

OVERSTRAND MUNISIPALITEIT
ERF 6184, MALVA STRAAT 124, MOUNT PLEASANT,
HERMANUS, OVERSTRAND MUNISIPALE GEBIED:
AANSOEK VIR VERGUNNINGSGEBRUIK & AFWYKING:
HIGHWAVE CONSULTANTS (PTY) LTD NAMENS WJ LE
ROUX

Kragtens Artikels 47 en 48 van die Overstrand Munisipaliteit Wysigingsverordening vir Munisipale Grondgebruikbeplanning, 2020 (Verordening) word hiermee kennis gegee van die volgende aansoek van toepassing op Erf 6184, Mount Pleasant (die eiendom), naamlik:

Vergunnings gebruik

Aansoek ingevolge Artikel 16(2)(o) van die Verordening vir die voorgestelde ontwikkeling van 'n telekommunikasie basisstasie met 'n 25m monopool mas.

Afwyking

Aansoek ingevolge Artikel 16(2)(b) van die Verordening vir die verslapping van die hoogte beperking van 10.5m tot 25m om die voorgestelde ontwikkeling van 'n 25m monopool mas op die eiendom te akkommodeer.

Volle besonderhede rakende die voorstel is beskikbaar vir inspeksie gedurende weksdae tussen 08:00 en 16:30 by die Departement: Stadsbeplanning, Patersonstraat 16, Hermanus. Enige kommentaar op die voorstel moet skriftelik ingedien word in terme van Artikels 51 en 52 van die voorgeskrewe Verordening na die Munisipaliteit (Patersonstraat 16, Hermanus / (e) loretta@overstrand.gov.za) voor of op **21 Maart 2025**, met die naam, adres en kontakbesonderhede, belang in die aansoek sowel as redes vir die kommentaar aangedui. Telefoniese navrae kan gerig word aan die **Stadsbeplanner, Mnr. B. Minnaar** by 028-313 8900. Die Munisipaliteit mag weier om die kommentaar te aanvaar na die sluitingsdatum. Enige persoon wat nie kan lees of skryf nie kan die Departement Stadsbeplanning besoek waar hul deur 'n munisipale amptenaar bygestaan sal word ten einde hul kommentaar te formaliseer.

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

Munisipale Kennisgewing Nr.28/2025

OVERSTRAND MUNICIPALITY
ERF 6184, 124 MALVA STREET, MOUNT PLEASANT,
HERMANUS, OVERSTRAND MUNICIPAL AREA:
APPLICATION FOR CONSENT USE & DEPARTURE:
HIGHWAVE CONSULTANTS (PTY) LTD ON BEHALF OF WJ LE
ROUX

Notice is hereby given in terms of Sections 47 and 48 of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020 (By-Law) of the following applications applicable to Erf 6184, Mount Pleasant (the property), namely:

Consent Use

Application in terms of Section 16(2)(o) of the By-Law to allow for the proposed development of a telecommunication base station with a 25m monopole mast

Departure

Application in terms of Section 16(2)(b) of the Bylaw for the relaxation of the height restriction from 10.5m to 25.0m to accommodate the proposed development of a 25m monopole mast on the property.

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

Full details regarding the proposal are available for inspection during weekdays between 08:00 and 16:30 at the Department: Town Planning, Paterson Street, Hermanus. Any written comments may be submitted in accordance with the provisions of Sections 51 and 52 of the said By-Law to the Municipality (16 Paterson Street, Hermanus / (e) loretta@overstrand.gov.za) on or before **21 March 2025**, quoting your name, address and contact details, interest in the application and reasons for comments. Telephonic enquiries can be made to the **Town Planner, Mr. B. Minnaar** at 028-313 8900. The Municipality may refuse to accept comments received after the closing date. Any person who cannot read or write may visit the Town Planning Department where a municipal official will assist them in order to formalize their comment.

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

Municipal Notice No.28/2025

UMASIPALA WASE-OVERSTRAND
ISIZA 6184, 124 MALVA STREET, MOUNT
PLEASANT, HERMANUS UMASIPALA WASE
OVERSTRAND: ISICELO SOKUSETYENZISWA
KWEMVUME KUNYE NOPHAMBUKO:
HIGHWAVE CONSULTANTS(PTY)LTD EGAMENI
LIKA WJ LE ROUX

Isaziso siyanikezelwa ngokweCandelo lama-47 nelama-48 loMthetho kaMasipala woLungiso loMthetho kaMasipala kuCwangciso lokuSetyenziswa koMhlaba kaMasipala, ka-2020 (uMthetho kaMasipala) kwezi zicelo zilandelayo zisebenza kwiSiza-6184, eMount Pleasant (kwipropati), ezizezi:

Ukusetyenziswa kwemvume

Isicelo ngokwemiqathango yeCandelo 16(2)(o) loMthetho kaMasipala ukuvumela isiphakamiso sophuhliso lwezonzibelelwano kumiliselwe ipali engenakususwa engange 25mitha ubude.

Unduluko

Isicelo ngokwemiqathango yeCandelo le-16(2)(b) loMthetho kaMasipala ukunyeniswa kobude obunesithintelo ukusuka 10.5mitha ukuya 25.0m ukulugiselela isiphakamiso sophuhliso se 25mitha ubude sepali engenakususwa kwi propati.

linkcukacha ngesi sindululo ziyafumaneka ukuze zihlolwe ngeentsuku zokusebenza ngamaxesha eveki phakathi kwentsimbi ye-08:00 neye-16:30 kwiSebe: Zicwangciso ngeDolophu kwa-16 Paterson Street, Hermanus.

Naziphi na izimvo ezibhaliweyo zingangeniswa ngokungqinelana nemigaqo yeCandelo lama-51 kunye nelama-52 alo Mthetho kaMasipala oxeliweyo kuMasipala (16 Paterson Street, Hermanus / (e) loretta@overstrand.gov.za) ngomhla okanye ngaphambi koko **21 eyoKwindla 2025**, ucaphula igama lakho, idilesi kunye neenkukacha zoqhagamshelwano, umdla kwisicelo kunye nezizathu zezimvo limbuzo ngomnxeba ingenziwa ku**Mcwangcisi weDolophu, uMnu. B Minnaar** kule nombolo 028-3138900. UMasipala unokwala ukwamkela izimvo ezifunyenwe emva komhla wokuvalela. Nabani na ongakwaziyo ukufunda okanye ukubhala angandwendwela iSebe loCwangciso lweDolophu apho igosa likamasipala liya kuthi limncedise ukuze abhale ngokusesikweni izimvo zakhe.

Umphathi kamasipala, Umasipala iOverstrand, Ibhokisi yePosi 20, **HERMANUS, 7200**

Inombolo yesaziso.28/2025

1. THE APPLICATION

Application is hereby made on behalf of our client Eagle Towers SA for the purpose of erecting a Freestanding Base Telecommunication station with a 25m Monopole Mast to allow the following on Erf 6184, Hermanus, Overstrand Local Municipality.

1. **Consent use application** in terms of Section 16(2)(o) of the Overstrand Municipal Land Use Planning By-law to allow the erection of a Telecommunication base station with a 25m Monopole Mast.
2. **Departure application** in terms of Section 16(2)(b) of the Overstrand Municipal Land Use Planning By-law to allow the following:
 - The height relaxation from 10.5m to 25.0m to allow the newly proposed 25m Monopole mast on the said property.

Highwave Consultants Pty Ltd applied for written confirmation from the South African Civil Aviation Authority (CAA) for the approval of Obstacles. Once communication from the CAA was received Highwave Consultants Pty Ltd will submit the letter to Overstrand LM.

2. PROPERTY DESCRIPTION, SIZE AND OWNERSHIP

The subject property relating to the application is identified as Erf 6184 Hermanus (**Figure 1 and Annexure C**) with an extent of 640m² (Six hundred and forty square meters). The property is situated on 124 Malva Street, Hermanus and is currently owned by Wilhelm Jacobus Le Roux (**Annexure D**).

