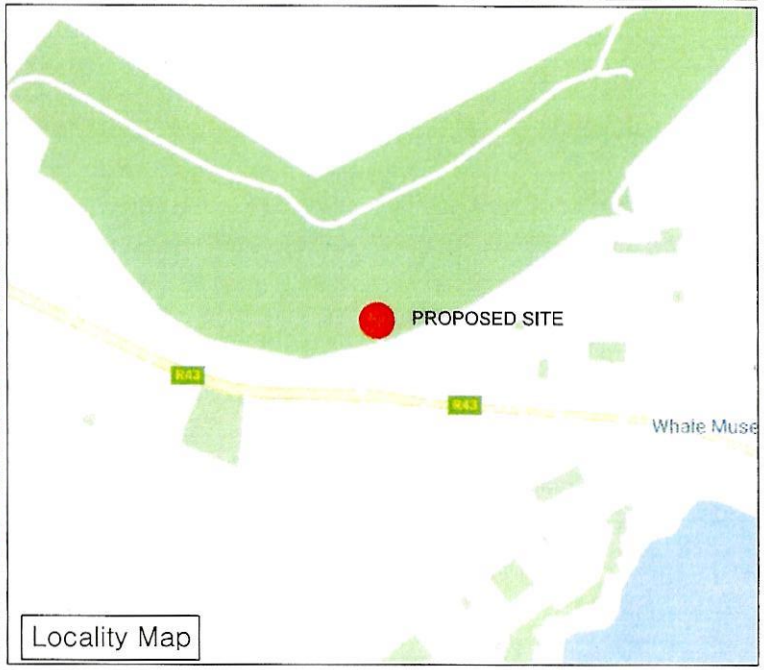
SECTION F: CONCLUSION

This consent use application in terms of the zoning scheme for a proposed TT on Remainder Erf 243, Hermanus, 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.



Aerial Map



Locality Map

vodacom

VC TOWER SITE ID:
BS 158332

VC TOWER SITE NAME:
HERMANUS RESERVOIR

PROPERTY DESCRIPTION:
REMAINDER ERF 243, HERMANUS

ADDRESS:
MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS

CO-ORDINATES:
Lat: -34.416211°
Long: 19.224964°

ELEVATION:
65m

WPP
TOWN AND REGIONAL PLANNING CONSULTANTS
Tel: (021) 552 5255
Fax: 086 537 9187
Unit H, 3rd Floor
Matrix Building, Bridgeway,
Century City, Cape Town
Po Box 152,
Century City,
7446

PROJECT:
PROPOSED NEW VODACOM 15m LATTICE MAST WITH 12m X 8m BASE STATION

APPROVED MAST:
15m LATTICE MAST

NOTES:
A) NEW 15m LATTICE MAST
B) CUSTOM BASE STATION
C) 2.4m PALISADE FENCE
D) SITE SIZE: SITE SHAPED TO FENCE WITH FENCE
E) BASE STATION: CHIP STONE SURFACE

