

# KZN Agriculture, Environmental Affairs & Rural Development

umNyango: ezoLimo ezeMvelo nokuThuthukiswa kweMiphakathi yaseMakhaya

#### **ISIFUNDAZWE SAKWAZULU-NATALI**

	(For official use only)
File Reference Number:	DC/
NEAS Reference Number:	KZN/EIA/
Date Received:	

# **Basic Assessment Report**

in terms of the
Environmental Impact Assessment Regulations, 2010
promulgated in terms of the
National Environmental Management Act, 1998 (Act No. 107 of 1998)

#### Kindly note that:

- 1. This **basic assessment report** meets the requirements of the EIA Regulations, 2010 and is meant to streamline applications. This report is the format prescribed by the KZN Department of Agriculture, Environmental Affairs and Rural Development. Please make sure that this is the latest version.
- The report must be typed within the spaces provided in the form. The size of the spaces provided is not indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with text.
- 3. Where required, place a cross in the box you select.
- 4. An incomplete report will be returned to the applicant for revision.
- 5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it will result in the rejection of the application as provided for in the regulations.
- 6. No faxed or e-mailed reports will be accepted.
- 7. The report must be compiled by an independent environmental assessment practitioner ("EAP").
- 8. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 9. The KZN Department of Agriculture, Environmental Affairs and Rural Development may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 10. The EAP must submit this basic assessment report for comment to all relevant State departments that administer a law relating to a matter affecting the environment. This provision is in accordance with Section 24 O (2) of the National Environmental Management Act 1998 (Act 107 of 1998) and such comments must be submitted within 40 days of such a request.
- 11. <u>Please note</u> that this report must be handed in or posted to the District Office of the KZN Department of Agriculture, Environmental Affairs and Rural Development to which the application has been allocated (please refer to the details provided in the letter of acknowledgement for this application).

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# SECTION A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS

# 1. NAME AND CONTACT DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Name and contact details of the EAP who prepared this report:

Business name of EAP:	BSO Projects T/A BSO International		
Physical address:	19A Old Main Road, Gillitts, 3610		
Postal address:	PO Box 1314, Kloof		
Postal code:	3640	Cell:	083 610 0890
Telephone:	031 7641622	Fax:	031 764 1684
E-mail:	peter@bso-int.com / brendan@bso-int.com		

#### 2. NAMES AND EXPERTISE OF REPRESENTATIVES OF THE EAP

Names and details of the expertise of each representative of the EAP involved in the preparation of this report:

Name of representative of the EAP	Education qualifications	Professional affiliations	Experience at environmental
			assessments (yrs)
Peter Koen	BSc     BSc (HON)     MSc	Member of IAIA     Member of IEMA     Member of PMI	9 years
Brendan Smith	BSS Env. Man.     BSS (HON) Env Man.	Member of IAIA	3 years

# 3. NAMES AND EXPERTISE OF SPECIALISTS

Names and details of the expertise of each specialist that has contributed to this report:

Name of specialist	Education qualifications	Field of expertise	Section/ s contributed to in this basic assessment report	Title of specialist report/ s as attached in Appendix D

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# SECTION B. ACTIVITY INFORMATION

#### 1. PROJECT TITLE

Describe the project title as provided on the application form for environmental authorization:

Proposed American Tower Corporation (ATC), telecommunications mast and associated infrastructure (351870 Mnamfu), within the Umzumbe Local Municipality located at Bonginduna Primary School, on Portion 42 of Farm no. 16459, Location No. 3.

#### 2. PROJECT DESCRIPTION

Provide a detailed description of the project:

ATC propose the construction of a new Telecommunications Mast and associated infrastructure (351870 Mnamfu) enabling wireless service providers to provide consolidated coverage for wireless voice and data services to the surrounding Umzumbe Local Municipality area. The total extent of the proposed project area is approximately 10m x 10m. The project will consist of a new telecommunications mast and associated infrastructure, while space for additional operators within the project area has been accommodated for. The proposed mast design is that of a 45m Lattice mast as it will be most suited from a technical perspective as well as taking into account the surrounding environment. The proposed project will be situated at Bonginduna Primary School, on Portion 42 of Farm no. 16459, Location No. 3.

#### 3. ACTIVITY DESCRIPTION

Describe each listed activity in Listing Notice 1 (GNR 544, 18 June2010) or Listing Notice 3 (GNR 546, 18 June 2010) which is being applied for as per the project description:

Activity 3, Listing notice 3:

The construction of masts or towers of any material or type used for telecommunications broadcasting or radio transmission purposes where the mast:

- (a) is to be placed on a site not previously used for this purpose, and
- (b) Will exceed 15 metres in height, but excluding attachments to existing buildings and masts on rooftops.
  - (a): In Eastern Cape, Free State, Kwazulu Natal, Limpopo, Mpumalanga and Northern Cape Provinces i. In an estuary;
    - ii. Outside urban areas,
      - (aa): A protected area identified in terms of NEMPAA, excluding conservancies;
      - (bb): National Protected Area Expansion Strategy Focus areas;
      - (cc): Sensitive areas as identified in an environmental framework as contemplated In Chapter 5 of the Act and as adopted by the competent Authority.
      - (dd): Sites or areas identified in terms of an International Convention.
      - (ee): Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
      - (f f): Core areas in biosphere reserves;
      - (gg): Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve;
      - (hh): Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.
    - iii. Inside Urban areas; in:
      - (aa): Areas zoned for use as public open space;
      - (bb): Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.

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#### 4. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this report. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

# Sections B 5 - 15 below should be completed for each alternative.

#### 5. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. List alternative sites were applicable.

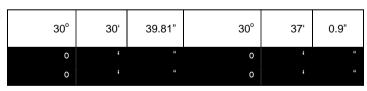
#### Alternative:

Alternative S1¹ (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)





# In the case of linear activities: Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S2 (if any)

Starting point of the activity

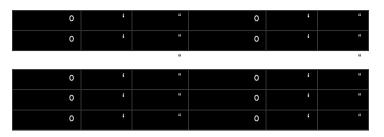
# Latitude (S): Longitude (E):



<sup>1</sup> "Alternative S.." refer to site alternatives.

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- Middle point of the activity
- End point of the activity Alternative S3 (if any)
- Starting point of the activity
- Middle point of the activity
- End point of the activity



For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 500m along the route for each alternative alignment.

#### 6. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1<sup>2</sup> (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:

100m<sup>2</sup>
100m<sup>2</sup>
m<sup>2</sup>

Length of the activity:



Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Size of the

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:

100m<sup>2</sup> 100m<sup>2</sup> m<sup>2</sup>

#### 7. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built Describe the type of access road planned:



No access roads are planned. Access to the site will be through the existing school access point.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

<sup>2</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

Atternative Att. Telef to dollarly, process	, teeringlegy of other diternatives.	
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#### 8. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this report.

The site or route plans must indicate the following:

- 8.1. the scale of the plan which must be at least a scale of 1:500;
- 8.2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
- 8.3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites:
- 8.4. the exact position of each element of the application as well as any other structures on the site:
- 8.5. the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 8.6. walls and fencing including details of the height and construction material;
- 8.7. servitudes indicating the purpose of the servitude;
- 8.8. sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
  - rivers, streams, drainage lines or wetlands;
  - the 1:100 year flood line (where available or where it is required by DWA);
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation including protected plant species (even if it is degraded or infested with alien species);
- 8.9. for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 8.10. the positions from where photographs of the site were taken.

#### 9. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

#### 10. FACILITY ILLUSTRATION

A detailed illustration of the facility must be provided at a scale of 1:200 and attached to this report as Appendix C. The illustrations must be to scale and must represent a realistic image of the planned activity/ies.

#### 11. ACTIVITY MOTIVATION

#### 11.1. Socio-economic value of the activity

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What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

R 650,000.00

It will be user dependant

YES✓ NO YES NO✓

5

R 25.000.00

75%

Undefined (the availability of improved telecommunication and internet access can lead to the creation of a number of home based businesses in the area)

Undefined (the availability of improved telecommunication and internet access can lead to the creation of a number of home based businesses in the area)

(undefined) %

# 11.2. Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

Mobile-communications are an essential part of a modern economy and are hence vital for the future growth and competitiveness of the economy. Large scale development of the surrounding area has resulted in an increased local population which has resulted in increasing pressure being placed on existing mobile telecommunication and data transfer services resulting in a decreasing level and quality of service provision within the area. The implementation of such a project will therefore contribute towards improving service delivery while simultaneously increasing network coverage. Such benefits will therefore accrue to both current and future residents.

Due to the demand for communication services in the area and the demand by residents/customers to have a choice of service providers, these continued complaints from customers for better service delivery will remain if the proposed site is not constructed.

The area surrounding 351870 Mnamfu has been selected as a result of poor coverage experienced by cellular customers in the area. With reference to this the mobile operators have approached ATC, so that they may provide suitable telecommunications infrastructure to enable more than one operator to collocate, and thereby providing a comprehensive solution, not specific to one operator.

Following the completion of an initial survey, it was decided that the solution to the identified problem would involve constructing a telecommunications mast and associated infrastructure at 351870 Mnamfu. The height of the mast was selected because of the terrain and foliage of the surrounding area in addition to the technical requirements. This mast height is required in order to optimally provide voice and data coverage of the surrounding area.

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The selected project site was chosen because it is in the optimal position to provide coverage and is well contained to the area which needs coverage. The advantages of installing the proposed system are numerous with regards to coverage, the mast and site design caters for a number of additional operators to also be accommodated for with regards to the proposed installation.

The aesthetics of the installation is of equal priority to the problem solving effects of the site. The approach of achieving quality coverage without unsightly changes to the surroundings makes it more difficult and innovative solutions to problems are chosen so that the impact of the presence of cellular technology in customers' lives is minimized.

The proposed project is therefore both necessary and desirable with regards to providing increased and improved telecommunication coverage (including wireless voice and data services) to the surrounding area.

#### Indicate any benefits that the activity will have for society in general:

The potential benefit lies in the result of the activity, which is increased telecommunication and data coverage and service provision within the surrounding area. Similarly, surrounding areas which may previously have been excluded from network coverage areas may be included through increased service provision.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

It will help uplift and develop the area. The benefits of the proposed project are therefore related to increased provision and coverage of telecommunication services within the area. Future businesses and residents to the area will also be positively benefitted as through the provision of increased and improved service delivery within the area.

#### 12. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

Title of legislation, policy or guideline:

List all legislation, policies and/or guidelines of any sphere of government that are relevant to the application as contemplated in the EIA regulations, if applicable:

Administering authority:

Date:

Constitution of the Republic of South Africa

National Environmental Management Act (Act No. 107 of 1998)

National Environmental Management: Air Quality Act (Act No. 39 of 2004)

National Environmental Management: Air Quality Act (Act No. 2004)

National Environmental Management: Biodiversity Act (Act No. 2004)

National Environmental Management: Biodiversity Act (Act No. 2004)

Dept. of Agriculture and Environmental Affairs

National Heritage Resources Act (Act No. 25 of 1999)

Dept. of Agriculture and Environmental Affairs

Dept. of Agriculture and Environmental Affairs

Dept. of Agriculture and Environmental Affairs

National Environmental Affairs

1998

10 of 2004)	Environmental Affairs	
National Heritage Resources Act (Act No. 25 of 1999)	Dept. of Arts and Culture	1999
KwaZulu-Natal Heritage Act (No. 10 of 1997)	Amafa aKwaZulu Natali	1997
KZN Town Planning Ordinance of 1949	KZN Department of Local Government and Traditional Affairs	1949
Environmental Conservation Act 73 of 1989	Dept. of Agriculture and Environmental Affairs	1989

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#### 13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

13.1. Solid waste managem	en	t
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Will the activity produce solid construction durina the waste construction/initiation phase?

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of? (describe)



The solid waste will be removed and transported by trucks to the nearest registered municipal landfill site which deals with construction waste.

Where will the construction solid waste be disposed of? (provide details of landfill site)

Nearest registered landfill site

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?

How will the solid waste be disposed of? (provide details of landfill site)

NO✓ YES  $m^3$ 

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

N/A

person:

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine the further requirements of the application.

Can any part of the solid waste be classified as hazardous in terms of the YES relevant legislation?

NO✓

If yes, contact the KZN Department of Agriculture, Environmental Affairs and Rural Development to obtain clarity regarding the process requirements for your application.

Is the activity that is being applied for a solid waste handling or treatment YES facility?

If yes, contact the KZN Department of Agriculture, Environmental Affairs and Rural Development to obtain clarity regarding the process requirements for your application.

#### 13.2. Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

If yes, what estimated quantity will be produced per month?

Will the activity produce any effluent that will be treated and/or disposed of on

YES NO✓  $m^3$ Yes NO✓

If yes, contact the KZN Department of Agriculture, Environmental Affairs and Rural Development to obtain clarity regarding the process requirements for your application.

Will the activity produce effluent that will be treated and/or disposed of at YES another facility?

If yes, provide the particulars of the facility:

Facility name: Contact

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Postal			
address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	
Describe the me	easures that will be taken to ensure the c	ptimal reuse	or recycling of waste
water, if any:			

#### 13.3. Emissions into the atmosphere

Will the activity release emissions into the atmosphere? If yes, is it controlled by any legislation of any sphere of government?



If yes, contact the KZN Department of Agriculture, Environmental Affairs and Rural Development to obtain clarity regarding the process requirements for your application.

If no, describe the emissions in terms of type and concentration:

The emissions are Electro Magnetic Radiation. Please see specialist reports in Appendix D.

#### 13.4. Generation of noise

Will the activity generate noise?



If yes, is it controlled by any legislation of any sphere of government? If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

During the construction phase of the proposed project noise generated by construction activities, construction vehicles and construction machinery and equipment will result in increased noise levels in the area surrounding the development area. However during the operational phase of the proposed project the only noise that will be generated as a result of the project will be noise emitted from standard household air-conditioner units within the equipment containers, as these units are necessary for maintaining a constant temperature within the equipment shelter to allow for the optimal operating and lifespan of the base station and its associated electronic equipment.

#### 14. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

municipal water board groundwater river, stream, other the activity will not use water✓

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Does the activity require a water use permit from the Department of Water Affairs?



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If YES, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this report.

#### 15. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The entire BTS (Base Transceiver Station) system seldom consists of more than 4 or 5 pieces of signal transmission equipment, and a small household air conditioner. The very nature of the transmission equipment makes it impossible for it to operate in an un-efficient manner without adversely affecting its own operation. The equipment container itself is thermally insulated as to reduce load on the air conditioner (s).

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

BTS sites require very little power or land, relative to common commercial applications, this limited power requirement invalidates the cost, and potential land requirement of "Alternative Energy Resources"

# SECTION C: SITE/ AREA/ PROPERTY DESCRIPTION

#### Important notes:

For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be
necessary to complete this section for each part of the site that has a significantly different
environment. In such cases please complete copies of Section C and indicate the area, which is
covered by each copy No. on the Site Plan.

Section	С	Сору	No.	
(e.g. A):				

Subsections 1 - 6 below must be completed for each alternative.

# 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

#### Alternative S1:

Flat✓	1:50 1:20	- 1:20 1:15	- 1:15 – 1:10	1:10 1:7,5	<b>–</b> 1:7,5 <b>–</b> 1:5	Steeper than 1:5
Alternati	ve S2 (if	any):				
Flat✓		- 1:20 1:15	- 1:15 – 1:10	1:10 1:7,5	<b>–</b> 1:7,5 <b>–</b> 1:5	Steeper than 1:5
Alternati	ve S3 (if	any):				
Flat	1:50 1:20	- 1:20 1:15	– 1:15 – 1:10	1:10 1:7,5	– 1:7,5 – 1:5	Steeper than 1:5

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# 2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (Please cross the appropriate box).

Δ	Iternative	<b>S1</b>	(preferred	cita).
м	niemanive	JΙ	lbielelleu	SILE1.

