

**DRAFT BASIC ASSESSMENT REPORT  
THE PROPOSED TELECOMMUNICATION MAST AND  
BASE STATION ON ERF 2464 AERORAND MIDDELBURG**



**PREPARED BY KATLEGO KALE**

**AUGUST 2018**

**HUAWEI TECHNOLOGIES SOUTH AFRICA (PTY) LTD**

**UNIT 12 WOODLANDS OFFICE PARK**

**WOODLANDS**

**JOHANNESBURG**

**2191**



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## LIST OF ACRONYMS

BAR	Basic Assessment Report
MTN	Mobile Telephone Network Pty Ltd
DARDLEA	Department of Agriculture, Rural Development, Land and Environmental Affairs
EA	Environmental Authorisation
IAIAsa	International Association of Impact Assessment South Africa
IDP	Integrated Development Plan
I & AP	Interested and Affected Parties
IDP	Integrated Development Plan
NDM	Nkangala District Municipality
NEMA	National Environmental Management Act
SIP	Strategic Infrastructure Plans
SDF	Spatial Development Framework
SPLUMA	Spatial Planning and Land Use Management Act
STLM	Steve Tshwete Local Municipality

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## 1. INTRODUCTION

An application is being made by Huawei TECHNOLOGIES PTY LTD on behalf of Mobile Telephone Network Pty Ltd (MTN) to the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (Nkangala District Office) for a Basic Assessment for the proposed telecommunications mast on Erf 2464, Aerorand MIDDELBURG. The application was submitted to DARDLEA and given reference number **1/3/1/16/1N-141**. The proposed telecommunication mast is a 25 m monopole with a 10 m x10 m base station. The mast is to be placed on a site previously not used for this purpose in an area zoned as public open space, thus triggering Listed Notice 3, Activity 3 (ii) (aa) : The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower , is to be placed on a site not previously used for this purpose and , will exceed 15 meters in height , (f) Mpumalanga , (ii) inside urban areas, (aa)areas zoned for use as public open space.

### 1.1 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

Table 1: EAP Details

<b>EAP:</b>	Ms Katlego Kale
<b>Contact Person :</b>	Ms Katlego Kale
<b>Address:</b>	UNIT 12 WOODLANDS OFFICE PARK WOODLANDS JOHANNESBURG 2191
<b>Telephone</b>	078 136 2284
<b>Email:</b>	<a href="mailto:katlego.kale@huawei.com">katlego.kale@huawei.com/</a> <a href="mailto:katlego.kale9@gmail.com">katlego.kale9@gmail.com</a>
<b>EAP qualifications:</b>	B.A Geography and Environmental Management, B Hons Spatial Planning, Masters in Urban and Regional Planning
<b>EAP registrations/associations</b>	IAIAsa 5023 SACPLAN C /8409/2017

### 1.2 EXPERTISE OF EAP TO CARRY OUT BASIC ASSESSMENT PROCESS

Ms Katlego Kale is a member of IAIAsa, IWMSA as well as SACPLAN. She holds a Bachelor's degree in Geography and Environmental Management, a Bachelor of Honours in Spatial Planning and Masters in Urban and Regional Planning. Ms Kale has over 4 years of experience in environmental management, including Basic Assessments, Full Scoping and EIR processes as well as landfill management, monitoring and auditing, mining applications, liquor license applications and drafting

environmental strategies and reports. She has worked throughout the Free State, KwaZulu Natal, Northern Cape, Gauteng and North West Provinces.

## 2. PROPERTY INFORMATION

### 2.1 PROPERTY DESCRIPTION

The proposed site is located on Erf 2464 in Aerorand Middelburg within the Steve Tshwete Local Municipality. The GPS coordinates for the site are 25 ° 47' 7.84 ''S and 29° 27' 33.29'' E. The locality is seen below and on **Annexure A\_ Locality**