DATE	DESCRIPTION	REVISION
09-09-2019	1st Issue	0

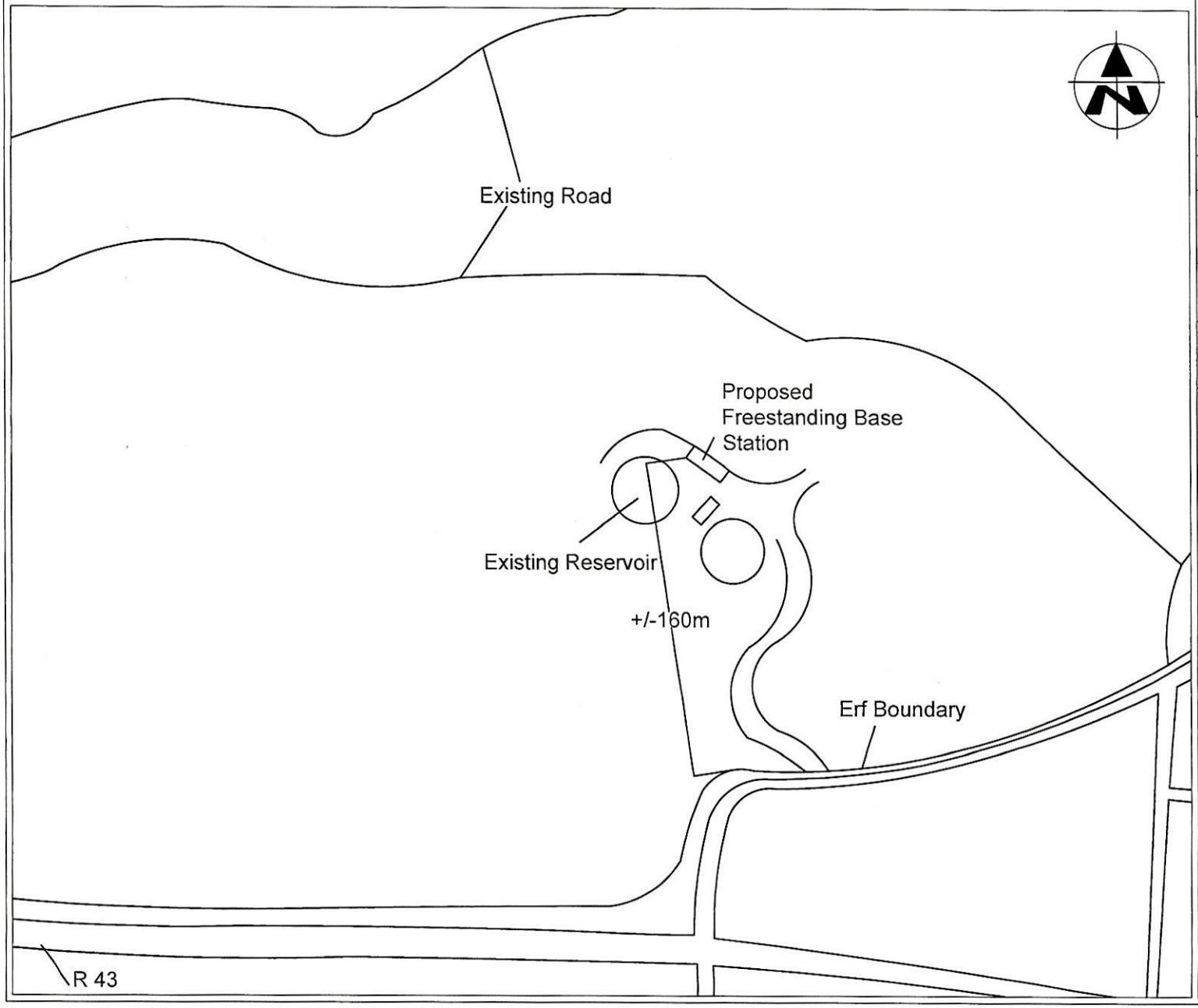
DRAWING NUMBER: -
SHEET: 1 OF 4

DRAWING TITLE: LOCALITY MAP

DRAWN: R.CHIPPS
SCALE: NTS

DATE: 2019-09-09
REVISION: 0

Site Plan



vodacom

VC TOWER SITE ID:
BS 158332

VC TOWER SITE NAME:
HERMANUS RESERVOIR

PROPERTY DESCRIPTION:
REMAINDER ERF 243, HERMANUS

ADDRESS:
MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS

CO-ORDINATES:	ELEVATION:
Lat: -34.416211° Long: 19.224964°	65m

WPP
TOWN AND REGIONAL PLANNING CONSULTANTS
Tel: (021) 552 5255
Fax: 086 537 9187
Unit H, 3rd Floor
Matrix Building, Bridgeway,
Century City, Cape Town
Po Box 152,
Century City,
7446

PROJECT:
PROPOSED NEW VODACOM 15m LATTICE MAST WITH 12m X 8m BASE STATION

APPROVED MAST:
15m LATTICE MAST

NOTES:
A) NEW 15m LATTICE MAST
B) CUSTOM BASE STATION
C) 2.4m PALISADE FENCE
D) SITE SIZE: SITE SHAPED TO FENCE WITH FENCE
E) BASE STATION: CHIP STONE SURFACE