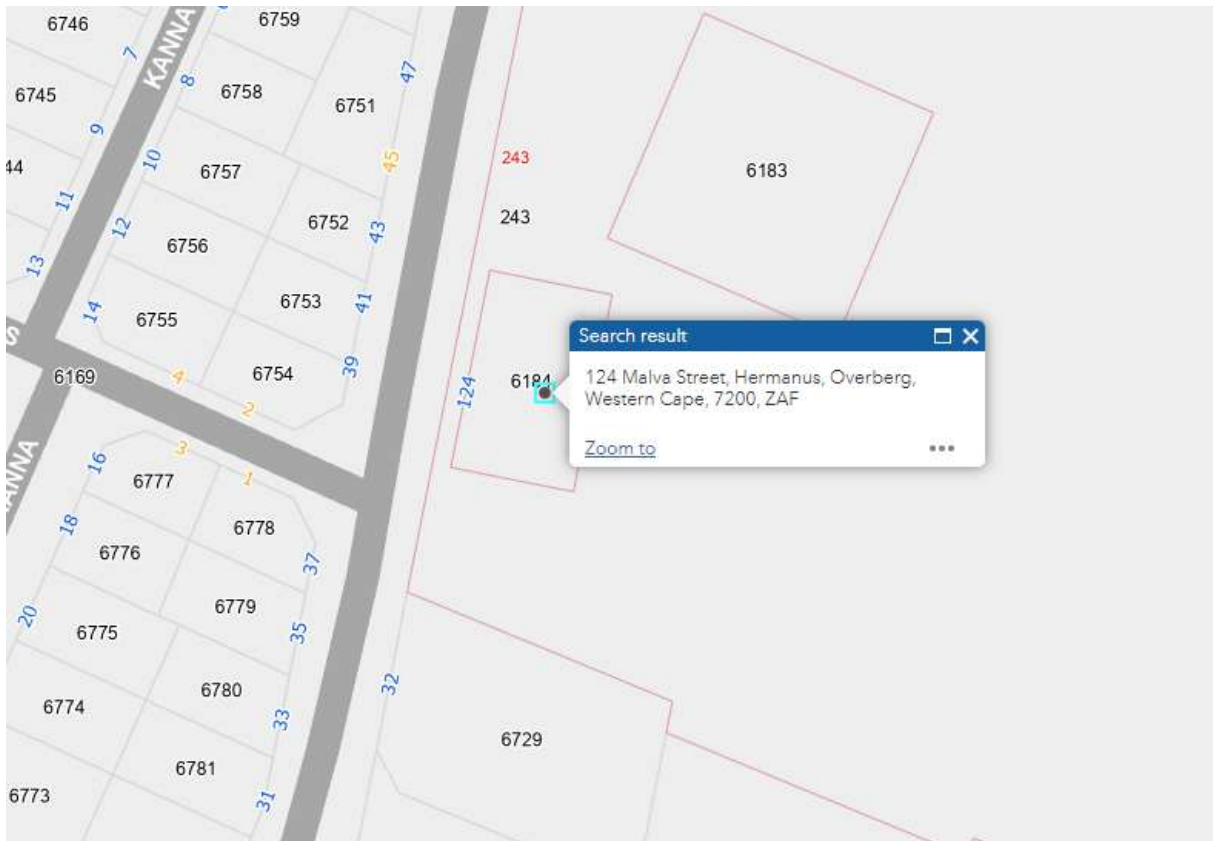


Figure 1: Team Viewer Screenshot

There are no restrictive title deed conditions as pertained in the Title Deed T57220/1994 (Please refer to **Annexure B**: Title Deed)

TITLE DEED DESCRIPTION:	<i>Erf 6184, Hermanus in the Overstrand Municipality, Western Cape Province.</i>
TITLE DEED NUMBER:	<i>T57220/1994</i>
TITLE DEED RESTRICTIONS:	<i>None</i>
PROPERTY SIZE:	<i>640m² (Six hundred and forty square meters)</i>
ZONING:	<i>Business Zone 2: Local Business</i>
PROPERTY OWNER:	<i>Wilhelm Jacobus Le Roux</i>
SERVITUDES:	<i>None</i>

3. CONTEXTUAL INFORMANTS

a. Locality

The concerned property is identified as Erf 6184 Hermanus (hereafter referred to as the “Property”). As previously mentioned, the property is situated 124 Malva Street (**Figure 2**).

b. Land Use

The property is currently zoned Business Zone 2: General Business Bulk 2 (**Figure 3**) and is utilised as a superette (**Annexure G**). The surrounding land uses in the area are predominantly utilized for business and residential purposes (**Figure 3**). The land use surrounding the property is Business Zone 1: General Business Bulk 1.



Figure 2: Locality

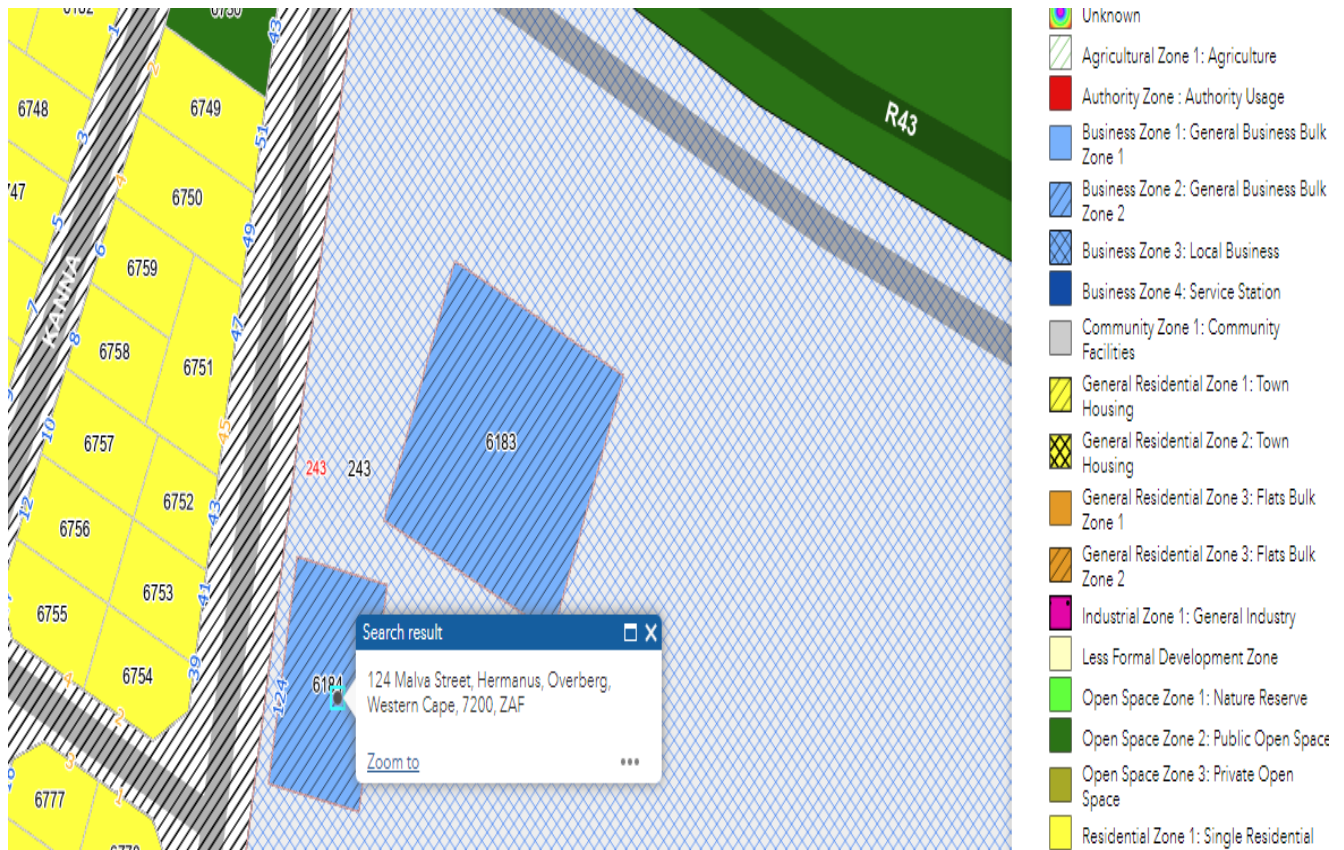


Figure 3: Land-uses and Zoning

4. DEVELOPMENT PROPOSAL

a. Development

It is the intention of our client to apply in terms of the Overstrand Municipal Land Use Planning By-law for a consent use (**Figure 4**) and relaxation of the height restriction (**Figure 5**) for the purpose of erecting a freestanding base telecommunication station.

- b) **Consent uses** are: adult entertainment business, bottle store, crematorium, dwelling unit, flats (on ground floor), funeral parlour, institution, motor repair garage, place of entertainment, recreational facilities, residential building, second dwelling unit, service station, transmission apparatus (subject to the provisions of Chapter 16.10), transport use, utility services, warehouse and service trade.

Transmission Apparatus:

- 16.10.23 Applications for the installation of Transmission Apparatus (TA) shall, to the satisfaction of the Municipality, incorporate the following:
- (a) Site Development Plan which clearly illustrates the proposal in the context of the existing landscape and receiving environment, with reference to application guidelines as may be incorporated in the application form;
 - (b) Transmission Apparatus Infrastructure Plan (indicating but not limited to the following, namely dimensioned plans showing detail of TA, graphic illustration of the proposed facility, elevation details, proposed materials and colours, screening or fencing);
 - (c) Site Development Plan and Transmission Apparatus Infrastructure Plan to be accompanied by a report detailing the motivation for the selected site, how the siting and design of the facility responds to the SDP;
 - (d) Motivation report to be accompanied by relevant proof pertaining to need and desirability (demand & technical requirements);
 - (e) Application to satisfactorily demonstrate to the AO / MPT that all alternatives to the site itself have been explored within a 1km radius of the subject property;
 - (f) Minimum of two alternative sites and design options to be considered;
 - (g) Zoning and land use map to accompany application, that shall also indicate all areas of heritage or environmental significance, if applicable;
 - (h) Visual Impact Assessment prepared by a suitably qualified professional, if required by the municipality, that shall incorporate mitigation measures limiting visual impact;
 - (i) Landscaping plan to accompany application, if required by the municipality, and
 - (j) Statement demonstrating that the installation complies with the applicable health and safety standards.

Figure 4: Extract from the Overstrand Municipal Land Use Planning By-law (Consent Uses)

Bulk Zone	Height	Storeys
Bulk Zone 2 (B2)	10,5 m	3

Figure 5: Extract from the Overstrand Municipal Land Use Planning By-law (Restrictions).