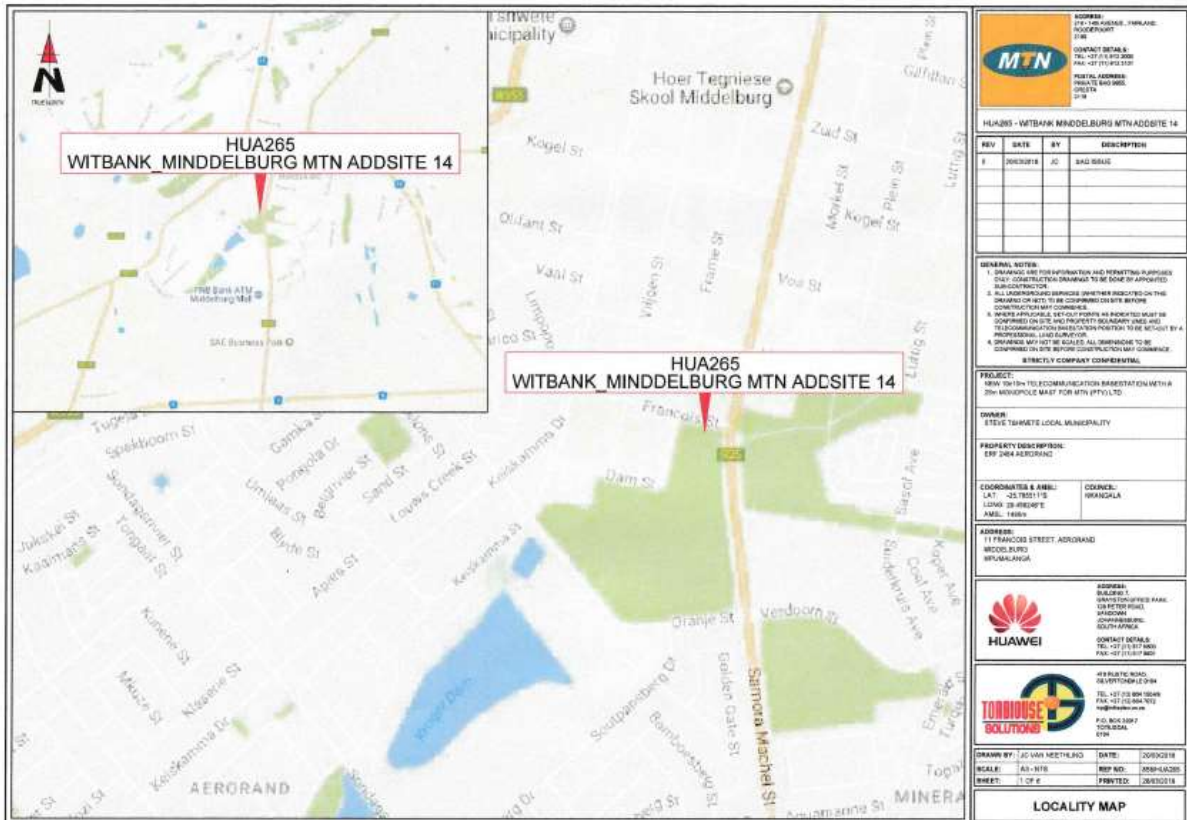


Figure 1: Locality of the proposed site

### 2.2 LOCAL AUTHORITY

The applicable property falls within the jurisdiction of Steve Tshwete Local Municipality.

### 2.3 REGISTERED OWNER

The property is registered in the name of STEVE TSHWETE LOCAL MUNICIPALITY under title deed number T 4116/2009 attached as **Annexure B- Windeed Search**

#### 2.4 SIZE AND ZONING OF PROPERTY

The application property measures 24.6798 h in extent. The land is currently zoned as PUBLIC OPEN SPACE. See attached Annexure **B- Windeed Search**

#### 2.5 RESTRICTIVE CONDITIONS OF TITLE

There are no restrictive conditions in the Title Deed that prohibits the erection of the proposed mast.

#### 2.6 TOPOGRAPHY

There are no indications from a topographical point available that shows that problems might arise due to the proposed development. The surrounding area to the proposed locality is relatively flat

#### 2.7 SUMMARY OF PROPOSED ACTIVITY

<b>Site Name:</b>	Witbank_Middelburg_MtnAddsite_14
<b>Area Type:</b>	Urban
<b>Mast Type:</b>	Monopole
<b>Mast Planned Height:</b>	25m
<b>Site Location:</b>	25° 47'7.84 S , 29° 27'33.29 E
<b>Local Authority:</b>	Steve Tshwete Local Municipality
<b>Zoning :</b>	Public Open Space