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley <b>√</b>	Plain	Undulating pla hills	in/low	Dune	Sea- front
Alternative	S2 (if any):								
Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea- front	
Alternative	S3 (if any):								=" _
Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea- front	

# 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

	L L. C.	6.0.2	r: - 0		٧٢٥	NO.
as a specialist been consulted for t		n of this sec	tion?		YES	NO✓
YES, please complete the following	g:					
ame of the specialist:						
ualification(s) of the specialist:						
ostal address:						
ostal code:						
elephone:				Cell:		
-mail:				Fax:		
e there any rare or endangered flo		pecies (incl	uding red data	species)	YES	NO✓
esent on any of the alternative site	s?					
YES, specify						
id explain:	20.0				\/F0	110.4
re their any special or sensitive hat	oitats or othe	r naturai tea	tures present of	on any of the	YES	NO✓
ternative sites?						
YES, specify						
nd explain:			-1:-10		VEC	NO.
e any further specialist studies rec	ommenaea r	by the specia	alist?		YES	NO✓
YES,						
pecify:	А	20			VEC	NO.
YES, is such a report(s) attached i	n <u>Appendix L</u>	<u>)</u> ?			YES	NO✓
anatura of anacialists			Data:			
gnature of specialist:			_ Date:			
the cite(s) leasted an any of	the followi	na larana	the energy	iata hayaa\?	,	
the site(s) located on any of				,		CO (:t
	Alternative	9 51:	Alternativ	e S2 (if	Alternative	S3 (if
callow water table (less than 1 Em	YES	NO✓	any): YES	NO✓	any): YES	NO✓
nallow water table (less than 1.5m	YES	NO♥	YES	NO♥	YES	NO♥
eep)	VEC	NO✓	VEC	NO✓	YES	NO✓
olomite, sinkhole or doline areas	YES	NO♥	YES	NO♥	YES	NO♥
easonally wet soils (often close to	YES	NO✓	YES	NO✓	YES	NO✓
easonally wel solls tollell close to	IEO	NO♥	IES	NO♥	TES	NO♥
ater bodies)	VEC	NO.	VEC	NO.	VEC	NO.
ater bodies) nstable rocky slopes or steep	YES	NO✓	YES	NO✓	YES	NO✓
ater bodies) nstable rocky slopes or steep opes with loose soil						
ater bodies) nstable rocky slopes or steep opes with loose soil ispersive soils (soils that dissolve	YES YES	NO <b>√</b>	YES YES	NO✓	YES YES	NO✓
ater bodies) nstable rocky slopes or steep opes with loose soil ispersive soils (soils that dissolve water)	YES	NO✓	YES	NO✓	YES	NO✓
ater bodies) nstable rocky slopes or steep opes with loose soil ispersive soils (soils that dissolve water) oils with high clay content (clay						
ater bodies) instable rocky slopes or steep opes with loose soil ispersive soils (soils that dissolve water) bils with high clay content (clay action more than 40%)	YES YES	NO <b>✓</b>	YES YES	NO✓ NO✓	YES YES	NO <b>√</b>
ater bodies) nstable rocky slopes or steep opes with loose soil ispersive soils (soils that dissolve water) oils with high clay content (clay	YES	NO✓	YES	NO✓	YES	NO✓

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۸ "	0.00	sensitive	+~	araaiar
ΑΠ	area	sensilive	1()	erosior

YES NO✓ YES NO✓

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

#### 4. GROUNDCOVER

Has a specialist bee	en consi	ulted fo	or the completion of this	s section?			YES	NO✓
If YES, please comp	olete the	e follow	/ing:					
Name of the special	list:							
Qualification(s) of th	ne speci	alist:						
Postal address:								
Postal code:	_							
Telephone:					Cell:			
E-mail:					Fax:			
•		•	flora or fauna species	(including red d	ata species	)	YES	NO✓
present on any of th	ne altern	ative si	ites?					
If YES, specify								
and explain:								
• •	ıl or sen	sitive h	nabitats or other natura	Il features prese	ent on any o	f the	YES	NO✓
alternative sites?								
If YES, specify								
and explain:								
· · · · · · · · · · · · · · · · · · ·	cialist st	udies r	ecommended by the s	pecialist?			YES	NO✓
If YES,								
specify:								
If YES, is such a rep	port(s) a	ittached	d in <u>Appendix D</u> ?				YES	NO✓
				Б.				1
Signature of special	ist:			Date:				

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition <sup>E</sup>	Natural veld with scattered aliens <sup>E</sup>	Natural veld with heavy alien infestation <sup>E</sup>		Gardens ✓
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

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# 5. LAND USE CHARACTER OF SURROUNDING AREA

Cross the land uses and/or prominent features that currently occur within a 500m radius of the site and give a description of how this influences the application or may be impacted upon by the application:

Land use character			Description
Natural area	YES	NO	·
Low density residential	YES✓	NO	
Medium density residential	YES	NO	
High density residential	YES	NO	
Informal residential	YES	NO	
Retail commercial & warehousing	YES	NO	
Light industrial	YES	NO	
Medium industrial	YES	NO	
Heavy industrial	YES	NO	
Power station	YES	NO	
Office/consulting room	YES	NO	
Military or police base/station/compound	YES	NO	
Spoil heap or slimes dam	YES	NO	
Quarry, sand or borrow pit	YES	NO	
Dam or reservoir	YES	NO	
Hospital/medical centre	YES	NO	
School/ creche	YES✓	NO	Bonginduna Primary School
Tertiary education facility	YES	NO	,
Church	YES	NO	
Old age home	YES	NO	
Sewage treatment plant	YES	NO	
Train station or shunting yard	YES	NO	
Railway line	YES	NO	
Major road (4 lanes or more)	YES✓	NO	N2 Freeway
Airport	YES	NO	·
Harbour	YES	NO	
Sport facilities	YES	NO	
Golf course	YES	NO	
Polo fields	YES	NO	
Filling station	YES	NO	
Landfill or waste treatment site	YES	NO	
Plantation	YES	NO	
Agriculture	YES✓	NO	Subsistence agriculture fields
River, stream or wetland	YES	NO	-
Nature conservation area	YES	NO	
Mountain, hill or ridge	YES	NO	
Museum	YES	NO	
Historical building	YES	NO	
Protected Area	YES	NO	
Graveyard	YES	NO	
Archaeological site	YES	NO	
Other land uses (describe)	YES	NO	

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# 6. CULTURAL/ HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or within 20m of the site?



If YES, contact a specialist recommended by AMAFA to conduct a heritage impact assessment. The heritage impact assessment must be attached as an appendix to this report.

Briefly explain the recommendations of the specialist:

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES NO✓ YES NO✓

If YES, please submit the necessary application to AMAFA and attach proof thereof to this report.

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# SECTION D: PUBLIC PARTICIPATION

#### 1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  - (i) the site where the activity to which the application relates is or is to be undertaken; and
  - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
  - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land:
  - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  - (v) the local and district municipality which has jurisdiction in the area;
  - (vi) any organ of state having jurisdiction in respect of any aspect of the activity (as identified in the application form for the environmental authorization of this project); and
  - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in—
  - (i) one local newspaper; or
  - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  - (i) illiteracy;
  - (ii) disability; or
  - (iii) any other disadvantage.

#### 2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—

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- (i) that an application for environmental authorization has been submitted to the KZN Department of Agriculture, Environmental Affairs and Rural Development in terms of the EIA Regulations, 2010;(ii)
- (iii) a brief project description that includes the nature and location of the activity to which the application relates;
- (iv) where further information on the application can be obtained; and
- (iv) the manner in which and the person to whom representations in respect of the application may be made.

#### 3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

#### 4. DETERMINATION OF APPROPRIATE PROCESS

The EAP must ensure that the public participation process is according to that prescribed in regulation 54 of the EIA Regulations, 2010, but may deviate from the requirements of subregulation 54(2) in the manner agreed by the KZN Department of Agriculture, Environmental Affairs and Rural Development as appropriate for this application. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate.

<u>Please note</u> that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

#### 5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before this application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations (regulation 57 in the EIA Regulations, 2010) and be attached as <u>Appendix E</u> to this report.

#### 6. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES

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District, local and traditional authorities (where applicable) are all key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of this application and provided with an opportunity to comment.

Has any comment been received from the district municipality?  If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):
Has any comment been received from the local municipality?  If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):
Has any comment been received from a traditional authority?  If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):  YES NO✓

# 7. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES✓ NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

1.	Ezemvelo KZN Wildlife	-See Appendix E
2.	Dept. of Transport	- Awaiting comment.
3.	Telkom	- Awaiting comment.
4.	Dept. of Water	- Awaiting comment.
5.	Dept. of Minerals & Energy	- Awaiting comment.
6.	Dept. of Health	- Awaiting comment.
7.	AMAFA	- Awaiting comment.
8.	Eskom	- See Appendix E
9.	Department of Human Settlements	- Awaiting comment.
10.	Department C.O.G.T.A.	-Awaiting comment
11.	SANRAL	- See Appendix E
12.	Umzumbe Local Municipality	-Awaiting comment
13.	Ugu District Municipality	- Awaiting comment.

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# SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

#### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

See appendix E

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached as <u>Appendix E</u> to this report):

See appendix E

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

#### 2.1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

#### a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the planning and design phase:

#### Alternative S1 (preferred alternative)

**Direct impacts:** During the design phase all different mast types must be assessed and the one that will blend in the best with the environment must be selected.

Indirect impacts: No impact

Cumulative impacts: No impact

Alternative S2 (if any)

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts: The surrounding community will have limited access to telecommunication services.

*Indirect impacts:* This may result in resentment and frustration of the community regarding the lack of adequate telecommunication service provision.

**Cumulative impacts:** General lack of upliftment within the community through a lack of adequate telecommunication service provision.

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Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative S1

#### **Alternative S2**

Select a mast design that will blend in with its surrounding environment as much as possible.

#### b. Process, technology, layout or other alternatives

List the impacts associated with any process, technology, layout or other alternatives that are likely to occur during the planning and design phase (please list impacts associated with each alternative separately):

#### Alternative A1 (preferred alternative)

**Direct impacts:** The proposed 45m lattice mast will be as in-obtrusive as possible. The mast has also been designed to accommodate other users, to limit the number of masts required in the area.

Indirect impacts: No impact

Cumulative impacts: No impact

#### Alternative A2 (if any)

**Direct impacts:** The proposed 45m lattice mast will be as in-obtrusive as possible. The mast has also been designed to accommodate other users, to limit the number of masts required in the area.

Indirect impacts: No impact

Cumulative impacts: No impact

#### No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No impact
Cumulative impacts: No impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative A1:

#### Alternative A2:

- The design of the mast must be adapted to best fit in with the character of the surrounding environment.
- The mast must be designed in such a way to be shared with other users.
- The design of the mast must be adapted to best fit in with the character of the surrounding environment.
- The mast must be designed in such a way to be shared with other users.

#### 2.2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

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# a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the construction phase:

Alternative S1 (preferred site)

Potential Impacts	Significance of Impacts (Low, Medium, Medium- High, High & Very High)	Proposed Mitigation	Significance of Impacts after mitigation (Low, Medium, Medium-High, High & Very High)
Safety and Security: The digging of the mast foundation could be a safety hazard.	-М	The site and employees are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the National Building Regulations.  Restrict Public access to the site.  Demarcate the area with red tape	-L
Air Pollution: The construction activities may lead to an increase in dust.		Burning of Waste should not be permitted.     Construction activities should not be the source of dust production and a dust suppression program should be put in place.	-L
Noise Pollution: Various construction activities (e.g. construction vehicles, concrete pouring, etc.) would increase noise levels around the site, which would create a nuisance to residents neighbouring the site.	-M	1. The Contractor shall be familiar with and adhere to, any local by-laws and regulations regarding the generation of noise and hours of operation.  2. The construction process is foreseen to be only 2-4 weeks, and will be limited to normal office hours.	-L
Visual: The proposed development would have a short-term visual impact during the construction phase.	-M	Incorporate measures for visual screening (e.g. using shade cloth) in the Environmental Management Plan (EMP).     Avoid construction activities outside of normal working hours.	-L
Impact on Biodiversity: Removal of Indigenous trees and plant species.	-L	1. The project site is only 68.59m² in extent.	-L
Heritage Impact:		Contractors and plant operators should be briefed what to look out for during bulk earthworks and excavations.     Should any archaeological objects be disturbed, exposed or uncovered during the bulk earthworks, it should immediately be reported to Amafa Heritage KwaZulu Natal.	-L
Social Impacts (Job Creation): The creation of temporary employment opportunities during the construction phase of the project would result in a localised, short-term benefit of medium intensity.	+L	Utilising local contractors and labourers as far as possible to increase employment opportunities in the area	+L
Reduction in Alien Plant Species: Alien invasive	+L	Ensure the eradication of alien invasive plant species.	+M

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plant species would be . Implement а continuous removed as part of the removal program. construction phase activities.

For technical reasons the proposed site is the best in terms of achieving optimal telecommunication coverage of the surrounding area.

Indirect impacts: Increase of employment opportunities in other economic sectors due to the availability of affordable wireless data-communication services in the area.

Cumulative impacts: No Impact

#### Alternative S2 (if any)

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No Impact

Cumulative impacts: No Impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative S1

#### **Alternative S2** Safety and security:

- No rubble or discarded building materials must remain on the construction site for more than two weeks.
- The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the National Building Regulations.
- · Do not allow the movement of public within the development site by posting notices at the entrance gates and perimeter fencing/walls.

#### Air pollution:

- · Air filters on all mechanized equipment must be properly designed and maintained.
- Onsite burning of waste is not permitted.
- Construction activities will not be the source of dust production. A dust suppression program should be implemented.

#### Noise pollution:

- Silencers on diesel-powered equipment must be properly designed and maintained.
- Construction activities should be limited to normal office hours.

#### Visual pollution:

- · Avoid shiny metals in structures. If possible shiny metal structures should be darkened or screened to prevent glare.
- Night-time light sources must be directed away from residential

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- Incorporate measures for visual screening (e.g. using shade cloth) in the Environmental Management Plan (EMP).
- Avoid construction activities outside of normal working hours.
- Appoint a suitably qualified environmental control officer.

#### Heritage resources:

Should any archaeological artefacts be exposed during excavation, work on the area where the artefacts were found, shall cease immediately and the ECO and Amafa KZN Heritage should be notified as soon as possible.



#### b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the construction phase (please list impacts associated with each alternative separately):

#### Alternative A1 (preferred alternative)

#### Direct impacts:

Safety and Security

Access to the project area must be limited as well as controlled. Trenches must be marked with red tape to ensure visibility thereof.

Air Pollution

Dust suppression must be carried out on a regular basis

• Noise Pollution

Construction activities must be kept to normal working hours. The adjacent landowners must be notified of especially noisy activities at least 24 hours in advance.

Visual

Shade cloth should be utilised to shield adjacent landowners from the development during the construction phase.

Heritage Impact

Machine operators must be notified about the possibility of unearthing any artefacts of heritage value, should this occur all development in the specific area must stop.

Social Impacts

Maximise local employment opportunities during the construction phase of the development.

• Impact on Alien Vegetation

Remove alien vegetation from the development site through the implementation of an alien invasive species removal program during the construction phase.

Indirect impacts: Positive social spin offs due to the availability of affordable data-communication services in the area.

**Cumulative impacts:** No cumulative impacts are foreseen during the construction phase of the development due to its temporary nature as well as relatively short implementation period.

#### Alternative A2

#### Direct impacts:

Safety and Security

Access to the project area must be limited as well as controlled. Trenches must be marked with red tape to ensure visibility thereof.

Air Pollution

Dust suppression must be carried out on a regular basis

Noise Pollution

Construction activities must be kept to normal working hours. The adjacent landowners must be notified of especially noisy activities at least 24 hours in advance.

Visual

Shade cloth should be utilised to shield adjacent landowners from the development during the construction phase.

Heritage Impact

Machine operators must be notified about the possibility of unearthing any artefacts of heritage value, should this occur all development in the specific area must stop.

Social Impacts

Maximise local employment opportunities during the construction phase of the development.

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#### Impact on Alien Vegetation

Remove alien vegetation from the development site through the implementation of an alien invasive species removal program during the construction phase.

Indirect impacts: Positive social spin offs due to the availability of affordable data-communication services in the

Cumulative impacts: No cumulative impacts are foreseen during the construction phase of the development due to its temporary nature as well as relatively short implementation period.

#### No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No Impact

Cumulative impacts: No Impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative A1:

#### Topsoil:

- · Stockpiled topsoil should be used as the final cover for all disturbed areas where revegetation is required.
- soil Stockpiled should by protected erosion-control berms if exposed for a period of greater than 14 days during the wet season.
- · Soil stockpiles should be located away from drainage lines and areas of temporary inundation.

#### Personnel:

- Construction staff should be educated as to the need to refrain from destruction of animals and as well as from indiscriminate waste disposal and/or pollution of local soil and water resources.
- Machine/vehicle operators should clear instructions receive to remain within demarcated access operations/construction areas. Penalties should be introduced if necessary to ensure that this ruling is adhered to.
- Staff should be informed that access to adjacent properties is strictly off-limits and that it will be deemed a serious offence (i.e. no fences should be jumped at any time and no gates are to be opened without permission from the relevant landowner).
- The contractor should ensure proper supervision of employees at all times.
- The contractor shall take due cognizance of the character. culture and circumstances of the specific community.