The application entails the following proposed development parameters:

- Erection of a 25m Monopole Mast situated in the western portion of the property.
- Installation of 12 triband antennae on the proposed 25m mast.
- Installation of 4 transmission dishes on the proposed 25m mast.
- Construction of 3 x 2.8m (L) x 3m (W) concrete plinths and installation of 1 x telecommunications equipment containers measuring 1.2m (L) x 2m (W) at ground level.
- The mast and equipment containers will be placed inside an 8m (L) x 8m (W) compound enclosed off by a 2.1m palisade fence.

Access to the proposed freestanding base station will be obtained from a proposed new entrance on Malva Street (Refer to Plan 3/4 **Annexure E:** Plans).

b. Security

The proposed freestanding base telecommunications station will be constructed on Erf 6184 Hermanus, surrounded by palisade fences. Extra security to the actual telecommunications base station will be added by a 2,1m high palisade fence. The telecommunications radio and transmission equipment will be installed inside alarm monitored containers; these containers are secure as they are always locked. The antennae will be located 15m above ground level and are inaccessible to the public. Access to the equipment and antennae will be limited to registered and qualified personnel only. Health and safety legislation also require restrictive security signage (0,4 x 0,5m) to be attached to access gate, containers, and mast door.

The above safety and security measures have been put in place by telecommunication operators and legal entities to prevent access to the public and greatly reduce vandalism of the equipment.

c. Electricity Requirements

Electricity supply will be obtained from the available on-site supply by Eskom, technological advances have also seen current telecommunications equipment reduce their electricity usage.

d. Environmental

The National Environmental Management Act (Act 107 of 1998) regulates environmental and social sustainability. According to the National Environmental Management Act Regulations Listing Notice 3 of 2014, which came into effect on 08 December 2014, an Environmental Impact Assessment (EIA) or Record of Decision (ROD) is a ONLY an requirement for:

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

- a) is to be placed on a site not previously used for this purpose; and
- b) will exceed 15 meters in height.

But excluding attachments to existing buildings and masts on rooftops”.

Listing Notice 3 of 2014 clearly defines the requirements in the Western Cape:

“(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.

As this site falls within an urban area inside the Overstrand Municipal area and not in an area designated for conservation use as prescribed in the Spatial Development Framework adopted by the competent authority, or zoned for conservation purposes, it does not trigger a listed activity in terms of the 2014 NEMA regulations and therefore no environmental impact assessment or ROD (Record of Decision) is required.

However, Highwave Consultants Pty Ltd applied for written confirmation from the Western Cape Provincial Government Department of Environmental Affairs and Development Planning for written confirmation that this application does not trigger a listed activity in terms of the 2014 NEMA regulations. Once communication from the Western Cape Provincial Government Department of Environmental Affairs and Development Planning was received Highwave Consultants Pty Ltd will submit the letter to Overstrand LM.

5. MOTIVATION

a. Background

Recent research conducted has indicated that there is a current lack of cellular infrastructure to provide optimal and efficient data/ voice coverage to the surrounding mostly residential community situated in the Hermanus area.

The need for optimal coverage was mainly caused by the increase in subdivisions of the surrounding large properties into industrial, commercial, and business parks over the past few years as well as the introduction of LTE (*latest cellular technology*). As identified by the TMIP the coverage radius/ footprint for cellular telecommunications technology has been reduced due to the latest technology and additional need for increased data speed and voice quality. In addition to the research there has been a clear increase in customer complaints in the surrounding area regarding poor or no voice & data coverage which is paramount to ensuring economic development of the surrounding area.

b. Proposed Development Parameters

The current and proposed allowable development parameters as per the Business Zone 3: Local Business are indicated in the table below:

Development Parameters	Zoning Scheme Regulations (CO1)	Proposed Development on Erf 6184, Hermanus
Height	Height restriction: 10.5m	DEPARTURE: 25m

Figure 6: Applicable Development Parameters

The proposed erection of a freestanding base telecommunication station will **NOT** have an impact on parking, and coverage or floor factor as described in the Overstrand Zoning Scheme.

c. Physical Characteristics

RF Engineers are subject matter experts and identify sites by utilizing a specific set of engineering rules and principles, Erf 6184, Hermanus was identified as a prime position on the following premise:

- Property offers the optimal position situated between existing and planned base stations to provide efficient data and voice coverage.
- Surrounding geographical aspects are in line with the requirements.
- Minimized physical, natural and visual impact.
- Ability to reduce the number of base stations in the surrounding areas by allowing co-location on this mast.
- Ability to provide sufficient security to the equipment.
- Capacity to share infrastructure with majority of the operators.
- Property position will address the complaints received in the area.
- Sufficient space to erect a freestanding base telecommunications station.

In order to achieve the optimal data and voice coverage objectives base stations needs to be approximately 300m apart on average, this depends on the density of the surrounding areas as well as geographical and physical features. The fresnaye effect also influences

the quality of the voice and data coverage caused by the amount of steel and concrete of the buildings in the surrounding area, this results in a reduced coverage area.

d. Title Deed Restrictions

In respect of Erf 6184, Hermanus it was found that there are no restrictive title deed conditions contained in title deed no. *T57220/1994* that needs to be removed. ***(Please refer to the attached Annexure B: Title Deed)***

e. Health

Current research on freestanding base telecommunication stations has reached a point whereby scientists are satisfied that 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.

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. ICNIRP allows for an exposure measurement level of 41.000 (v/m) within a distance of 15m from the antennae. Cellular operator antennae operate at a level of not more than 0.04 (v/m) within a distance of 15m, in laymen's terms the levels are approximately 1/1000th of the prescribed exposure levels. It is therefore clear that the installation of these antennae does not pose a health risk. 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 following these guidelines and are far below international standards.

A statement made by the Department of Health dated 19 January 2018 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.”

The following is an extract from www.arpana.gov.au and clearly differentiate between two types of radiation, one can cause harm to the human body and the other one pose no threat to the human health. The name of the two are:

- **Ionising Radiation**

This type of radiation refers to the type that carries enough energy to cause ionisations in atoms. This is a much stronger type of radiation compared to non-ionising radiation. This is the dangerous type that you typically will find in gamma rays, x-rays, etc.

- **Non-Ionising Radiation**

This type of radiation refers to types of radiation that do not have enough energy to cause ionisation of the atoms. These types of radiation are the “every day” radiation that everyone experience such as infrared, microwaves and do not have enough energy to cause harm.

It is proven that the proposed cell mast development and every other freestanding base telecommunication station utilise **non-ionising** radiation.

5G and the concerns related to it:

The following was a study that was conducted in South Africa and published on the 6th of September 2021 on My Broadband. (The source is below)

“The electromagnetic radiation you are exposed to when standing close to an active microwave oven is much higher than a 5G cellular tower, a MyBroadband investigation has shown.

Even though the radiation from the microwave was much higher, it remained within the safety thresholds of the International Commission on Non-Ionizing Radiation Protection (ICNIRP). MyBroadband sent a researcher to several cellular masts around the Gauteng area to see if the electromagnetic radiation they emit present any danger to the people living around them. For points of comparison, he also measured the radiation emitted from a microwave oven and Wi-Fi router.

All testing was performed using an [RS Pro IM-195 RF Field Strength Meter](#).

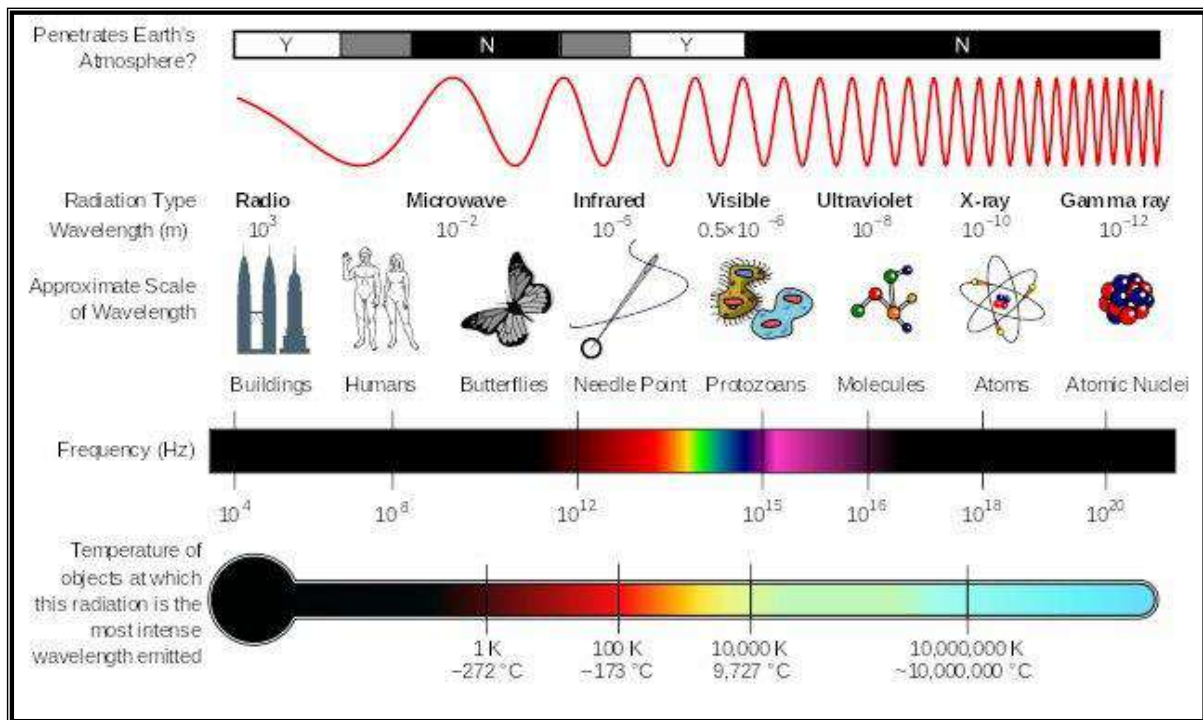


Figure 7: Electromagnetic Spectrum Diagram

A diagram of the electromagnetic spectrum, showing various properties across the range of frequencies and wavelengths.

