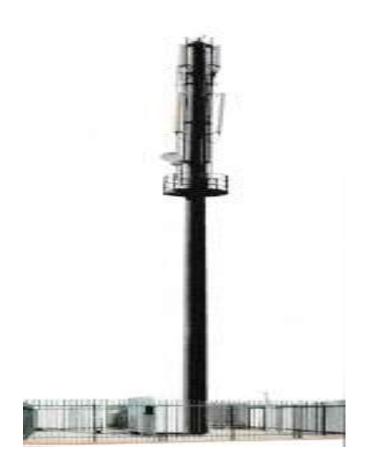
# DRAFT BASIC ASSESSMENT REPORT THE PROPOSED TELECOMMUNICATION MAST AND BASE STATION ON ERF 347 NASARET MIDDELBURG



# PREPARED BY KATLEGO KALE AUGUST 2018

HUAWEI TECHNOLOGIES SOUTH AFRICA (PTY) LTD
UNIT 12 WOODLANDS OFFICE PARK
WOODLANDS
JOHANNESBURG
2191



## TABLE OF CONTENTS

1.	INTRODUCTION	1
	1.1 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER	1
	1.2 EXPERTISE OF EAP TO CARRY OUT BASIC ASSESSMENT PROCESS	1
2.	PROPERTY INFORMATION	2
	2.1 PROPERTY DESCRIPTION	2
	2.2 LOCAL AUTHORITY	2
	2.3 REGISTERED OWNER	2
	2.4 SIZE AND ZONING OF PROPERTY	3
	2.5 RESTRICTIVE CONDITIONS OF TITLE	3
	2.6 TOPOGRAPHY	3
	2.7 SUMMARY OF PROPOSED ACTIVITY	3
	2.8 LOCALITY AND PICTURES	3
3.	LEGISLATION AND GUIDELINES	8
4.	DESCRIPTION OF THE RECEIVING ENVIRONMENT	8
	4.1 PHYSICAL ENVIRONMENT	8
	4.2 BUILT ENVIRONMENT	8
	4.2 SOCIO-ECONOMIC ENVIRONMENT	9
5.	NEED AND DESIRABILITY	10
	4.1 NEED	10
	4.2 DESIRABILITY	10
	4.3 ORDELY PLANNING	10
6.	PUBLIC PARTICIPATION PROCESS	11
	6.1 PUBLIC PARTICIPATION METHODS	11
	6.2 AUTHORITY PARTICIPATION	12
	6.3 ISSUES AND RESPONSES REPORT	12
7.	DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS ON THE ENVIRONMENT	13
8.	ENVIRONMNETAL IMPACT STATEMENT	27
9.	RECOMMENDATIONS OF PRACTITIONER	27

#### **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

### LIST OF TABLES

Table 1: EAP Details	1
Table 1: EAP Details Table 2: Authority participation	12
Table 3: Assessments and impacts	
·	
LIST OF FIGURES	
Figure 1: Locality of the proposed site	2
Figure 2: Locality of the site	4
Figure 3: Site Detail / Plan	4
Figure 4: Detail of the proposed mast	5
Figure 5: Extended detail of proposed mast	5
Figure 6: Elevation and detail of mast	
Figure 7: Detail for proposed mast	
Figure 8 Pictures showing surroundings	
Figure 9: Facility Illustration/Site Pictures	

#### 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 347, Nasaret MIDDELBURG. The application was submitted to DARDLEA and given reference number 1/3/1/16/1N-140. The proposed telecommunication mast is a 35 m tree mast 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

EAP:	Ms Katlego Kale
Contact Person :	Ms Katlego Kale
Address:	UNIT 12 WOODLANDS OFFICE PARK WOODLANDS JOHANNESBURG 2191
Telephone	078 136 2284
Email:	katlego.kale@huawei.com
EAP qualifications:	B.A Geography and Environmental Management, B Hons Spatial
EAP	Planning, Masters in Urban and Regional Planning
registrations/associations	
	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 347 in Nasaret Middelburg within the Steve Tshwete Local Municipality. The GPS coordinates for the site are 25 ° 48′ 03.2 "S and 29° 30′ 25.9" 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 50019/2001 attached as **Annexure B-Windeed Search** 

