

## 4.2

**ERF 6256, 76 SEVENTH STREET, HERMANUS (VOËLKLIP): OVERSTRAND MUNICIPAL AREA: APPLICATION FOR CONSENT USE AND DEPARTURE: MESSRS WARREN PETTERSON PLANNING TOWN AND REGIONAL PLANNING CONSULTANTS ON BEHALF OF SEAGULLS VIEW**

**6256 HVK (3678)**

**SW van der Merwe  
16 September 2019**

**(028) 313 8900**

**Hermanus Administration**

### **1. EXECUTIVE SUMMARY**

An application has been received on 11 May 2017 from Messrs Warren Petterson Planning Town and Regional Planning Consultants (WPP) on behalf of Seagulls View applicable to Erf 6256, Hermanus for the following:

- ❖ consent use (transmission tower) in terms of Section 16(2)(o) of the Overstrand Municipality By-Law on Municipal Land Use Planning, 2015 (By-Law) in order to accommodate a cellular communication base station on the above property, and
- ❖ departure in terms of Section 16(2)(b) of the above By-Law to exceed the applicable 8,5m height restriction in order to accommodate the 15m high monopole mast of the cellular communications base station.

A Locality Plan of the property concerned is attached as Annexure A. Motivation Report from the applicant in support of the proposal is attached as Annexure B and the Site Development Plan is attached as Annexure C.

### **2. DECISION AUTHORITY**

Municipal Planning Tribunal

### **3. BACKGROUND / SITE HISTORY**

The erf is zoned Business Zone 3: Local Business, measures 1004m<sup>2</sup> and is located along Seventh Street, Voëlklip.

The property is developed with a building that consists of a ground floor shop and first floor flats held in terms of a sectional title scheme.

### **4. SUMMARY OF APPLICANT'S MOTIVATION**

Only the key points of the Motivation Report are summarised as follows (the detailed report is attached as Annexure B):

- ❖ In modern day society the dependency on communicative technology becomes increasingly higher due to society's utilization of more mobile devices and more than one (1) device per household which mainly rely on internet connectivity.
- ❖ Due to factors including densification, urbanization, and influx of seasonal guests over festive seasons and holidays in a tourist attractive place like Fernkloof dropped calls and poor network coverage (related to both voice and data) are experienced.

- ❖ This application is motivated by several customer complaints from residents, businesses and commuters received by MTN, Vodacom and Cell C in and around the area of Hermanus.
- ❖ MTN, Vodacom and Cell C 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.
- ❖ The coverage in some areas have very limited LTE, LTE Advanced, and fixed LTE coverage and the proposed free standing base station will increase the amount of coverage in this area.
- ❖ The increase in network strength 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 base station will be erected at a cost of approximately R1,5m. These high costs are a very good reason to rather co-locate on existing free standing base stations or to settle for a rooftop base station in lieu of building a new free standing base station.
- ❖ The mix of land uses range from low density residential to open space.
- ❖ 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 proposal will have no impact on external engineering services, on transport or traffic related considerations, or on the biophysical environment.
- ❖ Every possible measure has been taken to make the design as aesthetically pleasing as possible.
- ❖ The proposal will have no detrimental impact on the surrounding properties and will provide an essential service to the surrounding community.
- ❖ The closest telecommunication base station is approximately 2,5km away from the proposed base station.
- ❖ 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 landowner.
- ❖ The impact on the site will be minimal as the proposal is at the minimal height with a 15m a green monopole and equipment that will be painted green to match the backdrop to further mitigate the visual impact and ultimately blend in with the surroundings.
- ❖ Currently scientific research is yet to produce conclusive evidence suggesting adverse health effects associated with, working with or living close to cellular technology.
- ❖ Communication companies deliver an important service to the wider public and in terms of their licence with ICASA they have to meet certain standards to retain their licence of which one is to supply adequate network coverage to their customers.

## 5. ADMINISTRATIVE COMPLIANCE

Methods of advertising		Date published	Closing date for comments
Local newspaper	<b>Yes</b>	16/11/2017	19/01/2018
Notices	<b>Yes</b>	16/11/2017	19/01/2018

Ward councillor	<b>Yes</b>	16/11/2017	19/01/2018
Total objections	<b>TWO (2)</b>		
Total letters of support	<b>TWO (2)</b>		
Was public participation undertaken in accordance with Section 46 - 50 of the By-Law on Municipal Land Use Planning?			<b>Yes</b>
Was the application processed correctly (if no, elaborate below):			<b>Yes</b>
Is the proposal consistent with the principles referred to in Chapter 2 of SPLUMA and Chapter VI of LUPA? (can be elaborated further below)			<b>Yes</b>

#### 6. SUMMARY OF COMMENTS FROM ORGANS OF STATE AND/OR MUNICIPAL DEPARTMENTS

Name	Date received	Summary of comments	Recommendation
Building Control	21/11/2017	Parking layout not as per approval. Building not as per approved building plans.	Negative
Overstrand Heritage & Aesthetics Committee	18/01/2018	Reluctantly supported.	Positive
Fire Services	23/01/2018	No objection. Application has no impact on requirements of National Fire Protection Regulations SANS10400T:2011	Positive
Engineering Services	24/01/2018	Annexure F.	Positive
Department of Transport and Public Works	6/02/2018	Attached as Annexure G.	Negative
Telkom	15/02/2018	Attached as Annexure H.	Positive
Environmental Affairs & Development Planning : Directorate Development Management (Region 2)	19/03/2018	Attached as Annexure I.	Positive

#### 7. SUMMARY OF COMMENTS RECEIVED DURING PUBLIC PARTICIPATION

Two (2) letters of objection were received - LH Roux (Erf 5499) and C Springett (Erf 2175) and two (2) letters in support of the application were received from the owners of Erven 2293 and 2001, which letters are attached as Annexure D. Letters of comment were also received from the Department of Transport and Public Works

and Overstrand Building Department. The applicant's response is attached as Annexure E.

The main grounds of objection are the following:

- (i) position of the proposed transmission tower;
- (ii) health risk: objector refers to studies and research that indicates that base stations do affect health risk;
- (iii) visual impact: the objector considers a 15m high transmission tower to be unsightly;
- (iv) weak motivation for the proposed transmission tower since need is purely justified as several customer complaints on dropped calls and poor network coverage. No indication is given about the amount of complaints whilst the objector living 50m away hardly experience dropped calls, and
- (v) impact on property value.

**Department Transport and Public Works: Road Network Management, Western Cape Government)**

Objects to the application in terms of the Land Use Planning Act, No 3 of 2014 due to the following unresolved matters, namely:

- (i) the permanent closure of the access off Seventh Street, and
- (ii) the lease of the portion of road reserve within which the building is built, to the property owner.

**Building Control**

*"Parking layout is not as per approval. Building is not as per approved plans."*

**8. SUMMARY OF APPLICANT'S REPLY TO COMMENTS**

The applicant's comment is attached as Annexure E and is summarised as follows:

**(i) Position of mast**

These nominal points are selected because of an increase of customer complaints in an area when there is an increase in the number of users in an area. The coverage provided by the existing network decreases leading to dropped calls and lack of data services. Locations for telecommunication infrastructure are primarily chosen where a need exists for coverage. Should a need not exist a company would not invest capital to build a base station in the area. The fact that there are only a few base stations in the surrounding area supports the statement that there is a clear need for coverage in the area.

To relocate the mast to the outskirts of Voëlklip or the mountainous areas will not provide sufficient LTE and 4G coverage for Voëlklip, the target area, which include local businesses, residents and a large influx of holidaymakers during festive and holiday seasons. Due to potential growth of the population that is caused by current and future development, the relocation of the base station as suggested, then the

efficiency of the mast declines. The mast will fill a larger gap in the network at its proposed position.

**(ii) Health**

There are frequent reports in the media and electronics media regarding complaints of residence nearby base stations that resulted in the company facing many problems and protest against the installation of base stations.

The increase of the number of base station installations have raised anxiety at the general public regarding health effects as it is generally perceived as hazardous because of radiation produced. The misconceptions about radiation and electromagnetic waves have led to opposition to these facilities. Current research has reached a point whereby scientists are satisfied that base stations do not pose a health threat, but research on handsets are ongoing since it is deemed that placing a handset to your head could pose a greater health threat.

In a statement the World Health Organisation stated that the effects from base stations and wireless networks are so low that the temperature increases are insignificant to affect human and animal health.

Cellular companies monitor the health impact of their base stations carefully and spend large sums of money on research.

Emissions from existing and proposed base stations comply with the Department of Health's guidelines on EMF exposures that are based on guidelines endorsed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the emission of existing and proposed base stations are far below international standards.

A test was done by the City's Department: City Health – Specialised Services at a similar installation in Camps Bay that proved that the emissions are a mere fraction of a percentage point of the ICNIRP guideline.

All health aspects were taken into consideration and the proposal will not violate any individual's right to an environment that is not harmful to its health or general wellbeing.

**(iii) Visual impact**

The visual impact is argued to be acceptable and every possible measure has been implemented to mitigate the visual impact of the base station. The height of the mast was proposed at 15m and the mast may be lowered to 10m which is lower than the normal 25m. 15m is the lowest possible height at this point that the antennae can still provide sufficient coverage to the complaint area.

A monopole mast design was chosen for the base station as it is more acceptable within an urban environment. The complaint area is characterized by low rising buildings and there are no tall structures that could support the infrastructure in order to serve the area effectively.

Surrounding urban infrastructure such as street lights will assist in visually blending the mast in with the environment. The applicant is of the opinion that a single monopole mast at the proposed location is the most desirable option. The equipment and other infrastructure can be painted a suitable colour to further mitigate the base station and ultimately blend in with its surroundings. The visual impact of the base station is argued to be acceptable since every possible mitigating measure has been implemented.

**(iv) Applicant's Motivation**

No comment provided.

**(v) Impact on property value**

No comment provided.

**Department of Transport and Public Works: Road Network Management, Western Cape Government**

The applicant states that compliance with the concerns of the department should be addressed through enforcement of the conditions of approval.

**Building Control**

The applicant did not comment.

**9. MUNICIPAL ASSESSMENT OF COMMENTS**

**(i) Position of the mast**

The proposed transmission tower will be situated on a commercial property to the rear of the existing 10,5m high building. The base of the installation will therefore be screened from views from Seventh Street, whilst an acceptable separation from the closest residential properties will be achieved. The proposal is therefore not considered to unacceptably detract from the visual amenity of the locality to warrant refusal of planning permission.

The applicant did not submit proof of complaints regarding dropped calls as a result of alleged insufficient network coverage in the area, thus one cannot just assume that the increase in network coverage is justified. The applicant further did not satisfactorily demonstrate that alternative locations in the Voëlklip area would be insufficient for coverage of the area. In addition, the applicant did not address the possibility of higher towers closer to the rural area that would sufficiently cover most of the Voëlklip area with substantive proof.

**(ii) Health**

A copy of a letter from the Department of Health, Directorate: Radiation Control (attached as Annexure J) stating at present there is no conclusive scientific evidence that points to any health hazard associated with the very low levels of exposure that the general public would typically experience in the vicinity of a base station and advise that the ICNIRP exposure guidelines be adhered to.

**(iii) Visual Impact**

The objector's comment is noted and agreed with. The proposed transmission tower will be screened by the existing business building, being two storeys in height from views from Seventh Street. The proposed installation will be a 15m high monopole structure and is not considered to have an unacceptable visual impact, given the proposed location on business premises that also provides a reasonable buffer from adjacent residential properties.

**Applicant's Motivation**

Objector opposes the application on the basis that the motivation for the tower is fairly weak, containing many inputs that have no sound basis. For instance identified needs states "*several customer complaints*" on "*dropped calls and poor network coverage*". The question is how many actually complained. Objector lives approximately 50m from the proposed tower, use a cell phone most days and hardly ever experience dropped calls.

The objector's comment is noted and agreed with. The applicant apart from network coverage maps did not provide any substantive evidence to justify need, nor was produced any material evidence with reference to customer complaints, dropped calls, poor coverage, etc.

**(v) Impact on property value**

The objection based on property value is considered speculative and not substantiated by concrete proof.

**Department of Transport**

The objection is noted. The objection relates to a previous application that was conditionally supported by the department. The landowner must however be forced to comply with the relevant conditions relating to the previous application in terms of the provisions of Section 83.(1) of the By-Law, but as a separate matter. In terms of the provisions of Section 67.(1) of the By-Law the Municipality may not impose conditions that does not arise from the approval of such application.

Although the above-mentioned conditions have not yet been met by the landowner, the applicant's response on this point of the objection cannot be supported since it has no relevance to the current application.

**Building Control**

The comment is noted and agreed with. Having had regard to the comment from Building Control, the application is evaluated on the basis of the "as built" development. Taking the current illegal structure on the property and the proposed position of the base station into consideration, it is the opinion that the problems regarding parking and manoeuvring of vehicles on the property will only worsen should the application be successful. In the latter regard it should also be noted that the Site Development Plan submitted by the applicant does not address the impact of the proposed development on the flow and manoeuvring of vehicles on the property once the base station has been constructed.