#### 2.8 LOCALITY AND PICTURES

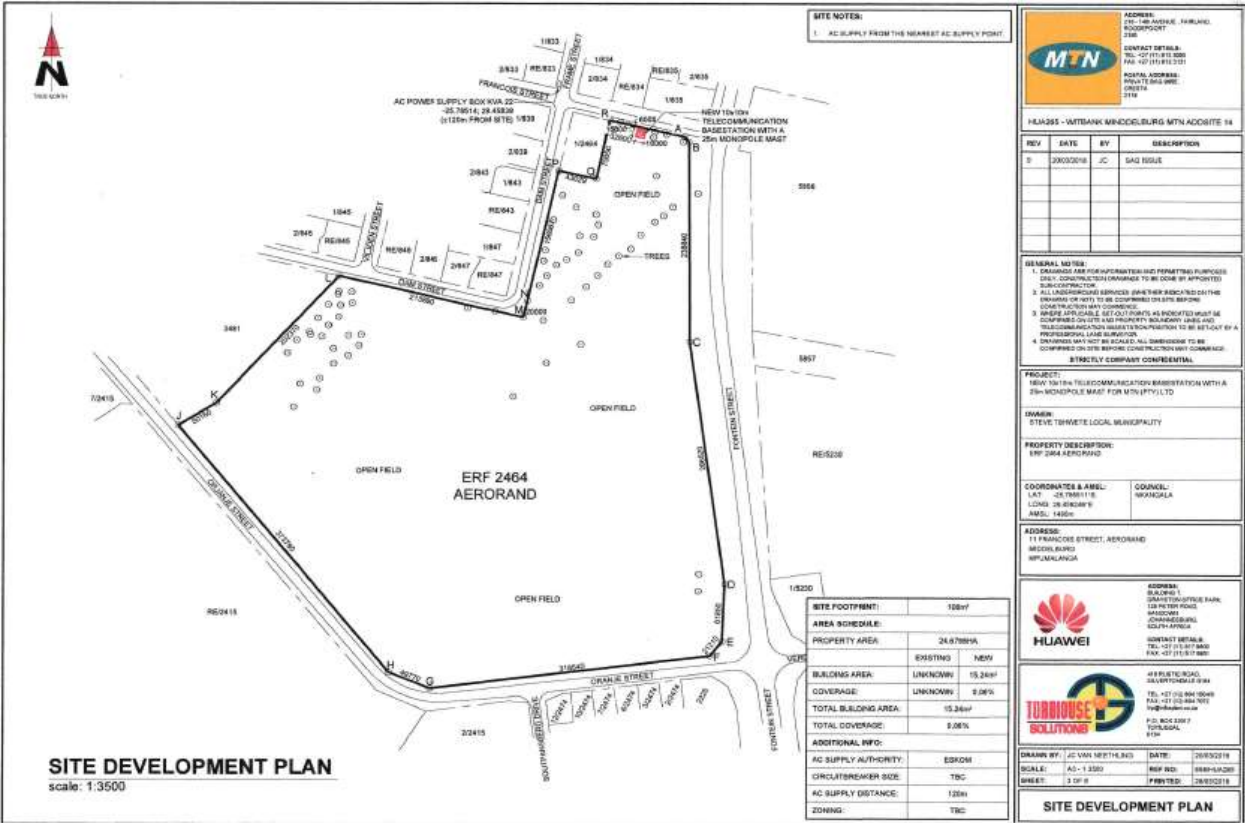


Figure 2: Site Development Plan

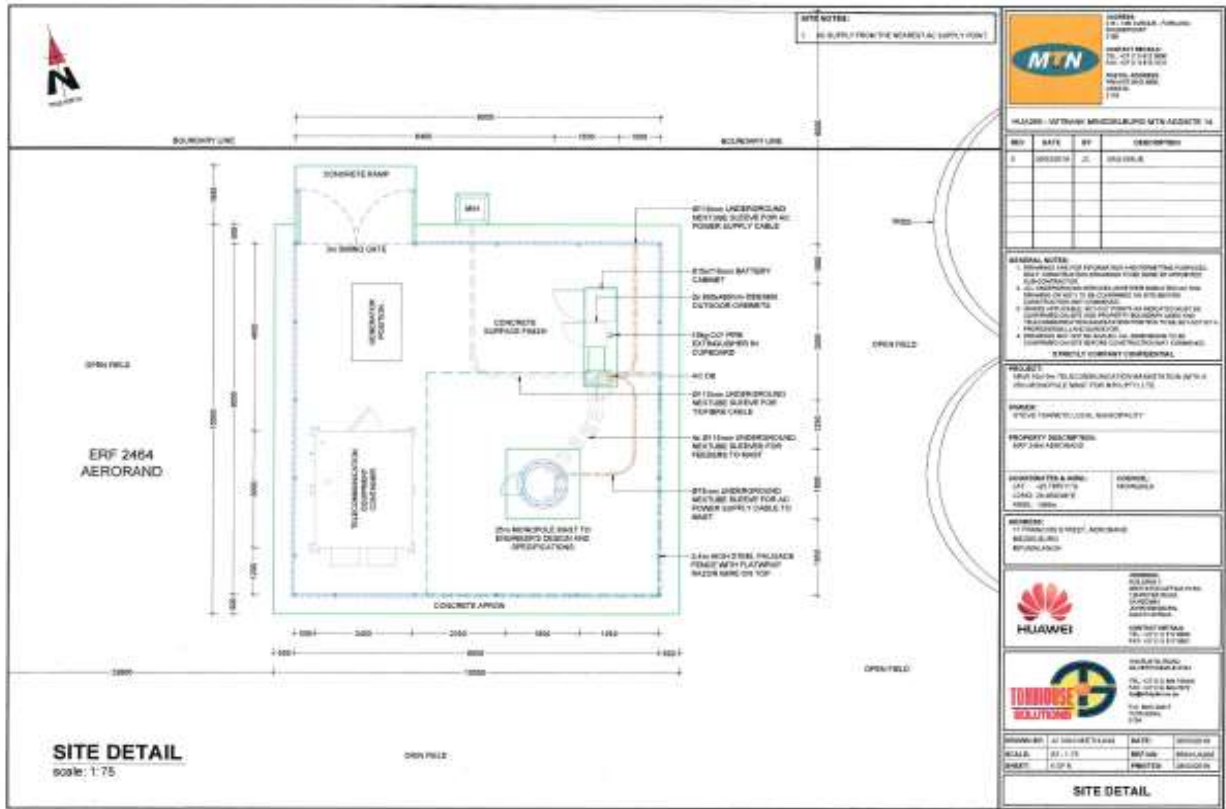


Figure 3: Site Detail / Plan



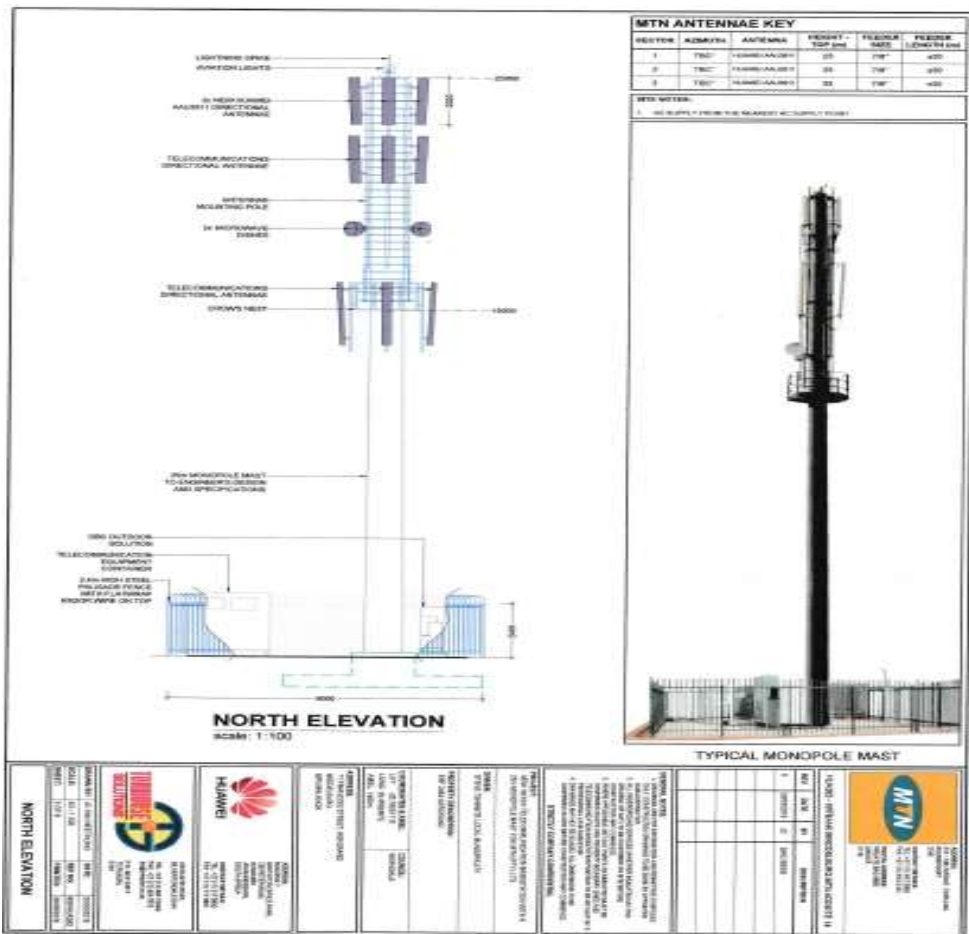


Figure 4: North Elevation and Detail of the proposed mast



Figure 5: Facility Illustration/Site Pictures

### 3. LEGISLATION AND GUIDELINES

TITLE OF LEGISLATION, POLICY OR GUIDELINE	ADMINISTRING AUTHORITY	DATE
<b>The Constitution of the Republic of South Africa , Act 108 of 1996</b>	Parliament	1998
<b>National Environmental Management Act, Act 107 of 1998 and related regulations &amp; guidelines</b>	Department of Environmental Affairs	1998
<b>The National Heritage Resources Act, Act 25 of 1999</b>	South African Heritage Resource Agency	1999
<b>Occupational Health and Safety Act , act 85 of 1993</b>	Department of Labour	1993
<b>Civil Aviation Act, 2009 (Act No. 13 of 2009) South African Civil Aviation Authority</b>	Civil Aviation Authority	2009
<b>Spatial Planning and Land Use Management Act , Act 16 of 2013( Approval in terms of town planning schemes and/or National Building Regulations)</b>	Department of Rural Development and Land Reform/ Steve Tshwete Local Municipality	2013

### 4. DESCRIPTION OF THE RECEIVING ENVIRONMENT

#### 4.1 PHYSICAL ENVIRONMENT

The proposed site is relatively flat in gradient, with a plain landform. There is no geologically unstable characteristics on the site in terms of dolomite, unstable soils, or wetlands. The areas is also not susceptible to erosion and is not slopey. The groundcover present can be described as “natural veld in a good condition”. As indicated, the zoning is public open space and the surrounding land use is low density residential area.

#### 4.2 BUILT ENVIRONMENT

In terms of the built environment, there is already access to the site, therefore no new site access is required. In addition to this, no water or water sources will be used and there is an AC power supply box as seen in Figure 5 for the power supply. The proposed development is also in line with the property’s existing land use rights. A lease will be signed with the local council and other processed to