#### **Biodiversity:**

Areas compacted by vehicles during construction may have to

#### Alternative A2:

# Topsoil:

- · Stockpiled topsoil should be used as the final cover for all disturbed areas where revegetation is required.
- Stockpiled soil should by protected erosion-control berms if exposed for a period of greater than 14 days during the wet season.
- Soil stockpiles should be located away from drainage lines and areas of temporary inundation.

#### Personnel:

- Construction staff should be educated as to the need to refrain from destruction of animals and as well as from plants. indiscriminate waste disposal and/or pollution of local soil and water resources.
- Machine/vehicle operators should receive clear instructions to remain within demarcated access operations/construction areas. Penalties should be introduced if necessary to ensure that this ruling is adhered to.
- Staff should be informed that access to adjacent properties is strictly off-limits and that it will be deemed a serious offence (i.e. no fences should be jumped at any time and no gates are to be  $opened\ without\ \bar{\ }permission\ from$ the relevant landowner).
- The contractor should ensure proper supervision of employees at all times.
- The contractor shall take due cognizance of the character. culture and circumstances of the specific community.

#### **Biodiversity:**

 Areas compacted by vehicles during construction may have to

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be scarified (ripped) to allow penetration of plant roots and the re-growth of natural vegetation.

#### Waste and Sanitation:

- No disposal of sewage should occur on or near the site.
- Chemical toilets must be provided by the contractor in accordance with requirements.
- The contractor shall at all times provide adequate sanitary facilities on site so that all employees are at all times within easy reach of sanitary facilities.
- In general, littering, discarding or burying of any materials should not be allowed on site.
- Material from excavation shall only be spoiled or temporarily stockpiled on sites approved or designated by the Engineer in writing. Surplus excavated material shall be removed to a spoil area designated by the engineer. Haul and spoil roads shall be limited to the minimum necessary for the efficient construction of the works.

#### **Visual Impact:**

- All construction material must be stored in one place out of the direct eyesight of pedestrians.
- This impact is only a problem during the construction phase and thus will not have a long term effect on the community.

#### Noise Pollution:

Operating hours should be limited to normal office hours especially for activities that involve high levels of noise, unless otherwise approved by the Environmental Control Officer in consultation with adjacent landowners.

be scarified (ripped) to allow penetration of plant roots and the re-growth of natural vegetation.

#### Waste and Sanitation:

- No disposal of sewage should occur on or near the site.
- Chemical toilets must be provided by the contractor in accordance with requirements.
- The contractor shall at all times provide adequate sanitary facilities on site so that all employees are at all times within easy reach of sanitary facilities.
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- Material from excavation shall only be spoiled or temporarily stockpiled on sites approved or designated by the Engineer in writing. Surplus excavated material shall be removed to a spoil area designated by the engineer. Haul and spoil roads shall be limited to the minimum necessary for the efficient construction of the works.

#### **Visual Impact:**

- All construction material must be stored in one place out of the direct eyesight of pedestrians.
- This impact is only a problem during the construction phase and thus will not have a long term effect on the community.

#### Noise Pollution:

Operating hours should be limited to normal office hours especially for activities that involve high levels of noise, unless otherwise approved by the Environmental Control Officer in consultation with adjacent landowners.

#### 2.3. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

# a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the operational phase:

#### Alternative S1 (preferred alternative)

Potential Impacts	Significance rating of impacts (Low, Medium, Medium-High, High, Very High)		Significance rating of impacts after mitigation (Low, Medium, Medium- High, High, Very High)
Visual: The proposed mast would result in a permanent change to the visual landscape after construction is completed.	-M	<ol> <li>The proposed mast would limit the visual impact and will blend in with the surrounding sky and trees.</li> <li>Minimise external signage. Low signs that are less obtrusive in the landscape should be considered. No large illuminated signs should be permitted.</li> <li>Outdoor lighting, where required.</li> </ol>	-Ļ

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must be as unobtrusive as possible and fitted with reflectors to avoid light spillage. No floodlighting should be used. Low-level bollard and bulkhead type lighting should be considered for the parking areas, paths and steps.

*Indirect impacts:* Increased provision and coverage of telecommunication services available to the surrounding local community.

Cumulative impacts: No Impact

#### Alternative S2 (if any)

Direct impacts:

Indirect impacts:

Cumulative impacts:

# No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision within the surrounding area.

Indirect impacts: No Impact

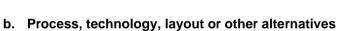
Cumulative impacts: No Impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative S1

Alternative S2

The 45m lattice mast must be maintained to standard. Limited signage must be erected against the fence.



List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase (please list impacts associated with each alternative separately):

#### Alternative A1 (preferred alternative)

#### Direct impacts:

- Interference with other telecommunication transmissions.
- Changes in the visual quality and character of surrounding landscape.

Indirect impacts: No Impact

Cumulative impacts: No Impact

#### Alternative A2

#### Direct impacts:

- · Interference with other telecommunication transmissions.
- Changes in the visual quality and character of surrounding landscape.

Indirect impacts: No Impact

Cumulative impacts: No Impact

#### No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No Impact
Cumulative impacts: No Impact

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Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative A1

#### Alternative A2

- Ensure the proposed datacommunication service's frequency does not interfere with other existing telecommunication transmissions in the area.
- The proposed mast will limit the visual impact and blend in with the existing trees and sky.
- Ensure the proposed datacommunication service's frequency does not interfere with other existing telecommunication transmissions in the area.
- The proposed mast will limit the visual impact and blend in with the existing trees and sky

#### 2.4. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING OR CLOSURE PHASE

#### a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the decommissioning or closure phase:

#### Alternative S1 (preferred alternative)

**Direct impacts:** The proposed development is a long term, permanent structure that is expected to be in place for numerous years. Hence no decommissioning or closure is foreseen or expected in the near future.

Indirect impacts: No Impact
Cumulative impacts: No Impact

#### Alternative S2

Direct impacts:

Indirect impacts:

Cumulative impacts:

#### No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No Impact

Cumulative impacts: No Impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative S1

#### Alternative S2

- Work to be carried out as specified in the Environmental Management Plan should the mast be decommissioned in future.
- Close out auditing to ensure compliance.

# • Alternative 32

#### b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately):

## Alternative A1 (preferred alternative)

Direct impacts: The proposed development is a long term, permanent structure that is expected to be in place for

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numerous years. Hence no decommissioning or closure is foreseen or expected in the near future.

Indirect impacts: No Impact
Cumulative impacts: No Impact

#### Alternative A2

*Direct impacts:* The proposed development is a long term, permanent structure that is expected to be in place for numerous years. Hence no decommissioning or closure is foreseen or expected in the near future.

Indirect impacts: No Impact

Cumulative impacts: No Impact

No-go alternative (compulsory)

Direct impacts: Limited access to telecommunication service provision in the surrounding area

Indirect impacts: No Impact

Cumulative impacts: No Impact

Indicate mitigation measures to manage the potential impacts listed above:

#### Alternative A1

#### Work to be carried out as specified in the Environmental Management Plan should the mast be decommissioned in future.

# • Close out auditing to ensure compliance.

#### Alternative A2

- Work to be carried out as specified in the Environmental Management Plan should the mast be decommissioned in future.
- Close out auditing to ensure compliance.

#### 2.5. PROPOSED MONITORING AND AUDITING

For each phase of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

#### Alternative S1 (preferred site)

Alternative S2

It will be the responsibility of the contractor, engineer, ECO and the Municipality to ensure that all site related mitigation measures and impacts are monitored and audited.

#### Planning Phase:

All drawings needs to be approved by the Municipality

#### **Construction Phase:**

An Environmental Control Officer must be appointed; the ECO will then be responsible for the monthly auditing of the site during the construction phase. The ECO must supply DAEA with audit reports on a monthly basis.

## Operational Phase:

An independent environmental auditor should be appointed to do an annual audit of the development. This report must also be sent to DAEA.



#### 3. ENVIRONMENTAL IMPACT STATEMENT

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Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

#### Alternative S1 (preferred site)

The major environmental impact, which is likely to result from this development, is the visual impact of the proposed development on the surrounding land uses.

Impact Type	Likelihood (Probability)	Duration	Significance after mitigation
Visual Impact	High	Permanent	Medium
Noise	Low	Permanent	Very Low
Heritage Impacts	Low	Permanent	Very Low
Traffic	Low	Permanent	Very Low
Biodiversity Impacts	Very Low	Temporary	Very Low
Stormwater Management	Very Low	Permanent	Very Low
Air Pollution	Very Low	Temporary	Very Low

By taking the proposed mitigation measures proposed in this Basic Assessment Report for the environmental impacts identified into account, it is concluded that the development could be supported and that it will contribute positively to the community by improving the telecommunication service delivery currently experienced by the surrounding community in the area.

#### **Alternative S2**

#### Alternative A1 (preferred alternative)

This development could be supported. However the proposed site location is in close proximity to an Eskom power line. Alternative A2 is to be pursued.

#### Alternative A2

#### No-go alternative (compulsory)

The surrounding community will have no to limited access to telecommunication services within the area.

# SECTION F. RECOMMENDATION OF EAP

Is the information contained in this report and the documentation attached hereto in the view of the EAPr sufficient to make a decision in respect of this report?

If "NO", please contact the KZN Department of Agriculture, Environmental Affairs and Rural Development regarding the further requirements for your report.



If "YES", please attach the draft EMPr as <u>Appendix F</u> to this report and list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

It is the opinion of the Environmental Assessment Practitioner that the project can be supported on condition that design alternative A1 is implemented and provided that sensitive planning, design and good environmental management be carried out by the proponent during all phases of development.

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A variety of mitigation measures have been identified that will serve to mitigate the scale, intensity, duration or significance of the impacts that have a medium and high significance rating. These include guidelines to be applied during the construction and operational phases of the project. The proposed mitigatory measures, if implemented, will reduce the significance of the majority of the identified impacts to "low", and that the proposed project should proceed.

The recommendations listed below have been divided into construction and design / operation phase recommendations

#### 1. CONSTRUCTION PHASE RECOMMENDATIONS

#### 1.1 Construction Environmental Management Plan

- An Environmental Management Plan is prepared for the development that includes Construction Phase and Operational Phase recommendations.
- A suitably qualified Environmental Control Officer (ECO) should be appointed to ensure that the Construction EMP is implemented and adhered to.

#### 1.2 Archaeology

- Amafa should be contacted if any heritage objects are identified during earthmoving activities and all development should cease until further notice.
- The contractor and plant operators should be briefed to look out for archaeological sites (e.g. shell middens
  and human burials) during bulk earthworks and excavations. This briefing should be undertaken as part of
  the environmental awareness training undertaken by the ECO before construction commences.

#### 1.3 Noise

- The Contractor shall be familiar with and adhere to, any local by-laws and regulations regarding the generation of noise and hours of operation.
- The provisions of SABS 1200A Subclause 4.1 regarding "built-up areas" shall apply to all areas within audible distance of residents.
- The Contractor shall negotiate for any permits requiring deviation from local by-laws and/or regulations with the local authority.

#### 1.4 Employment

Without compromising construction activities and schedules, local labour from the surrounding community should be employed as far as possible. Those successful in obtaining employment should be provided with the appropriate training.

#### 2. DESIGN / OPERATION PHASE RECOMMENDATIONS

Mitigatory measures that should be considered for implementation into the proposed design and operation phases are listed below.

#### 2.1 Access

Access to the property should be controlled.

#### 2.2 Noise

 Operating hours should be restricted to normal business hours as far as possible especially for activities creating loud noise, unless permission has been obtained from adjacent residents.

#### 2.3 Employment

 Local labour from the surrounding community should be employed as far as possible. Those successful in obtaining employment should be provided with the appropriate training.

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# **SECTION G: APPENDIXES**

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

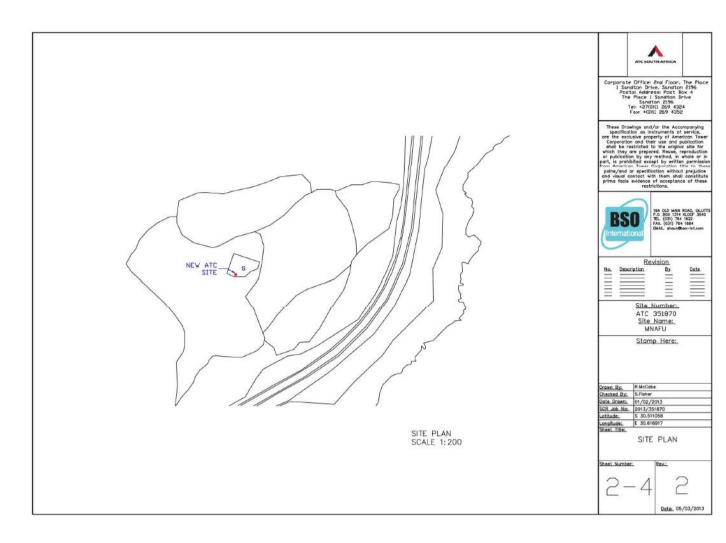
Appendix E: Comments and responses report

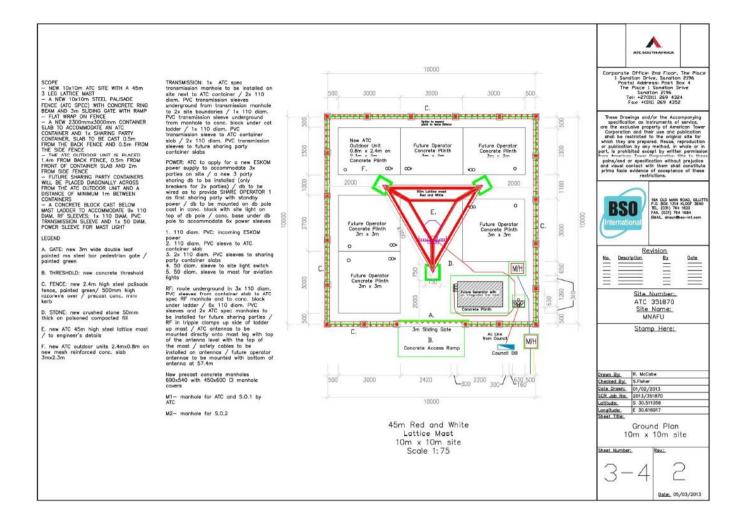
Appendix F: Draft Environmental Management Programme (EMPr)