The current scientific understanding is that electromagnetic waves up to the visible light spectrum are unlikely to be harmful to human health below certain power thresholds.

Electromagnetic fields that run at frequencies higher than that of ultraviolet light are known as ionising. Ionising electromagnetic radiation, such as that caused by x-rays and gamma rays, can damage DNA and are known to cause cancers. Non-ionising radiation does not cause DNA damage as ionising radiation does, but it may be harmful to human health at high enough power levels.

For example, microwave ovens use electromagnetic waves with frequencies around 2.45 gigahertz (GHz). This is in the same vicinity as technologies like Wi-Fi and Bluetooth.

The difference is that microwave ovens emit these waves at a much higher power level, measured in Watt (W), compared to Wi-Fi and Bluetooth devices. Hertz is a measurement of how many times a wave oscillates every second, whereas Watt is a measure of the wave's power.

The ICNIRP defines safe reference levels for the general public at the following power densities. As the frequency of the electromagnetic wave increases, the safe power density increases:

- 900MHz — 4.5 W/m²
- 1.8GHz — 9 W/m²
- 1.9GHz — 9.5 W/m²
- 2.0GHz+ — 10 W/m²

To get a sense of the ambient electromagnetic radiation we are exposed to, we took a baseline reading outside, in a suburban neighbourhood. The measurement varied from about 0.002W/m² to 0.004W/m². We then took measurements at varying distances from a cellphone tower, and the highest reading we got was 0.004W/m² — entirely within what is considered normal.

Our researcher said it wasn't possible to get a proper reading from the tower due to the inverse-square law.”

As seen above and recently proven, there are no reasons to be concerned with regards to 5G cellular infrastructure.

Source:

https://mybroadband.co.za/news/science/412846-we-measured-the-radiation-from-a-microwave-and-compared-it-to-a-5g-tower.html?utm_source=newsletter

The Directorate: Radio Control, within the South African Health Products Regulatory Authority (SAHPRA) is the responsible authority regulating cellular base-station effects on health and they confirmed that there are no health dangers related to freestanding base telecommunication station / cell masts. Please see attached letter “SAHPRA Letter on Health Effect_2022” (***Please refer to Annexure H: SAHPRA Letter on Health Effect_2022***).

f. Need, desirability: Current Cellular Coverage

In modern times it is become a rear instance where a member of the public only utilises one cellular phone, majority utilize a cellular phone for personal and an additional phone,

iPad or dongle for business purposes, it's on this premise that we believe it to be in both the Overstrand Municipality and the operators interests to address the problem of weak voice and data coverage and to provide the surrounding high traffic commercial & business community with the basic need of effective voice and data coverage, as it has become an integral part of our daily lives.

The need for the freestanding base telecommunication station is not only centred on cell phone reception for the community of Hermanus, but the focus is also on improving internet speeds in the area as the industry is moving towards a data centric industry. It is also aimed at users of new wireless technology. According to Tumotech, due to the emergence of more apps than anyone can keep track of and advanced software the pressure on networks has intensified. This is likely to continue with more and more data centric services coming out such as video streaming (Netflix, DSTV box-office, DSTV Now and DSTV Catch Up). The fibre rollout development is already a step in the right direction. However, there is still a lack of upstream bandwidth industry investment. Upstream bandwidth refers to data sent from the user devices such as desktop computers, smart phones, laptops, and tablets toward the Service Provider destination. The challenge is that wireless internet infrastructure is focused on downloading data and not the uploading of it.

When selecting a site, special consideration is given to the geographical aspects so that the cellular infrastructure is positioned to ensure optimal functionality and availability to the customer. This reduces the number of base telecommunication stations necessary to provide the best possible experience for the end user.

Our client Eagle Towers SA pride themselves in ensuring that a positive impact is created in terms of the social, environmental, and economic wellbeing of the area. Since the introduction of LTE in South Africa in 2012 there has been greater need for access to faster data, due to the higher penetration of LTE data in commercial and business areas, this has led to lower subscription fees which provide economic sustainability and development. LTE will ultimately address high data traffic requirements and the surrounding community will be the main beneficiary.

The erection of a telecommunication base station does not impact on the current or surrounding land uses of the property, nor does it encroach onto any street building lines or increase the need for parking or bulk of the said property. The construction and

maintenance phase of the proposal will provide a positive economic and social impact by ensuring job creation.

The increase in tourist activities in the Hermanus area over the holiday seasons created a high demand for effective voice and data requirements. The commissioning of the proposed telecommunication base station will alleviate the congestion experienced by cellular operator customers and ensure that their needs are accommodated.

In modern times it has become a rare instance where a member of the public only utilizes one cellular phone, majority utilize a cellular phone for personal and an additional phone, iPad or dongle for business purposes, it's on this premise that we believe it to be in both the Overstrand Municipality and the operators interests to address the problem of weak voice and data coverage and to provide the surrounding high traffic commuters with the basic need of effective voice and data coverage, as it has become an integral part of our daily lives.

When selecting a site, special consideration is given to the geographical aspects so that the cellular infrastructure is positioned to ensure optimal functionality and availability to the customer. This reduces the number of base telecommunication stations necessary to provide the best possible experience for the end user.

Our client Eagle Towers pride themselves in ensuring that a positive impact is created in terms of the social, environmental, and economic wellbeing of the area. Since the introduction of LTE in South Africa in 2012 there has been greater need for access to faster data, due to the higher penetration of LTE data in "rural areas", this has led to lower subscription fees which in itself provide economic sustainability and development. LTE will ultimately address high data traffic requirements and the surrounding community will be the main beneficiary.

The erection of a telecommunication base station does not impact on the current or surrounding land uses of the property, nor does it increase the need for parking or bulk of the said property. The construction and maintenance phase of the proposal will provide a positive economic & social impact by ensuring job creation.

The increase of individuals in the Hermanus area created a high demand for effective voice and data requirements. The commissioning of the proposed telecommunication base station will alleviate the congestion experienced by cellular operator customers and ensure that their needs are accommodated.

The following illustrations describe the “Fresnaye Effect” and when base stations are more than 500m from each other in which the desirability for this site is supported as more people move into this area and the snowball effect it will have on the coverage network.

f.1 Choice of site

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 8 - 10 strive to explain how the need for an increase in cellular infrastructure evolves in a typical area.

f.2 Cellular infrastructure explained:

Figure 8 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 9). 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 10). If a need for coverage does not exist in a specific area, no company would invest capital to build a freestanding base telecommunication station in the said area. The fact that there are only a few and not enough freestanding base telecommunication stations in the surrounding area to address the need for sufficient and high-quality network coverage supports the statement that there is a clear need for network coverage in the area.

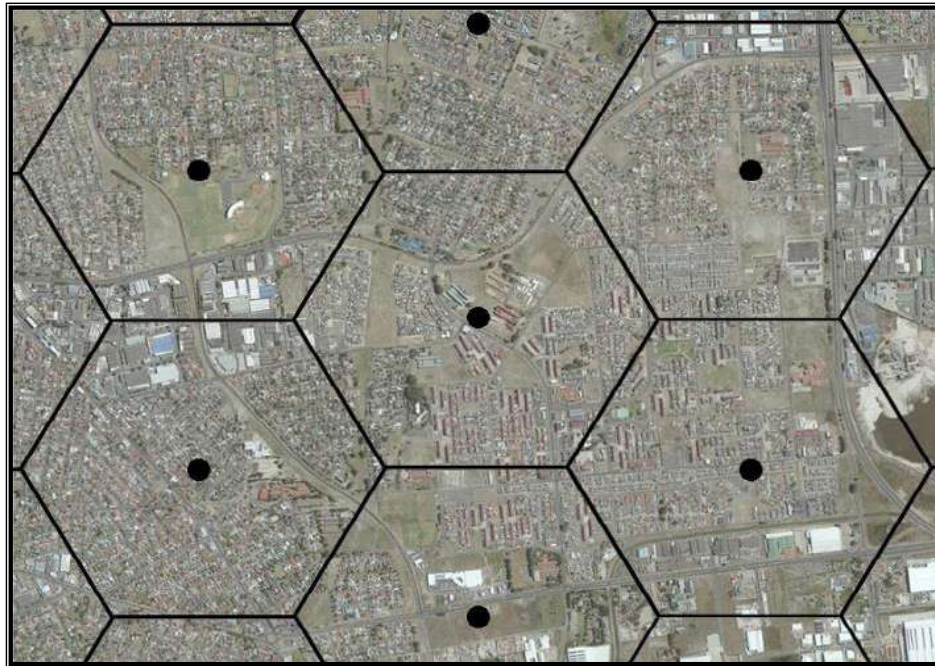


Figure 8: Initial coverage (cell) provided by base stations.