obtain approvals on Building Plans, Consent Use and Civil Aviation Authority are underway. These will be submitted once they are approved.

Lastly, there will be solid waste on the site for a maximum of 6 weeks during the construction phase. The waste will be loaded on roadworthy vehicles and disposed of at a nearest registered landfill site. There will be no waste during the operational phase.

## 4.2 SOCIO-ECONOMIC ENVIRONMENT

With a 2016 population of 278 000 and a 4.9 % population growth in 2016, it is evident that there is a need to update the telecommunication infrastructure of the area to accommodate the growing use of technology in our communities. The site is located within the urban edge, thus the IDP and SDF of the area were taken into consideration when choosing the site.

There will be minimum noise levels that emanate from the installation of air conditioners. The generated noise levels are within acceptable standards and will not disturb the immediate surroundings. There will be no liquid effluent from the proposed development and there will be exhaust emissions and dust will be produced during the construction phase. The construction phase will however be of very short period. During the operational phase, base stations transmit power levels from a few watts to 100 watts or more, depending on the size of the region or "cell" that they are designed to service. The South African Department of Health sets out safety guidelines for all emissions throughout the electromagnetic spectrum (including RF emissions from base stations). These guidelines were developed by the international commission on non-ionising radiation protection

In terms of the layout, site and technology alternatives, there were none investigated. The proposed mast site will offer ideal coverage. The mast is 25m, 10mx10m base and if it less than 25 m, it will not have enough coverage thus requiring another mast to be built in the immediate area.