#### 2.4 SIZE AND ZONING OF PROPERTY

The application property is described as 800.00 DUN in the deed search. 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

Site Name:	Witbank_Middelburg_NewSite_101199	
Area Type:	Urban	
Mast Type:	Tree	
Mast Planned Height	35m	
Site Location:	25 ° 48' 03.2 "S and 29° 30' 25.9" E.	
Local Authority:	Steve Tshwete Local Municipality	
Zoning:	Public Open Space	

#### 2.8 LOCALITY AND PICTURES



Figure 2: Locality of the site

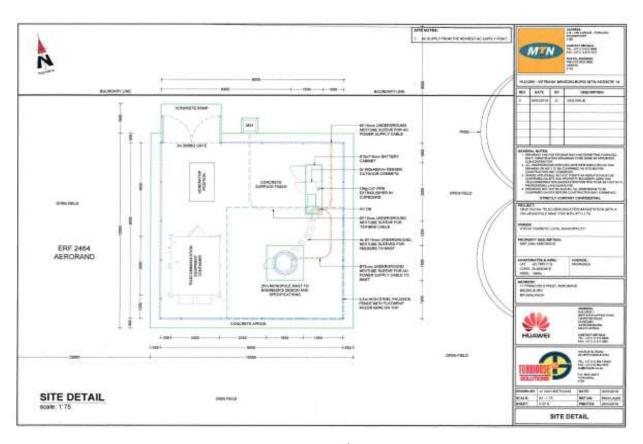


Figure 3: Site Detail / Plan

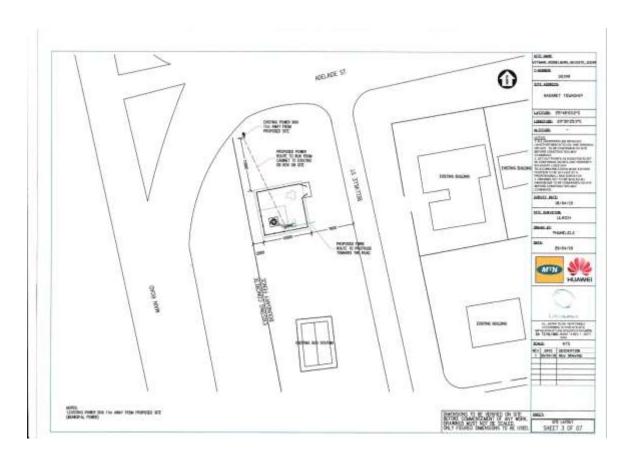


Figure 4: Detail of the proposed mast

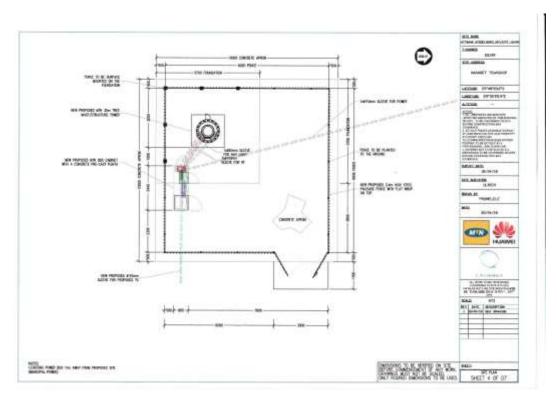


Figure 5: Extended detail of proposed mast

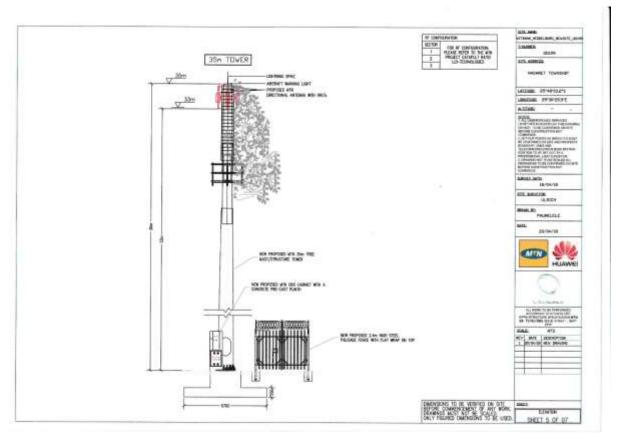


Figure 6: Elevation and detail of mast

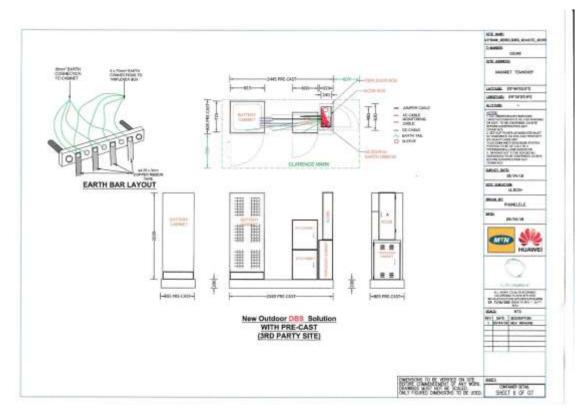


Figure 7: Detail for proposed mast

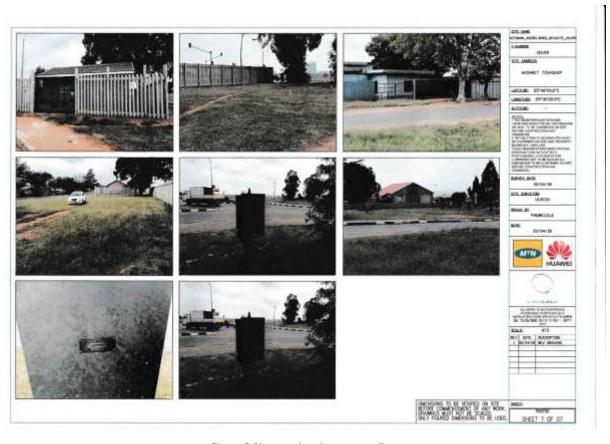


Figure 8 Pictures showing surroundings

Figure 9: Facility Illustration/Site Pictures

#### 3. LEGISLATION AND GUIDELINES

TITLE OF LEGISLATION, POLICY OR GUIDELINE	ADMINISTRING AUTHORITY	DATE
The Constitution of the Republic of South Africa , Act 108 of 1996	Parliament	1998
National Environmental Management Act, Act 107 of 1998 and related regulations & guidelines	Department of Environmental Affairs	1998
The National Heritage Resources Act, Act 25 of 1999	South African Heritage Resource Agency	1999
Occupational Health and Safety Act , act 85 of 1993	Department of Labour	1993
Civil Aviation Act, 2009 (Act No. 13 of 2009) South African Civil Aviation Authority	Civil Aviation Authority	2009
Spatial Planning and Land Use Management Act, Act 16 of 2013( Approval in terms of town planning schemes and/or National Building Regulations)	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 are 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 7 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 35m, 10mx10m base and if it less than 35 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 347 as an optimal position for the construction of the proposed mast.

Erf 347 Nasaret 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 50019/2001** that prohibit the construction of a cellular mast on the property. The mast will be 35 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

AUTHORITY	Contact person	Contact Details
Nkangala District Municipality		013 249 2000 ndm@nkangala.gov.za
Steve Tshwete Local Municipality	Thembi Mathebula/ Sibongile Mtshewni	013 249 7000 thembokuhlep@stlm.gov.za
South African Heritage Resource Agency	B Moduka	013 766 5196 bmoduka@mpg.gov.za
South African Civil Aviation Authority	Simphiwe Masilela	O11 607 1228 SimphiweM@atns.co.za obstacles@caa.co.za