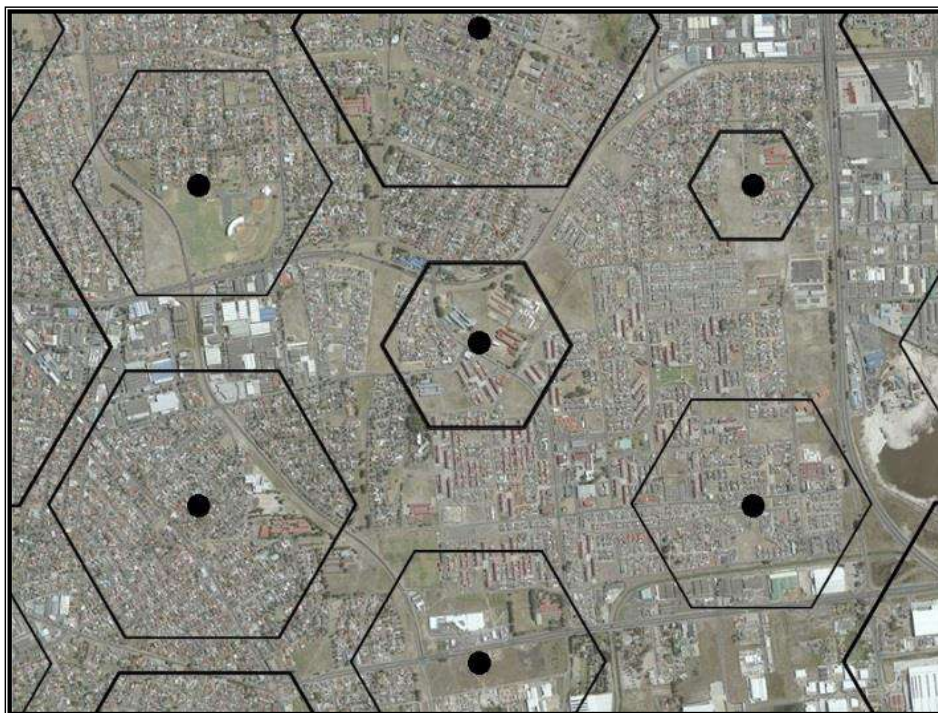


Figure 9: Coverage decreases due to increase in network users – cell size decreases.

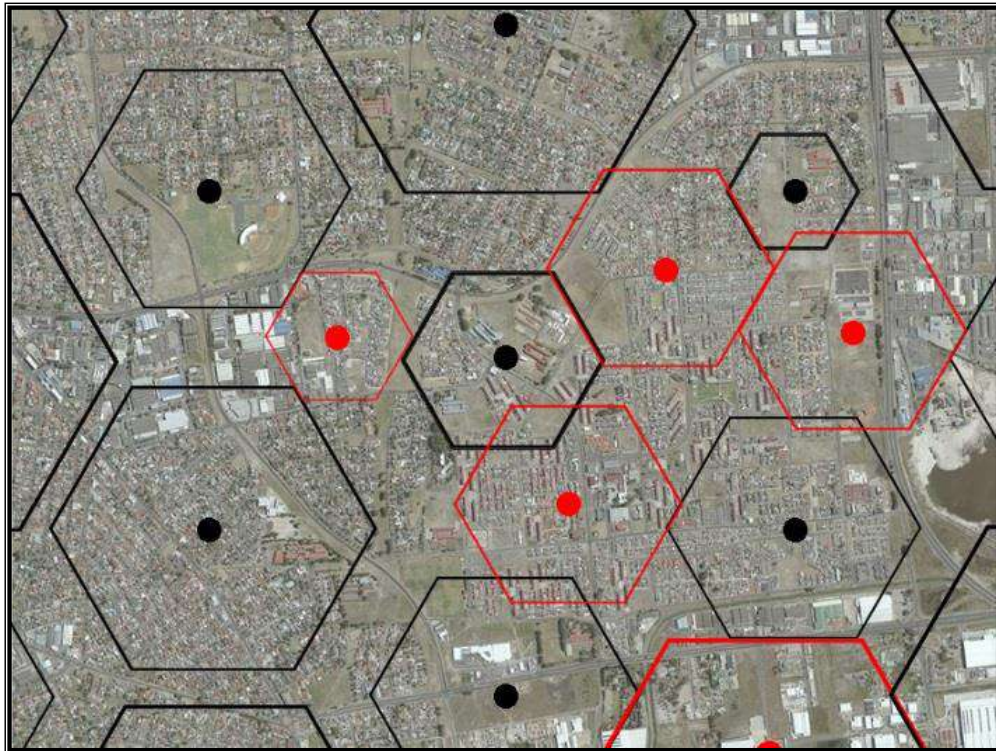
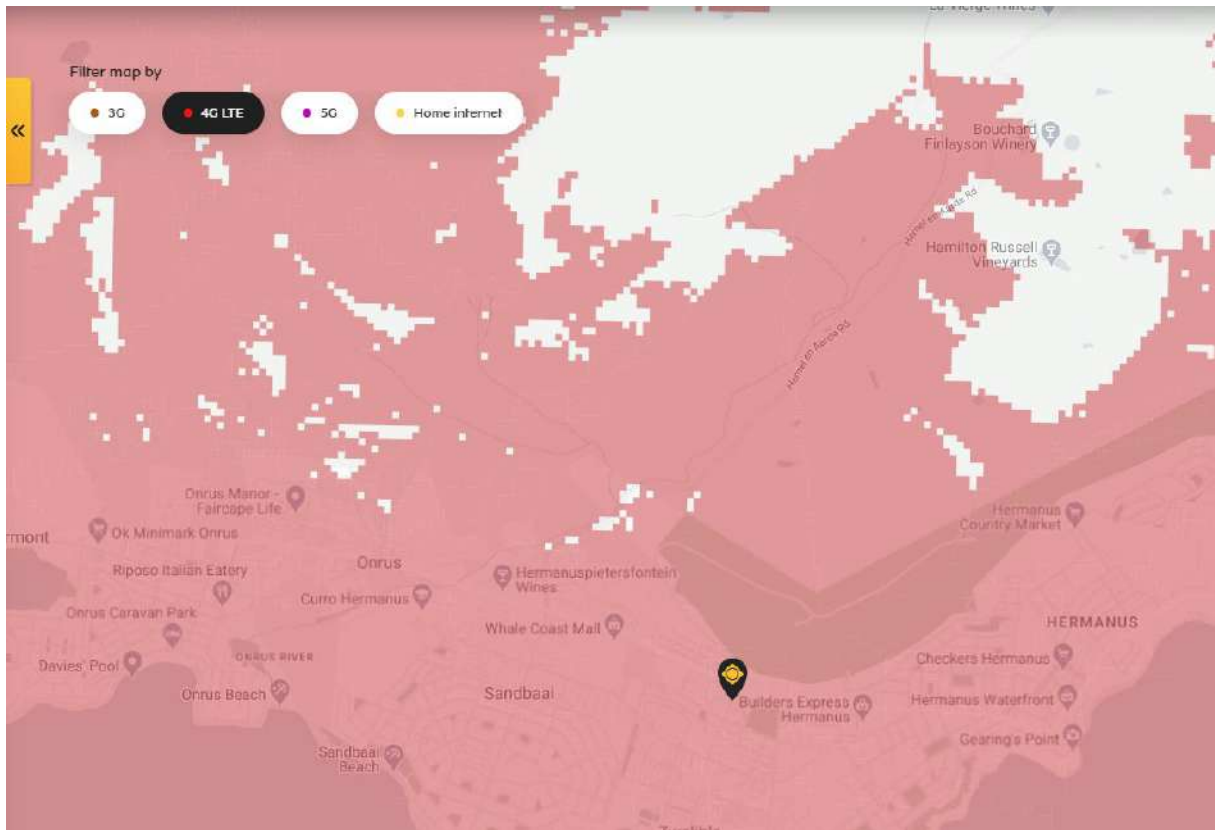


Figure 10: Additional base stations required to fill the gaps.

There is a lack of voice and data coverage in the Hermanus area. This places its inhabitants in danger as they might experience times that they cannot reach emergency services, e.g. the Police, Fire Department and/or ambulance. It restricts economic activity in the area as many people are dependent on having high quality signal for their livelihood.