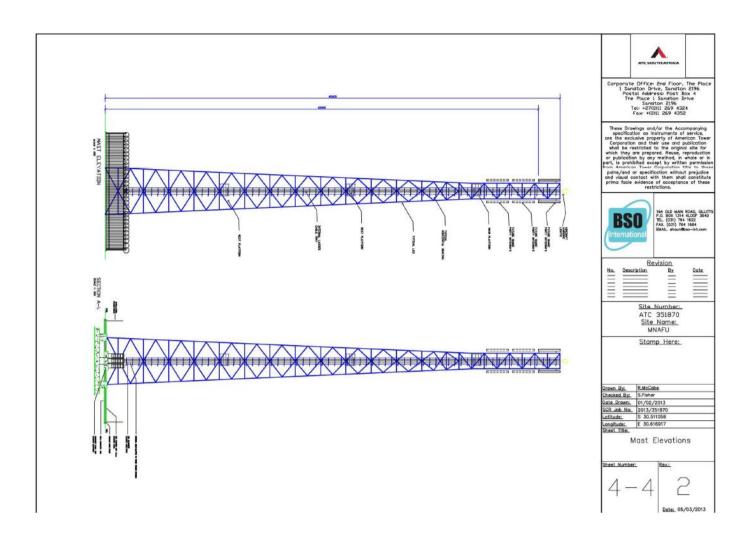
Appendix G: Other information

# **APPENDIX A: SITE PLANS**









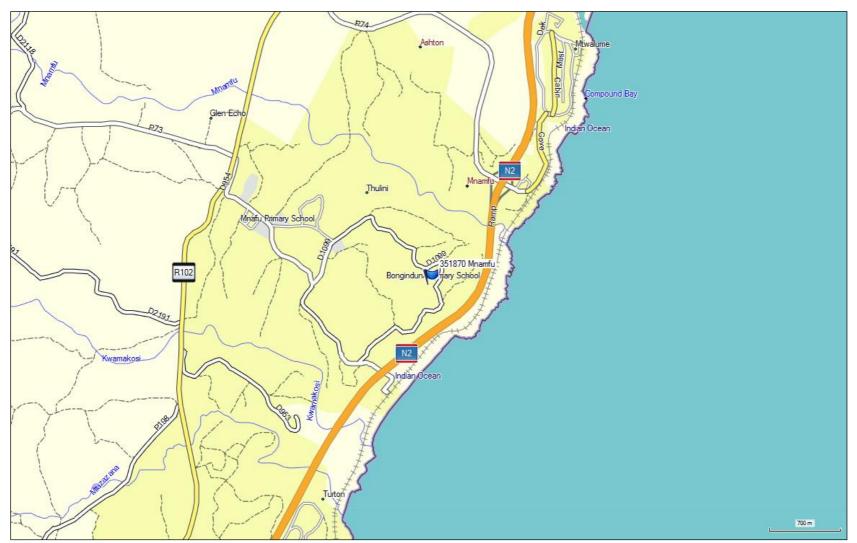


Figure 1: Site location at 700m map detail

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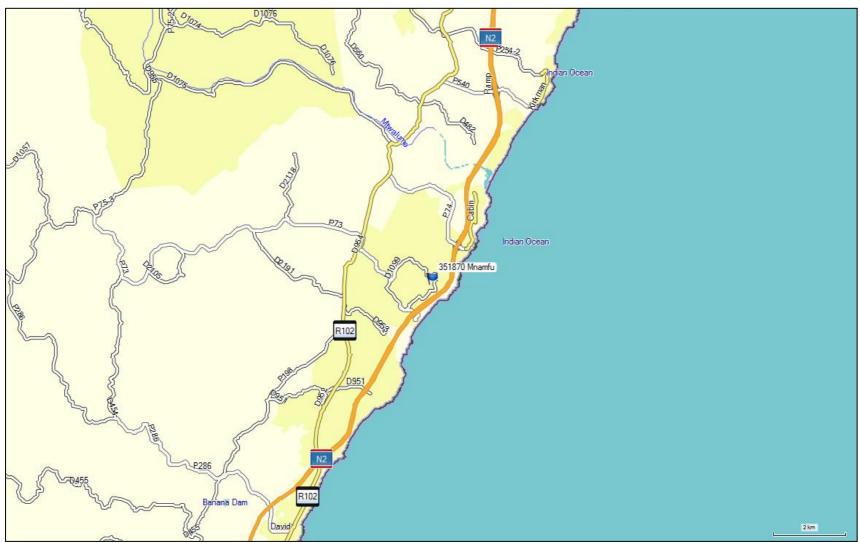


Figure 2: Site location at 2km map detail

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### **APPENDIX B: PHOTOGRAPHS**

### **PROPOSED SITE LOCATION**









### **APPENDIX C: Site Facility Illustrations**

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### **APPENDIX D: Specialist Report** SA CELLULAR HEALTH & SAFETY FACTS

# i if I'm still concerned about exposure frequency energy?

in of First, you should be familiar with the safety language information are mentioned below in this pamphlet. handset user manual

Some cellphone users may choose to use a headset, earbud free" operation of the phone. If you decide to use these devices it should be for convenience and not because of health concerns. These devices are available through your service provider, manufacturer of the phone or various or other similar device designed for convenient "handsretail outlets.

## Additional information

www.sacta.co.za/011 615 9800 or from the following Detailed information for both cellphones and base stations can be obtained from us at international sources:

World Health Organisation: www.who.int/peh-emf

International Commission on Non-Ionising Radiation Protection: www.icnirp.com

UK Radiation Protection Board: www.nrpb.org.uk

JS Cellular Telecommunications Industry Association: www.phonefacts.net

Australian Communication Authority:

www.aca.gov.au/standards/emr.htm

Health Canada: www.hc-cs.gc.ca

German Research Association for Radio Application: www.fgf.de

Research Centre for the Environment Compatibility of Electro-Magnetic Fields: www.femu.rwth-aachen.de

Global GSM Association: www.gsmworld.com/technology/other hs sites.html

Swedish Radiation Protection Institute: www.ssi.se/english/index.html

### Telecommunication Association The South African Cellular

SACTA is an independent non-profit organisation representing the mobile cellular public switched and fixed mobile telecommunications industry within the Republic of South Africa SACTA aims to be a source of credible information, guidance, co-operation and communication for the local and global telecommunications industry, the public, regulator and Government on matters relating to radiofrequency emissions.

The content appearing on this pamphlet has been assembled for general information purposes only. SATTA has taken every reasonable care in compiling the information, however, you are urged to consult with suitably qualified advisors before any reliance or taking any action based on information contained in this pamphlet or any other material e.g. Website erc. to which this pamphlet refers.

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# **FOUTH AFRICAN CELLULAR TELECOMMUNICATIONS ASSOCIATION**

Contact Details PO Box 28961



*<b>FRICAN CELLULAR TELECOMMUNICATION ASSOCIATION* 

## FACTS ABOUT CELLPHONES AND BASE STATIONS



SACTA MEMBERS www.sacta.co.za

SONY ERICSSON • TELKOM • VODACOM ALCATEL • CELL C • MOTOROLA • MTN • NOKIA • SAMSUNG•

## FACTS ABOUT CELLIPHONES AND RASE STATIONS

The use of cellphones has increased dramatically in South Africa and throughout the World. Questions are asked about how this technology works and the health and safety aspects of the equipment.

There is a vast amount of information available globally, in all forms of media, on every aspect of mobile telecommunication services and the technology. This information includes published papers on research studies conducted over the past 40 years on radio frequency emissions.

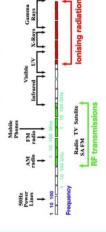
The South African Cellular Telecommunications Association (SACTA) recognises the prime importance of health, safety and technology issues related to the use of mobile communication and technologies. SACTA is committed to ensure that the public has access to factual information that will educate and inform and has accordingly compiled this brochure.

## How Mahile Communication Morks

### Mobile Communication a Badioframenty Energy

Radiofrequency (RF) emissions are electromagnetic waves that transport energy as they travel through space and time. The RF energy provides the support medium for transportation of information between the base station and cellphone.

# IIIII The electromagnetic spectrum



The electromagnetic spectrum covers many different frequency bands, each with its own characteristics. The RF waves associated with mobile technology fall into the "non-ionising" portion of the spectrum. This means the waves are not capable of breaking chemical bonds in biological structures or removing electrons (ionisation) from constituent atoms. In this respect, the RF emissions are very different from, and should not be confused with, the ionising radiation produced by x-rays and gamma rays.

When a person talks on a cellphone, it transmits a signal that is received by a nearby base station antenna. This cellphone transmits and receives low power, RF signals that allow the sound of your voice or other data to be conveyed to another user.

Your cellphone transmits power to an average level of 0.25 watts (during a conversation). However, while you are in the midst of a conversation, it will only transmit the minimum power required to maintain the call, which, in most urban areas, is about 0.063 watts. This automatic power adjustment feature helps to lengthen the life of the cell phone battery and reduces interference.

# Is there any ovidence of an adverse health visk

evidence indicates that there are no adverse health Periodic reviews by numerous government agencies, international health observation that the signals from cellphones pose no energy have been the subject of intensive studies for over 40 years. The preponderance of scientific effects from the use of cellphones and the operation organisations and scientific bodies support the health risk. The base of scientific knowledge related significant amount of research now being conducted under the directorship of the World Health aspects of radiofrequency to RF emissions continues to expand with Organisation (WHO) www.who.int/peh-emf. of a mobile cellular network. The health and safety

The South African Department of Health sets out safety guidelines for all emission throughout the electromagnetic spectrum. These guidelines were developed by the International Commission on Non-Ionising Radiation Protection (ICNIRP). The ICNIRP guidelines were endorsed by the European Commission in July 1999 and subsequently by the UK government in May 2000. The World Health Organisation (WHO) also endorses the use of ICNIRP as a suitable safety standard for RF (www.ionirp.com).

## What about base stations?

Claims that base stations are harmful to health are not borne out by established scientific opinion. The World Health Organisation's position is that the radio frequency fields around base stations are typically a fraction of the levels stated in the safety guidelines and therefore do not constitute a health risk.

### **APENDIX E: Comments & Responses Report**

### **ONSITE NOTICE PHOTOS**





**ONSITE NOTICE: ENGLISH** 

**ONSITE NOTICE: ISIZULU** 



ONSITE NOTICES ENGLISH & ISIZULU- Entrance to Bonginduna Primary School

Department of Agriculture,
Environmental Affairs & Rural
Development, KwaZulu-Natal



ONSITE NOTICES ENGLISH & ISIZULU- Along adjoining main road

### **BID DOCUMENT** (ENGLISH)

### BASIC ASSESSMENT PROCESS FOR THE PROPOSED CONSTRUCTION OF A NEW AMERICAN TOWER CORPORATION (ATC) TELECOMMUNICATIONS MAST

20 January 2014

### 1. INTRODUCTION

Proposed American Tower Corporation (ATC), mast and associated base station, (351870 Mnamfu), within the Umzumbe Local Municipality located at the Bonginduna Primary School on Portion 42 of Farm no. 16459, Location No. 3.

### LEGAL REQUIREMENTS

In accordance with the regulations published in Government Notice R 546 of 18 June 2010, in terms of sections 24(2) and 240 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), publish Listing Notice 3, the developer is required to carry out a Basic Environmental Assessment for the following activities:

### GNR 546, 18June 2010:

Activity 3, Listing Notice 3

The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes

(a): is to be placed on a site not previously used for this purpose,

(b): will exceed 15 meters in height, but excluding attachments to (a): In Eastern Cape, Free State, Kwazulu Natal, Limpopo, Mpumalanga and Northern Cape Provinces

i. In an estuary,

ii. Outside urban areas,

(aa): A protected area identified in terms of NEMPAA, excluding

(bb): National Protected Area Expansion Strategy Focus areas; (cc): Sensitive areas as identified in an environmental framework as contemplated in Chapter 5 of the Act and as adopted by the competent Authority.

(dd): Sites or areas identified in terms of an International Convention.

(ee): Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans:

Core areas in biosphere reserves;

(gg): Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a

(hh): Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.

iii. Inside Urban areas: in:

(aa): Areas zoned for use as public open space:

(bb): Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.

Background: The proposed project entails the construction of a mast used for telecommunication transmission purposes which is

greater than 15 metres in height and falls within a geographical trigger area, thus constituting a listed activity in terms of Government Gazette Notice No. R546.

3. ENVIRONMENTAL ASSESSMENT PRACTITIONER
The applicant ATC has appointed BSO International independent Environmental Assessment Practitioner International as the responsible for undertaking the Basic Assessment Process.

### 4. SITE DESCRIPTION

### 4.1 Location

ATC proposes the construction of a new telecommunications mast situated on Portion 42 of Farm no. 16459, Location No. 3, within the Umzumbe Local Municipality and the Ugu District Municipality.

### 4.2 Project Coordinates

S 30° 30' 39 81" Latitude E 30° 37' 0.9" Longitude:

### PROJECT DETAILS

### 5.1 Project Description

Proposed ATC Telecommunications 45m lattice mast and associated base station within the Ulundi Local Municipality located at the Bonginduna Primary School, on Portion 42 of Farm no. 16459, Location No. 3, for the provision of wireless voice and data services. Space for additional operators' antennae and operating equipment has been accommodated for within the proposed project area.

### 5.2 Bulk Services:

Due to the fact that the proposed project is that of a Telecommunications mast and associated base station, no bulk service provision will be required for the operational phase of the proposed development.

### 6. POTENTIAL ENVIRONMENTAL ISSUES

- 1) Geophysical and biophysical (including biodiversity) issues include:
  - a)During the construction phase of the development, bulk earthworks and structural works have the potential to impact on the environment. Soil erosion, storm water management. waste management and other construction related activities, are all issues which will be addressed in the Basic Assessment Report
  - b)The location of the development footprint will be planned in such a manner to limit any impact on environmentally sensitive areas, such as wetlands and drainage lines. Furthermore due to the small size of the project area, impacts on biodiversity will be contained within an area of approximately 10m x 10m, thereby further reducing the effect of such impacts.
  - c) Any potential environmental issues which are likely to arise as a result of implementation of the proposed project will be restricted to the construction phase of development, following



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which no additional environmental issues are expected to

2) Socio-economic issues include:

- a) During the construction phase of development an increase in traffic along local roads may be expected as a result of construction vehicles travelling to and from the project area.

  b) The impact of the proposed development on the sense of
- place and aesthetics of the surrounding landscape will be considered during the Basic Assessment process.
- c) Implementation of the proposed project will result in increased/improved telecommunication and wireless voice data service provision to the surrounding area which will impact positively on local society as well as local businesses.

Cultural-historic issues include:

a) The applicant is unaware of any archaeological sites on the property. Amafa AKwaZulu-Natali (KZN Heritage) will however be contacted as part of the Basic Assessment process to clarify this.

### 7. PUBLIC PARTICIPATION PROCESS

Public participation is an integral part of the Basic Assessment process, and will include the following components:

### Initial Consultation:

The primary purpose of this phase is to present the motivation for the proposed project and elicit issues, concerns and comments from Interested and/or Affected Parties.

Information Sharing Meeting: It is not intended to hold a public meeting regarding the proposed development. Should the response to the public participation process indicate a high level of public concern however, the need for a public meeting will be reviewed.

### Comment on the Basic Assessment Report:

The Basic Assessment Report will be made available to all registered I&AP's, to provide an opportunity to comment in writing on this document once concluded prior to its submission to the competent authority. All comments received will be included in a comments and response report to be compiled by the Environmental Assessment Practitioner. This report will describe the issues raised, the date the issue was raised, by whom and how the issue will be, or has been dealt with.

### Opportunity for Appeal

Interested and/or Affected Parties (I&AP's) can appeal against the decision of the competent authority in terms of the provisions in Sections 60 to 68 of Government Notice R 546 published on 18 June 2010

Your participation is important for the Basic Assessment process. If you would like BSO International to add you to our database of stakeholders who wish to participate in the Basic Assessment process, or should you have any queries regarding the process or comments about the proposed development, please contact

> Peter Koen or Brendan Smith (details below) on or before the 24 March 2014

### Contact details:

Peter Koen/ Brendan Smith BSO International Postal address: PO Box 1314 KLOOF, 3640

Tel: 031 764 1622 Fax: 031 764 1684

Email: peter@bso-int.com/ brendan@bso-int.com



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### PROJECTED EIA TIMEFRAMES

	SCOPE OF WORK	DATE
	Erect Site Notices, publish newspaper advert (South Coast Herald) and post Background Information Documents (BID) to IAPs.	20 January 2014
PARTICIPATION PHASE	Post BIDs to Organs of State,  Unzumbe Local Municipality  Ugu District Municipality  AMAFA  Dept. of Health  Dept. of Minerals & Energy  Dept. of Transport KZN  Dept. of Water Affairs  Ezemvelo KZN Wildlife  SANRAL  Eskom  Telkom  WESSA  Dept. of Cooperative Governance & Traditional Affairs  Dept. of Human Settlements	20 January 2014
	Due date for registration and comments pertaining to BIDs from Organs of State	17 February 2014
PUBLIC	Due date for registration and comments pertaining to BIDs from IAPs	17 February 2014
	Submission of application form to DAEA&RD	31 March 2014
⊨	Complete and submit Draft Basic Assessment Report (BAR) to Registered IAPs and Organs of State	24 February 2014
	Due date for comments on BAR	24 March 2014
SSMENT	Complete and submit Final BAR to DAEA&RD and Registered IAPs	31 March 2014
	Review Period by DAEA (30 days)	30 April 2014
SES	Additional Review Period by DAEA (30 days) complete	1 May 2014
AS PH PH	Issue of Record of Decision by DAEA&RD and submission to Registered IAPs	8 May 2014

The involvement of interested and affected parties is <u>CRITICAL</u> to the environmental assessment process and we ask that you abide by the timeframes to ensure that the process runs without too many disruptions.