## 10. MUNICIPAL PLANNING EVALUATION (REFER TO RELEVANT CONSIDERATIONS GUIDELINE)

### 10.1 Background

N/A

### 10.2 (In)consistency with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

The application is in line with the planning objectives applicable to this application.

The objectives relating to:

#### Spatial Justice

The application will not further perpetuate spatial injustices since excellent communication services will be provided to the inhabitants of the area.

#### Spatial sustainability

Enhanced data signal will promote all three aspects of sustainability (social, economic and environmental aspects). Economically businesses will benefit due to enhanced connectivity, social facet via improved access to emergency services and environmentally the installation provides for co-location, limiting the amount of base stations required.

#### Efficiency

The installation is located to ensure optimal placement promoting effectiveness.

#### Spatial resilience

The application will ensure that the existing resource, land is used to its maximum in an affordable manner and it is in line with the Overstrand Municipality's forward planning documents.

#### Good administration

The application followed the required planning procedures and a good public participation process has been followed.

### 10.3 (In)consistency with the principles referred to in Chapter VI of the Land Use Planning Act, 2014 (Act 3 of 2014)

Same as Point 10.2 above.

### 10.4 (In)consistency with the IDP/Various levels of SDF's/Applicable Policies

Inconsistent with the Zoning Scheme, but consistent with the Spatial Development Framework.

### 10.5 (In)consistency with guidelines prepared by the Provincial Minister

N/A

**10.6 Impact on Municipal engineering services**

The existing services are available and have been viewed positively by the Engineering Department.

**10.7 Outcomes of investigations/applications i.t.o other legislation**

N/A

**10.8 Existing and proposed zoning comparisons and considerations**

The Overstrand Zoning Scheme Regulations provide for telecommunication installations as a consent use on the subject property, subject to compliance with the applicable development parameters. The proposed transmission tower will exceed the prescribed 8,5m height restriction with 6,5m.

**10.9 Additional Planning Motivation For Removal of Restrictive Condition**

N/A

**11. THE DESIRABILITY OF THE PROPOSAL**

The subject property is situated within an area that predominantly has a character of single residential uses with a fixed character with regard to the height of structures, being an average of  $\pm 8\text{m}$ . The application property comprises a two storey building with a ground floor shop and first floor apartments measuring approximately 10m to the top of the roof. The opinion is thus held that the proposed transmission tower would not unacceptably detract from the visual amenity of the locality being a monopole mast that is screened from views from Seventh Street by the existing building, whilst an acceptable buffer from the closest residential properties will be maintained.

The applicant's motivation for the proposed installation states that there are several customer complaints from residents, businesses and commuters regarding dropped calls and lack of coverage. The applicant's motivation did not provide substantiated evidence of numbers and the localities of the complaints that have been submitted to justify the allegations, thus failing to demonstrate the need for the proposed transmission tower.

The applicant's Site Development Plan and motivation failed to address the impact of the siting of the proposed transmission tower on the approved parking layout, the flow and manoeuvring of vehicles on an existing business premises. The existing development on the property does not conform to the approved building plans with reference to the required amount of on-site parking bays and unauthorised additions, which will be further exacerbated should the application be supported. The said non-compliance with the approved building plans is dealt with in a separate process.

Given the aforementioned the opinion is held that the proposed location of the transmission tower will worsen the existing situation should the application be successful.

**12. RECOMMENDATION**

1. that the objections be noted;
2. that the application in terms of Section 16.(2)(o) of the Overstrand Municipality By-Law on Municipal Land Use Planning, 2015 (By-Law) for a consent use to accommodate a 15m high transmission tower and associated equipment compound on Erf 6526, Hermanus, as well as the departure in terms of Section 16.(2)(b) of the By-Law to encroach the 8,5m height restriction to 15m to accommodate the transmission tower on the property, **not be approved** in terms of the provisions of Section 61 of the By-Law; and
3. that the applicant and objectors be notified of their right of appeal in terms of Section 78 of the Overstrand Municipality By-Law on Municipal Land Use Planning, 2015 with regard to the above decision.

**13. REASONS FOR RECOMMENDATION**

- ❖ The applicant failed to provide substantive evidence demonstrating the need of the proposed transmission tower.
- ❖ The applicant points out that there are several customer complaints from residents, businesses and commuters but did not submit proof of numbers and the localities of the complainants to justify the allegations.
- ❖ The applicant failed to consider the impact of the proposal on the existing business premises in terms of the approved parking layout, traffic flow and manoeuvring.

**14. Annexures**

Annexure A:	Locality Plan
Annexure B:	Motivation Report
Annexure C:	Site Development Plan
Annexure D:	Objections
Annexure E:	Comment on objections
Annexure F:	Services Report
Annexure G:	Comment: Department of Transport and Public Works
Annexure H:	Comment: Telkom
Annexure I:	Comment: Department of Environmental Affairs and Development Planning
Annexure J:	Department of Health, Directorate: Radiation Control

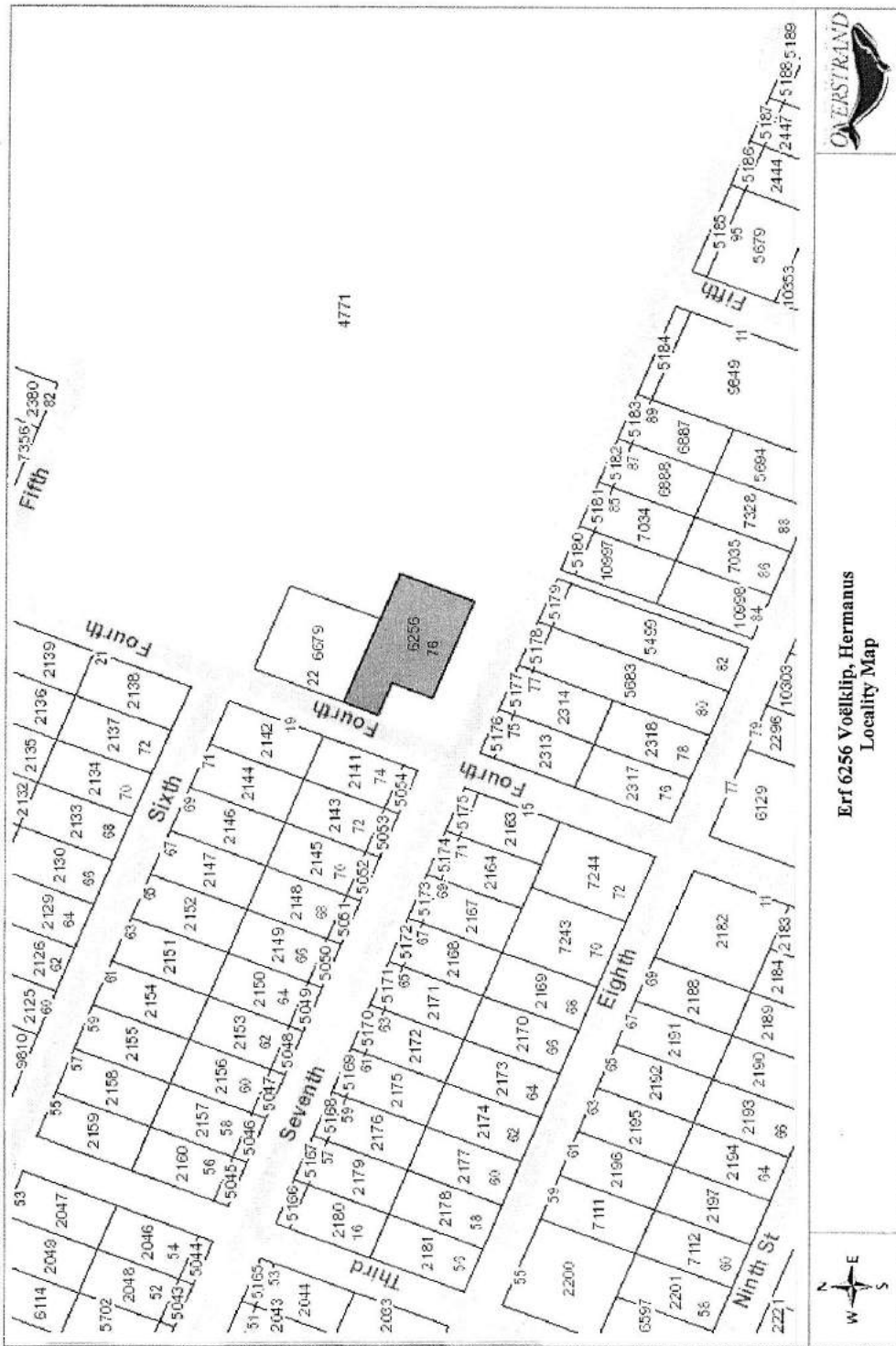
**SIGNATURES****REGISTERED PLANNER:**

Name : **S VAN DER MERWE**

SACPLAN Reg No: **A/1850/2014**

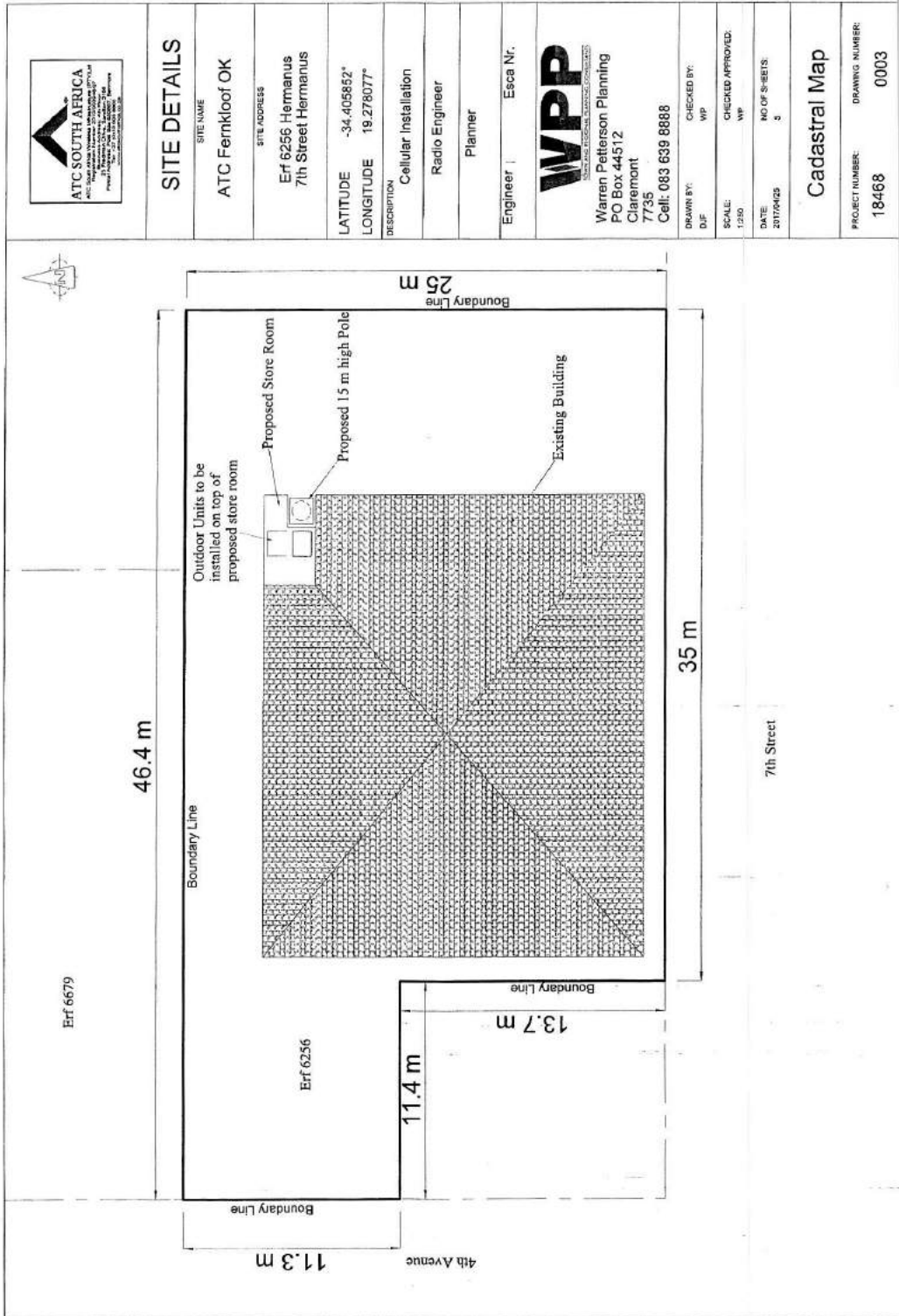
Signature : \_\_\_\_\_

Date: \_\_\_\_\_



Erf 6256 Voelklip, Hermanus  
Locality Map





**SITE DETAILS**

SITE NAME

ATC Fernkloof OK

SITE ADDRESS

Erf 6256 Hermanus  
7th Street Hermanus

LATITUDE -34.405852°

LONGITUDE 19.278077°

DESCRIPTION

Cellular Installation  
Radio Engineer

Planner

Engineer | Esca Nr.