The no-go alternative will only come into effect should this report find that the proposed mast will have major environmental impacts on the receiving environment that cannot be mitigated within acceptable levels. The no-go alternative will, however leave the immediate area without any coverage, thus leaving a negative socio-economic impact of no effective coverage in the area.

## 5. NEED AND DESIRABILITY

### 4.1 NEED

Cell phones have become an important part of the South African way of life and fulfil an important role in our daily lives. Through them, communication is made easier, quicker and readily available. In order to provide effective cell phone communication, cell masts have to be provided and placed at optimal locations. Huawei Technologies, has identified erf 2464 as an optimal position for the construction of the proposed mast.

Erf 2464 Aerorand Middelburg was identified as a suitable candidate due to its location and existing infrastructure available such as electricity and road networks. The site is ideally located to provide the required coverage and functionality.

### 4.2 DESIRABILITY

The proposed activity is of public interest as it will provide a range of data signal and connectivity improvements in the immediate area. Furthermore the activity ensures sufficient telecommunications infrastructure that keeps up with trends. Lastly, this activity will also generate an income for the land owner, Steve Tshwete Local Municipality. The position of the mast will not affect the access or functionality of the property.

In addition to this, the proposed project is in line with the 17 Strategic Infrastructure Projects (SIP) as it deals with the expanding access to communication technology as well as the NDP 2030 vision by upgrading telecommunication infrastructure. This will have a positive impact on the community through effective communication channels.

### 4.3 ORDELY PLANNING

There are no restrictive conditions on title deed number **T 4116/2009** that prohibit the construction of a cellular mast on the property. The mast will be 25 m which requires a Civil Aviation Authority (CAA) approval. The activity does trigger listed notice 3, activity 3 in the 2014 EIA regulations hence and EA is being sought from DARDLEA. The proposed activity will also comply with all regulatory legislation.

## 6. PUBLIC PARTICIPATION PROCESS

The Public Participation Process allows for I & AP to identify their issues and concerns relating to the proposed activity, which they feel should be addressed in the EIA process. According to Section (2)(4)(f) and (o) of the NEMA, the participation of all I&AP in environmental governance must be promoted and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured, and - the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.

In order to give effect to the above sections, it is essential to ensure that there is adequate and appropriate opportunity for public participation in decisions that may affect the environment. Section 24(1A) (c) of the Act allows for this participation by requiring that the person conducting PP comply with any regulated procedure related to public consultation and information gathering through the public participation process (PPP). Further to this, the Act requires that the person conducting a PPP must take into account any relevant guidelines applicable to PP as contemplated in section 24J of the Act

The planned public participation for this proposed project is outlined below.

### 6.1 PUBLIC PARTICIPATION METHODS

As this is the Draft BAR, public participation is still to be undertaken. This will include the following measures:

- A copy of the BAR will be stationed at Steve Tshwete Local Municipality and Library for comments ;
- A newspaper advert will be placed in the Middelburg Observer ;
- Site notices will be placed on site and nearby/ adjacent sites; and
- Adjacent landowners will be notified by hand delivered letters.

The final public participation process with the methods followed will be included in the Final BAR to be submitted to the Department.

## 6.2 AUTHORITY PARTICIPATION

In addition to the above mentioned methods, the following authorities will be consulted for their inputs

Table 2: Authority participation

<b>AUTHORITY</b>	<b>Contact person</b>	<b>Contact Details</b>
<b>Nkangala District Municipality</b>		013 249 2000 <a href="mailto:ndm@nkangala.gov.za">ndm@nkangala.gov.za</a>
<b>Steve Tshwete Local Municipality</b>	Thembi Mathebula/ Sibongile Mtshegni	013 249 7000 <a href="mailto:thembokuhlep@stlm.gov.za">thembokuhlep@stlm.gov.za</a>
<b>South African Heritage Resource Agency</b>	B Moduka	013 766 5196 <a href="mailto:bmoduka@mpg.gov.za">bmoduka@mpg.gov.za</a>
<b>South African Civil Aviation Authority</b>	Simphiwe Masilela	011 607 1228 <a href="mailto:SimphiweM@atns.co.za">SimphiweM@atns.co.za</a> <a href="mailto:obstacles@caa.co.za">obstacles@caa.co.za</a>

## 6.3 ISSUES AND RESPONSES REPORT

No responses, comments and issues have been raised on the proposed development as the public participation process has not been carried out yet. This section of the BAR will be included in the Final BAR with all issues and responses and how they were handled.

## 7. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS ON THE ENVIRONMENT

The table below outlines the possible impacts as well as their significance and mitigations for the proposed telecommunications mast. The (-) represents negative impacts while (+) represents positive impacts.

Table 3: Assessments and impacts

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	MITIGATION PROPOSED
<b>PLANNING AND DESIGN PHASE ( type, height, footprint etc) OF THE MAST TO BE CONSTRUCTED</b>	<b>DIRECT:</b> Impact upon vegetation: the site is located on an open space and will have minimal impact on the area vegetation during the project planning and design stages.	MINOR -	The client and its contractors, must take into account the recommendations of this basic assessment report, so that it is positively utilised on a pro-active basis to aid in the mitigation of impacts.
	Minimising of visual impact: due to the fact that the infrastructure in question will be a 25m high mast. It is deemed important that the visual impact be minimized.	MINOR -	The proposed mast will be a 25m monopole mast planned within an area with low visual sensitivity.. The client will implement elements of good visual design.
	<b>INDIRECT:</b> The client need to upgrade their network in the area. The network problems will be resolved after the mast has been erected.	MAJOR +	The proposed infrastructure will improve the telecommunication coverage and capacity in the area.