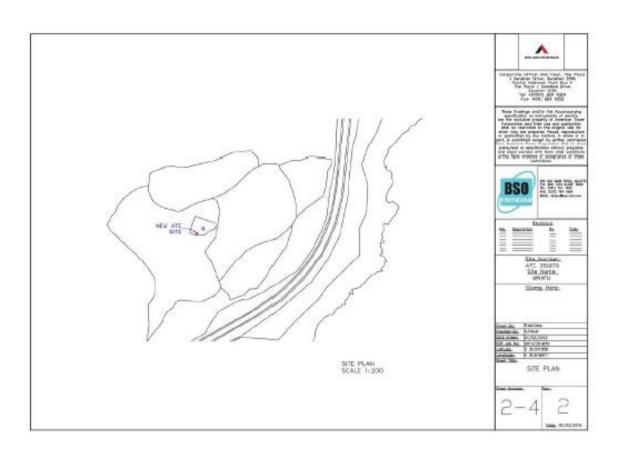
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### APPENDIX A (SITE PLANS)



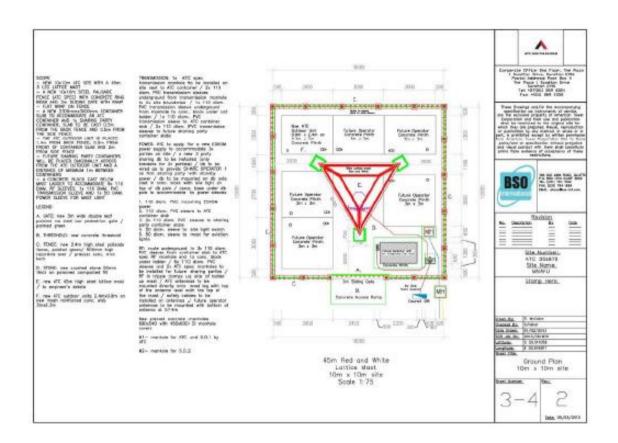


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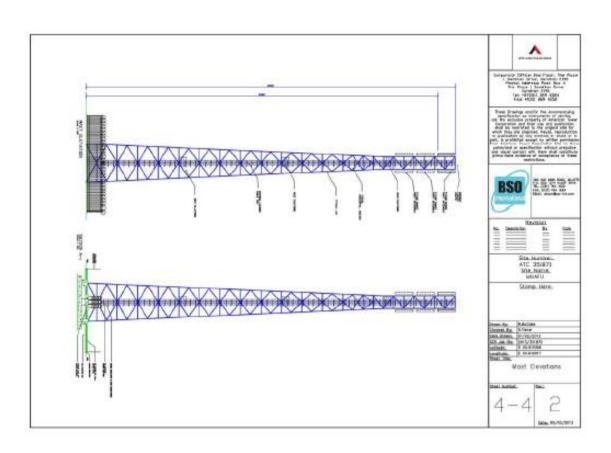




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### APPENDIX B (PROPOSED SITE LOCATION)







### APPENDIX C (STREET MAP, GOOGLE EARTH IMAGE & 1:50 000 MAP)

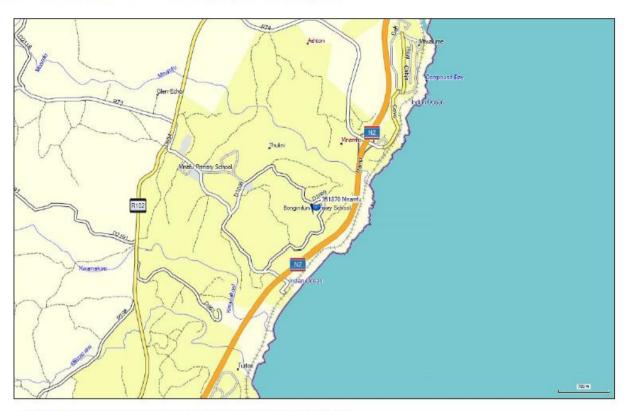


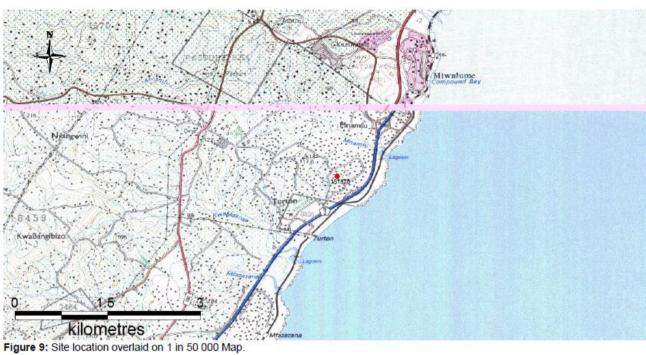
Figure 7: Site location overlaid on GPS Street Map at 700m Detail.





Figure 8: Site location overlaid on a Google Earth Orthophoto.







Department of Agriculture,
Environmental Affairs & Rural
Development, KwaZulu-Natal

### **BID DOCUMENT** (ISIZULU)

### INDIKIMBA YOKUHLOLISISA ISAKHIWO ESIHLONGOZWAYO SENSIKAYEZO-KUXHUMANA ENTSHA YAKWA AMERICAN TOWER CORPORATION (ATC)

20 January 2014

### 1. ISINALISO NOMA ISINGENISO

Ukuhlongozwa kwensika yokuxhumanisa yakwa American Tower Corporation (ATC), e-(351870 Mnamfu)kanye nesiteshi esivisizinda esambisana noma esunikezelana naso, ngaphakath kukamasipala wakwa Umzumbe Local Municipality esitholakala e Bonginduna Primary School, Portion 42 of Farm no. 16459, Location No. 3.

### IZIDINGO - ZOKOMTHETHO

Ngokogunyazisa kokwethula noma wokubika kwesaziso sikakahulumeni esingu R385 kanye nesingu R386 ka 21 April 2006 ngokwesigaba 24D kazwelonke yokwengamela nokophathwa yokongiwakwemvelo ka Act (no. 07 ka 1998) umakhi kudingeka alandele indikimba yokuhlolisisa kwezokongiwa kwemvelo kule- micimbi elandelayo:

### GNR386 ka 18 June 2010 (INDIKIMBA NOMA UMGOMO WOKUHLOLISISA NOKUHLAZIYA:

Umsebenzi owu no. 3, Isaziso 3

Ukwakhiwa kwensika yanoma yiluphi uhlobo nobude obungakanani kubandakanya lezo ezisetshenziswa ekwakheni kwezokuxhumana kokusakaza kanye nokuthunyelwa kokusakaza nemi bhoshongo yakhona lapha, kubalwa okulandelayo ngalombhoshongo (a): uzobekwa endaweni engakaze isetshenziselwe loluhlobo Ìwesakhiwo

(b): ubude bayo buzoba ngaphezu kwama mitha angu 15, ngaphandle kokuhlanganisa okuzobe kukwi building kanye nangaphezu komboshongo.

(a): Esifundazweni sase Eastern Cape, Free State, Kwazulu Natal,

Limpopo, Mpumalanga and Northern Cape

i. In an estuary; ii. Ngaphandle kwezindawo ezingamalokishi

(aa): Indawo evikelekile ngokomnyango we NEMPAA (bb): Indawo kazwelonke evikelekile

(cc): Indawo eSensitive ekhethwe abezemvelo ukuthi ikalelwe isikhathi esilapha ku Chapter 5 okwi Act eyafakwa abanegunya lokunika imvume.

(dd): Ama Sayithi kanye nendawo kutholakale ngaphansi komgomo we International Convention.

(ee): Indawo eyi biodiversity ekhethwe kwi system ye biodiversity plans eyafakwa abanegunya lokunika imvume bioregional plans; (f f): Izindawo ezikwi biosphere reserves;

(gg): lindawo ezisondelene ngama kilometres awu 10 ne Paki kazwelonke noma kumaheritage sites noma engu 5 kilometres kwi ndawo evikeliwe ekhethwe uhlelo lakwi NEMPAA;

(hh): Indawo esondelene namanzi endaweni yokuthuthukisa

engango 1 kilometre. iii. Phakathi endaweni eyilokishi:

(aa): Indawo ilungiselwe ikusetshenziswa njengendawo evulelekile yomphakhathi (bb): Indawo eyenzelwe ezolimo kwi Spatial Development

rameworks

Umnyombo: Umsebenzi ohlongozwayo u hlose noma ifuna kwakiniwe umbhoshongo wokuxhumana obude bawo ungu 15-mitha ubude, inkwazi ukubandakanye izinhlelo nemicimbi njengokusho kwesaziso sikahulumeni segazethe engu no. R546

### Usolwazi wokubhekela kwezokongiwa nokugcinwa kwezemvelo.

Ofake isicelo – ATC uQoke owe BSO International njengonobuchule nolwazi womsebenzi woкupnexeia ukunganukubeswa komoya nevelo (EAP) ukuba nguye niengonobuchule wokubhekela ongobhekela yonke indikimba nezinhlelo zokuhlolisisa nokuhlaziya izidingo zalokhu kwakhiwa.

### 4. UHLOBO LWENDAWO YOKWAKHA

### 4.1 Kwakhiwa endaweni ekuphi

ATC uhlongoza ukuba insika entsha yokuxhumana Nesizinda sayo ibe sendaweni eku Portion 42 of Farm no. 16459, Location No. 3, ngaphansi ko Umzumbe Local Municipality ne Ugu District Municipality.

### 4.2 uKuxhunyaniswa Kwalomsenzi Nokuhlelwa Kwawo

S 30° 30' 39.81" Latitude: Longitude: E 30° 37' 0.9"

### 5. IMINININGWANE YALOMSEBENZI NOMA-I PROJECT

### 5.1 Incazelo yomsebenzi

Lensika noma umbhoshongo ehlongozwa uATC, ozoba u40m Lerisika noma uninnoshingo eninigozwa untro, ozoba unum Jattice hambisana nenqala sizinda sayo-eku Umzumbe Local Municipality, Bonginduna Primary School, Babanango, eku 42 of Farm no. 16459, Location No. 3kuzokwazeka ukuthintana ngezincimgo ezingadingi owaya – ukwazi ukugcina uhla lwamagama. KuzokwazekaLuluhlelo luzokwazi ukusiza nabanye futhi abadinga ukuxhuma kulo – kwezoku xhumana kanti nezindlela zokwakha izindlela zalabo abufuna ukuhweba ngezocingo

### 5.2 Inxanxathela Yezigxobo:

Ngoba izobe ingeyohlobo oluphambili isizwa yilemibhoshonga asikho isidingo sezigxobo eziningi.

### 6. AMAPHUZU OKUSIZAKALA NOBUHLE KWEZEMVELO

1) Ukuhleleka, nesimo somhlabathi kanye nokuthinteka:

a)Ngesikhathi senxenye yokwakha nokuthuthukisa kwesizinda, kuyoba nobuhle kwezemvelo nesimo sezulu. Ukuguguleka komhlabathi nokuvikela nokuqhaphelisisa kokuvuza kwamanzi nokugcineka kucocekile futhi ungekho udoti kanye nokuningi okuhambisana nemicimbi yezokwakha. Lezizinto ezibalawi okuyoxoxwa ngazo-embikweni ohlanganisiwe wokuhlaziya lomsebenzi.



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- b)Indawo yempela lapho kobe kwakhiwa khona iyohlelwa ngobuchule ukuvikela noma ukunciphisa ukuthinteka kwezindawo ezisebucayini, njengezindawo ezinamaxhaphozi kanye nezindawo ezinamapayipi amanzi nalawo avuzayo Kanti futhi ngenxa yobuncane bendawo okuzosetshenzwa kuyona, izindawo ezinemve lo kanye nezitshalo iyogcineka endaweni elinganiselwa ku 10x10m lokho kobe kwenzelwa ukunciphisa ukuthinteka kwezindawo ezibalulekile.
- c) Izindawo ezibalulekile zenhlalo nezemvelo ngenxa yokuhlongoza lesakhiwo ziyovikeleka zingavunyelwa futhi ukumba kwakhiwe kuzona – futhi kuyethenjwa
- Ezenhlalakahle nezohwebo zibandakanya Lokhu okulandelaya:
  - a) Kulindelekileke ukuthi ngesikhathi kwakhiwa, kuyoba nokwenyuka kwenani lwezimoto kanye nokuphuthiza emigwaqeni yasemdaweni – zobe zithutha impahla yokwakha.
  - b) Uhlonzo nomphumela walentuthuko ehlongozwayo kanye nobuhle bendawo okwakhiwa kuyo yinto okuyocatshangwa ngayo kuxoxwe ngayo – kwethulwa uhlelo nokuhlaziywa kwalomsebenzi.
  - c) Ukweziwa kwalentuthuko ehlongozwayo kuyoletha futhi kuthuthukise ezokuxhumana ngomakhale khukhwini kanti kuthuthuke nokusetshenziswa kwamacomputer kanye nohlelo lokugcinwa kwagama nokuxoxa ngezikhahlamezi zakamuva – internet phela kuyo phinde kuhlomule umphakathi kannye nosomabhizinisi bendawo.

### Izindawo zamasiko nezingumlando yilezi:

 a) Ofaka isicelo akazi nomakakaziswa ngezindawo ezingcine izinqalabutho zendawo kanye namaliba azo, kulendawo acela ukwakha kuyo. Amafa-Akwazulu (KZN Heritage) Kuzoxhunyanwa nawo njengenxenye sokuhlaziya wonke umongo nezidingo nqangi zalomsebenzi

### 7. IQHAZA ELIZOBANJWA UMPHAKATHI

Umphakathi ungumgogodla wenxenye yokuhlaziya nokubonisana ngaletuthuko ehlongozwayo-lapha kufaka izihloko nqangi ezilandelayo:

### Izinxoxo zokuqala zokubonisa nokuzethula:

Inhloso nqangi yalesigaba ukuveza ubuhle nogqozi lokwakhiwa kwalesizinda kanye nokuthola amanye amaphuzu kuwona kanye. Kutholakale kuzwakale labo abayithokozelayo kanye nalabo abathinteka kabi...

### Umhlangano wokwabelana ngolwazi:

Akuhlosiwe ukuba kubanjwe ukhukhulela ngoqo womhlalangano – kepha uma kubonakala linyuka isasa nokukhathazeka komphakathi. Isidingo somhlangano womphakathi wovivinywa kuboniswane ngawo emazingeni aphezulu.

### Ukuphawula ngombiko wesisekelo sokubonisana nokuhlaziya ngalentuthuko:

Umbiko uyokwethulwa kuwona wonke amalungu ayithandayo, nathinteka kabi noma angahambisani nayo. Ukuba aphawule ngokubhala ngalomqulu uma sekuxoxisenwe ngaphambi kokuba wethulwe kwabakhulu abengamele lemisebenzi konke ukuphawula nemibono iyofakwa encwadini noma emabhukwini emibono eyobe ihlanganiswe yahlelwa usolwazi kwenzemvelo nocwaningo liwayo. Lombiko uyocacisa ukuthi amaphuzu abekwa kanjani nosuku axoxwa ngalo, futhi abekwa noma aphakanyiswa ngubani futhi lamaphuzu nemibono iyoba namthelela miphi noma futhi amukelwa kanjani.

### Ithuba Lokuphikisa isingumo

Abathintekayo nabanogqozi ngalo msebenzi bavulelelekile ukudlulisa uvo lwabo oluphikisayo kwabomthetho abengamele loluhlelo. Ngaphansi kwesisekelo sika 60 kuya ku 68 we Government Notice R 546 eshiciyelwe ngo mhlaka 18 June 2010.