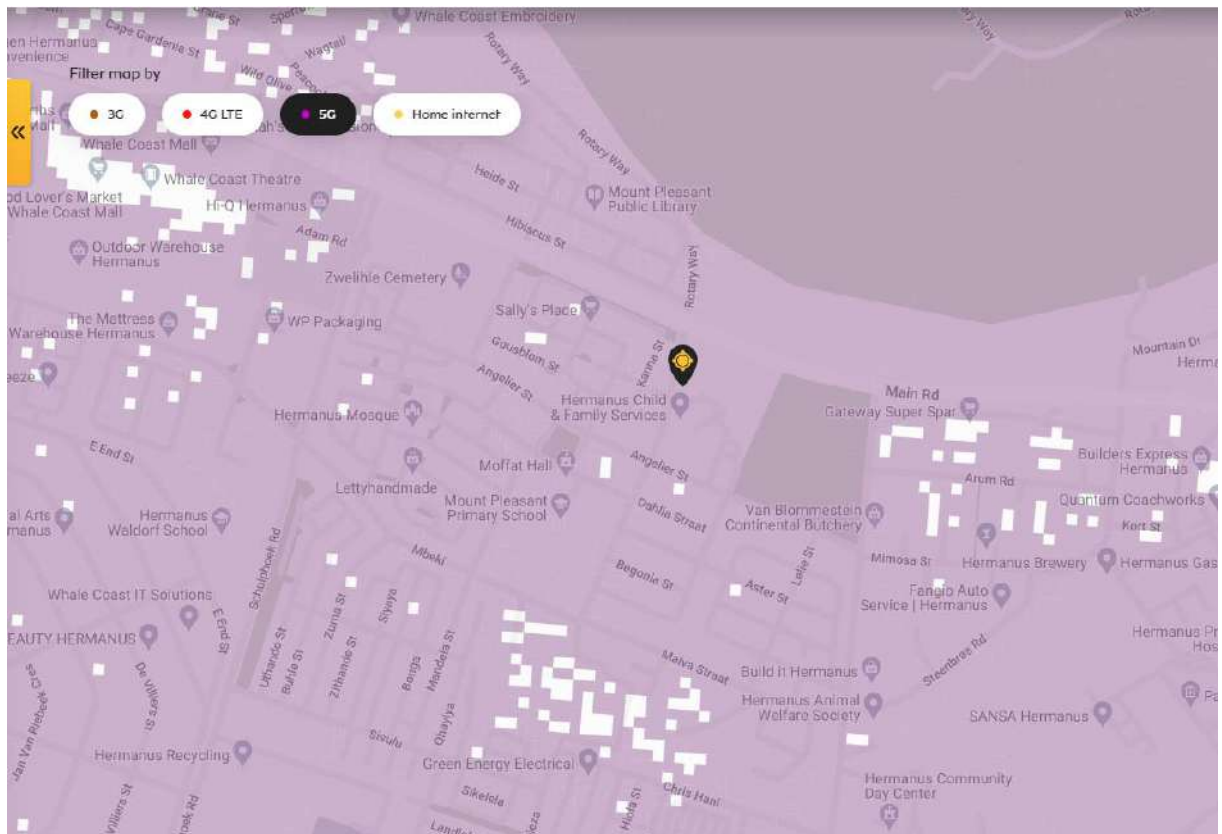
It is of utmost importance to understand that the current positions for cell masts given to our client does not necessarily mean that the signal is weak in the said area. The operators aim to strengthen the coverage and to future proof it for new technologies.

It is for instance MTN's goal to strengthen the Fixed LTE coverage in this area which will see substantial increases in internet speed and consistency. The image below was taken from MTN's website illustrating the current Fixed LTE coverage for the Hermanus area. The proposed mast location is indicated with a MTN marker on the map.



Source: MTN Coverage South Africa

The coverage map below depicts the coverage for MTN 5G in the project area. It is evident that some areas do not have 5G coverage. The proposed mast will ensure that 5G coverage is provided to the surrounding community. The proposed mast location is indicated with the MTN marker on the map below:



Source: MTN Coverage South Africa

In the case with Vodacom, this proposed cell mast development will aid Vodacom in providing 5G coverage in the Hermanus area. The following insert was taken from Vodacom’s network map:

CRITERIA	PROPOSAL ON ERF 6184 HERMANUS
<p>(a) Site Development Plan which clearly illustrates the proposal in the context of the existing landscape and receiving environment, with reference to application guidelines as may be incorporated in the application form;</p>	<p>Please refer to submitted building plans and supporting documents that addresses this criterion.</p>
<p>(b) Transmission Apparatus Infrastructure Plan (indicating but not limited to the following, namely dimensioned plans showing detail of TA, graphic illustration of the proposed facility, elevation details, proposed materials and colours, screening, or fencing);</p>	<p>Please refer to submitted building plans and supporting documents that addresses this criterion.</p>
<p>(c) Site Development Plan and Transmission Apparatus Infrastructure Plan to be accompanied by a report detailing the</p>	<p>With reference to accompanying development plans, this report aims to confirm that the TA is presented in an unused portion of the Property. Visual sensitivity is usually determined by the context and type of viewers in the immediate area. Our client took this into account when choosing the position on the property.</p>

<p>motivation for the selected site, how the siting and design of the facility responds to the SDP;</p>	<p>The TA at this position holds the ability to accommodate at least three of the four MNOs operating in SA. The design is carefully selected as it will accommodate the most operators while limiting the number of future base stations.</p>
<p>(d) Motivation report to be accompanied by relevant proof pertaining to need and desirability (demand & technical requirements);</p>	<p>Section 5 (g) reflects the current coverage in the area. During the National State of Disaster issued by the National Government during the COVID-19 pandemic, telecommunication services were realised as essential. These services allowed people to work-from-home, educate children and staying connected with loved ones. As more people depend on these services during these uncertain times, the pressure on existing infrastructure and the general coverage increases. Additionally, this development will be able to provide optic fibre connectivity to the community of Hermanus. This development will provide sharable infrastructure for multiple MNOs.</p>
<p>(e) Application to satisfactorily demonstrate to the AO / MPT that all alternatives to the site itself have been explored within a 1km radius of the subject property;</p>	<p>My client went out to the site to find the best suited location.</p>
<p>(f) Minimum of two alternative sites and design options to be considered:</p>	<p>As discussed under criterion (e), limited alternative sites in the surrounding area exist that may act as alternative sites. No buildings exist that may present a rooftop-based TA as alternative. Alternatives are presented in this motivation in (refer to Section 5.1.).</p>

	<p>The location for the proposed mast has been chosen for the following reasons:</p> <ol style="list-style-type: none"> a. The owner has agreed to the location as it fits in with existing and future activities on the application property. b. The position of the mast was chosen as it is centrally located, and it is the most optimal position for the providing voice and data coverage for Hermanus. c. The placement of the mast is strategic in the sense that it serves as a connection waypoint and to advance the current network in Hermanus. The mast has a line of sight with existing masts in Hermanus and surrounding areas. The reason for this is to communicate effectively with existing masts in Hermanus and surrounding areas.
<p>(g) Zoning and land use map to accompany application, that shall also indicate all areas of heritage or environmental significance, if applicable;</p>	<p>Accompanying drawings aligns with this criterion. No heritage or environmentally significant sites are near the site.</p>
<p>(h) Visual Impact Assessment prepared by a suitably qualified professional, if required by the municipality, that shall incorporate mitigation</p>	<p>A VIA was conducted-see attached. It was concluded that the visual impact on these receptors range from moderate to low or insignificant with the highest impact on the immediate streetscape. No mitigation measures are therefore required</p>

measures limiting visual impact;	
(i) Landscaping plan to accompany application, if required by the municipality, and	A landscaping plan will be provided should the municipality request it.
(j) Statement demonstrating that the installation complies with the applicable health and safety standards.	Telco Towners only uses competent contractors for the installation of TA. Merlin Projects manages its Tower build operations in line with the Occupational Health and Safety (OHS) Act, 1993 (Act No. 85 of 1993) and the applicable sub-regulations, particularly the Construction Regulation (CR) 2014.

Western Cape Integrated Development Plan

As depicted in the Western Cape IDP, a change in intensified land use and form is anticipated. The Hermanus area has been identified as an easily accessible activity corridor where increased public movement and transportation is both being expected and supported by the district municipality. The area is also identified as a Tourism node which will in fact lead to strain on the current network during peak seasons. The positioning of the base station will be in proximity of the district restructuring routes. This will lead to an increase in tourism, commercial and business activities and would require the need to erect a base station which in turn will address the increased communication needs of the surrounding community.

Western Cape Economic Development Strategy (2009)

The Directorate for Economic and Human Development published a draft Economic Development Strategy in 2009 which supports the need to provide fundamental telecommunications infrastructure and to provide the best possible available coverage. This will lead to the attraction and growth of the commercial sector and at the same time retain and advance skilled persons.

Please find below an extract from the above-mentioned policy supporting telecommunications infrastructure:

“High data access and low telecommunications costs are a key input factor for local community, business and industry to achieve sustainable growth” &

“Taking into account the high accessibility of mobile telephones and the growth in the mobile telecommunications market, the provincial government will actively seek to create technology parks in nodal areas in order to increase the digital literacy of citizens”.

As confirmed by the policy, basic access to voice and data coverage is defined as a basic need for the public and falls under the umbrella of electricity, water, sanitation, and access.

h. Electricity

The electricity supply to TI (Telecommunications Infrastructure) must, where practically possible, make use of underground cables. All electrical installations must be as per ESKOM or Overstrand Municipality’s Electrical Department requirements and standards. Our client will ensure that the proposal will be in line with the above-mentioned electrical supply requirements.

i. Visual Impact

Special consideration has been given to the placement of the proposed freestanding base station to minimize the visual impact as far as possible however this is challenging at times. The proposed erection of a 25m freestanding base station will offer the opportunity for operators to collocate resulting in the reduction of future telecommunication towers. Our client Eagle Towers SA has selected to erect a Monopole design mast to reduce the visual impact and be in fitting with the surrounding environment. A visual impact assessment was conducted to illustrate the visual impact that the tower will have on its surroundings. The assessment has been attached to this report as **Annexure F**. In short, the findings of the assessment are as follows:

The area is characterized by medium to high-density residential neighbourhood with community facilities. A high activity level exists in the area with both traffic and pedestrians using the street space. Malva Street is an important access corridor

into the neighbourhood. The mast is situated on a business property abutting the residential component of the neighbourhood.

The digitally modelled viewshed indicates that the mast can potentially be visible from quite a distance. The mast is however of small horizontal extent and do not protrude above the other masts in the area and therefor the view from a distance is negligible.