Warren Petterson Planning  
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7735  
Cell: 083 639 8888

DRAWN BY: WPP

CHECKED BY: WPP

SCALE: 1:250

CHECKED APPROVED: WPP

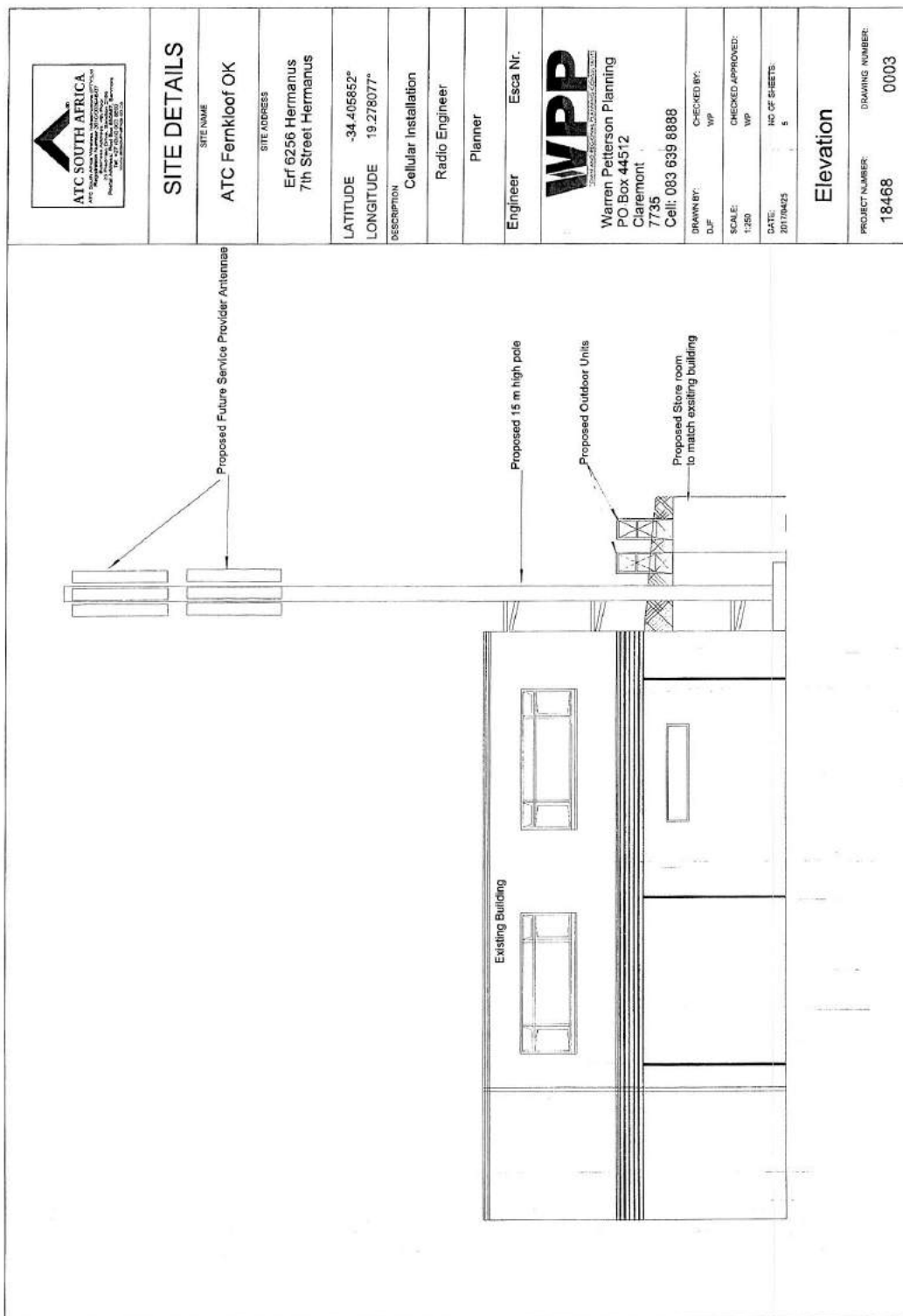
DATE: 2017/04/25

NO OF SHEETS: 5

**Cadastral Map**

PROJECT NUMBER: 18468

DRAWING NUMBER: 0003



**SITE DETAILS**

SITE NAME

ATC Fernkloof OK

SITE ADDRESS

Erf 6256 Hermanus  
7th Street Hermanus

LATITUDE -34.405852°

LONGITUDE 19.278077°

DESCRIPTION

Cellular Installation

Radio Engineer

Planner

Engineer Esca Nr.



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CHECKED BY: W.P.

SCALE: 1:250

CHECKED APPROVED: W.P.

DATE: 2017/04/25

NO. OF SHEETS: 5

**Elevation**

PROJECT NUMBER: 18468

DRAWING NUMBER: 0003



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ANNEXURE B 1/20

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## SECTION A: BACKGROUND

### A.1. THE APPLICATION

Application is hereby made for the following:

- ✓ **Consent Use in terms of the zoning scheme** in terms of section 16(2)(o) of the Overstrand Municipality By-law on Municipal Land Use Planning, 2015 for the purpose of erecting a 15m FSBTS.
- ✓ **Permanent Departures** regulation in terms of section 16(2)(b) of the Overstrand Municipality By-law on Municipal Land Use Planning, 2015 for the purpose of the relaxation of the height restriction from 8.5m to 15.0m in order to allow for the above mentioned consent.

### A.2. DETAILS OF THE DEVELOPMENT AREA

Table 3 - Details of the Development Area

<b>TITLE DEED DESCRIPTION</b>	ERF 6256, HERMANUS, OVERSTRAND MUNICIPALITY, CALEDON DIVISION, WESTERN CAPE PROVINCE]
<b>TITLE DEED NUMBER</b>	T60522/1984
<b>PROPERTY SIZE (m<sup>2</sup>)</b>	1004 m <sup>2</sup>
<b>CURRENT ZONING (per OMZS, 2013)</b>	BUSINESS ZONE 3: LOCAL BUSINESS (B3)
<b>OWNER OF PROPERTY</b>	Sectional Title Scheme, Seagulls View, SS209/2014

## 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 Municipality of Overstrand is located directly adjacent 7th Street/ R43.

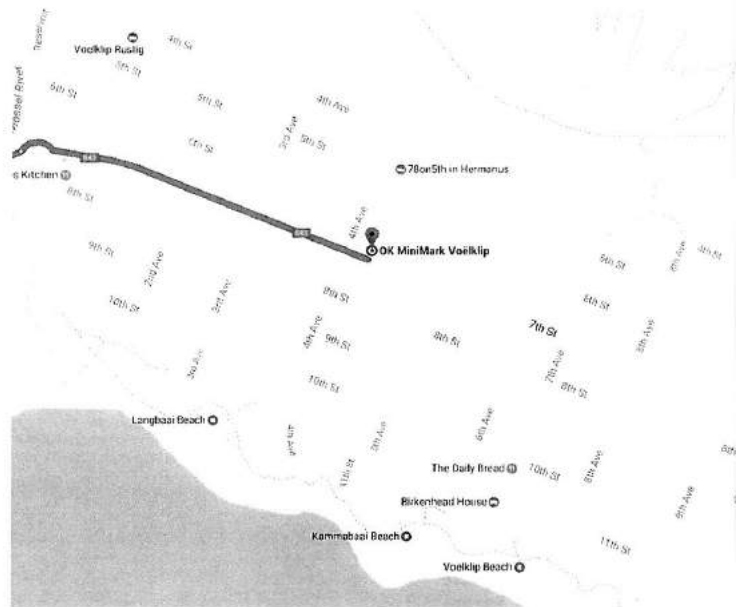


Figure 1 - Location of the property adjacent to 7th Street/ R43

### B.2. CURRENT LAND USE AND ZONING

Table 4 - Current land use and zoning

<b>CURRENT LAND USE</b>	One (1) building utilised as a shop
<b>ZONING</b>	BUSINESS ZONE 3: LOCAL BUSINESS (B3)

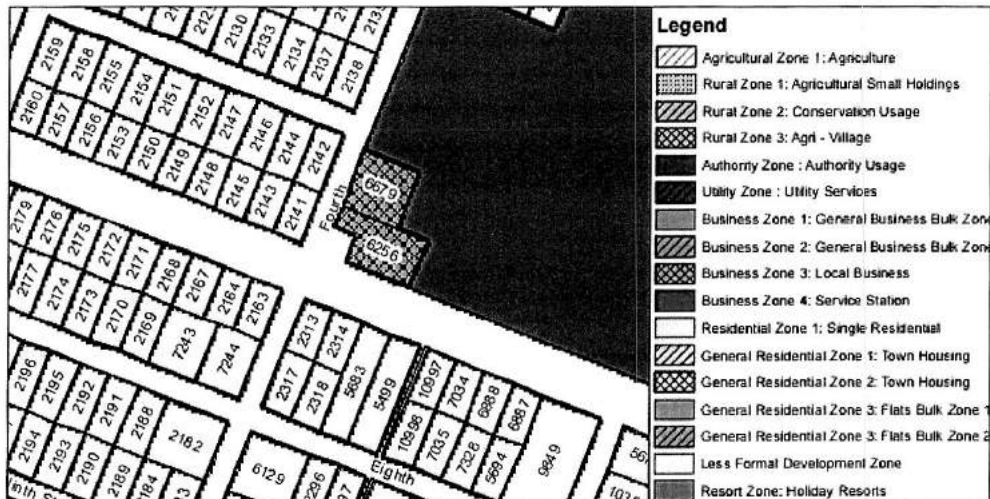


Figure 2 - OMZS (2013) - Extract of Hermanus Zoning

The property in question with the zoning of 'Business Zone 3: Local Business' has the following primary rights and rights by means of a consent use application:

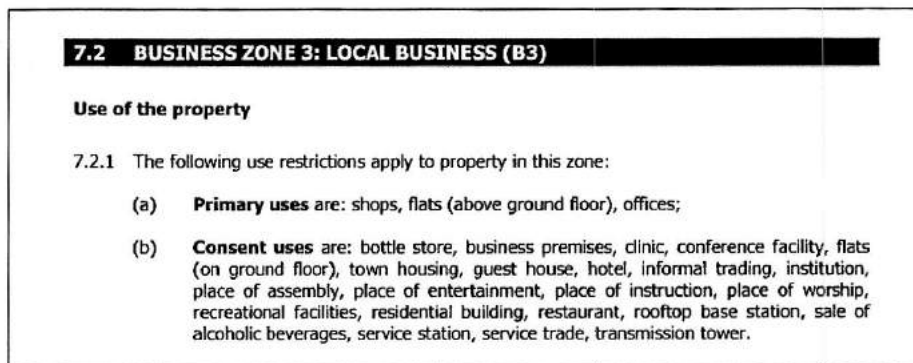


Figure 3 - Business Zone 3: Local Business (OMCS, 2013)

### B.3. SURROUNDING AREA

The 7th Street/ R43 directly adjacent to the south and the Main road to west serve as the main distributors. Suburbs near the property are Voëlklip (eastern direction), Fernkloof Estate (western direction) and Hermanus (further west).

The surrounding land uses in the area are predominantly utilised for residential, local business and open space purposes. On the subject property, to the west is utilised for business purposes.

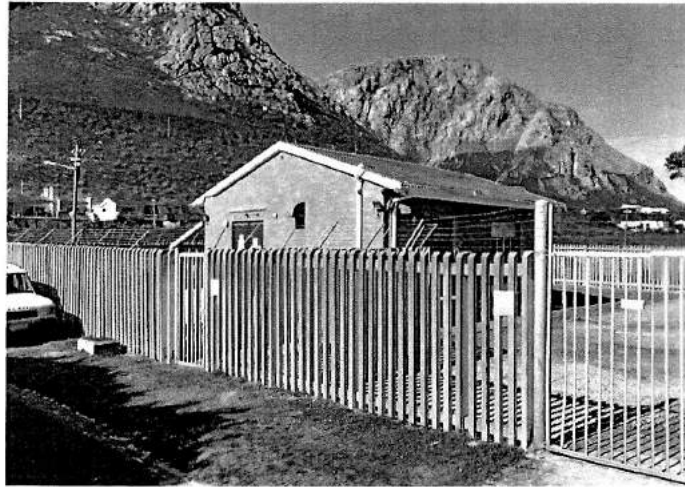


Figure 4— Land use to the north



Figure 5 – Friendly SevenEleven (OK MiniMark) on subject property

## SECTION C: DEVELOPMENT PROPOSAL

### C.1. APPLICATION SPECIFICATIONS

The client (ATC South Africa) wishes to apply for consent and a permanent departure (relaxation of height restriction) in order to erect a FSTBS.

#### C.1.1 Development Concept

The application comprises the following proposed development parameters:

- ✓ A 15m Monopole mast attached to the existing building,
- ✓ 2 x 3-panel antennae attached to the mast,
- ✓ Microwave dishes attached to the mast,
- ✓ 2 x Equipment containers, and
- ✓ Extension of existing storeroom in order to accommodate proposed outdoor units (refer to Sheet no. 5 of attached drawings).