#### 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
PLANNING AND	DIRECT:	MINOR -	The client and its contractors, must take into account
DESIGN PHASE ( type,	Impact upon vegetation: the site is located on an		the recommendations of this basic assessment
height, footprint etc)	open space and will have minimal impact on the		report, so that it is positively utilised on a pro-active
OF THE MAST TO BE	area vegetation during the project planning and		basis to aid in the mitigation of impacts.
CONSTRUCTED	design stages.		
			The proposed mast will be a 35m monopole mast
	Minimising of visual impact: due to the fact that	AUNOR	planned within an area with low visual sensitivity
	the infrastructure in question will be a 35m high	MINOR -	The client will implement elements of good visual
	mast. It is deemed important that the visual		design.
	impact be minimized.		
	INDIRECT:		The proposed infrastructure will improve the
	The client need to upgrade their network in the		telecommunication coverage and capacity in the
	area. The network problems will be resolved after	MAJOR +	area.
	the mast has been erected.		

	CUMILATIVE:		The client and its contractors must take into account
	The size of the base station will measure		the recommendations of this basic assessment
	approximately (100m²) in extent and is located		report, so that it is positively utilised on a pro-active
	within an open space. Limited natural vegetation	MINOR -	basis to aid in the mitigation of impacts.
	will need to be disturbed.		
	The residents in the area will benefit by this		
	development as the telecommunication network	MAIOD	
	in the area will be upgraded.	MAJOR +	
NO-GO ALTERNATIVE	DIRECT:	MINOR +	None required
	No need for the cost of construction of a mast.		
	No visual impact on the short to medium distance		
	of the site.		
	INDIRECT:	MAJOR -	Construction of communication mast in the area.
	Communication in the area will not be approved,		
	reducing the service and business potential of the		
	area.		
	CUMULATIVE :	MAJOR -	Construction of communication mast in the area.
	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.		

CONSTRUCTION PHASE				
ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	MITIGATION PROPOSED	
MAST CONSTRUCTION AND EARTH WORKS	DIRECT: 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 (100m²). 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.	
REMOVAL OF VEGETATION	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	
REMOVAL OF TOPSOIL DURING EARTH WORKS CONSTRUCTION SITE AND MAST	Loss of topsoil Soil erosion  Visual impact present at short to medium distances from site (minor negative impact)	MINOR -	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:  • trenching for the installation of services (e.g. electricity),	
CONSTRUCTION			<ul> <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>	

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.

Stockpiled topsoil and sub-soils should be protected from contamination e.g. by fuel spillages etc.

Remove the topsoil approximately 300mm deep from excavation areas and stockpile separate from subsoil for landscaping/rehabilitation.

Utilise topsoil for landscaping.

Prevent unnecessary clearing of topsoil.

Proper waste management (reduction, recycling, reuse, collection, storage, transport, treatment and disposal) during both the construction and operation of the structure.

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.

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.

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.

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.

			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.
			The construction site should be fenced.
			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.
			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.
WASTE AND BUILDING	Waste handling: pollution of soil and water	MINOR-	Contractors should remove all waste generated by
RUBBLE PRODUCES	resources due to bad waste handling practices.		themselves during construction and it should be
DURING			disposed of at a suitable solid waste disposal venue.
CONSTRUCTION PHASE.			Waste material will be kept in designated areas.

CEMENT AND CHEMICALS MIXING	Building rubble because of the premanufactured equipment that will be used, pollution of the area is minimized during the construction phase.  Pollution of soil and water resources due to bad cement mixing practices.	MINOR-	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.  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.  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'
			site under strict observations of the manufacturers' instructions.
	<ul><li>INDIRECT:</li><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.

	communication and good quality	MAJOR +	the following mitigatory measures are deemed
coverage to th	e specified area utilizing a single		necessary to ensure safe and efficient traffic flow to
mast;			and from the mast site, during construction:
			Posting of relevant traffic signage where
The movemen	nt of construction vehicles and	MINOR -	construction will take place (to inform
personnel may	cause minimal disturbance to	William	motorists of construction vehicles).
residents durin	g the 6-week construction phase.		Adequate parking shall be provided on site,
This may occur	as a result of noise and presence		to accommodate construction vehicles - no
of the construc	ction workers on site. The privacy		vehicles should be parked in any public road
and security of	the local households is unlikely to		reserve, at any time.
be jeopardized	, as construction workers will not		
overnight at the	e proposed site.		Uncontrolled movement of vehicles on the site during
			construction must not be allowed
Nuisance (noise	e) and health hazard	MINOR -	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.
			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).