The identified receptors namely the immediate residential area; the R43 as a route of regional scenic significance; Rotary Drive and Mountains to the north were assessed in terms of exposure, sensitivity, intrusion, and duration. It was concluded that the visual impact on these receptors range from moderate to low or insignificant with the highest impact on the immediate streetscape where the impact is potentially high.

Several high mast light poles and flood lights are present in the area, but only two monopole cell towers were observed in the adjoining areas. The mast will not contribute significantly to the scene and the cumulative impact is rated as low.

Given the assessment of the mast in the context of the receiving area, it is suggested that the mast could be accommodated in the landscape. No mitigation measures pertaining to the appearance of the mast is proposed. The only mitigation measure relates to the positioning of security lighting as not to cause a disturbance to the direct neighbours.

j. Access & Traffic considerations

Erf 6184, Hermanus is easily accessible, and access will be obtained from the proposed new access gate on Malva Street (**Annexure E** Plans plan 3/4). These streets have low traffic volume thus this development will not affect traffic negatively and will not cause any additional traffic volume to the area.

k. Alternative Candidates/ Solutions

Cognizance needs to be taken of the fact that our client received coordinates of possible mast locations from the registered service providers (MTN, Vodacom, Cell C, etc). The

nominal point usually represents areas where a mast will benefit the coverage grid of the said operator and will also benefit the residents in turn as well. Our client takes these coordinates and circulates it to their consultants (Highwave Consultants) and in turn the consultants' approach various property owners in each radius from these coordinates in order to secure a position on which the mast will be developed on. In this case Highwave Consultants received an already signed lease agreement with the project property owner.

Highwave Consultants can confirm that there are two possible candidates in the surrounding area that could have work, however one of the two properties did reject the proposal on a previous occasion. Erf 6184, Hermanus were the only candidates interested in the development.

The other alternative candidates are as follows:

1. Greenfield site named Abagold Head office:

This site was identified, and the owner was approached with an offer to rent the space on the southern corner of the property. This site failed due to the property owner not being interested.

2. Hermanus Sports Ground:

This site could have worked; however, the property is owned by the Overberg Local Municipality. Due to the lengthy nature of concluding a lease agreement with organs of government, the property was not considered.

We can confirm that although there are alternative locations for the proposed project, the best location with a willing landlord was obtained. The owners of Erf 6184, Hermanus indicated that they are willing to house such a structure on their property.

6. CONSISTENCY WITH SPLUMA PRINCIPLES

The spatial planning and land use management act (SPLUMA) came into effect on 1 September 2014. One of the main objectives of this act is to provide a framework for spatial planning and land use management to address past spatial and regulatory imbalances.

SPLUMA sets out the following 5 main principles applicable to spatial planning, land use management and land development.

The table below indicates how to propose development will be consistent with the SPLUMA principles.

Principle	Motivation
Spatial justice:	<ul style="list-style-type: none"> • The development aims to promote community development within the urban fabric of Hermanus. • The proposed application will contribute to the functional and integrated land use pattern in the surrounding area.
Spatial sustainability:	<ul style="list-style-type: none"> • Development complies with Western Cape Provincial Spatial Development Framework (2014) as a spatial tool to guide future development on a provincial level. • The proposed development does not trigger any environmental listed activities according to the national environmental management act (1998) • Densification inside the urban area results in more effective provision of services that will result in more feasible provision of infrastructure and social services. • The proposed development will have no impact on the character of the surrounding area.
Spatial efficiency:	<ul style="list-style-type: none"> • Development will make use of existing local resources and contribute to specialized skills development within the local municipality.

	<ul style="list-style-type: none"> • Intensification inside the urban edge results in optimal use of existing resources and infrastructure.
Spatial resilience:	<ul style="list-style-type: none"> • The development complies with the following spatial development frameworks: <ul style="list-style-type: none"> ▪ Western Cape Provincial Development Framework 2014.
Good administration:	<ul style="list-style-type: none"> • The principle has no direct bearing on the application. The Overstrand Municipality is obligated to consider the application fairly and within the timeframes provided in terms of the municipal planning by-law.

7. CONCLUSION

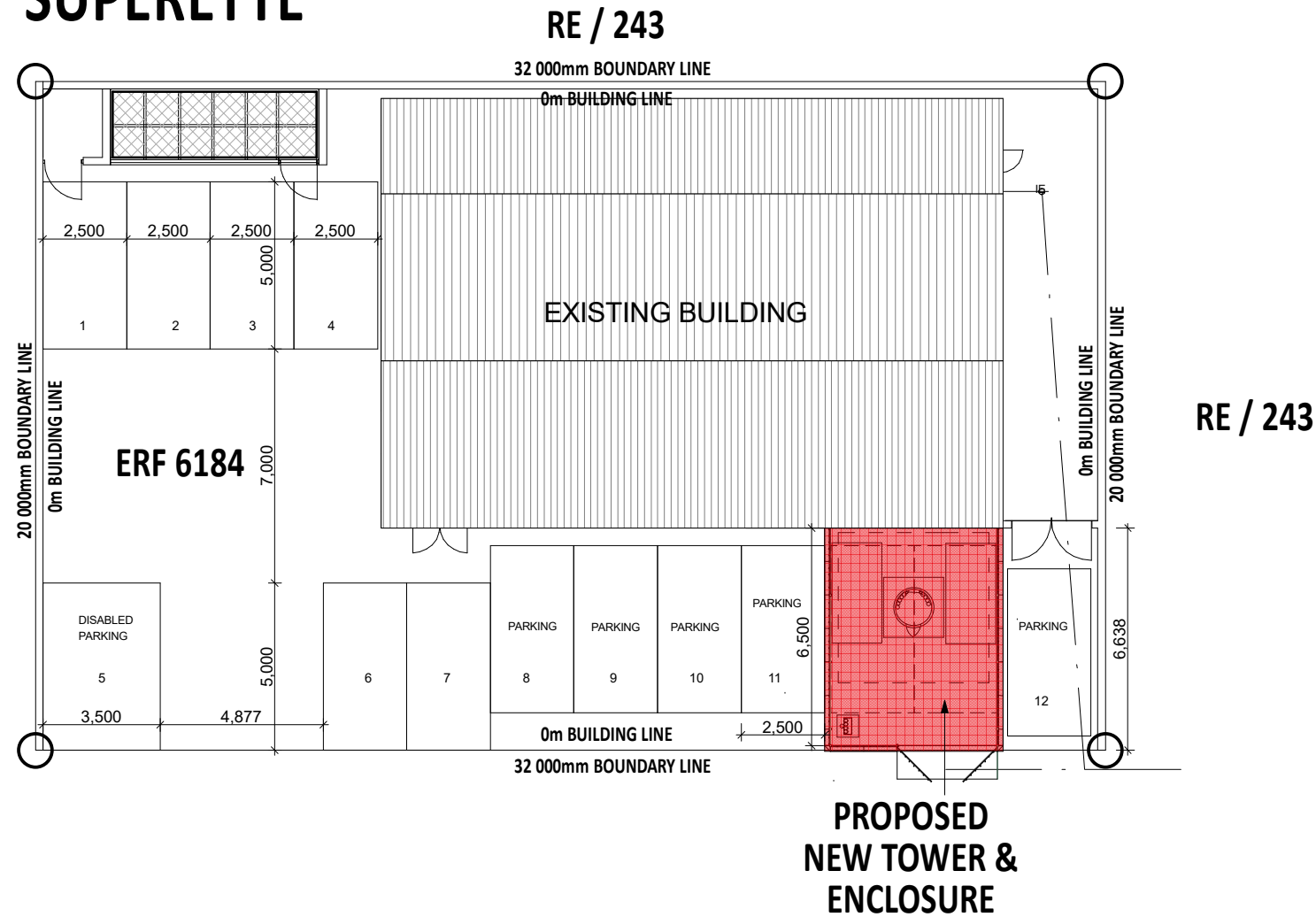
The application for the consent use and departure application to allow the freestanding base telecommunications station on Erf 6184, Hermanus will have a reduced impact on the surrounding build environment due to its positioning. As supported by various policies and legislation, the proposal will have a positive economic and social impact ensuring that the surrounding community benefits from optimal and effective voice and data coverage. The development will not have an impact on parking, coverage, or the floor factor.

Notwithstanding the above, the erection of a freestanding base telecommunication station will provide an additional passive income to the landowner which can in turn utilize the additional income to uplift the surrounding area. The application has been proven to be desirable and it is hereby kindly requested that the Overstrand Municipality provide their full support for the following:

1. **Consent use application** in terms of Section 16(2)(o) of the Overstrand Municipal Land Use Planning By-law to allow the erection of a Telecommunication base station with a 25m Monopole Mast.

2. **Departure application** in terms of Section 16(2)(b) of the Overstrand Municipal Land Use Planning By-law to allow the following:
 - The height relaxation from 10.5m to 25.0m to allow the newly proposed 25m Monopole mast on the said property.