DATE	DESCRIPTION	REVISION
09-09-2019	1st Issue	0

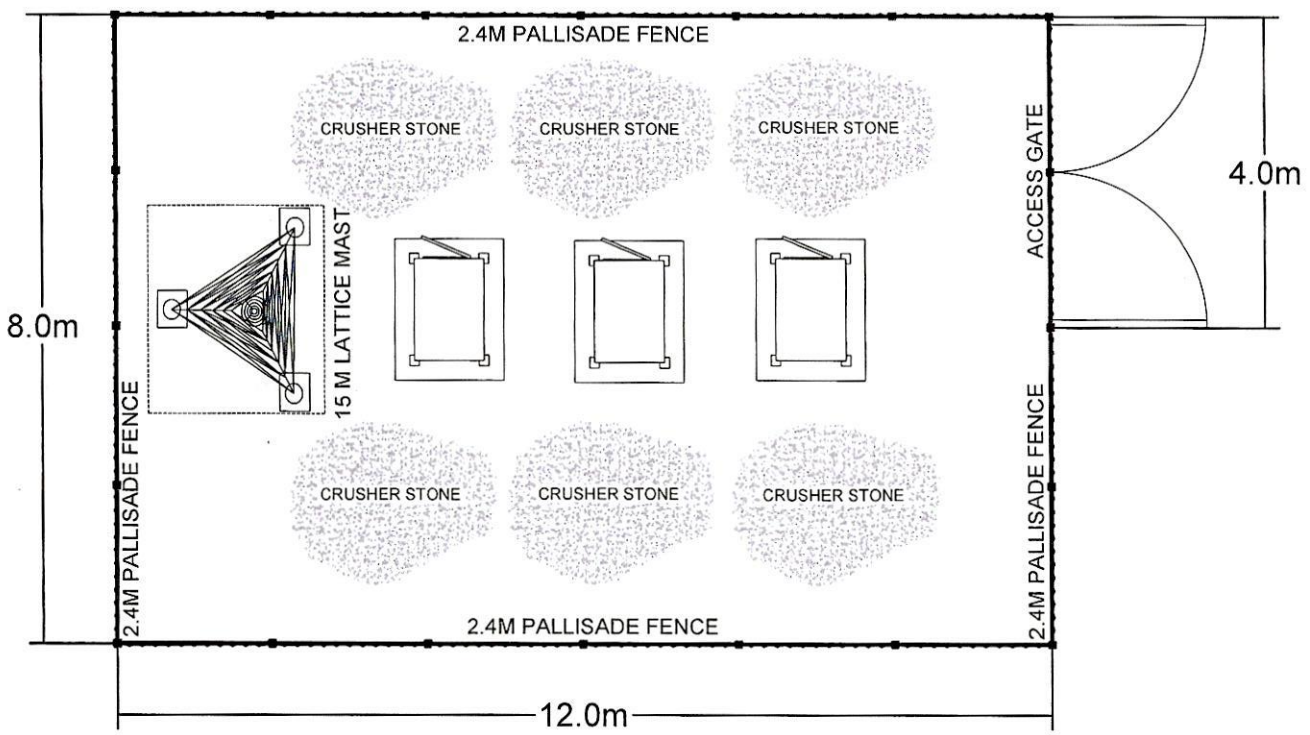
DRAWING NUMBER: -
SHEET: 2 OF 4

DRAWING TITLE: SITE PLAN

DRAWN: R.CHIPPS
SCALE: 1:20 000

DATE: 2019-09-09
REVISION: 0

Top View



vodacom

VC TOWER SITE ID:
BS 158332

VC TOWER SITE NAME:
HERMANUS RESERVOIR

PROPERTY DESCRIPTION:
REMAINDER ERF 243, HERMANUS

ADDRESS:
MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS

CO-ORDINATES:
Lat: -34.416211°
Long: 19.224964°

ELEVATION:
65m

VPP
TOWN AND REGIONAL PLANNING CONSULTANTS
Tel: (021) 552 5255
Fax: 086 537 9187
Unit H, 3rd Floor
Matrix Building, Bridgeway,
Century City, Cape Town
Po Box 152,
Century City,
7446

PROJECT:
PROPOSED NEW VODACOM 15m LATTICE MAST WITH 12m X 8m BASE STATION

APPROVED MAST:
15m LATTICE MAST

NOTES:
A) NEW 15m LATTICE MAST
B) CUSTOM BASE STATION
C) 2.4m PALISADE FENCE
D) SITE SIZE: SITE SHAPED TO FENCE WITH FENCE
E) BASE STATION: CHIP STONE SURFACE