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.

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.

No fires will be permitted on site without the authority of the resident engineer or project manager.

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.

	CUMILATIVE:  Better communication infrastructure can help with the economic growth of the surrounding area as well as better safety and security to the	MAJOR +	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).  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.  None
	surrounding community.	FDATIONAL DUACE	
A CTIVITY		ERATIONAL PHASE	DDDDDGCD AUTICATION
ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
OPERATION OF THE MAST AS WELL AS MAINTENANCE	<b>DIRECT</b> Minor visual impact to the immediate area;	MINOR -	Due to the fact that the infrastructure in question will be a 35m high mast it is deemed important that the visual impact be minimized. The proposed mast will
THEREOF.	Erosion;     Waste;     Spread Of Alien Blant Species	MINOR -	be a monopole mast. The client must implement elements of good visual design. Site is not situated within visual sensitive area.
	Spread Of Alien Plant Species.		ישונוווו עוטעמו שבווטונועב מובמ.

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).

Monitor stormwater exit points and regularly maintain stormwater structures to maintain their effectiveness;

Regularly clean stormwater run off channels; rehabilitate eroded area; monitoring of road/access infrastructure

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.

Disposal of hazardous substances in an approved manner;

			During rehabilitation only indigenous vegetation must be used.
	INDIRECT: Better communication services in the area;	MAJOR +	Monitoring Of Road/Access Infrastructure
	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.	MINOR -	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.
	CUMULATIVE:  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.	MAJOR +	The residents of the area will benefit by the proposed project as the telecommunications network coverage and capacity will be improved.  The residents in the area are dependent on good
	surrounding community.		telecommunication networks.
	DECO	MMISSIONING PHASE	
REMOVAL OF ALL INFRASTRUCTURE OF THE MAST.	<b>DIRECT:</b> Minor negative visual impact during the deconstruction of the mast;	MINOR –	DECONSTRUCTION OF THE EXISTING MAST ONCE THE MAST IS NO LONGER IN OPERATION AND NO LONGER MAINTAINED; ENSURE THAT SUITABLE ARRANGEMENTS BE MADE TO PROTECT THE ENVIRONMENT AGAINST LONG
			TERM NEGATIVE IMPACTS;

Positive impact on the visual aspects of the area after the mast has been deconstructed and infrastructure removed;	MINOR +	Prevent erosion through regular monitoring and rehabilitation of degraded areas; minimize negative visual impacts; proper waste management (reduction, recycling, reuse, collection, storage,
Possibility of pollution of the surroundings with deconstruction material;	MINOR –	transport, treatment and disposal) during the deconstruction of the structure.
Possibility of erosion if the site is not rehabilitated.	MINOR —	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.  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.  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.

			The site must be rehabilitated after deconstruction to a state similar to that of the surrounding area
II	NDIRECT :		Planning and construction of infrastructure to
	Poor telecommunication phone coverage in this area;	MAJOR -	improve telecommunication coverage in the area
	The coverage and capacity problem will not be solved in the area should the mast be demolished.	MAJOR -	
С	CUMULATIVE :		Planning and construction of infrastructure to
	Might lead to safety and security issues in surrounding area;	MAJOR –	improve telecommunication coverage in the area.
	Might have negative impact on local economy if operational mast is removed.	MAJOR -	Better policing.

#### 8. ENVIRONMNETAL 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 35 m tree telecommunication mast on erf 347 Nasaret 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.