MOUNT PLEASANT SUPERETTE



Site Plan

1:200



**EAGLE
TOWERS SA**

Site Name & BS Number

MOUNT PLEASANT SUPERETTE

Revision	Date	Drawn By:	Reason for Revision:
A	21/02/24	T.E	ISSUED FOR APPROVAL
B	24/04/24	A.H	ISSUED FOR APPROVAL
C	06/08/24	A.H	PARKING LAYOUT REVISED

NOTES:

Lats -34.418435° Longs 19.216046°

Region: **WESTERN CAPE**

Property Description:
**ERF 6184, MALVA STREET,
HERMANUS, WESTERN
CAPE**

Project: **GREENFIELD
25m MONO POLE
HASL 217m**

Site Plan

Task:	Initial:	Signature:	Date:
Draughtsperson:	T.E		21/02/24
Design Approval:	T.E		21/02/24
Technical Approval:			
Approved for Issue:			

Scale: AS SHOWN Drawing Reference:
Site Plan ETSA - 1159
SHEET 3 of 5 REVISION: C

MOUNT PLEASANT SUPERETTE



Site Name & BS Number
MOUNT PLEASANT SUPERETTE

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A	21/02/24	T.E	ISSUED FOR APPROVAL
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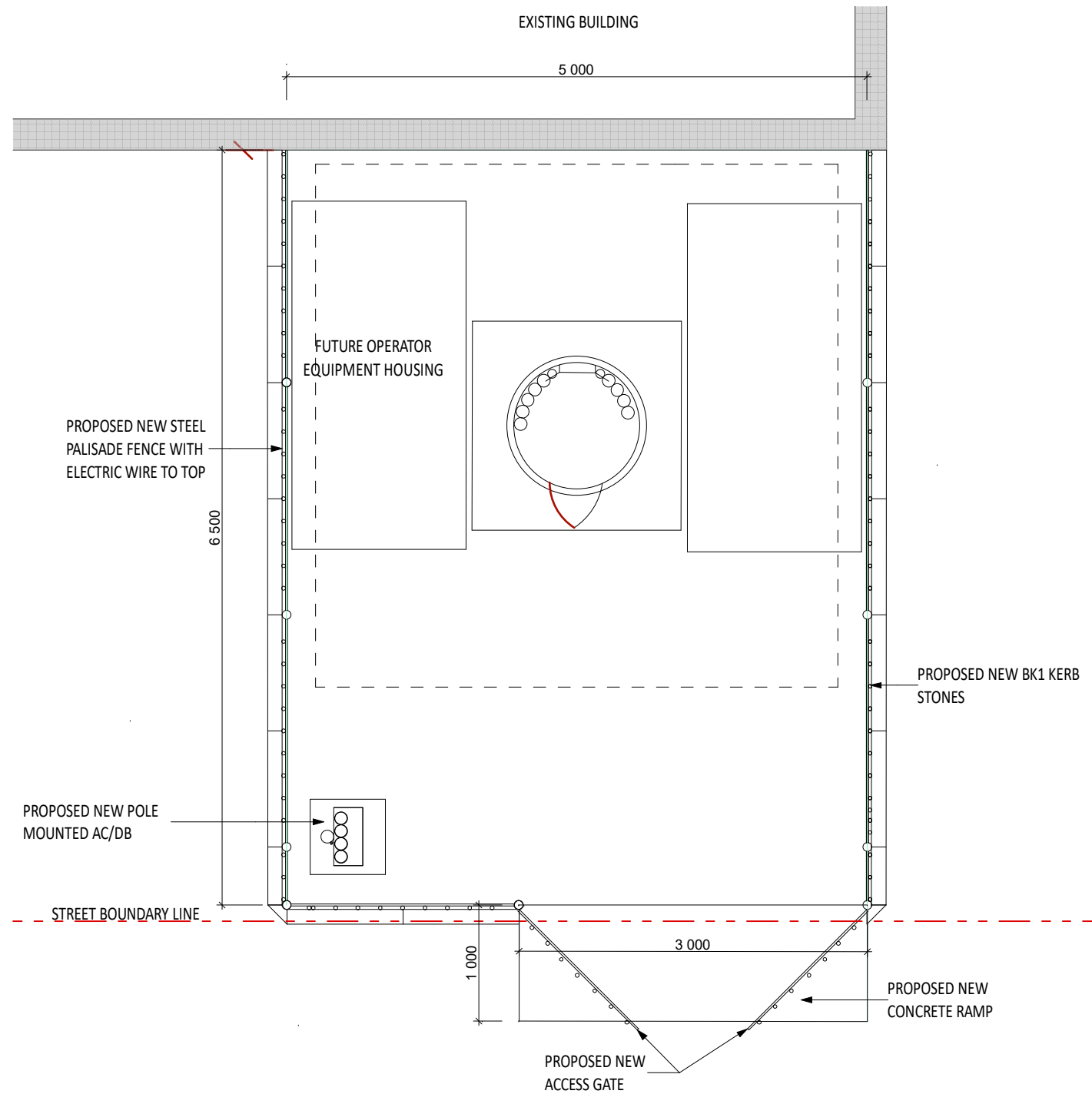
Plan Layout

Task:	Initial:	Signature:	Date:
Draughtsperson:	T.E		21/02/24
Design Approval:	T.E		21/02/24
Technical Approval:			
Approved for Issue:			

Scale: NTS Drawing Reference:

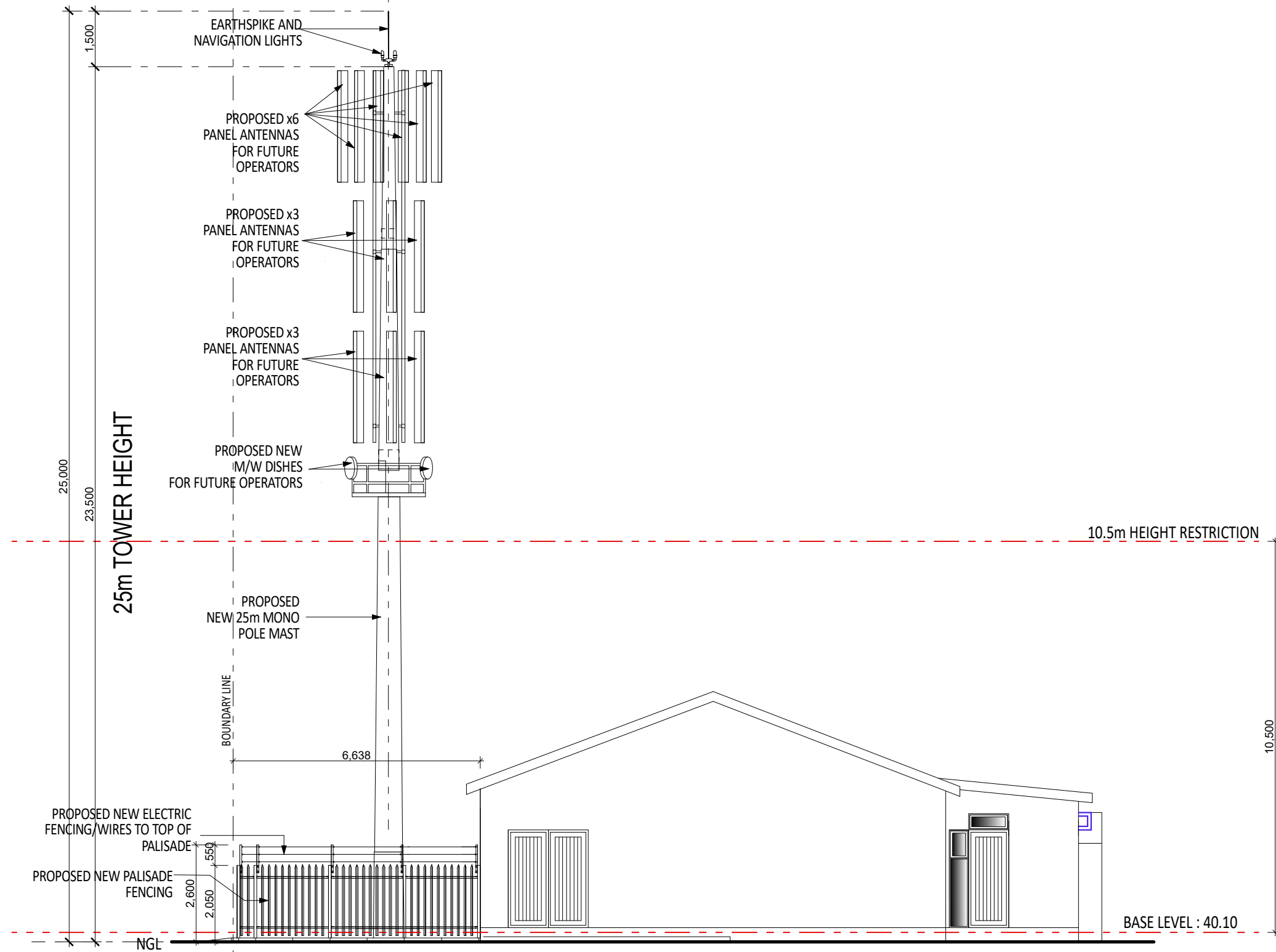
Plan Layout
SHEET 4 of 5

ETSA - 1159
REVISION: B



Floor Plan Layout
1:50

MOUNT PLEASANT SUPERETTE



South Elevation

1:125



Site Name & BS Number

MOUNT PLEASANT SUPERETTE

Revision	Date	Drawn By:	Reason for Revision:
A	21/02/24	T.E	ISSUED FOR APPROVAL
B	24/04/24	A.H	ISSUED FOR APPROVAL

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Elevation

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Design Approval:	T.E		21/02/24
Technical Approval:			
Approved for Issue:			

Scale: NTS Drawing Reference:
ETSA - 1159
REVISION: B

Elevation
SHEET 5 of 5