The total ground coverage of the FSTBS 8m<sup>2</sup>.

#### C.1.2 Height Restriction Relaxation

In terms of the property's zoning of 'Business Zone 3: Local Business', a maximum height above base level of 8.5m to top of roof (please read together with the OMIZS, 2013:68). The FSBTS is proposed at a height of 15m.

(c)	<b>Height</b>
(i)	The maximum height of a building, measured from the base level to the top of the roof is 8,5 m;
(ii)	The maximum number of storeys is 2; and
(iii)	Earth banks and retaining structures shall comply with 16.6.

Figure 6 - Height Restrictions (OMIZS, 2013:68)

A permanent departure application is hereby made in terms of section 16(2)(b) of the Overstrand Municipality By-law on Municipal Land Use Planning, 2015 for the relaxation of the height restriction of erf 6256, Voëlklip, Hermanus from 8.5m to 15m to allow for the erection of a FSBTS.

The FSBTS is exceeding the current maximum height above base level with 6.5m. However, this will not obstruct the existing utility services, landscaping etc. and will be mitigated as a monopole (galvanised grey to better blend with sky).

## C.2. ACCESS

Access to the proposed FSBTS will be obtained from the entrance to the property found on the southern side of the property, situated adjacent to 7th Street/ R43, Voëlklip, Hermanus.

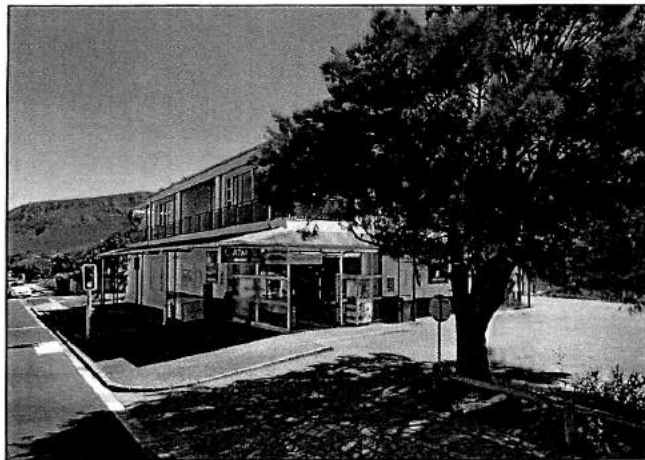


Figure 7 - Access to the site

## C.3. SECURITY

The proposed equipment will be secure inside the equipment units proposed on top of the extended existing storeroom that will be kept locked at all times. The antennae will be secure given their position at the top of the mast.

These measures rule out the possibility of any public access to the equipment and serve to protect the equipment from being vandalized. Similar security measures are implemented at similar installations and have proved to be very effective.

## C.4. POWER

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

### C.5. 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 (Government Notices No. 983, 984 and 985, promulgated 06 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 metres 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:

*(f) 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.*
- iii) Areas zoned for use as public open space or equivalent zoning within urban areas.*

The proposed development does not constitute a listed activity as the site has been previously used for this purpose. An Environmental Authorization (EA) is therefore not required. (See Annexure F).

## 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

	<b>HOW DOES THIS APPLICATION COMPLY WITH THIS PRINCIPLE?</b>
<b><i>Principle 7a: Spatial Justice</i></b>	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.
<b><i>Principle 7b: Spatial Sustainability</i></b>	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.
<b><i>Principle 7c: Spatial Efficiency</i></b>	Spatial efficiency relates to the concept of minimum distance to be travelled between a specific location and intended destination. FSTBS and RTBS is placed in an area (optimally situated between planned and existing stations) with a reason. This reason is to incorporate various factors (e.g. amount of users, quality of service etc.) when considering the placement in order to promote effectiveness and is not merely placed by random.
<b><i>Principle 7d: Spatial Resilience</i></b>	Spatial resilience can be defined as the ability of a region to withstand possible arising shocks (e.g. economic crisis, social disruptions etc.). However, FSTBS and RTBS will be a service that will always be necessary. In a state of crisis, communication plays an integral role in a societal environment.
<b><i>Principle 7e: Good administration</i></b>	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.2. INTEGRATED DEVELOPMENT PLAN, 2014

The IDP (2014) refers to the enhancement of TI in order to provide the Overstrand Municipal area with enhanced communicative technologies especially with regard to fibre-optic communication connectivity required for a pro-poor Tourism as stipulated on page 90 (IDP, 2014.)

The International Centre for Responsible Tourism advocates "Pro-poor Tourism" – an approach towards tourism which ensures that "local poor people are able to secure economic benefits from tourism in a fair and sustainable manner Robson, S and Higon, S, 2004). Pro-poor tourism can benefit local poor people in three ways: It can bring economic gain through employment and micro-enterprise development; infrastructure such as roads, water and electricity supply, telecommunications and waste management can be improved; and poor people can be engaged in decision-making.

Figure 8 - Extract: Page 90 of the OMIDP, 2014

Furthermore, improved TI will contribute to the better coordination of Disaster Management as it will allow emergency service to be contacted and connected to any area in distress when needed – as stipulated on page 230 of the OMIDP, 2014.

### 12.2.3 DISASTER MANAGEMENT COORDINATOR:

- a. Establish and maintain required telecommunications links
- b. Identify available resources for disaster management purposes,
- c. Establish and maintain a resources database.
- d. Ensure effective media liaison.
- e. Coordinate all communication to and from incident.
- f. Compilation of pro-active departmental disaster management programmes to support risk reduction or elimination.
- g. Rendering support and advice throughout all phases of disaster management planning activities,
- h. Disaster Management Plan forms an integral part of the IDP,

Figure 9 - Extract: Page 230 of the OMIDP, 2014

This application is in line with this vision of the Overstrand Municipality as the TI installed on the said property will provide these sought-after services (e.g. Pro-poor Tourism and Disaster Management).





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### D.3. LOCAL SPATIAL DEVELOPMENT PRINCIPLES, 2006 (Greater Hermanus)

Table 6 - Local Spatial Development Principles, 2006

Description	Level of compliance
<b>Principle i. – Promote:</b>	
<i>Conservation of sensitive natural resources, including the mountain backdrop and associated Fynbos reserves, a varied coastal strip and associated marine reserves and a series of river and estuarine systems;</i>	This application will contribute to the conservation of the surrounding environment as emergency services such as the fire department can be contacted in case of a fire. This will in return provide for less drop-calls in emergency situations.
<i>Conservation of cultural heritage resources, including the character of the historical fishing/holiday settlement areas of Hermanus and Onrust, the number of buildings of historical, architectural and social value, as well as the scenic beauty of the rural landscape of Hemel-en-Aarde Valley;</i>	This application will contribute to the conservation of cultural heritage resources. Due to the historical background of tourism in this area, a FSTBS will enhance the experience of tourists. Tourists will have access to enhanced accessibility to voice- and data coverage for social (emergency services such as police and ambulances) and cultural activities (enhanced accessibility to informative services).
<i>The equitable distribution of community facilities throughout the Greater Hermanus area;</i>	This installation will provide accessibility to enhanced technology (e.g. LTE, 4G, Optic Fibre etc.) which will be accessible to inhabitants of Voëlklip and Fernkloof Estate. Especially during festive seasons and holidays with the increase in users, voice- and data are not equally distributed.
<i>The provision of a range of residential housing types and appropriate densification strategies in order to retain the character of Greater Hermanus, while ensuring appropriate growth to address the growing population's housing needs;</i>	With the promotion of housing typologies and increased need for housing in the Greater Hermanus area comes the needs for increased TI. A growth in population equals a growth in network-users. Current TI fails to provide for this increase in network-users.
<i>Greater Hermanus as a tourism destination;</i>	Tourism will benefit from enhanced connectivity and coverage. Current TI in the area of Voëlklip fails to provide sufficient network accessibility in holiday seasons. Therefore, poor signal is experienced which may hold social and safety risks (e.g. Failure to contact emergency services).
<b>Principle ii. – Restrict:</b>	
<i>Industrial development to clean industries and service industrial activities.</i>	N/A in terms of this application
<b>Principle iii. – Maintain:</b>	
<i>The unique village character of Greater Hermanus;</i>	Enhanced voice and data coverage will contribute to communication services which will in return



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	contribute in retaining the village character of Greater Hermanus.
<i>The open space corridors created by the Onrus River and other drainage channels;</i>	The property in question has a zoning of "Business Zone 3: Local Business". Therefore, the property is not an open space.
<i>The network of primary, secondary and linkage scenic routes, e.g. the coastal footpath along the cliffs of Hermanus, Marine Drive, Rotary Way, the route through the Hemel-en-Aarde Valley and the R43.</i>	This proposed FSBTS will contribute to the maintenance of the coastal footpath as voice- and data accessibility will allow for any damage or issues (e.g. floods, fire etc.) to be reported timeously.
<b>Principle iv. – Contain:</b>	
<i>The urban footprint of Greater Hermanus within a well-defined urban edge.</i>	The urban edge will not be influenced by this application.



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## SECTION E: MOTIVATION

This section is seen as the motivation of the application as it provides information with regard to the need and desirability, development parameters, site characteristics, visual impact, health and safety and alternative candidates relating to this specific application.

### E.1. BACKGROUND

Over recent years' cellular communication in South Africa has evolved from merely a means of convenience to an essential business tool, means of communication and safety measure. Initial high tariff rates limited the accessibility of the product and its service. However, over time more reasonable consumer tariffs and packages have been introduced, making cellular communications more accessible to a much larger sector of the population.

Data usage on the mobile networks is also becoming faster, more affordable, and more accessible. User behaviour patterns are continuously changing in reaction to cheap internet, new data intensive smartphones, data intensive applications and websites, and an increasingly social-media-driven society. These factors resulted in the average consumer data usage doubling every year.

The current cellular infrastructure is not equipped to handle this level of high demand. As a result, the networks become congested with connection problems and dropped calls on the voice network and limited or unstable internet connections on the data network.

Cellular service providers are taking steps to improve their network by keeping abreast with the advances in communication technology and providing increased capacity in terms of coverage in the areas where there is an increased demand. MTN, Vodacom and Cell C strives to make this technology available to a wider spectrum of the population.

Newer technology such as LTE provides faster internet to more users which alleviates the pressure on the base station, however its range is very limited. A single old generation GSM voice based base station could cover dozens of kilometres. The new LTE base stations have a maximum coverage range of 500m depending on the number of users.

The congestion of existing sites together with the decrease in its coverage range necessitates that the distance between base stations decreases, resulting in the need for construction of new freestanding and rooftop cellular base stations.

It is estimated that cellular network operators in South Africa will build more than 4000 new base stations over the next 5 years.

The proposed site is located at a nominal point as identified by network planners. By utilizing sites located at the networks' nominal points the number of future base stations is limited and an effective service network can be developed.



## E.2. DEVELOPMENT MOTIVATION

Please read together with previous sections in this application. This consent use and building line departures in order to allow for the erection of a FSBS 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 Fernkloof, Hermanus, dropped calls and poor network coverage (related to both voice and data) are experienced. This application is motivated by several customer complaints (from residents, businesses and commuters) received by MTN, Vodacom and Cell C in and around the area of Hermanus. MTN, Vodacom and Cell C 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 10 - LTE, LTE Advanced, Fixed LTE coverage

Figure 9 illustrates the current coverage in Fernkloof, Hermanus. It should be noted that some areas have very limited LTE, LTE Advanced, Fixed LTE coverage. Therefore, a FSBS as proposed in this application will increase the amount of coverage in this area (Refer to the website <https://www.cellc.co.za/cellc/coverage-map> for coverage maps).



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The increase in network strength brought by the proposed FSBTS 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 FSBTS will be erected at a cost of approximately R1.5mil. These high costs are a very good reason to rather co-locate on existing freestanding base stations or to settle for a rooftop base station in lieu of building a new freestanding base station.

The mix of land uses range from low density residential to open space. 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 use will have no impact on the external engineering services, on transport or traffic related considerations, or on the biophysical environment. Every possible measure has been taken to make the design as aesthetically pleasing as possible.

It is our submission that the proposed use will have no detrimental impact on the surrounding properties and will provide an essential service to the surrounding community.

#### E.2.2. Site selection methodology

The current roll out of telecommunication infrastructure by cellular network providers is undertaken to upgrade and improve network coverage and quality to all customers. Telecommunication networks experience peak demand in the evenings between 18:00 and 23:00. This is because during these times people are at their homes and use internet intensive devices. Thus, a large portion of the network upgrade is aimed at residential areas. Business and other activity areas have been prioritised over the past 20 years, for commercial reasons and given the fact that legislation and policies steered proposals of this nature, towards non-residential areas. Due to the tourism value of the said area, upgrading the coverage of LTE, 4G technology and accessibility to Fibre will be beneficial for Fernkloof within the Greater Hermanus area. This area includes tourist and economic attractions which include wineries, estates and route towards tourist destinations along the coast. Telecommunication networks experience peak demand in the holidays and festive seasons. Thus, a large portion of the network upgrade is aimed at areas with tourism and economic potential.