Ukubamba kwakho iqhaza ku BSO International ukuba ikufake ohliwini lamagama lamalungu afuna ukuba yinxenye kwi Basic Assessment Process. Noma unemibuzo ngalokwakhiwa kwesizinda saka ATC,

> ungaxhumana no Peter Koen (imininingwane ngezansi) Engakashayi umhlaka 24 March 2014

### Ungathintana no:

Peter Koen/ Brendan Smith BSO International Postal address: PO Box 1314

KLOOF, 3640 Tel: 031 764 1622 Fax: 031 764 1684

Email: peter@bso-int.com/ brendan@bso-int.com



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### **IZIKHATHI EZIKALELWE I EIA**

	INCAZELO EMFUSHANE MAYELANA NOMSEBENZI	DATE
_	Ukukhishwa kwezaziso sama Sayithi, ukukhiswa kwesikhangiso kwi phephandaba (South Coast Herald) noku poswa kwe Background Information Documents (BID) to IAPs(Kubantu abathintekayo)	20 January 2014
ISIКНАТНІ SEQHAZA LOMPHAKATHI	Ukuposwa kwama BIDs kulama Organs of State,  • Umzumbe Local Municipality  • Ugu District Municipality  • AMAFA  • Dept. of Health  • Dept. of Minerals & Energy  • Dept. of Transport KZN  • Dept. of Water Affairs  • Ezemvelo KZN Wildlife  • SANRAL  • Eskom  • Telkom  • WESSA  • Dept. of Cooperative Governance & Traditional Affairs  • Dept. of Cooperative Governance	20 January 2014
ATH.	Usuku lokugcina loku bhalisa kanye nemibono emayelana nama BIDs avela kuma Organs of State	17 February 2014
SIKH	Usuku lokugcina lokubhalisa kanye nemibono emayelana nama BIDs eqhamuka kubantu abathintekayo	17 February 2014
	Ukuhanjiswa kwe fomu lwesicelo ka DAEA&RD	31 March 2014
	Ukuhanjiswa kwe Draft Basic Assessment Report (BAR) kumalungu abhalisile anogqozi nathintekayo nakuma Organs of State	24 February 2014
5	Usuku lokugcina lwemibono mayelana ne BAR	24 March 2014
SMENT	Ukuqedelwa nokuhambisa iBAR ka DAEA&RD naku malungu	31 March 2014
	abhalisiwe anogqozi nathinthekay Ukuhlolisiswa kwesikhathi wumnyango waka DAEA (30 days)	30 April 2014
SIC SES ASE	Ukuphinda kuhlolisiswe isikhathi wumnyango waka DAEA (30 days)	1 May 2014
SSI	Ukunikezwa iRecord of Decision wumnyango wakaDAEA (30 days)	1 May 2014 8 May 2014
9 % F	kudluliselwa kumalungu abhalisiwe nathinthekayo	0 Ividy 2014

Ukubandakanya amalungu athinthekayo <u>kubaluleke kakhulu</u> ohlelweni lokuhlolwa kwezemvelo, siyacela ukuthi nizigcine izikhathi ezinqunyelwe loluhlelo khona yonke into izihamba kahle kungabi khona izinkinga

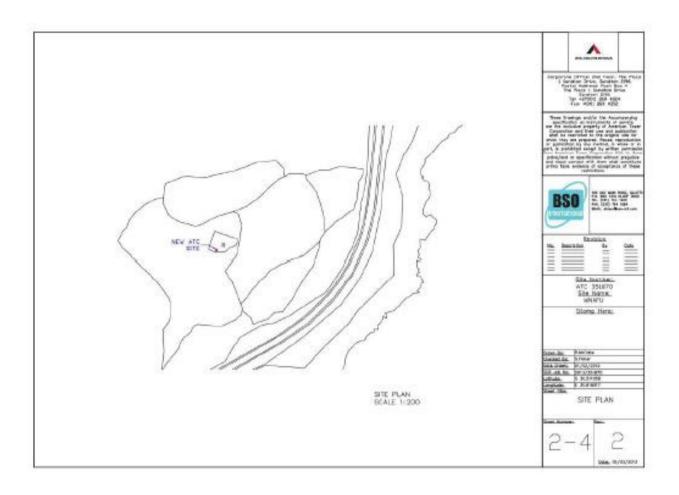


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### APPENDIX A (SITE PLANS)

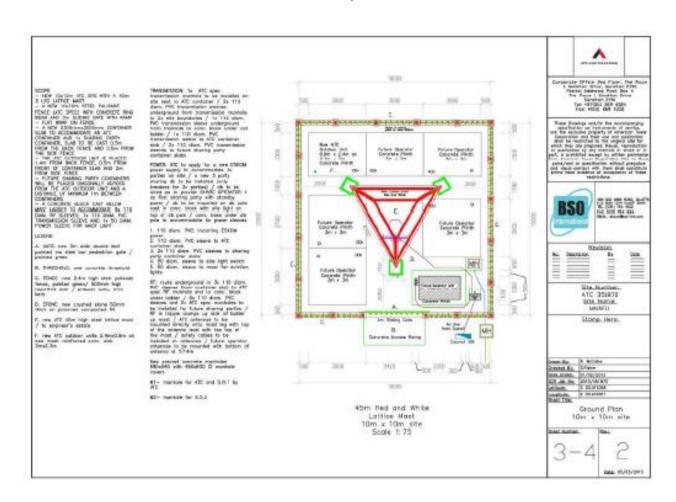




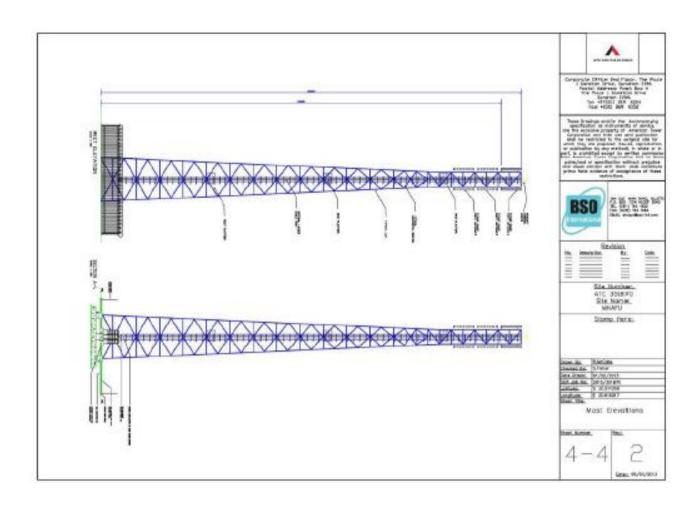




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### APPENDIX B (PROPOSED SITE LOCATION)











### APPENDIX C (STREET MAP, GOOGLE EARTH IMAGE & 1:50 000 MAP)



Figure 7: Site location overlaid on GPS Street Map at 700m Detail.





Figure 8: Site location overlaid on a Google Earth Orthophoto.





Figure 9: Site location overlaid on 1 in 50 000 Map.



### **NEWSPAPER ADVERT**



English advert placed in The Mercury on 22 January 2014

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### isiZulu advert place in Isolezwe Newspaper on 22 January 2014

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### **DETAILS OF I&APS (SURROUNDING LANDOWNERS) NOTIFIED**

Awaiting comments from I&AP within 100m of the proposed site.

BIDs were hand-delivered to all surrounding residents at a community meeting held at the Bonginduna Primary School on the 6<sup>th</sup> of February 2014. To date we have not received any feedback, however the proposed telecommunication mast was met with positive reactions at the community meeting.

### BID Handover for the Proposed Telecommunications Mast at 351870 Mnamfu

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### **Comments from I&APs**

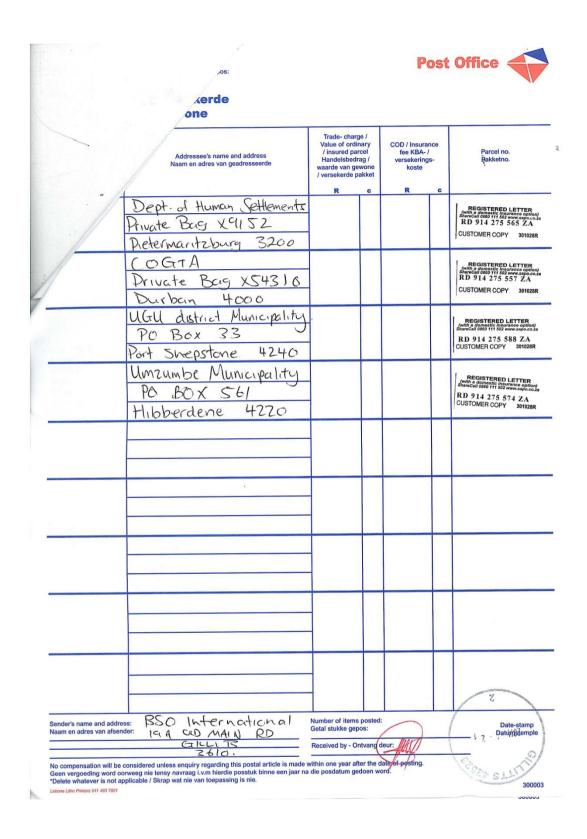
To date no comment or feedback has been received from the I&APs (surrounding landowners).

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### PROOF OF BID SENT TO I&APS (Organs of State)

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### **COMMENTS FROM ESKOM**



Mr B Smith BSO International P O Box 1314 KLOOF 3640 Date: 20/01/2014

Enquiries:

Mr Roland Moore 033 395 3744 Ref TG 2014/01/20

Dear Mr Smith,

### Proposed Mnamfu Telecommunications mast : Ptn 42 of the farm Location No 3 - 16459

I confirm that Eskom Eastern Region has no objection to your proposed mast.

All correspondence relevant to this matter should be addressed to the Principal Survey Technician, Mr R M Moore, Eskom Sub-Transmission Survey, P.O. Box 5, Mkondeni, 3212.

Yours faithfully

R M Moore

Head of Sub Transmission Survey (Eastern Region)

Eastern Region
Engineering Land Development Department
I Portland Road Pilkondeni P O Box 5 Mkondeni 3212 5A
Tel +27 33 395 3911 Fax + 27 33 395 3974 www.eskom.co.za

Directors: P M Malovano. (Acting Cheirman) LCZ Celle SD Dube LG Josefston (Swedish) HB Lee (Korean). WE Lucas Bull. J Mirrenge (Mwandan) JRD Modise. PS Of Flaherty\*. U Zikatala. (\*Biscotive Director). Company Seefstary: B Miscomwu. Eskom Holdings Limited Rog No. 2002/015527/06





#### **COMMENTS FROM SANRAL**

#### **Brendan Smith**

From: Casper Landman (ER) [LandmanC@nra.co.za]

Sent: Monday, January 20, 2014 3:12 PM

To: 'Brendan Smith'

Cc: Judy Marx (ER); Lerato Mothapo (ER)
Subject: RE: EIA BID- 351870 Mnamfu

#### Hello Brendan,

If more than 60 metres away from the National Road Reserve and in excess of 500 metres from any intersection with the National Road the SA National Roads Agency (SANRAL) is not affected.

This application looks like it does not affect us.

Regards

Cas

From: Brendan Smith [mailto:brendan@bso-int.com]

Sent: 20 January 2014 01:07 PM To: Casper Landman (ER) Subject: EIA BID- 351870 Mnamfu

Hi Mr. Landman,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



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#### OFFICIAL COMMENT FROM AMAFA AKWAZULU NATALI

 Although no official comment has been received from AMAFA, we provided them with the BID to which Bernadet requested BSO to upload the document to their SAHRIS database. The BID has been uploaded, no comment has yet been received (See copies of emails sent below).

#### **Brendan Smith**

From: Bernadet [bernadetp@amafapmb.co.za]
Sent: Thursday, February 06, 2014 4:19 PM

To: 'Brendan Smith'

Subject: RE: EIA Bid 351870 Mnamfu

#### Good day Brendan/Shaun

I have been evaluating the applications on the sahris facility and note that your application was uploaded but still has outstanding information that needs to be addressed before the application can be reviewed. Below is a copy of the message directed at you and Shaun Fisher regarding this application. Please register your name or institution on the sahris facility so that we can communicate with you via the sahris messaging system. Note that the messages will be linked to e-mail and you will be able to receive it as e-mail.

"Thank you for your invitation to comment. You are required to upload the NID Form J & proof of payment. Visit the Amafa website on <a href="https://www.heritagekzn.co.za/permits">www.heritagekzn.co.za/permits</a> and download the forms. The banking details are on the cover sheet of the application form."

#### Kind regards

Bernadet Pawandiwa(Heritage KZN)

From: Brendan Smith [mailto:brendan@bso-int.com]

Sent: Tuesday, February 04, 2014 1:40 PM

To: bernadetp@amafapmb.co.za
Subject: FW: EIA Bid 351870 Mnamfu

#### Good day bernadet,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

#### Kind regards

Brendan Smith
BSO International
brendan@bso-int.com
+27 31 764 1622



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#### OFFICIAL COMMENT FROM EZEMVELO KZN WILDLIFE

#### **Brendan Smith**

From: Dominic Wieners [Dominic.Wieners@kznwildlife.com]

Sent: Monday, February 24, 2014 8:52 AM

To: Brendan Smith Subject: RE: EIA- 351870 Mnamfu

Hi Brendan.

Please would you send a hard copy of the DBAR to our offices for review and comment.

Kind regards Dominic

From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, February 24, 2014 8:54 AM To: Dominic Wieners

Subject: EIA- 351870 Mnamfu

Hi Mr. Wieners,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, January 20, 2014 1:06 PM To: wienersd@kznwildlife.com Subject: EIA BID- 351870 Mnamfu

Hi Mr. Wieners,

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# **Basic Assessment Report**

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



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Environmental Affairs & Rural	
Development, KwaZulu-Natal	

#### OFFICIAL COMMENT FROM C.O.G.T.A

 Although no official comment has been received from C.O.G.T.A., we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:55 AM

 To:
 THULANI.BHENGU@kzncogta.gov.za

Subject: EIA - 351870 Mnamfu

Hi Mr. Bhengu,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com]
Sent: Monday, January 20, 2014 1:08 PM
To: THULANI,BHENGU@kzncogta.gov.za
Subject: EIA BID- 351870 Mnamfu

Hi Mr. Bhengu,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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# OFFICIAL COMMENT FROM THE DEPARTMENT OF HUMAN SETTLEMENTS

 Although no official comment has been received from The Department Of Human Settlements, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:55 AM

 To:
 peter.woolf@kzndhs.gov.za

 Subject:
 EIA -351870 Mnamfu

Hi Mr. Woolf,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, January 20, 2014 1:08 PM

Subject: FW: EIA BID-351870 Mnamfu

Hi Mr. Woolf

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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# OFFICIAL COMMENT FROM THE DEPARTMENT OF MINERALS AND ENERGY

 Although no official comment has been received from The Department Of Minerals and Energy, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:53 AM

To: zama.zulu@dmr.gov.za Subject: EIA - 351870 Mnamfu

Hi Zama,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, January 20, 2014 1:04 PM

To: zama.zulu@dmr.gov.za Subject: EIA BID- 351870 Mnamfu

Hi Zama Zulu,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

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#### OFFICIAL COMMENT FROM THE DEPARTMENT OF WATER AFFAIRS

 Although no official comment has been received from The Department Of Minerals and Energy, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

From: Brendan Smith [brendan@bso-int.com]
Sent: Monday, February 24, 2014 8:55 AM

To: philipr@dwa.gov.za
Subject: PIA -351870 Mnamfu

Hi Mr. Phillip,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com]

Sent: Monday, January 20, 2014 1:06 PM

To: philipr@dwa.gov.za

Subject: EIA BID-351870 Mnamfu

Hi Mr. Phillip,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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#### OFFICIAL COMMENT FROM THE DEPARTMENT OF HEALTH

 Although no official comment has been received from The Department Of Health, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:53 AM

 To:
 wilson.khanyile@kznhealth.gov.za

 Subject:
 EIA 351870 Mnamfu

Hi Mr. Khanyile,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com]
Sent: Monday, January 20, 2014 1:04 PM
To: wilson.khanyile@kznhealth.gov.za
Subject: EIA BID- 351870 Mnamfu

Hi Mr. Khanyile,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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#### OFFICIAL COMMENT FROM TELKOM

 Although no official comment has been received from The Department Of Health, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:56 AM

 To:
 'wayleaves2@telkom.co.za'

 Subject:
 EIA - 351870 Mnamfu

Good day,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com]
Sent: Monday, January 20, 2014 1:10 PM
To: 'wayleaves2@telkom.co.za'
Subject: FW: EIA BID- 351870 Mnamfu

Good day,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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#### OFFICIAL COMMENT FROM THE DEPARTMENT OF TRANSPORT

 Although no official comment has been received from The Department Of Health, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:54 AM

 To:
 roy.ryan@kzntransport.gov.za

 Subject:
 EIA - 351870 Mnamfu

Hi Mr. Ryan,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com]
Sent: Monday, January 20, 2014 1:05 PM
To: roy.ryan@kzntransport.gov.za
Subject: EIA BID- 351870 Mnamfu

Hi Mr. Ryan

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Please note a hard copy of the BID is being posted to your offices.

Kind regards

Brendan Smith

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#### OFFICIAL COMMENT FROM THE UMZUMBE LOCAL MUNICIPALITY

 Although no official comment has been received from the Umzumbe Municipality, we provided them with the BID and were notified of the availability of the BAR, and made several follow ups in which we requested that they provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:57 AM

 To:
 'thulas@umzumbe.gov.za'

 Subject:
 EIA- 351870 Mnamfu

Good day,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, January 20, 2014 1:13 PM To: 'thulas@umzumbe.go.za' Subject: 351870 Mnamfu

Good day,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622

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#### OFFICIAL COMMENT FROM THE UGU DISTRICT MUNICIPALITY

Although no official comment has been received from the uGu District
Municipality, we provided them with the BID and were notified of the availability
of the BAR, and made several follow ups in which we requested that they
provide comment. (See copies of emails sent below).