DATE	DESCRIPTION	REVISION
09-09-2019	1st Issue	0

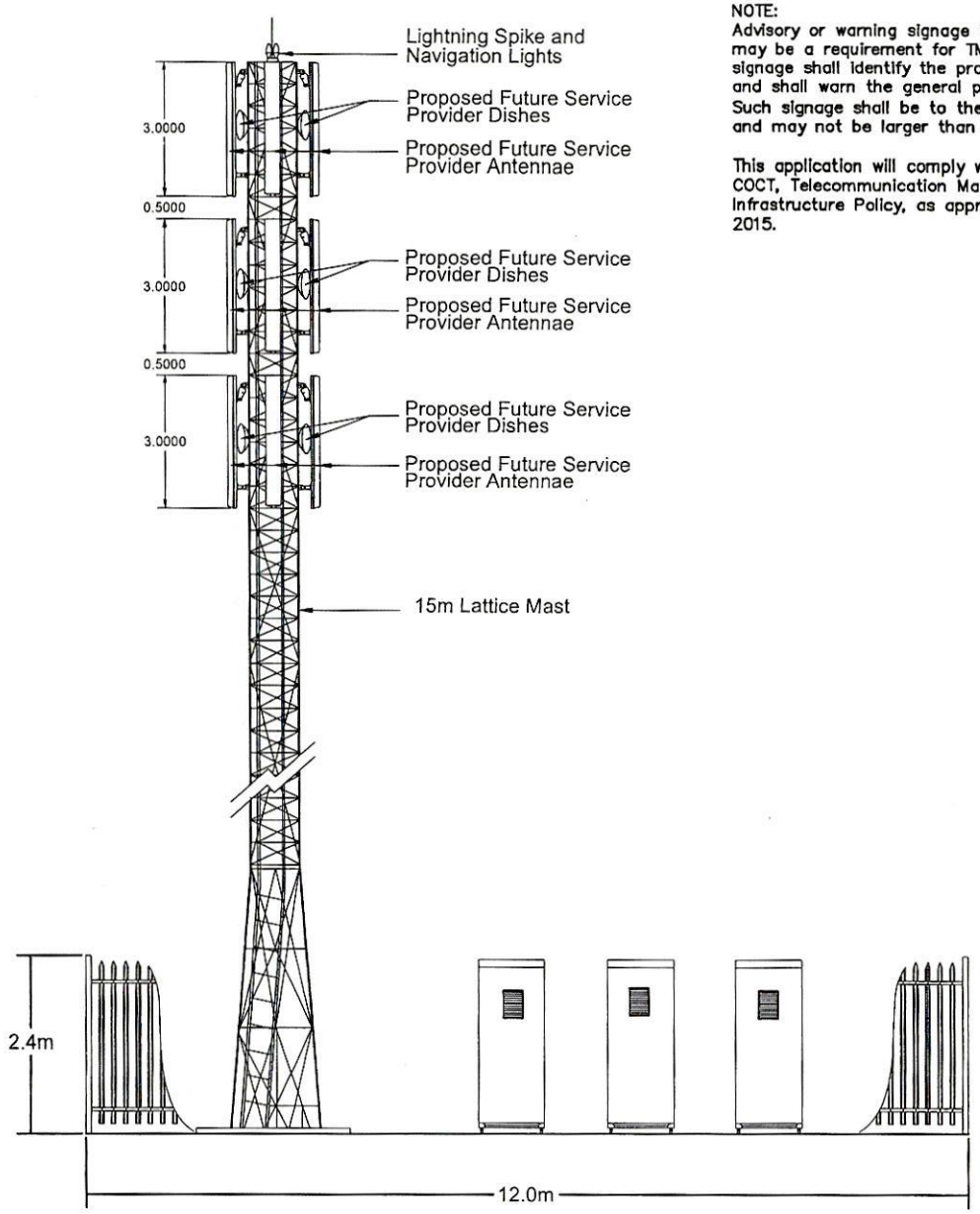
DRAWING NUMBER: -
SHEET: 3 OF 4

DRAWING TITLE: TOP VIEW

DRAWN: R.CHIPPS
SCALE: NTS

DATE: 2019-09-09
REVISION: 0

Elevation



NOTE:
Advisory or warning signage including a pictogram may be a requirement for TMI. Such signage shall identify the property and the TMI and shall warn the general public as required. Such signage shall be to the Citys' satisfaction and may not be larger than 400mm x 500mm.

This application will comply with the COCT, Telecommunication Mast Infrastructure Policy, as approved in April 2015.

vodacom

VC TOWER SITE ID:
BS 158332

VC TOWER SITE NAME:
HERMANUS RESERVOIR

PROPERTY DESCRIPTION:
REMAINDER ERF 243, HERMANUS

ADDRESS:
MOUNTAIN DRIVE, NORTHCLIFF, HERMANUS

CO-ORDINATES:
Lat: -34.416211°
Long: 19.224964°

ELEVATION:
65m

WPP
TOWN AND REGIONAL PLANNING CONSULTANTS
Tel: (021) 552 5255
Fax: 086 537 9187
Unit H, 3rd Floor
Matrix Building, Bridgeway,
Century City, Cape Town
Po Box 152,
Century City,
7446

PROJECT:
PROPOSED NEW VODACOM 15m LATTICE MAST WITH 12m X 8m BASE STATION

APPROVED MAST:
15m LATTICE MAST

NOTES:
A) NEW 15m LATTICE MAST
B) CUSTOM BASE STATION
C) 2.4m PALISADE FENCE
D) SITE SIZE: SITE SHAPED TO FENCE WITH FENCE
E) BASE STATION: CHIP STONE SURFACE

DATE	DESCRIPTION	REVISION
09-09-2019	1st Issue	0

DRAWING NUMBER: -
SHEET: 4 OF 4

DRAWING TITLE: ELEVATION

DRAWN: R.CHIPPS
SCALE: NTS

DATE: 2019-09-09
REVISION: 0