When choosing a site for a telecommunication base station, service providers are guided by nominal points indicating the areas where poor signal is being experienced.

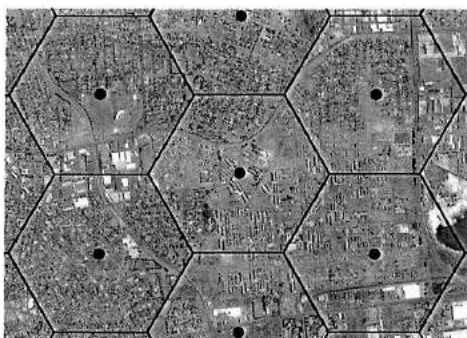
##### E.2.2.1. Choice of site

These points are selected because of an increase of customer complaints, within an area. As an increase in the number of users occurs, the area which is covered by the existing network decreases,



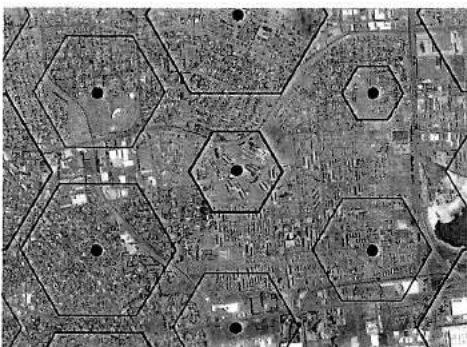
leading to poorer network coverage. Figures 10-12 strive to explain how the need for an increase in cellular infrastructure evolves in a typical urban area.

*Cellular infrastructure explained:*



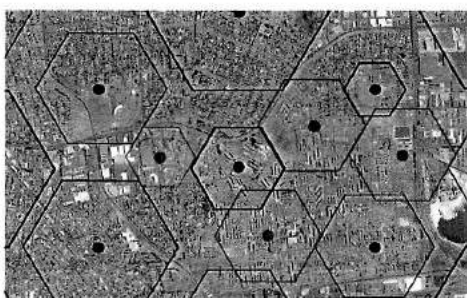
*Figure 10 is an illustration of optimum network and data coverage. This is explained by envisioning the octagonal shape of a honeycomb (cells).*

**Figure 11 - Initial coverage (cell) provided by Telecommunication Base Stations**



**Figure 12 - 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.*



**Figure 13 - Additional telecommunication 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 11). If a need for coverage does not exist in a specific area, no company would invest capital to build a telecommunication base station in the said area. The fact that there are only a few telecommunication base stations in the surrounding area supports the statement that there is a clear need for coverage in the area.

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.



Figure 14 - Surrounding Base Stations

Table 7 - Surrounding Base Stations as alternatives

	FSTBS/RTBS	Site location	Distance	Lack of sufficiency
A	FSTBS	Unknown Road.	+/-2500m Eastern Direction	Failure to provide for the necessary coverage necessity due to distance away from proposed mast

Considering the information in Figure 14 and Table 7 the need for the proposed FSTBS is clear. Existing TI are not sufficient to provide coverage as the closest TBS is approximately 2500m away from the proposed FSTBS.

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- Preferred site, in compliance with regulations. Site will be optimally placed to provide signal for the surrounding businesses and commuters utilising 7<sup>th</sup> Street/ R43 (Erf 6256 – Business Zone 3).
- Option 2- Site is in compliance with regulations and policies in order to construct a Cellular Communications Base Station, however the building found on Erf 6679 is not high enough to accommodate the attachment of this specific mast design.
- Option 3- Although there is enough space on the property, Erf 2145 is zoned for residential purposes.
- Option 4- Although there is enough space on the property, Erf 2148 is zoned for residential purposes.



Figure 15 - Alternative candidates in close proximity to the nominal

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,
- It is accessible to contractors during construction and maintenance,
- The proposal and location of the base station is the best solution to the coverage problem of the area with the least negative impacts,
- The proposal is secure due to its locality, and
- Most importantly it will serve the complaint area (the area with the lowest levels of cellular reception due to locality and high volumes of users) optimally.

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

The proposed FSTBS will create an opportunity for other service providers to co-locate, as other



Figure 16 - Superimposition from the west of the proposed FSTBS

structures of this height do not exist in this area. The impact of the site, proposed at the minimal height of 15m mitigated as a green monopole within the residential nature of the area. In addition, the proposed equipment and mast will be colour coded (painted green) to match the backdrop to further mitigate the visual impact and ultimately blend in with its surroundings.



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#### 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 14 October 2011 on the Health Effects of base stations states the following (see attached Annexure G):

*"The Department is therefore satisfied that the health of the general public is not being compromised by their exposure to the microwave emissions of cellular base stations. This also means that local and other authorities, in considering the environmental impact of any particular base station, do not need to and should not attempt, from a public health point of view, to set any restrictions with respect to parameters such as height of the mast, distance to the mast, and duration of exposure."*

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.





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## SECTION F: CONCLUSION

We would like to emphasise the positive contribution this base station will have on the immediate area of Erf 6256, Voëlklip, Hermanus as well as the surrounding community and passing commuters:

- Most households in the surrounding area depend on the services of the cellular telecommunications providers, including internet and social networking media (Facebook, Twitter etc.). With such a high demand for their products, it follows that service providers are responsible for supplying a high level of network coverage.
- please note that the residents in the area are not the only ones being provided with these services. Visitors to the area, businesses and daily commuters will benefit by having access to improved communication facilities.
- Mobile communication has become an important safety and security element in modern society. In an emergency, such as housebreaking, medical alert or fire, a member of a household can quickly and easily contact the emergency services for help. However, if the coverage of mobile service providers' is poor, then contacting emergency services becomes a difficult task.

Finally, we would like to emphasize that communications companies deliver an important service to the wider public, and in terms of their license with ICASA they have to meet certain standards in order to retain their licenses. One of these standards is to supply adequate network coverage to their demanding customers. The proposal also allows for all other service providers to share this installation and refrain from constructing another base station in this area.

Please notify us should any additional information be required. We look forward to your positive consideration of this application.





TR A Theart  
C Hobbie  
82 Eighth Street  
Voëlklip  
Hermanus, 7200

10 January 2018

Municipal Manager  
Overstrand Municipality  
P O Box 20  
Hermanus  
7200

FILE NO:	EL 6256
SCAN NO:	Hermanus
	19
COLLABORATOR NO:	1119824

P O Box 1381  
Hermanus  
7200

Dear Sir,

**Overstrand Municipality Erf 6256, 76 Seventh Street, Voëlklip, Hermanus. Application for Consent use and Departure: Warren Petterson Planning (obo Seagulls View).**

I am in receipt of your notice regarding the abovementioned application – which I oppose. My name is Hennie Roux, I am a full time resident of Hermanus and reside at 82 Eighth Street, Voëlklip, Hermanus on Erf 5499, which is diagonally opposite Erf 6256 where the proposed transmission tower is to be erected. I can be contacted via my e-mail address [lhroux@telkomsa.net](mailto:lhroux@telkomsa.net), via telephone on 028 314-1439 or by post at P O Box 1351, Hermanus, 7200.

We are living in a world that continues to change so fast that most of us lag behind. I am well aware of the continued growth and development of cellular and wireless communication platforms - which permeate life and create untold wealth for the multi Billion Dollar companies owned by the developers. I realise that an additional communications tower will improve the ability to communicate, but am extremely against the positioning of this tower.

My opposition to this application is threefold. I am opposed to the fact that a 15 meter high tower will forevermore be an unsightly structure (no matter whether it is painted green, red or blue) against the backdrop of the beautiful mountain in Voëlklip.

I also oppose the application on the basis that the motivation for this tower is fairly weak, containing many inputs that have no sound basis. For instance - Identified needs state "several customer complaints" on "dropped calls and poor network coverage". The question must be HOW MANY actually complained. I live +/- 50 meters away from the proposed tower – use a cell phone on most days and hardly ever experience dropped calls. In addition the compliance levels identified in the Spatial Planning and Spatial Development sections (D1 and D2) are virtually irrelevant to the Description.

Finally the question of "Health" remains. The proposal states – "There is no conclusive evidence that these base stations affect health, but scientific research is ongoing." This means that there is no conclusive evidence that it "does not" affect health. There are thousands of articles, studies and research projects on the effects of base stations on the health of humans and animals. It appears that most of these studies are funded by the Cellular companies themselves. And they focus mainly on carcinogenic effects, with little research into other health effects. How unbiased these are - is

18 JAN 2018

debateable. There are however prominent scientists who have recorded their research and there is strong evidence that these Base Stations do affect health. (From headaches to skin rash and mood swings)

So my biggest opposition to this application is the fact that the base station is to be erected on a property to which hundreds and sometimes (in holiday periods) thousands of people, per day, come to shop at the OK Mini Mart. Thus, placing the base station on this property potentially exposes far more people to the possible hazards of the Radio waves. Surely this is not in the interest of the public, nor of the Municipality. Why can this base station (tower) not be placed against the foot of the mountain in line with the Eskom electricity lines. The move will hardly change the coverage of the tower, and will be a much safer, more acceptable and visually agreeable structure.

I trust that you will take note of these comments and that a solution which supports a "Safety First for Hermanus residents" will be forthcoming.

Yours sincerely

LH (Hennie) Roux

Alida Conradie - Voelklip Application for ERF 6256 (76 Seventh Street)

TRATHA  
CHOLIVIE

**From:** Corey Springett <corey.springett@gmail.com>  
**To:** <aconradie@overstrand.gov.za>  
**Date:** 2018/01/15 08:50 AM  
**Subject:** Voelklip Application for ERF 6256 (76 Seventh Street)



Morning,

I received application to erect a Cell Phone tower at ERF 6256 (76 Seventh Street, Voelklip).

As the owners of ERF 2175 (61 Seventh Street, Voelklip) we would like to inform you that **we are NOT supportive** of this application and feel that the tower will present both an eyesore and health hazard to the surrounding properties - not to mention the impact it might have on the value of our properties.

Corey Springett  
 ERF 2175 - 61 Seventh Street, Voelklip  
 083 444 9991

Kind Regards

**COREY SPRINGETT**  
 (M) +27 83 444 9991

FILE NO:	EL 6256
	Hermanus ✓
SCAN NO:	HVK 6256
COLLABORATOR NO:	1120163

18 JAN 2018

**Alida Conradie - erf 2001 approval of cellular tower erection**

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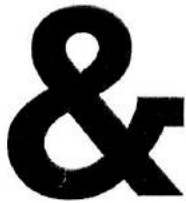
**From:** Lucille Sinclair <lucille@atelierampersand.com>  
**To:** "aconradie@overstrand.gov.za" <aconradie@overstrand.gov.za>  
**Date:** 2017/12/05 12:08 PM  
**Subject:** erf 2001 approval of cellular tower erection  
**Cc:** "kennetts@agrivie.com" <kennetts@agrivie.com>

---

Hi,

Please note that I, the owner of erf 2001 in Voelklip, hereby confirm that I have no obligation to the erection of the proposed cellular tower on erf 6256, 7<sup>th</sup> street, Voelklip. This should deliver much improved cellular reception on MTN, which has been non-existent so far.

Kind regards,  
Lucille



ATELIER AMPERSAND

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Navrae:  
Enquiries: H Boshoff (Town Planner)

Lêerverwysing:  
File Reference: 6256 HVK (3678)

Datum:  
Date: 16 November 2017

**TOWN PLANNING / STADSBEPLANNING  
HERMANUS**

Erf 2293  
M Fricke  
18 Hiddingh Avenue  
NEWLANDS  
7700

**REGISTERED MAIL**

Dear Sir / Madam

---

**NOTICE TO AFFECTED PERSONS**

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**ERF 6256, 76 SEVENTH STREET, VOËLKLIP, HERMANUS : APPLICATION FOR CONSENT  
USE AND DEPARTURE : WARREN PETERSON PLANNING (obo SEAGULLS VIEW)**

Attached please find a self-explanatory notice for your attention.

Yours faithfully

J. S. MÜLLER

**DIRECTOR : INFRASTRUCTURE AND PLANNING**

*I have no objection to the above.*

*Jan. M. Fricke*

*25/11/2017*



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Director: Infrastructure & Planning  
Overstrand Municipality  
Town planning Department  
16 Patterson Street  
Hermanus  
7200

20 February 2018

Attention: S Müller

Dear Sir

**RESPONSE TO OBJECTIONS RECEIVED ON THE APPLICATION FOR LOCAL AUTHORITY CONSENT USE AND HEIGHT RESTRICTION RELAXATION APPLICATION FOR FREESTANDING CELLULAR COMMUNICATIONS BASE STATION ON ERF 6256, VOËLKLIP, HERMANUS (76 SEVENTH STREET).**

Your letter dated 31 January 2018 refers.

During the public participation process of this application, two (2) letters/emails of objection were received from the surrounding property owners. One (1) comments/ objections was received from Road Network Management department of Western Cape Government.