	<p><b>CUMILATIVE:</b></p> <p>The size of the base station will measure approximately (100m<sup>2</sup>) in extent and is located within an open space. Limited natural vegetation will need to be disturbed.</p> <p>The residents in the area will benefit by this development as the telecommunication network in the area will be upgraded.</p>	<p>MINOR -</p> <p>MAJOR +</p>	<p>The client and its contractors must take into account the recommendations of this basic assessment report, so that it is positively utilised on a pro-active basis to aid in the mitigation of impacts.</p>
<b>NO-GO ALTERNATIVE</b>	<p><b>DIRECT :</b></p> <p>No need for the cost of construction of a mast.</p> <p>No visual impact on the short to medium distance of the site.</p>	<p>MINOR +</p>	<p>None required</p>
	<p><b>INDIRECT :</b></p> <p>Communication in the area will not be approved, reducing the service and business potential of the area.</p>	<p>MAJOR -</p>	<p>Construction of communication mast in the area.</p>
	<p><b>CUMULATIVE :</b></p> <p>Limited communication will have a negative impact on the economic potential of the area as well as on the safety and security of the surrounding community.</p>	<p>MAJOR -</p>	<p>Construction of communication mast in the area.</p>



CONSTRUCTION PHASE			
ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	MITIGATION PROPOSED
<b>MAST CONSTRUCTION AND EARTH WORKS</b>	<b>DIRECT :</b>  Impacts on the biological environment	MINOR -	Due to the extremely limited extent of the proposed activity, the impact upon the biological environment will be minimal (100m <sup>2</sup> ). Fauna (birds) may be temporarily displaced from the area during construction due to the noise and activity. The immediate proximity of other available habitat means that this impact is of moderate significance.
<b>REMOVAL OF VEGETATION</b>	Vegetation removal at the footprint of the mast and vegetation disturbance due to construction vehicle	MINOR -	All excavation activities for any purpose whatsoever should be preceded by selective stripping and stockpiling of vegetative (humus) and soil materials in the order of their horizons as found on site, for the purpose of replacement in the appropriate horizon order, after the completion of construction. These activities should include: <ul style="list-style-type: none"> <li>trenching for the installation of services (e.g. electricity),</li> <li>foundations, o access road construction, of site clearance, borrow pits, and o yards or lay-down areas or any other areas affecting the natural environment.</li> </ul>
<b>REMOVAL OF TOPSOIL DURING EARTH WORKS</b>	Loss of topsoil Soil erosion	MINOR -	
<b>CONSTRUCTION SITE AND MAST CONSTRUCTION</b>	Visual impact present at short to medium distances from site (minor negative impact)	MINOR -	

			<p>Replacement and rehabilitation should be progressive with construction and not left until the end. Temporary topsoil stockpiles should be seeded, or protected in a manner acceptable to the environmental planner, so as to avoid erosion by rain or wind.</p> <p>Stockpiled topsoil and sub-soils should be protected from contamination e.g. by fuel spillages etc.</p> <p>Remove the topsoil approximately 300mm deep from excavation areas and stockpile separate from subsoil for landscaping/rehabilitation.</p> <p>Utilise topsoil for landscaping. Prevent unnecessary clearing of topsoil.</p> <p>Proper waste management (reduction, recycling, reuse, collection, storage, transport, treatment and disposal) during both the construction and operation of the structure.</p>
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			<p>Proper storage facilities should be provided for the storage of oils, grease, fuels, chemicals and any hazardous materials to be used during construction. These storage facilities (including any tanks) should be stored on an impermeable surface and in closed containers in order to ensure that accidental spillage does not pollute local soil or water resources.</p> <p>The construction contractor must plan and implement best practice. Construction sites must be kept clean and tidy at all times. Pollution control and anti-littering measure being very important.</p> <p>All domestic waste generated on the site should be disposed of in a proper manner off site. In general, littering, discarding or burying of any materials should not be allowed on site. Refuse bins must be available on the site.</p> <p>Once construction is completed, all redundant infrastructure, waste and construction materials should be removed from the site by the contractor and disposed of in an appropriate manner, i.e. at a registered site.</p>
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			<p>The site should be serviced by properly managed and maintained toilet facilities. No disposal of sewage should occur on or near the site. The use of chemical toilets by the work force will help prevent possible health hazards.</p> <p>The construction site should be fenced.</p> <p>Contractors' yards: a material delivery and storage area should be demarcated in co-ordination with the contractor. Material should not be brought onto a site prematurely, which could result in additional areas being cleared or affected.</p> <p>Rehabilitate compacted soils: soils compacted by construction activity shall be deep ripped to loosen compacted layers and graded evenly. Topsoil shall be re-spread upon completion of construction activities. Vehicles and equipment shall be maintained in proper working order, in order to limit gaseous emissions, pollution and should be free from oil and hydraulic fluid leaks, etc.</p>
<p><b>WASTE AND BUILDING RUBBLE PRODUCES DURING CONSTRUCTION PHASE.</b></p>	<p>Waste handling: pollution of soil and water resources due to bad waste handling practices.</p>	<p>MINOR-</p>	<p>Contractors should remove all waste generated by themselves during construction and it should be disposed of at a suitable solid waste disposal venue. Waste material will be kept in designated areas.</p>