#### **Brendan Smith**

 From:
 Brendan Smith [brendan@bso-int.com]

 Sent:
 Monday, February 24, 2014 8:56 AM

 To:
 'dd.naidoo@ugu.gov.za'

 Subject:
 FW: EIA BID- 351870 Mnamfu

 Attachments:
 351870\_Mnamfu\_English BID\_VER1.pdf

Hi Mr. Naidoo,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, please note that the draft Basic Assessment Report (BAR) has been completed for the proposed telecommunications mast at 351870 Mnamfu. Please indicate if you wish to receive a copy of the draft BAR for your review and comment.

#### Kind regards

Brendan Smith BSO International brendan@bso-int.com +27 31 764 1622



From: Brendan Smith [mailto:brendan@bso-int.com] Sent: Monday, January 20, 2014 1:10 PM To: 'dd.naidoo@ugu.gov.za' Subject: EIA BID- 351870 Mnamfu

Hi Mr. Naidoo,

In accordance with regulation 56 (1) (a) (ii) of National Environmental Management Act 107 of 1998, GNR 543, comment is requested with reference to the attached Background Information Document (BID) for the proposed telecommunications site 351870 Mnamfu. If any additional information is required please do not hesitate to contact us.

Kind regards

Brendan Smith BSO International brendan@bso-int.com

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# **COMMENTS & RESPONSES TABLE**

Organisation	Contact Person	Tel	Email	Postal Address	Summary of Comments	BSO Response
Amafa	Berndet Pawandiwa	033 394 6543	bernadetp@amafapmb.co.z a	P.O. Box 2685, Pietermaritzburg,3201	Requested BID to be uploaded to the SAHRIS database.	BID uploaded to the SAHRIS database
Dept. of Health	Mr W.D Kanyile	033 846 7503	wilson.khanyile@kznhealth .gov.za	Private Bag X9051, Pietermaritzburg, 3200	No Comment Received	
Dept. of Minerals & Energy	Zama Zulu	031 335 9600	zama.zulu@dmr.gov.za	P.O. Box 54307, Durban, 4000	No Comment Received	
Dept of Transport	Mr Roy Ryan	033 355 8600	roy.ryan@kzntransport.gov .za	Private Bag X9043, Pietermaritzburg, 3200	No Comment Received	
Dept of Water Affairs	Mr Raj Phillip / Coleen Moonsami	031 336 2741/ Raj 082 808 9906	philipr@dwa.gov.za	P. O. Box 1018, Durban, 4000	No Comment Received	
Ezemvelo	Dominic Wieners	033 845 1346 / 033 845 1455	wienersd@kznwildlife.com	P. O. Box 13053, Cascades, 3202	Requested copy of the draft BAR	Draft BAR to be provided
SANRAL	Mr Casper Landman	033 392 8100 / 083 283 6028	landmanc@nra.co.za	P.O. Box 100410, Scottsville, 3209	No objection to the proposed mast	
Eskom	Roland Moore	033 395 3779	MooreRM@eskom.co.za	PO Box 5, Mkondeni, 3212	No objection to the proposed mast	
Telkom	Kubeshni Govender	031 363 3495	govenk12@telkom.co.za	Private Bag X54326, Durban, 4000	No Comment Received	
Dept. of Cooperative Governance & Traditional Affairs	Thulani Bhengu	031 204 1956 (thulani) or 033 395	THULANI.BHENGU@kzncog ta.gov.za	Private Bag X54310, Durban, 4000 Private Bag X9078, Pietermaritzburg, 3200	No Comment Received	

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# Basic Assessment Report

Dept. of Human Settlements	peter woolf Portia Myakayaka	033 392 6425	PORTIA.MYAKAYAKA@kzn dhs.gov.za peter.woolf@kzndhs.gov.z a	Private Bag X9152, Pietermaritzburg, 3200	No Comment Received	
					No Comment Received	
Umzumbe Local Municipality		039 972 0005	thulas@umzumbe.go.za	PO Box 561, Hibberdene, 4220		
Ugu District Municipality	Mr. D Naidoo		dd.naidoo@ugu.gov.za	PO Box 33, Port Shepstone, 4240	No Comment Received	

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# **Appendix F: Draft Environmental Management Programme (EMPr)**



# **Environmental Management Plan (EMP)**

(Compiled and Submitted in terms of the National Environmental Management Act (Act 107 of 1998))

# **American Tower Corporation (ATC)**

Project Reference Number:

351870 Mnamfu

17/2/2014

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#### **EXECUTIVE SUMMARY**

The proponent, ATC, intends the construction of a new telecommunications mast and associated infrastructure at 351870 Mnamfu for the provision of consolidated coverage for wireless voice and data services to the surrounding area located within the Ulundi Local Municipality. The total extent of the proposed project area is approximately 10m x 10m. The project will consist of a new telecommunications mast and associated base station, while space for additional operators within the project area has been accommodated for. The proposed mast design is that of a 45m lattice mast as it will be most suited from a technical perspective as well as taking into account the surrounding environment. The proposed project will be situated on the grounds of the Bonginduna Primary School, portion 42 of farm no. 16459 Location No. 3.

The KZN DAEA&RD requested that an Environmental Management Plan (EMP) be prepared for the proposed project, which addresses all phases of the proposed project, for submission to them [for approval]. The scope of environmental management described in this EMP pertains to the project as a whole and aims to integrate environmental planning, design, construction and operational activities on the site.

The EMP has as its basis the recommendations listed in the Basic Assessment Report. It is important to note that the project and the implementation of environmental specifications is an on-going process that is dynamic in nature. This EMP forms part of the contractual obligation between the Contractor and the proponent, American Tower Corporation (ATC)

.

# Introduction

# **Background and Brief Project Description**

The proposed project involves the construction of a new telecommunications mast and associated infrastructure at 351870 Mnamfu enabling wireless service providers to provide consolidated coverage for wireless voice and data services to the surrounding area located within the Ulundi Local Municipality. The total extent of the proposed project area is approximately 10m x 10m. The project will consist of a new telecommunications mast and associated infrastructure, while space for additional operators within the project area has been accommodated for. The proposed mast design is that of a 45m lattice mast as it will be most suited from a technical perspective as well as taking into account the surrounding environment. The proposed project will be situated on the grounds of the Bonginduna Primary School, portion 42 of farm no. 16459 Location No. 3, within the Umzumbe Local Municipality.

#### Aims of the EMP

The purpose of the EMP is to set environmental targets for the Contractor and reasonable standards against which the Contractor's performance in this regard can be measured during construction. This document will form the basis for the environmental specifications that the Constructor is obliged to comply with during construction of the proposed project. This document will thus form a binding agreement between the Contractor and ATC.

The EMP addresses issues in order to ensure that all environmental aspects are carefully considered and monitored and adverse impacts managed. It is important to note that the development and implementation of environmental specifications is on-going and the EMP is typically dynamic in nature.

#### Contents of the EMP

The EMP consists of the following sections:

**Chapter 1: Introduction:** This section includes the project background, aims of this EMP and describes the contents of this EMP.

- Chapter 2: Administration and regulation of environmental obligations: This section identifies the proposed mechanisms for monitoring compliance with the EMP and reporting thereof.
- Chapter 3: Environmental Specifications: Construction Phase: This section includes environmental specifications relating to the construction phase of the project.
- **Chapter 4: Environmental Specifications: Operational Phase:** This section includes environmental specifications relating to the operational phase of the project.
- Chapter 5: Environmental Specifications: Decommissioning Phase: This section includes environmental specifications relating to the decommissioning of the site.
- **Chapter 6: Emergency Response Plan:** This section provides a summary of responses to emergency situations

# Administration and regulation of environmental obligations

# **Environmental Site Agent**

The Environmental Site Agent (ESA) is the person, appointed by the Contractor on behalf of the Applicant or the Environmental Consultant appointed on behalf of the Applicant, involved with the project and all projects within the operational region of the Contractor and who is responsible for the implementation of the environmental management plan. This person is therefore responsible for the environmental issues involved with the construction phase of the project. The ESA will be required to oversee a number of sites at any given time and is required to manage his/her time effectively to ensure that he/she fulfils his/her environmental obligations in respect of all sites.

The ESA must be a person with adequate environmental knowledge to understand and implement this management plan. It is required that the ESA reports to the Applicant (ATC) irrespective of who appointed the ESA. The ESA has the authority to stop works if in his/her opinion there is a serious threat to or impact on the environment, caused directly from the construction operations. This authority is to be limited to emergency situations where consultation with the HOD Implementation and/or Property Supervisor and/or National Property Manager is not immediately available. In all such work stoppage situations, the ESA is to inform the HOD Implementation and/or Property Supervisor and/or National Property Manager of the reasons for the stoppage as soon as possible thereafter.

Upon failure by the Contractor and/or his employees to show adequate consideration to the environmental aspects of this EMP, the ESA may recommend the suspension of works pending an investigation by the HOD Implementation and/or Property Supervisor and/or National Property Manager.

# **Environmental Awareness Training for Site Personnel**

All Contractor teams involved in work on the project are to be briefed on their obligations towards environmental controls and methodologies in terms of this EMP prior to the commencement of work. The briefing will take the form of an onsite talk, when an RFQ (Request for Quotation) site survey is set up, and shall be demonstrated by the ESA. The education / awareness programme should be aimed at all levels of employees within the Contractor team. (See "Do's and Don'ts" summary sheet).

# **On Site Communication Procedure**

## **Environmental Awareness Training for Site Personnel**

The Site Instruction book entries will be used for the recording of general site instructions as they relate to the work taking place on site. It will also be used for the issuing of stop work orders for the purposes of immediately halting any particular activities of the Contractor in lieu of the environmental risk that they may pose.

## **Record Keeping**

All records relating to the implementation of this EMP must be kept on site; on the ATC Operating System and archived at an adequate archive facility where it is safe and can be retrieved easily. These records should be kept for two years and should at any time be available for scrutiny by any relevant authorities.

## **Photographs**

It is recommended that photographs are taken on the site prior to, during and immediately after construction as a visual reference. These photographs should be stored with other records related to this EMP and on the ATC Operating System. If captured in digital format, hard copies must be kept with all other records relevant to the implementation of this EMP. In particular, the Contractor and ESA are responsible for taking photographs of the environmental aspects of environmentally sensitive areas for use in rehabilitation processes.

#### **Environmental Audit Report**

An Environmental Audit Report is a report completed by the ESA and signed off by the HOD Implementation and/or the Property Supervisor and/or National Property Manager, and then sent to the relevant authorities, by the ESA, stating the completion of the project and compliance with the EMP and conditions.

# **Basic Rules of Conduct**

The following list represents the basic "Do's and Don'ts" towards environmental awareness, which all participants in this project must consider whilst carrying out their tasks and duties. These are not

exhaustive and serve as a quick reference aid. NOTE: **All new site personnel must attend an environmental awareness presentation.** Please inform your foreman or manager if you have not attended such a presentation alternatively contact the ESA.

#### DO:

- ✓ Use the toilet facilities provided report dirty or full facilities;
- ✓ Clear your work areas of litter and building rubbish at the end of each day use the waste bins provided and ensure that litter will not blow away;
- ✓ Report all fuel or oil spills immediately and stop the spill continuing;
- ✓ Dispose of cigarettes and matches carefully. (Littering is an offence);
- ✓ Confine work and storage of equipment to the immediate work area and within the site boundary;
- ✓ Where possible use a drip tray under vehicles and machinery and empty drip trays after rain and throw away where instructed;
- ✓ Use all safety equipment and comply with all safety procedures;
- ✓ Ensure a working fire extinguisher is immediately at hand if any "HOT WORK" is undertaken e.g. welding, grinding, gas cutting etc;
- ✓ Try to avoid producing dust wet dry ground and soil;

#### DONT:

- Make any fires;
- Enter any fenced off or marked area;
- Allow cement or cement bags to blow around;
- \* Allow waste, litter, oils or foreign materials into the storm water channels;
- ★ Litter or leave food laying around;
- Make loud noises around the site. Report or repair noisy vehicles
- × Damage or cut down any trees or plants without permission.

# **Internal Review and Auditing**

The Contractor and ESA shall establish an internal review procedure to monitor the progress and implementation of the EMP during the construction phase. All audits will be signed off by the HOD Implementation and/or Property Supervisor and/or National Property Manager.

Where necessary, and upon the recommendation of the ESA and/or the Contractor, procedures that require modification will be changed to improve the efficiency of the EMP. All modifications to the EMP shall be approved by the Department before; if possible, any changes or adjustments to the EMP are implemented. Any material changes or adjustments to the EMP shall be registered accordingly on ATC's operating system. Adjustment and update of the original EMP document is not required when these *ad hoc* changes are made.

At the conclusion of the project an environmental audit report shall be compiled by the ESA, and signed off by HOD Implementation and/or Property Supervisor and/or National Property Manager and submitted to the Department by the ESA. This report shall be compiled by the ESA, in collaboration with the Contractor and/or the Environmental Consultant and/or the Applicant. It shall, as a minimum, outline the implementation of the EMP during the construction phase, and highlight any problems and issues that arose during the construction period to report, on a formal basis, the lessons learnt from this project.

# ENVIRONMENTAL SPECIFICATIONS: CONSTRUCTION PHASE

#### Site Demarcation

The "site" refers to the total area where the contract will take place and any other area reasonably required by the Contractor to undertake the construction activities in order to fulfil the contract. Areas where construction is prohibited are referred to as 'no-go' areas. 'No-go' areas identified on site include all areas outside of the footprint of the base station as well as environmentally sensitive sites. The environmental sensitivity of the area should be ascertained and then the position and orientation of the BTS site as per the approved drawings should be pegged out. 'No-go' areas should be demarcated to prevent environmental degradation thereto. This responsibility rests with the ESA and/or the Contractor.

The Contractor shall be responsible for any clean-up and/or rehabilitation of all areas impacted outside the site and within the 'no-go' areas.

#### **Construction Facilities**

## **Construction Camp**

Construction crews may not stay on site overnight unless special permission has been obtained from the landowner. In the event that the landowner has given such permission, the position of the construction camp shall be agreed by the ESA and Contractor.

#### **Toilet Facilities**

The Contractor shall provide suitable sanitary arrangements (chemical toilets), which shall be located within the construction camp and/or in the construction footprint (where applicable) of the BTS. The siting of toilets shall be done in consultation with the ESA to ensure ease of access. Where required, toilet/s shall be secured to prevent them blowing over.

The Contractor shall be responsible for ensuring that all ablution facilities are maintained in a clean and sanitary condition to the satisfaction of the ESA. The Contractor shall provide toilet paper. The Contractor

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shall appoint a suitable sub-contractor to empty toilets on a regular basis. The sub-contractor and Contractor shall ensure that there is no spillage when the chemical toilets are cleaned and that the contents are properly removed from site.

The Contractor shall be responsible for enforcing the use of these facilities. Performing ablutions outside of established toilet facilities is strictly prohibited.

#### **Water Provision**

The Contractor shall be responsible for ensuring that there is access to clean drinking water for all employees on site. The use of water in rivers, dams, ponds etc. as drinking water is strictly forbidden.

#### **General Aesthetics**

All construction areas must be kept neat and tidy at all times. Different materials and equipment must be kept in designated areas and storing/stockpiling shall be kept orderly.

#### Site Clearing

## **Vegetation Clearing**

Before clearing of vegetation, the Contractor shall ensure that all litter and non-organic material is removed from the area to be cleaned. All vegetation that may not be removed must be clearly identified and demarcated. Where the surrounding flora is required to be protected from traffic, the entire construction area should be fenced off with a temporary 1.8m fence. The fence should be removed upon completion of construction. This responsibility rests with the Contractor and the ESA. The use of herbicides is prohibited.

#### **Site Access**

All access to and from the BTS shall be on demarcated roads (where possible). The route for permanent access to the site shall be determined prior to construction, and shall be pegged out accordingly. Photographs shall be taken indicating the route detail. Rehabilitation of secondary

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roads must be conducted by the Contractor. No machinery may disturb any vegetation along side any road.

# **Trenching**

All trenching must be completed in such a manner as to limit damage to the surrounding environment. If required in the authorisation, trenching is to be done by hand.

# **Materials Handling and Storage**

# **Handling**

The Contractor shall ensure that all suppliers and their delivery drivers are aware of procedures and restrictions in terms of this EMP. The Contractor (and suppliers) shall ensure that all materials are appropriately secured to ensure safe passage between destinations. Loads shall have appropriate cover to prevent spillage from the vehicle during transit. The Contractor shall be responsible for any clean-up resulting from the failure by his employees or suppliers to properly secure transported materials. The Contractor shall ensure that delivery drivers are supervised during offloading.

# **Storage of Construction Materials**

The Contractor shall ensure that areas for storage of construction materials are determined in consultation with the ESA and adequately demarcated. All construction materials including but not limited to building material shall be stored on such demarcated areas.