The Overstrand Municipality Integrated Zoning Scheme (2013) specifically makes provision for freestanding installations on business zoned properties (Subject property zoning: 'Business Zone 3: Local Business') by means of Council's Consent. This is one (1) of only two (2) properties earmarked for business activities in the area in need of mobile coverage (Erven 6679 and 6256) with sufficient available space for such an installation. We believe this proposed development will be greatly beneficial for the inhabitants of Voëlklop/ Fernkloof – which includes local businesses, holidaymakers 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 mast will provide infrastructure for 2-3 service providers (e.g. Cell C, Vodacom and/or MTN) – sharing of infrastructure. As Hermanus (Fernkloof in this instance) is a tourist attractive destination, the load on voice and data coverage over the festive and holiday season is extremely high. This results in increasingly high numbers of dropped calls and limited data coverage (e.g. failure of WhatsApp messages and other social media applications including Facebook, to operate properly).

In light of this, we feel that each application should be evaluated according to its individual merit. Therefore, we are of the opinion that this application should be approved based on the proposed mitigation measures for the cellular base station illustrated in this letter.

The main concern raised by the objectors (two (2) letters of objection) relates to (i) *position of mast*, (ii) *health*, (iii) *visual impact*, and (iv) *property value*. Road Network Management raised concerns regarding the closure of the access off Seventh Street and the leasing of the portion of the road reserve within which the building is built. In order to address this concerns, compliance with the mentioned issues may be enforced by means of a condition of approval.



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## INTRODUCTION

The use of cellular mobile telephones, computers, tablets etc. among the public in South Africa has become a necessity, widely accepted and frequently utilised. The distribution of users is not limited in the urban area but also spread across the country with variation in density. This include holiday settings such as Hermanus and surrounding towns in the Overstrand Municipality.

Modern mobile telecommunication is based on a cellular system (refer to figures 1-3). Each cell is covered by a base station that keeps track of the mobile phones within its range, connects them to the telephone network and handles carry-over to the next base station if a customer is leaving the coverage area (Figure 1). Early mobile telecommunication systems had very large cells with tens of kilometres radius and were predominantly located along highways due to offering service mainly for car-phones. With the introduction of digital mobile phone systems cell sizes got much smaller and base stations were established in densely populated areas (Figure 3). The limited power of mobile phones made it necessary to reduce the distance to the customers. The cell size depends on (1) the radiation distance of the mobile phone; (2) the average number of connected calls; (3) the topographic characteristics of the covered area and the surrounding buildings, vegetation and other shielding objects; and (4) the type of antenna used.

The current roll out of telecommunication infrastructure by cellular network providers is undertaken to upgrade and improve network coverage and quality to all customers. Telecommunication networks experience peak demand in the evenings between 17:00 and 23:00. This is because during these times people are at their homes and use internet intensive devices. Thus, a large portion of the network upgrade is aimed at residential areas. Business and other activity areas have been prioritised over the past 20 years for commercial reasons and given the fact that legislation and policies steered proposals of this nature, towards non-residential areas.

When choosing a site for a telecommunication base station, service providers are guided by nominal points indicating the areas where poor signal is being experienced.

### (i) POSITION OF MAST

These nominal points are selected because of an increase of customer complaints, within an area. When there is an increase in the number of users in an area. The coverage provided by the existing network decreases, leading to dropped calls and lack of data services. Figures 1-3 strive to explain how the need for an increase in cellular infrastructure evolves in a typical urban area.

Cellular infrastructure explained:

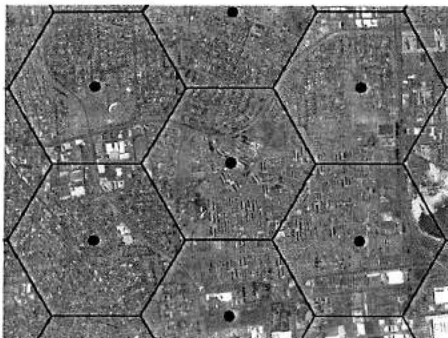


Figure 1 - Initial coverage (cell) provided by Telecommunication Base Stations

Figure 1 is an illustration of optimum network and data coverage. This is explained by envisioning the octagonal shape of a honeycomb (cells).

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.

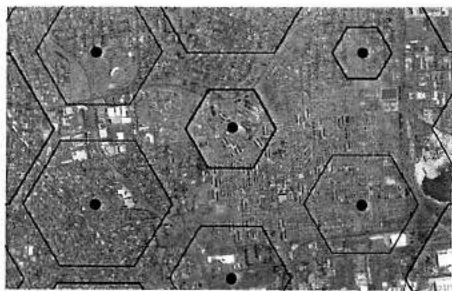


Figure 2 - Coverage decreases due to increase in network users – cell size decreases

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

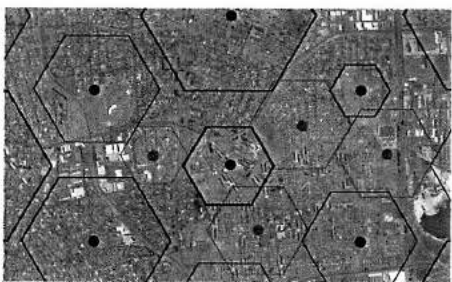


Figure 3 - Additional telecommunication base stations required to fill the gaps

Locations for telecommunication infrastructure are primarily chosen within areas where a need exists for coverage (refer to Figure 2). If a need for coverage does not exist in a specific area, no company would invest capital to build a telecommunication base station in the said area. The fact that there are only a few telecommunication base stations in the surrounding area supports the statement that there is a clear need for coverage in the area.



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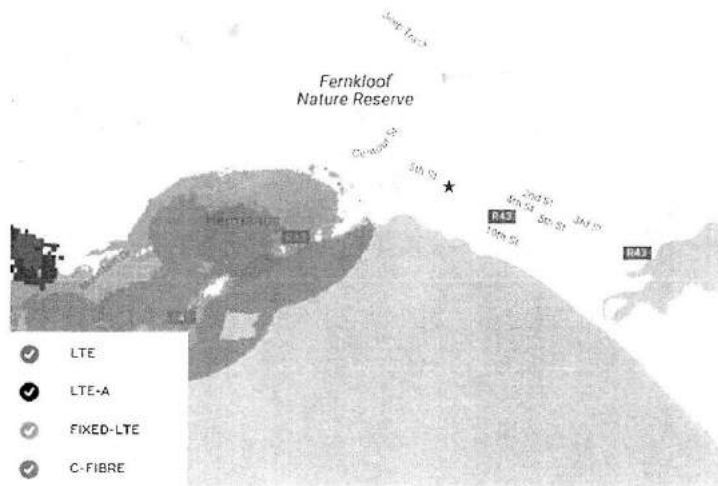


Figure 4 – Cell C LTE coverage in Voëlklip (Hermanus) (Refer to the website <https://www.cellc.co.za/cellc/coverage-map> for coverage maps )

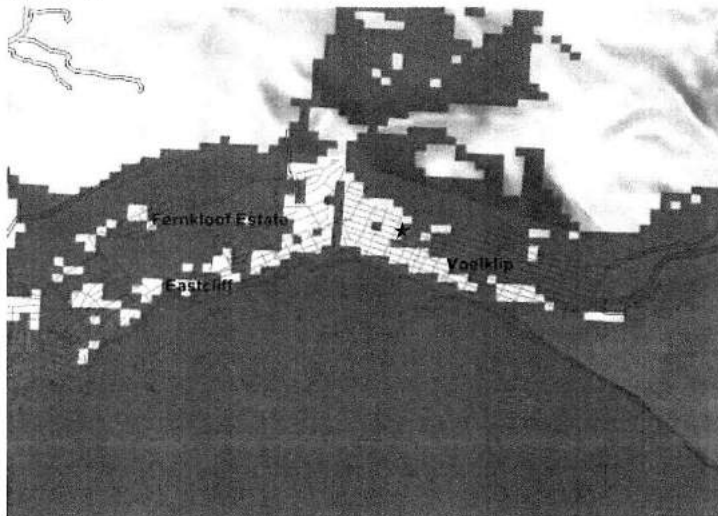


Figure 5 – Vodacom LTE coverage in Voëlklip (Hermanus) (Refer to the website <http://www.vodacom.co.za/vodacom/coverage-map> for coverage maps)

Figures 4 and 5 illustrates the current coverage in Voëlklip (Hermanus) for two service providers (Cell C and Vodacom). It should be noted that some areas have very limited LTE, LTE Advanced, Fixed LTE coverage. Therefore, a FBTS as proposed in this application will increase the amount of coverage in this area



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The objectors questioned why the mast cannot be relocated to the outskirts of Voëlklip or mountains outside the town. However, relocating the mast to this area will not provide sufficient LTE and 4G coverage (refer to Figures 1-5) for the area of Voëlklip, (the target area) which include local businesses, residents and a large influx of holidaymakers over festive and holiday seasons. Due to a potential growth in population caused by current and future development, repositioning the base station to another location, as suggested, the efficiency of the mast declines. The mast will fill a larger gap in the network at its proposed position – please refer to section (iii) *Visual Impact*, which provides a superimposition and discussion of the mast type.

## (II) HEALTH

Recent development shown the concerned among the public related to the health effect of RF radiation emitting from the Freestanding Base Telecommunication Station (FBTS). This is obvious from the frequent report in the newspaper and the electronics media concerning the complaint of residence nearby FBTSs. As results, the telecommunication company has faced many problems and protest from the public in the installation of new FBTS.

Along with popularity of mobile telephones and other devices, the increase in number of FBTSs installations in the country provide better coverage services to consumer have raised anxiety to the general public about whether it have an adverse effect on human health. They are generally perceived as hazardous because of the radiation they produced. Misconceptions are held by the general public in South Africa about the radiation (non-ionising radiation) of the electromagnetic waves used for telecommunications especially from FBTSs. This perception has often led to public opposition on the construction and existence of these facilities in many parts of the country. The general public often misunderstand the concept that non-ionizing radiation (produced by the FBTS) can cause cancer and other health related issues. Although both forms of energy are correctly called radiation, their biological effects are vastly different. Half-true or inaccurate information written in web sites, newspaper and circulated materials by some groups of people with vested interest has caused a lot of opposition by public on the development of telecommunication infrastructures.

Current research on telecommunications base stations has reached a point whereby scientists are satisfied that the base stations do not pose a health threat. Research on handsets is however ongoing, as it is deemed that placing the handset against your head could pose a greater threat to health. Mobile phones are low powered radiofrequency transmitters. They operate at frequencies between 450 and 2700 MHz. The handset only transmits power when turned on. Using the phone in areas of good reception decreases exposure as it allows the phone to transmit at reduced power.

In a statement made by the World Health Organisation (WHO) it is stated that effects from base stations and wireless networks are so low that the temperature increases are insignificant and do not affect human or animal health.

The WHO in 2004 said:

*"In the area of biological effects and medical applications of non-ionizing radiation approximately 25,000 articles have been published over the past 30 years. Despite the feeling of some people that more research needs to be done, scientific knowledge in this area is now more extensive than for most chemicals. Based on a*



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*recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields.” – World Health Organization (WHO) – website: <http://www.who.int/peh-emf/research/database/en/>*

Radio waves are emitted by numerous instruments including microwave ovens and television screens inside our households. Walking along any street exposes us to RF emissions. RF emissions are part of modern day society and scientists continuously monitor the impacts of these.

ICNIRP (International Commission on Non-Ionizing Radiation Protection), an independent scientific organization established in 1992 published guidelines providing a means of limiting and guiding human exposure to electromagnetic fields. These guidelines have become the world standard for human exposure to electromagnetic fields. ICNIRP considers both the thermal and non-thermal effects of RF exposures as well as all other identified hazards of RF exposure. Cellular equipment needs to comply with all the regulations of ICNIRP as well as the WHO and also National Legislation governing the use of this equipment and the emissions of radio waves. Cellular companies monitor the health impact of their base stations carefully, and spend large sums of money researching this topic annually.

South Africa’s Department of Health has also published EMF exposure limit guidelines. These are based on guidelines endorsed by the ICNIRP. Emissions from all existing and proposed base stations are in compliance with these guidelines and are far below international standards.

A statement made by the Department of Health dated 23 June 2015 on the Health Effects of cellular communications base stations states the following (see letter attached in application):

*“ 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”.*

Also mentioned in the statement of the Department of Health another WHO fact sheet was published in June 2011 and reviewed in October 2014 (i.e. *Electromagnetic fields and public health: mobile phones* viewable online at <http://www.who.int/mediacentre/factsheets/fs193/en/> ) and subsequently concluded the following:

*“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.”*

Further on in the document (attached in application), the Department of Health goes on to say that:

*“The Department is therefore satisfied that the health of the general public is not being compromised by their exposure to the microwave emissions of cellular base stations. This also means that local and other authorities, in considering the environmental impact of any particular base station, do not need to and should not attempt, from a public health point of view, to set any restrictions with respect to parameters such as distance to the mast, duration of exposure, height of the mast, etc.”*



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Furthermore, a test done by the City's Department: City Health – Specialised Services at a similar installation in Camps Bay proved that emissions from base stations are a mere fraction of a percentage point of the ICNIRP guideline. The test was also conducted by EMSS, a private company specialising in this RF emission testing. This study as an example is available on request. The City of Cape Town is more than welcome to take its own readings once the cellular communications infrastructure is operational.