	Building rubble because of the premanufactured equipment that will be used, pollution of the area is minimized during the construction phase.		The site is to be maintained in a sanitary condition and all toilet facilities shall be maintained in good order. Food cooking will only be permitted in designated areas.
<b>CEMENT AND CHEMICALS MIXING</b>	Pollution of soil and water resources due to bad cement mixing practices.	MINOR-	<p>Where cement and concrete, etc. Is mixed on site, this shall be done in specified areas on concrete aprons or on protected plastic linings and provision shall be made to contain spillage or overflows onto soils.</p> <p>The mixing of any paints, solvents, sealants, adhesives, chemicals or other noxious materials shall only be undertaken in designated areas on concrete aprons that have spillage control channels and separate storage areas. The mixing of materials shall not be permitted in the general areas of the site. All surplus or waste materials are to be removed from the site. All these operations shall only be allowed on site under strict observations of the manufacturers' instructions.</p>
	<p><b>INDIRECT:</b></p> <ul style="list-style-type: none"> <li>• Employment opportunities during the construction phase of the project</li> </ul>	MINOR +	Where appropriate, use should be made of labour intensive construction methods - local emerging contractors should be used if at all possible.

	<p>Improved telecommunication and good quality coverage to the specified area utilizing a single mast;</p> <p>The movement of construction vehicles and personnel may cause minimal disturbance to residents during the 6-week construction phase. This may occur as a result of noise and presence of the construction workers on site. The privacy and security of the local households is unlikely to be jeopardized, as construction workers will not overnight at the proposed site.</p> <p>Nuisance (noise) and health hazard</p>	<p>MAJOR +</p> <p>MINOR -</p> <p>MINOR -</p>	<p>the following mitigatory measures are deemed necessary to ensure safe and efficient traffic flow to and from the mast site, during construction:</p> <ul style="list-style-type: none"> <li>• Posting of relevant traffic signage where construction will take place (to inform motorists of construction vehicles).</li> <li>• Adequate parking shall be provided on site, to accommodate construction vehicles - no vehicles should be parked in any public road reserve, at any time.</li> </ul> <p>Uncontrolled movement of vehicles on the site during construction must not be allowed</p> <p>Contractors should remove all waste generated by themselves during construction and it should be disposed of at a suitable solid waste disposal venue.</p> <p>Waste material will be kept in designated areas.</p> <p>Toilet facilities: the use of portable chemical toilets for use by the labour force is essential to avoid pollution and attraction of vermin and flies (which could become a nuisance or a health hazard).</p>
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			<p>All plant and vehicles on the site will be equipped with noise suppressing measures and kept in proper working order. Where working at the site, noise levels must be within ambient noise level. Excessive noise from the labour force should be avoided, as this may cause a nuisance to adjacent areas of residence.</p> <p>Vehicles and equipment shall be maintained in proper working order, in order to limit gaseous emissions, pollution and should be free from oil and hydraulic fluid leaks, etc.</p> <p>No fires will be permitted on site without the authority of the resident engineer or project manager.</p> <p>The implementation of an occupational health and safety management system should be required of all contractors. Safety measures and work procedures/instructions should be communicated to all construction workers. First aid facilities shall be on hand at all times. Medical screening of employees shall take place.</p>
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			<p>The contractor shall implement adequate and mandatory safety precautions relating to all aspects of the operation. Warning and advisory signage should also be implemented (also with regards to vehicular movement along public roads).</p> <p>The site is to be maintained in a sanitary condition and all toilet facilities shall be maintained in good order. Food cooking will only be permitted in designated areas.</p>
	<p><b>CUMILATIVE:</b></p> <p>Better communication infrastructure can help with the economic growth of the surrounding area as well as better safety and security to the surrounding community.</p>	MAJOR +	None
<b>OPERATIONAL PHASE</b>			
<b>ACTIVITY</b>	<b>IMPACT SUMMARY</b>	<b>SIGNIFICANCE</b>	<b>PROPOSED MITIGATION</b>
<p><b>OPERATION OF THE MAST AS WELL AS MAINTENANCE THEREOF.</b></p>	<p><b>DIRECT</b></p> <p>Minor visual impact to the immediate area;</p> <ul style="list-style-type: none"> <li>• Erosion;</li> <li>• Waste;</li> <li>• Spread Of Alien Plant Species.</li> </ul>	<p>MINOR -</p> <p>MINOR -</p>	<p>Due to the fact that the infrastructure in question will be a 25m high mast it is deemed important that the visual impact be minimized. The proposed mast will be a monopole mast. The client must implement elements of good visual design. Site is not situated within visual sensitive area.</p>