# **Storage of Equipment**

Drip trays shall be provided for stationary plant (such as compressors, pumps, generators etc.) and for "parked" plant (e.g. mechanised equipment).

# **Refuelling and Maintenance**

# Refuelling

Where reasonably practicable, plant and vehicles shall be refuelled using suitable equipment (e.g. funnels) and the necessary drip trays.

#### **Maintenance**

All vehicles and equipment shall be kept in good working order and serviced regularly. Leaking equipment shall be removed from the site. All maintenance of equipment and vehicles shall be performed off site. No washing of plant and equipment shall be undertaken on site.

# **Accidental Leaks and Spills**

The Contractor shall ensure that his employees are aware of the procedure to be followed for dealing with spills and leaks. Any accidental leak or spill of fuel, oil or any other hazardous substance must be reported immediately to the ESA to ensure that the best remediation method is quickly implemented.

In the event of a hydro-carbon spill, the source of the spillage shall be isolated and the spillage contained. The area shall be cordoned off and secured. The Contractor shall ensure that there is always a supply of absorbent material readily available to absorb / breakdown spills.

The Contractor shall be liable to arrange for professional service providers to clear the area affected by the spill, if required.

# **Waste Management**

#### **Solid Waste**

Solid waste includes all construction waste (cement bags, tags, wrapping materials, cans, wire, nails, etc.) and surplus food, food packaging, organic waste etc. The Contractor shall be responsible for the establishment of a solid waste control and removal system that is acceptable to the ESA in order to prevent the spread of waste in, and beyond, the construction area. An

integrated waste management approach shall be used, based on the principles of waste minimisation, reduction, and reuse and recycling of materials. Containers for glass, paper, metals and plastics shall be provided, if sufficient solid waste is generated. The construction camp area (if applicable) is particularly suited for this purpose.

The Contractor shall provide vermin and weatherproof bins (with lids) of sufficient number and capacity to store solid waste produced on a daily basis. The lids shall be kept firmly on the bins at all times. Bins shall be located in areas where there is a concentration of labour and shall be easily accessible. Bins shall be emptied regularly as required, preferably every second day. The general cleanliness of the site shall form part of the ESA inspections.

All solid waste may be temporarily stored on site in a demarcated area, which meets the satisfaction of the ESA. All solid waste shall be disposed of offsite at a licensed landfill site. The stockpiling of construction rubble, cut vegetation or other material shall only be permitted in areas approved by the ESA. No waste material or litter shall be burnt or buried on site.

#### **Erosion Control**

The Contractor shall, as an ongoing exercise, provide erosion control to the satisfaction of the ESA. During construction, the Contractor shall protect areas susceptible to erosion by installing necessary temporary and permanent draining works as soon as possible.

Any runnels or erosion channels developed during the construction period shall be backfilled and compacted, and the areas restored to an acceptable condition (as determined by the ESA). Stabilisation of cleared areas to prevent and control erosion shall be actively managed.

During construction, the Contractor shall implement measures to prevent the migration of materials (fines) from the construction site into river courses, drainage lines, storm water and sewerage systems.

#### **Fire Control**

No fires shall be allowed on site. At least one 12.5kg type ABC (all purpose) fire extinguisher shall be kept on the construction site.

# Protection of Natural Features, Flora and Fauna

#### **Protection of Natural Features**

The Contractor shall not deface, paint, damage or mark any natural features outside the site for any purpose unless agree beforehand with the ESA. The Contractor shall not permit his employees to make use of any natural water sources situated on or near the site for purposes of swimming, personal washing and/or the washing of machinery or clothes.

#### **Protection of Flora**

The removal, damage or disturbance of flora, fauna or avifauna is forbidden. The clearing of vegetation within the construction area shall be undertaken in accordance with that specified in section 3.3.1.

The Contractor shall be familiar with any Ordinances, Acts, By-laws and/or regulations pertaining to the protection of natural features, flora and fauna on site. Where applicable, the Contractor shall apply for the necessary permits prior to removing any plants listed in the relevant schedules promulgated in terms of the legislation.

#### **Protection of Fauna**

The Contractor shall ensure that no hunting, trapping, shooting, poisoning or other disturbance of any fauna takes place. The feeding of wild animals is prohibited. No domestic pets or livestock are permitted on site.

## **Protection of Heritage and Cultural Features**

The Contractor shall not, without a permit issued by the relevant heritage resources authority, destroy damage, excavate, alter, deface or otherwise disturb archaeological finds. Archaeological finds can take the form of buried walls, old bottles, porcelain fragments, earthenware fragments, accumulations of bone and ash dumps.

If any archaeological or paleontological artefacts and/or human burials or remains are uncovered during construction, work in the vicinity of the find shall cease. The Contractor shall immediately

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notify the HOD Implementation and/or Property Supervisor and/or National Property Manager, who shall contact the South African Heritage Resources Agency (SAHRA). The Contractor will be required to abide by the specifications as set out by SAHRA or the heritage specialist appointed to investigate the find or burial.

#### **Dust Control**

The Contractor shall ensure that the generation of dust is minimised and shall implement a dust control programme to maintain a safe working environment, minimise nuisance and protect damage to natural vegetation.

The Contractor shall ensure that all exposed soil and material stockpiles are adequately protected against the wind. Where possible, dust suppression shall take place by way of spraying.

### **Noise Control**

The Contractor shall be familiar with and adhere to, any local by-laws and regulations regarding the generation of noise and hours of operation. Working hours shall be confined to the hours as stipulated in the Environmental Approval. The Contractor shall be held responsible for any complaints received from the department and/or public with respect to any contravention of agreed noise conditions.

#### Cement

Cement and concrete mixing directly on the ground shall not be allowed. Where possible; ready mix concrete shall be utilised in all site construction. Mixing of cement, if applicable, shall take place on impermeable surfaces to the satisfaction of the ESA.

Unused cement bags shall be stored out of the rain where they will not be affected by run-off. Used (empty) cement bags shall be collected and stored in weatherproof containers to prevent windblown cement dust and water contamination. Used cement bags shall not be used for any other purpose and shall be disposed of on a regular basis via the solid waste management system.

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All excess concrete shall be removed from site on completion of concrete works and disposed of at a licensed landfill site. Washing of the excess concrete or washing of concrete pump trucks into the ground is prohibited.

#### **Mast Colour**

The colour of the mast will as per the DCA specifications.

# **Complaints Register**

The ESA shall have accessible on the construction site a complaints register in terms of which all complaints received from interested and affected parties shall be recorded. The Complaints register shall be kept on site for the duration of construction activities and all complaints received shall be reported to the ESA.

# Site Rehabilitation and Landscaping

On completion of the project, the Contractor shall ensure that all structures, equipment, materials, waste, rubble, notice boards and temporary fences used during the construction operation are removed with minimum damage to the surrounding area. The Contractor shall clean and clear the site to the satisfaction of the ESA.

In the case of accidental spills of oils, the affected soils shall be dug out and removed from the site for disposal at a licensed hazardous waste site and replaced with fresh topsoil.

Rehabilitation shall especially focus on all scarred and open areas, in order to reduce visual impacts as a result of the construction phase. Stored topsoil, if applicable, shall be used for rehabilitation purposes.

# ENVIRONMENTAL SPECIFICATIONS: OPERATIONAL PHASE

The following responsibilities will be met to prevent negative environmental impacts:

- Providing a budget for maintenance;
- Maintaining all approved infrastructure in good working order to effectively fulfill its intended purpose and to prevent negative environmental impacts;
- Not construct any additional buildings, infrastructure etc. contrary to the approved Environmental Authorization, without performing an environmental impact assessment to evaluate alternatives and environmental impacts;
- To immediately remedy any factors that contribute to negative environmental impacts;
- To do an annual environmental audit and to have the results in writing available at the administration offices of ATC.

#### **Maintenance**

Procedure to be followed to ensure the high standards of appearance and quality are maintained on the BTS sites to ensure that environmental issues are adequately addressed and that BTS sites are effectively maintained.

- All BTS sites must be maintained and cleaned as per the schedule set by the Field Maintenance Supervisor responsible;
- 2. The items that must be checked will be as per the list below and as reflected in detail in the Site Maintenance Report and Statement of Work reference documentation;
  - a. Fence and Gate: Secure and rust treat as necessary;
  - b. Signage: Check all signs as per the BTS Site Infrastructure Specification;
  - c. Terrain:
    - i. Clean and de-weed inside and outside the BTS site and clean a 1m perimeter area around the fence. In areas susceptible to soil erosion, cut weed perimeter in such a way as to protect soil from erosion;
    - ii. De-weed invasive vegetation in the surrounding area of the BTS site;

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- iii. Check for any rubble that could have accumulated from previous maintenance work or during the BTS site build and remove and dump and a registered waste disposal site.
- d. Equipment Room: De-rust, wash walls and floor and dust interior;
- e. BTS Cabinet: Replace filter
- f. Container: Replace blown fluorescent lights (discard used lights in safe manner to ensure no mercury exposure), clean roof and cut away branches hanging over the site;
- g. Air Conditioner: Wash, dry and seal;
- h. Mast Navigation Lights: Replace blown globes
- Mast: Check foundation, bolts, bolt torque, cable tray, cage and contact specialist to remove nests;
- j. Road: Check condition i.e. check for signs of soil erosion, potholes and general sturdiness;
- k. Power Source: Check condition i.e. still safe and insulated;
- I. Maintenance Waste: All waste generated from the maintenance work must be removed from the area and disposed of at an approved landfill.
- 3. Invasive vegetation can easily be recognized as it is found in the immediate vicinity surrounding the site, but does not grow in the natural environment in the surrounding area. Normally the seeds of invasive vegetation are brought in an area with sand used during BTS site construction. Every effort must be made to remove invasive vegetation before it produces seeds.
- 4. In non-environmentally sensitive areas, ATC approved weed killers may be used, under controlled conditions, to minimize weed growth. Soil erosion must be considered and prevented prior to using any weed killers.
- Problems or non-compliance, such as poor road maintenance or erosion, mast paint peeling and poor mast condition, must be reported immediately. The necessary corrective action must be implemented to rectify the situation.

# ENVIRONMENTAL SPECIFICATIONS: DECOMMISSIONING PHASE

The objective to provide guidelines is to prevent structures being left to deteriorate. Therefore it is imperative that non-functional structures are removed as soon as possible and the area is rehabilitated. If non-functional structures are no longer required, it must be maintained as if it is in use to prevent the environmental degradation of the area.

The Applicant will be responsible for the following:

- Removal of the construction building rubble to a suitable licensed disposal facility;
- Ensuring that suitable arrangements are made to protect the environment against long term negative impacts;
- Minimize negative visual impacts;
- Maintain the storm water channels in a working condition;
- Clean up contaminants of the environment;
- Prevent erosion through regular monitoring and rehabilitation of degraded areas.

#### **Procedure**

Procedure to be followed when decommissioning a BTS site.

- A Work Authorization must be issued by the Planning and Optimization Division instructing
  the Implementation Division to decommission a particular site. In most cases, there will be a
  replacement BTS site issued at the same time. This may involve more than one BTS site to
  achieve the same coverage, largely depending on the site location and the Planning
  Engineer;
- 2. The BTS site will only be decommissioned once the replacement site has been activated (this is preferred, but not always possible), otherwise the replacement site must have at least been approved by the Property division and an instruction to proceed with the replacement BTS site build has been given to the Implementation Division;
- 3. When the site is decommissioned, the following areas should be considered as detailed further below:
  - a. Slab and concrete work;
  - b. Tower;

- c. Antennas;
- d. Feeder System;
- e. Fencing and Guardrails;
- f. Container;
- g. Site Rehabilitation;
- h. Dumping
- i. Power connection to be disconnected

#### **Slab and Concrete Work**

- 4. All the concrete, cement and reinforcing on site must be removed and disposed of in a Registered dump by the Contractor. All land must be filled with landfill and compacted as necessary. (Refer to owners requirements). If the landlord agrees, the concrete, cement and reinforcing can remain as is.
- 5. All stone or site fill must be removed and disposed of in an approved landfill by the Contractor.

#### Tower

- 6. The tower must be dismantled in a controlled manner and transported to the original tower manufacturer for inspection. The tower must be inspected for conformance to the current ATC specification. If the tower meets ATC's current tower specifications it must be packed for redistribution to another BTS site.
- 7. If the tower does not meet ATC's current tower specification it must be sent to the central warehouse or a location specified by the warehouse. The tower will then be retained until it can be removed (depreciated) from the asset register and sold as scrap metal.
- 8. All accessories associated with the tower such as booms, antenna poles, cat ladders, cables etc must be inspected and returned to the central warehouse for inspection, packaging and redistribution to another BTS site.
- All antennas shall be returned to the warehouse for testing to ensure that they still meet the
  manufacturer's specification. The central warehouse will identify whether they are on ATC's
  accepted antenna list. If so, they will be placed back in stock and redistributed to another
  BTS site.
- 10. If the antenna is not on ATC's current accepted antenna list, it will be sent to the central warehouse until it is removed from the asset register (depreciated) and scrapped.
- 11. Antenna brackets will be returned to the central warehouse for inspection and redistribution.

### Feeder System

- 12. Connectors will be cut off the feeder cable, the open ends will be weather sealed, rolled and sent to the central warehouse for inspection, evaluation and redistribution.
- 13. The warehouse will dispose of unusable feeder cable according to the approved disposal procedure.
- 14. All feeder brackets and clamps must be packed and sent to the central warehouse for distribution.
- 15. Earthing materials must be returned to the central warehouse for redistribution or disposal. Waterproofing should be disposed of by the Contractor in an approved landfill.

#### **Fencing and Guardrails**

- 16. All fencing must be removed in a controlled manner for reuse. Concrete must be removed and dumped in an approved landfill by the Contractor.
- 17. Gates and access ways must be returned to the central warehouse for inspection and redistributed to another BTS site.
- 18. All electric fencing must be removed and returned to the central warehouse for inspection and redistribution.

#### Container

- 19. The container must be stripped of all equipment, returned to the manufacturer for inspection and refurbished if necessary. The container is then redistributed to another BTS site, preferably in the same region.
- 20. All other equipment must be sent to the Central Warehouse for evaluation and redistribution, if applicable.
- 21. All the equipment above must go through acceptance testing as per the acceptance procedure relating to that specific piece of equipment.

#### Site Rehabilitation

22. The BTS site, access roads and any trenches must be rehabilitated, conforming to ISO standards and to a level accepted by both the ESA and the landlord and must meet legal obligations that may be imposed or apply to that particular BTS site.

#### **Dumping**

- No Contractor or Sub-contractor will dispose of any (dump) material or product without the approval from the responsible ESA.
- 24. All materials or products must be disposed of in the correct manner, in approved dumping site by the Contractor or Sub-Contractor. ATC must ensure that this procedure is followed for all sites decommissioned.

#### Records

# **EMERGENCY RESPONSE PLAN**

The objective of this section is to provide a brief summary of options available to the ESA. The details of the design will reside with the designers, but cognizance should be taken of the design philosophy and key aspects given in the guidelines to problem solving given below.

# **Typical remedial work options**

The following table is provided to assist the Contractor and ESA with problem solving:

Observation or Event	Action by ESA	Action by Contractor		
Spillage of diesel or	Report to ESA and continue	Action will be required asap by following		
hydrocarbons on soil	observations.	the next steps:		
	Also check:	> Dig down into the soil to see how		
	That the source causing the	far down the pollution has penetrated;		
	spillage is	> If penetration is less than 300mm:		
	decommissioned, and that	a. Turn the soil over to expose it to		
	the affected area is isolated	the air:		
	to prevent spreading of the	b. Apply Mono Ammonium		
	hazardous substance	Phosphate (MAP) at a rate of 58gr/m <sup>2</sup> to		
		the dug up soil		
		c. Water enough to keep the soil		
		moist		
		> If penetration is greater than		
		300mm:		
		a.Remove the affected soil and spread		
		in a layer not more than 300mm		
		thick;		
		b. Apply MAP at a rate of 50gr/m <sup>2</sup>		
		c.Water enough to keep the soil moist		
		Repeat the above steps every 6		
		weeks or until the soil is clean		
General Surface	Report to ESA and continue	Action will be required asap:		
Erosion	observations.	> Implement erosion protection works at		
	Also check:	identified problem areas;		
	➤ In respect of erosion of	> Implement remedial works to be done		
	roads that all vehicular	at affected areas in order to restore the		

movement is restricted to	area to its previous or better status.
the existing access routes	
to prevent criss-crossing of	
tracks through undisturbed	
areas.	