We are therefore of the opinion that all health aspects regarding the proposed base station were taken into consideration and that this proposal will not be in violation of any individual's constitutional right to an environment that is not harmful to their health or general wellbeing.

A condition may be included in the approval stating that should it be proven that there are negative health effects from base stations (in accordance with specific guidelines), and this base station falls within those guidelines, it will be rectified or if not possible, be decommissioned.

### (III) VISUAL IMPACT

The visual impact of the proposed base station is argued to be acceptable and every possible measure has been implemented to mitigate the visual impact of the proposed base station. The height of the mast was proposed as 15 meters; **this mast may be lowered to 10 metres lower than the usual 25m**. 15m is the lowest possible height at this point that the antennae can still provide sufficient coverage to the complaint area.

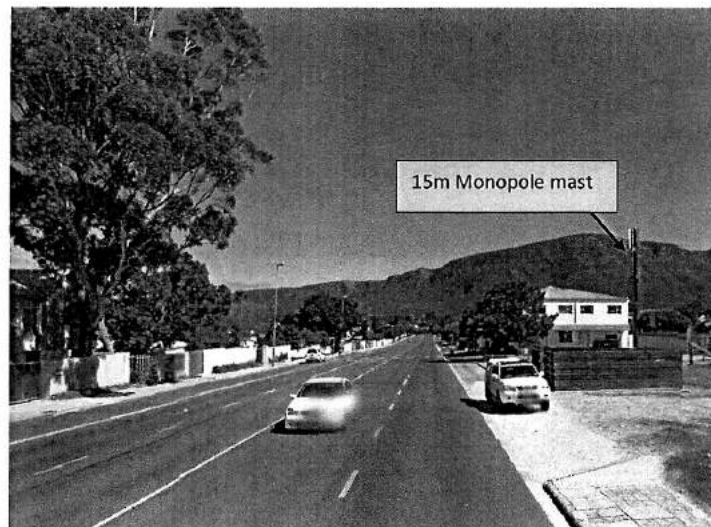


Figure 6 – Superimposition: Proposed 15m Monopole mast

A Monopole mast design (Figure 6) was chosen for the proposed base station as it is deemed more acceptable within an urban environment. The complaint area is characterized by low rising buildings and there are no tall structures that could support the proposed infrastructure in order to serve the complaint area effectively. Surrounding urban

infrastructure such as street lights will assist in visually blending the mast with the environment. We are of the opinion that erecting a single monopole mast at the proposed location is the most desirable option.

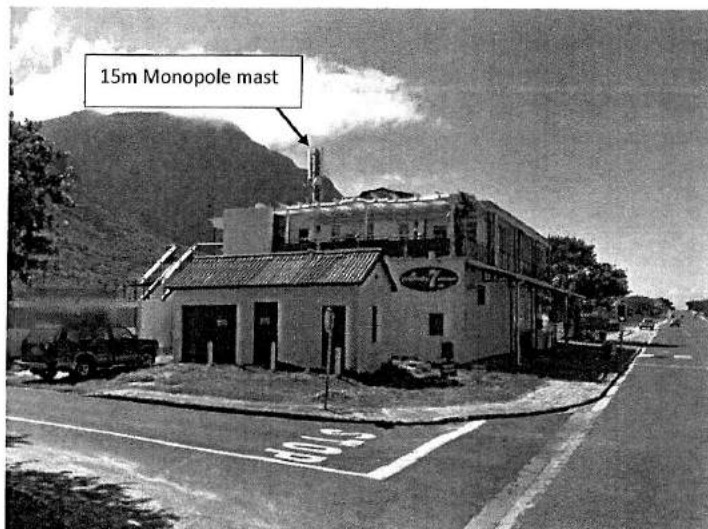


Figure 7 – Superimposition: Proposed 15m Monopole mast

Alternative mast designs may be considered as illustrated in Figures 8.

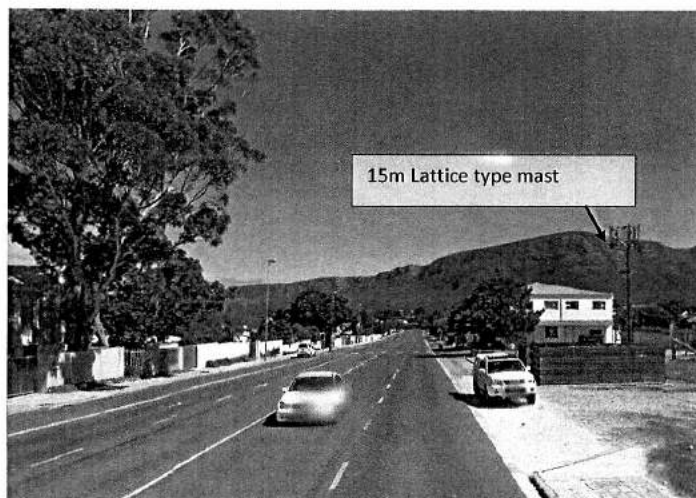


Figure 8 – Superimposition: 15m Lattice Mast (Alternative Design)



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Placing the mast in any other location would mean that more masts would be required to cover the complaint area. In addition, the equipment and other infrastructure can be painted a suitable colour in order to further mitigate the base station and ultimately blend in with its surroundings. The visual impact of the proposed base station is argued to be acceptable because of the fact that every possible mitigating measure has been implemented. (Please refer to Figure 6 and 7 - superimpositions).

#### (IV) PROPERTY VALUE

Concerns further relate to nearby property values being negatively affected. There is no evidence suggesting that base stations reduce the property values in any given area. If anything, value will be added by improved communication and subsequent virtual accessibility and safety in an area. Properties throughout the Western Cape have been enjoying above expected value increases.

In areas of visual sensitivity such as the property in question, the adoption of a visually appealing solution is crucial. Therefore, the proposed mast is suggested as a 15m 'Monopole type' (instead of a 25m mast) in order to better blend in with the surrounding environment.

We believe that this mast will contribute to the socio-economic environment, as sufficient mobile coverage (voice- and data) will allow for businesses, residents and seasonal holidaymakers to have enhanced access to faster, efficient and reliable internet and communication connectivity. Efficient internet connectivity and mobile coverage will therefore benefit surrounding properties rather than negatively impact.

#### CONCLUSION

We would like to emphasise the positive contribution this base station will have on the immediate area of Voëlkliip/ Fernkloof (Hermanus) as well as the surrounding community:

- Road Network Management raised concerns regarding the closure of the access off Seventh Street and the leasing of the portion of the road reserve within which the building is built. In order to address this concerns, compliance with the mentioned issues may be enforced by means of a condition of approval.
- Most households in the surrounding area depend on the services of the cellular telecommunications providers, including internet and social networking media (Facebook, Twitter etc.). With such a high demand for their products, it follows that service providers are responsible for supplying a high level of network coverage.
- Please note that the residents in the area are not the only ones being provided with these services. Visitors to the area, businesses and daily commuters will benefit by having access to improved communication facilities.
- Mobile communication has become an important safety and security element in modern society. In an emergency, such as housebreaking, medical alert or fire, a member of a household can quickly and easily contact the emergency services for help. However, if the coverage of mobile service providers' is poor, then contacting emergency services becomes a difficult task.



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Finally, we would like to emphasize that communications companies deliver an important service to the wider public, and in terms of their license with ICASA they have to meet certain standards in order to retain their licenses. One of these standards is to supply adequate network coverage to their demanding customers. The proposal also allows for all other service providers to share this installation and refrain from constructing another base station in this area.

Please notify us should any additional information be required. We look forward to your positive consideration of this application.

Kind regards,

Wessel Strydom

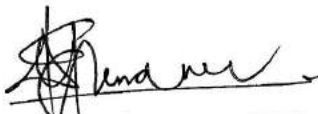
Pr. Pln. A/2514/2017

**COMMENTS FROM THE ENGINEERING SERVICES DEPARTMENT FOR:  
APPLICATION FOR CONSENT USE & DEPARTURE: ERF 6256, VOELKLIP  
(3678)**

Stormwater (SW) : In order  
Electricity : In order  
Water : In order  
Sewer : In order  
Roads and traffic : In order

**Conditions**

1. that only the existing water and sewerage connections will be available to the development, should larger capacity in any of these services be required, the upgrading will be at the owner's cost;
2. that only the existing electricity connection will be available for the development and that, should additional capacity be required, an investigation be conducted, with regard to the capacity required and that available, at the owner's cost;
3. that, should any upgrading and / or development of the sidewalk adjacent to the property be required as part of the development, application for such development be made to the office of the Area Manager: Hermanus for written approval;
4. that stormwater be allowed to discharge through Erf 6256, Hermanus, unobstructed;
5. that no on-street parking be allowed.



**DENNIS HENDRIKS  
SENIOR MANAGER:  
ENGINEERING SERVICES**

24 / 1 / 2018  
DATE



**ROAD NETWORK MANAGEMENT**  
Email: Grace.Swanepoel@westerncape.gov.za  
tel: +27 21 483 4669  
Rm 335, 9 Dorp Street, Cape Town, 8001  
PO Box 2603, Cape Town, 8000

**REFERENCE: 13/3/5/4-21/04 (Job 8901)**  
**ENQUIRIES: Ms GD Swanepoel**  
**DATE: 6 February 2018**

The Municipal Manager  
Overstrand Municipality  
PO Box 20  
**HERMANUS**  
7200

Attention: H Boshoff

Dear Sir

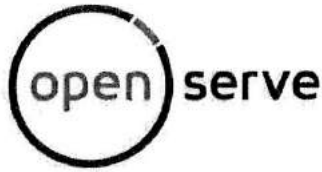
**ERF 6256, 76 SEVENTH STREET, VOËLKIP, HERMANUS: MAIN ROAD 28: APPLICATION FOR CONSENT USE AND DEPARTURE**

1. Your letter 6256 HVK (3678) dated 16 November 2017 refers.
2. This application is for Consent Use and Departure in order to erect a freestanding cellular communications base station tower of 15 m on the property.
3. There are still two issues that remain outstanding and require action:
  - 3.1 The permanent closure of the access off Seventh Street and
  - 3.2 The lease of the portion of road reserve within which the building is built, to the property owner.
4. Before this Branch considers any further improvements or enhancements to the property, it is imperative that the municipality ensures that the outstanding issues are resolved.
5. Accordingly, this Branch objects to the application in terms of the Land Use Planning Act, No 3 of 2014.

Yours faithfully



**ML WATERS**  
For CHIEF DIRECTOR: ROAD NETWORK MANAGEMENT



TP-A Theart  
(H Olivier)

Division of Telkom SA SOC Ltd

10 Jan Smuts Drive  
Pinelands  
7404

Candice Spammer

Tel: 021 414 5582

Fax: 086 480 0617

Email: spammec1@telkom.co.za

FILE NO: EL 6256-HVK
SCAN NO: 26
COLLABORATOR NO: 1129343

Our Ref.:

WWIP\_WVKL0331\_18

Your Ref.:

6256 HVK 3678

06 February 2018

Attention: S Müller

Overstrand Municipality

HERMANUS

**PLANT AFFECTED:**

APPLICATION FOR CONSENT USE AND DEPARTURE – ERF 6256, 76 SEVENTH STREET, VOELKLIP, HERMANUS

With reference to your application received November 2017.

**As important COPPER AND OPTIC FIBRE are affected, please contact our representative Frederik Swart at telephone number 028 514 1199 / 081 363 7815 / Frederiks@openserve.co.za least 48 hours prior of commencement on construction work.**

I hereby inform you that Open Serve approves the proposed work indicated on your drawing in principle. This approval is valid for 12 months only, after which reapplication must be made if the work has not been completed.

Any changes or deviations from the original planning during or prior to construction must immediately be communicated to this office.

Approval is granted, subject to the following conditions.

As per sketch attached, Open Serve infrastructure will be affected, consequently the conditions below and on the attached legend will apply.

61 Oak Avenue, Highveld, Techno Park, Centurion 0157  
Private Bag X881, Pretoria, Gauteng, 0001



Telecommunication services position is shown as accurately as possible but should be regarded as approximate only.

Should alterations or relocation of existing infrastructure be required, such work will be done at the request and cost of the applicant.

Please notify this office within 21 working days from this letter of acceptance and if any alternative proposal is available or if a recoverable work should commence.

It would be appreciated if this office can be notified within 30 days of completion of the construction work. Confirmation is required on completion of construction as per agreed requirements.

**Should Open Serve infrastructure be damaged while work is undertaken, kindly contact our representative immediately.**

All Open Serve rights remain reserved.