			<p>In cases where inhabitants of the surrounding areas have objections to the infrastructure, the client should meet with such persons in order to discuss and address their concerns. Records of such deliberations to be circulated to all parties involved (including relevant provincial departments/authorities).</p> <p>Monitor stormwater exit points and regularly maintain stormwater structures to maintain their effectiveness;</p> <p>Regularly clean stormwater run off channels; rehabilitate eroded area; monitoring of road/access infrastructure</p> <p>The mast must be frequently inspected and maintained through weeding, removal of any litter, and the repair of paintwork on the structures once peeling occurs. During these visits any environmental problems must also be reported. Depending on the case remedial actions might be required to rectify the situation.</p> <p>Disposal of hazardous substances in an approved manner;</p>
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			During rehabilitation only indigenous vegetation must be used.
	<p><b>INDIRECT:</b></p> <p>Better communication services in the area;</p> <p>During the maintenance/operational phase the movement of vehicles and personnel will occur on a 6-month cycle and will be visible but will cause minimal disturbance.</p>	<p>MAJOR +</p> <p>MINOR -</p>	<p>Monitoring Of Road/Access Infrastructure</p> <p>Employees Of The Client Will Visit The Site On A Regular Basis To Do Routine Maintenance To Keep All The Components In Good Working Order.</p>
	<p><b>CUMULATIVE:</b></p> <p>Better communication services in the area can lead to better economic development of the area as well as better safety and security to the surrounding community.</p>	<p>MAJOR +</p>	<p>The residents of the area will benefit by the proposed project as the telecommunications network coverage and capacity will be improved.</p> <p>The residents in the area are dependent on good telecommunication networks.</p>
<b>DECOMMISSIONING PHASE</b>			
<p><b>REMOVAL OF ALL INFRASTRUCTURE OF THE MAST.</b></p>	<p><b>DIRECT:</b></p> <p>Minor negative visual impact during the deconstruction of the mast;</p>	<p>MINOR –</p>	<p>DECONSTRUCTION OF THE EXISTING MAST ONCE THE MAST IS NO LONGER IN OPERATION AND NO LONGER MAINTAINED;</p> <p>ENSURE THAT SUITABLE ARRANGEMENTS BE MADE TO PROTECT THE ENVIRONMENT AGAINST LONG TERM NEGATIVE IMPACTS;</p>

	<p>Positive impact on the visual aspects of the area after the mast has been deconstructed and infrastructure removed;</p> <p>Possibility of pollution of the surroundings with deconstruction material;</p> <p>Possibility of erosion if the site is not rehabilitated.</p>	<p>MINOR +</p> <p>MINOR –</p> <p>MINOR –</p>	<p>Prevent erosion through regular monitoring and rehabilitation of degraded areas; minimize negative visual impacts; proper waste management (reduction, recycling, reuse, collection, storage, transport, treatment and disposal) during the deconstruction of the structure.</p> <p>The construction contractor must plan and implement best practice. Construction sites must be kept clean and tidy at all times. Pollution control and anti-littering measure being very important.</p> <p>All domestic waste generated on the site should be disposed of in a proper manner off site. In general, littering, discarding or burying of any materials should not be allowed on site. Refuse bins must be available on the site.</p> <p>Once deconstruction is completed all redundant infrastructure, waste and construction materials should be removed from the site by the contractor and disposed of in an appropriate manner, i.e. at a registered site.</p>
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			The site must be rehabilitated after deconstruction to a state similar to that of the surrounding area
	<p><b>INDIRECT :</b></p> <p>Poor telecommunication phone coverage in this area;</p> <p>The coverage and capacity problem will not be solved in the area should the mast be demolished.</p>	<p>MAJOR -</p> <p>MAJOR -</p>	<p>Planning and construction of infrastructure to improve telecommunication coverage in the area</p>
	<p><b>CUMULATIVE :</b></p> <p>Might lead to safety and security issues in surrounding area;</p> <p>Might have negative impact on local economy if operational mast is removed.</p>	<p>MAJOR –</p> <p>MAJOR -</p>	<p>Planning and construction of infrastructure to improve telecommunication coverage in the area.</p> <p>Better policing.</p>

## 8. ENVIRONMENTAL IMPACT STATEMENT

The main purpose of the proposed mast is to enable required coverage and functionality. For cell phone use, which is an important part of people's everyday lives. The positive impact of the activity will, taking into consideration the implementation of mitigation measures to minimise negative impacts on the environment have a positive overall impact.

### 1. Physical Impacts:

- The planning and design of the telecommunication base station is considerate of any operational and public demands and is done on the principle of minimising any negative impacts on the receiving environment
- The negative impacts during construction phase as indicated in section 6 of this report are temporary and will not have long term effects on the proposed development or immediate area. The impacts will only last for a maximum of 6 weeks, which is the construction period.
- The site may be, upon agreement, used by additional telecommunication service providers. This mitigation measure will minimise the establishment of base stations within the immediate area.

### 2. Biological Impacts:

- There are no expected or proven biological impacts that will result from the proposed development. The area is currently an open space and only 100 m<sup>2</sup> of grassland will be removed from the footprint area.

### 3. Socio-Economic Impacts:

- There will be optimum network coverage for the immediate and surrounding areas
- An additional income on the part of the land owner, which is an opportunity to generate revenue by the Steve Tshwete Local Municipality

## 9. RECOMMENDATIONS OF PRACTITIONER

As per the requirements of the National Management Act(Act 107 of 1998), the Basic Assessment Report has identified and assessed potential environmental impact associated with the development. It is therefore my recommendation that, the proposed 25 m monopole telecommunication mast on erf 2464 Aerorand Middelburg be granted Environmental Authorization with the following conditions:

- Measures must be implemented for the duration of the construction period to prevent unauthorized entry to the construction site;
- Dust suppression measures must be implemented during the construction phase to minimise pollution;
- All other town planning and regulatory permits must be adhered to before construction of the mast.
- All prevention and mitigation measures mentioned in this report and EMPr must be implemented and monitored.