Yours faithfully

pp   
\_\_\_\_\_  
Selwyn Bowers  
Operations Manager  
Wayleave Management: Western Region

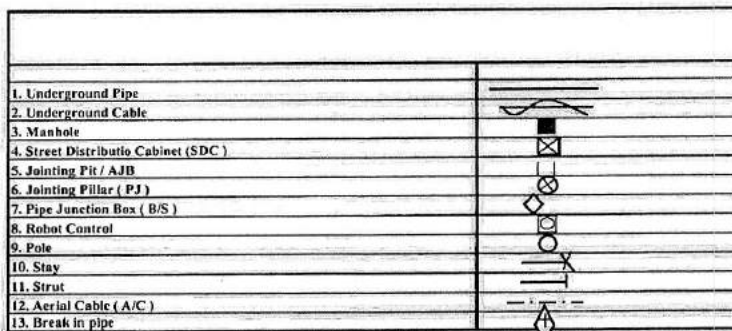
This wayleave, Reference Number **WWIP WVKL0331 18** is valid for 12 months from date here of and is subject to the following conditions:

1. No mechanical plant or vibrator type compactors may be used within three metres of any Open Serve plant ( I.E. any Telecommunication equipment above or below ground level )
2. The position of our plant affected by the proposal is indicated as approximate and **Frederik Swart** at telephone number **081 363 7815** must be contacted at least 48 hours prior to commencement of the work, upon which the actual location of Open Serve Plant will be indicated on site.
3. A written request must be submitted to Open Serve for consideration should the applicant require our plant to be relocated. The cost of such a relocation will be recoverable from the applicant.
4. It is the responsibility of the applicant to verify the existence of the indicated plant and to notify Open Serve immediately, should the applicant locate any Open Serve plant indicated on the provided plans.
5. Should the applicant expose any Open Serve plant, the safeguard thereof will be the applicant's full responsibility
6. Failing to comply with the above conditions or any special conditions addendum hereto will be regarded as gross negligence and the applicant will be held responsible for the damage or loss as a result thereof.

Date: 07 February 2018

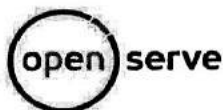
By: C Spammer

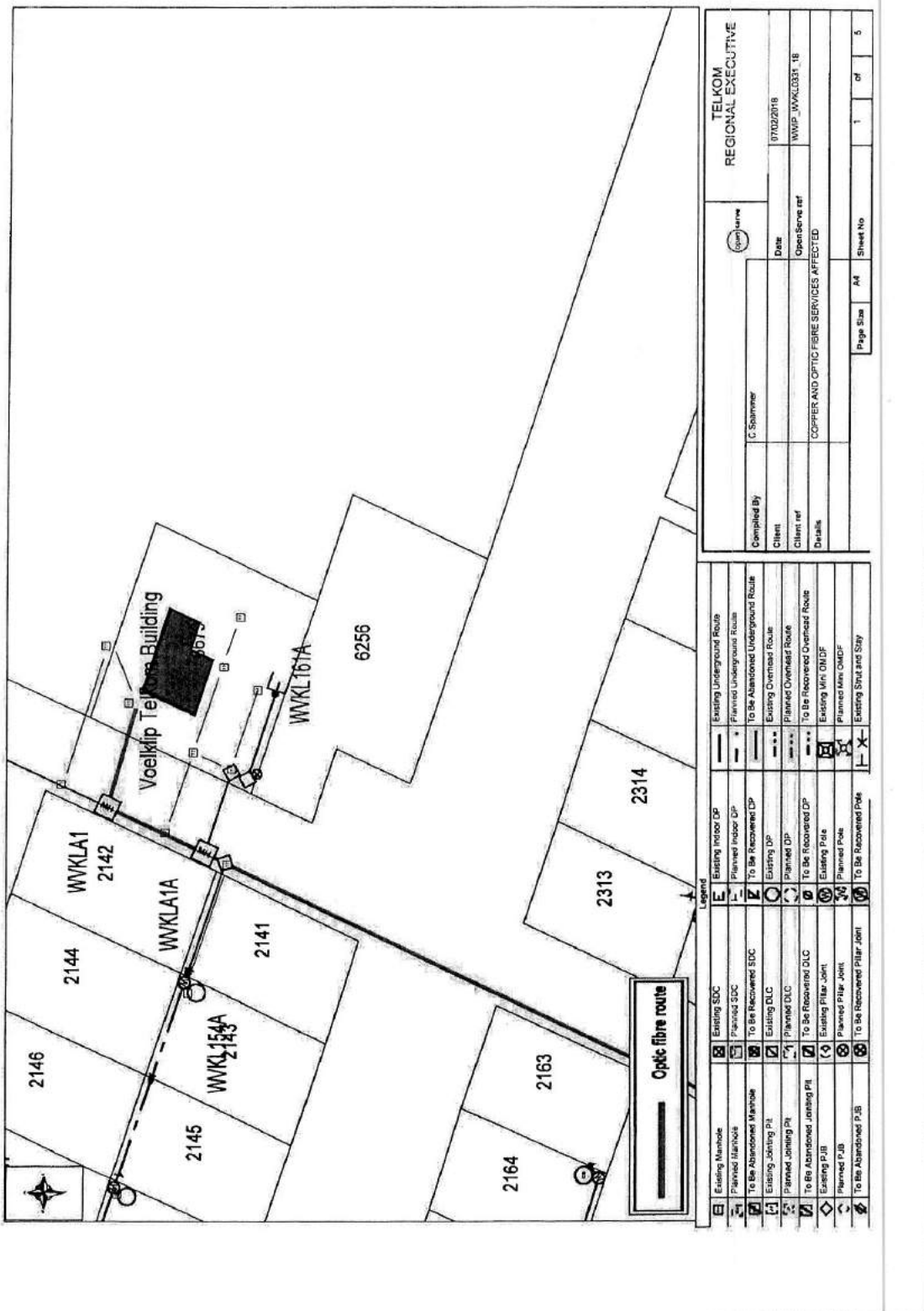
For Regional General Manager  
Western Cape ( N2W3T1B)



The pipeline indicated contains **OPTIC FIBRE** cables.

F Swart - telephone 028 514 1199 must be contacted at least 48 hours before commencement of work.





Completed By	C. Spammer	Drawn	
Client		Date	07/02/2018
Client ref		OpenServe ref	WVLP_WVKL0331_18
Details	COPPER AND OPTIC FIBRE SERVICES AFFECTED		
Page Size	A4	Sheet No	1 of 5

TELKOM	
REGIONAL EXECUTIVE	



**Western Cape  
Government**  
Environmental Affairs and  
Development Planning

DIRECTORATE: DEVELOPMENT MANAGEMENT  
(REGION 2)



**REFERENCE:** 16/3/3/6/E2/15/1403/17  
**ENQUIRIES:** Lorretta Osborne  
**DATE:** 2018-03-13

TP-A Theart  
(H Boshoff)

The Municipal Manager  
Overstrand Municipality  
PO Box 20  
**HERMANUS**  
7200

**Attention: H Boshoff**

FILE NO:	EL 6256-HVK
SCAN NO:	HVK 6256
COLLABORATOR NO:	1140656

Tel: (028) 313 8900  
Fax: (028) 313 2093

Dear Sir

**APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED) WITH RESPECT TO THE APPLICATION FOR CONSENT USE AND DEPARTURE OF ERF NO. 6256, VOËLKIP, HERMANUS**

1. The document dated 16 November 2017, as received by the Department on 23 November 2017, refers.
2. According to the information contained in the aforementioned correspondence this Department notes the following:
  - 2.1 The proposal is for the establishment of a 15m high monopole mast that will be attached to an existing building.
  - 2.2 The mast will have 2 x 3-panel antennae attached to the mast, as well as microwave dishes.
  - 2.3 Two equipment containers will be located on site.
  - 2.4 Access to the site is existing.
  - 2.5 Electricity will be sourced from the available on-site supply.
3. Your attention is therefore drawn to the listed activities in terms of the NEMA EIA Regulations 2014 (as amended) as defined in GN No. 327, 325 and 324 of 7 April 2017. Be advised that, based on the information provided, the application **does not** constitute any listed activities as defined in the NEMA EIA Regulations, 2014 (as amended).
4. The above-mentioned is based on the following:
  - 4.1 The activity will take place within a built-up area with a Business 3 Zoning and will be attached to an existing building.

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Tel: +27 21 483 3696/4349 Fax: +27 21 483 3633  
E-mail: [Lorretta.Osborne@westerncape.gov.za](mailto:Lorretta.Osborne@westerncape.gov.za)

Private Bag X9086, Cape Town, 8000  
[www.westerncape.gov.za/eadp](http://www.westerncape.gov.za/eadp)

5. However, should any revision of the proposed development constitute a listed activity(ies) in terms of the NEMA EIA Regulations, 2014 (as amended) as defined in GN No. 327, 325 and/or 324 an application must be submitted and environmental authorisation obtained before such activity(ies) may commence.
6. The applicant is reminded of his/her general duty of care and the remediation of environmental damage, Section 28(1) of NEMA specifically states that – *“Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”*
7. The applicant must comply with any other statutory requirements that may be applicable to the undertaking of the activity.
8. The Department reserves the right to revise or withdraw comments or request further information based on any information received.

Yours faithfully

PP 

**HEAD OF COMPONENT**  
**ENVIRONMENTAL IMPACT MANAGEMENT SERVICES: REGION 2**  
**DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**  
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## Department of Health

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### To whom it may concern

#### HEALTH EFFECTS OF CELLULAR BASE STATIONS AND HANDSETS

The Directorate: Radiation Control is the section within the National Department of Health that is responsible, from the viewpoint of human health, for regulating electronic products producing **non-ionising** electromagnetic fields (EMF), i.e. where the frequency of such EMF is less than 300 GHz. In carrying out this responsibility, the Directorate has been utilising the World Health Organization's (WHO) International EMF Project ([www.who.int/peh-emf/en/](http://www.who.int/peh-emf/en/)) as its primary source of information and guidance with respect to the health effects of EMF. The International EMF Project was established by the WHO in 1996 to (i) assess the scientific evidence for possible adverse health effects of non-ionising electromagnetic fields on an ongoing basis, (ii) initiate and coordinate new research in this regard, and (iii) compile health risk assessments for different parts of the electromagnetic spectrum. The Department of Health has been a member of the International Advisory Committee of the International EMF Project since 1998.

In June 2005 the International EMF Project hosted a workshop that was specifically aimed at considering the possible health consequences of the emissions from cellular base stations and wireless networks. The findings of this workshop were summarised in a 2-page Fact Sheet (<http://www.who.int/peh-emf/publications/facts/fs304/en/>). The following extract from this Fact Sheet is still considered by the WHO as a summary of the findings to date, i.e. ***“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.”***

Another WHO Fact Sheet was published in June 2011 and reviewed in October 2014, i.e. *Electromagnetic fields and public health: mobile phones*. This Fact Sheet can be found at <http://www.who.int/mediacentre/factsheets/fs193/en/> and the conclusion is stated as follows:

***“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.”***

The WHO recommends utilising internationally recognised exposure guidelines such as those published in 1998 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and reconfirmed in 2009 for the frequency range 100 kHz – 300 GHz (i.e. including all the frequencies employed by the cellular industry). The Department of Health likewise recommends the use of these ICNIRP guidelines to protect people against the known adverse health effects of EMF.

The numerous measurement surveys, which have been conducted around the world and in South Africa, have shown that the actual levels of public exposure as a result of base station emissions invariably are only a fraction of the ICNIRP guidelines, even in instances where members of the public have been really concerned about their exposure to these emissions. At present there is **no** confirmed scientific evidence that points to any health hazard associated with the very low levels of exposure that the general public would typically experience in the vicinity of a cellular base station. The Department is therefore satisfied that the health of the general public is not being compromised by their exposure to the microwave emissions of cellular base stations. This also means that local and other authorities, in considering the environmental impact of any particular base station, do not need to and should not attempt, from a public health point of view, to set any restrictions with respect to parameters such as distance to the mast, duration of exposure, height of the mast, etc.

The Department of Health is obviously not able to make any pronouncements about the specific levels of EMF that a member of the public would experience at any particular base station site when it is in operation. However, generally-speaking unless a person would climb to the top of a mast (or other structure supporting an antenna) and position him/herself not more than a few meters away right in front of the active antenna, such a person would have no real possibility of being exposed to even anywhere near the afore-mentioned ICNIRP guideline limits. Since these base stations are typically cordoned off by means of things such as barbed wire fencing and locked gates/doors in order to protect the sensitive and expensive technology, getting to a mast and actually climbing it despite the afore-mentioned security measures would certainly not be considered responsible behaviour. Even then the only real threat to the health of the person would be falling at any height from the structure in question. Based on the results of numerous global and local surveys, the experience has been that the exposure to base station EMF at ground level is typically in the range of between 0.001 – 1.0 % of the afore-mentioned ICNIRP guideline limits. Against this background of available data, there would be no scientific grounds to support any allegation

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that adverse health effects might be suffered by a responsible member of the public due to the EMF emitted by a base station.

Although the Department of Health currently neither prescribes nor enforces any compulsory exposure limits for electromagnetic fields, the Department does advise all concerned (whether they be a government department, the industry or the public) that voluntary compliance with the afore-mentioned ICNIRP exposure guidelines is the recommended and science-based way to deal with any situation involving human exposure to the non-ionising electromagnetic fields emitted by cellular base stations and handsets.

Yours sincerely,



**LL du Toit**  
DEPUTY DIRECTOR: RADIATION CONTROL