

# PROVINCE OF THE EASTERN CAPE DEPARTMENT OF ECONOMIC DEVELOPMENT AND ENVIRONMENTAL AFFAIRS

## BASIC ASSESSMENT REPORT

	(For official use only)
File Reference Number:	
Application Number:	
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), as amended.

### Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily 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 typing.
- 3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
- 4. An incomplete report may 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 may result in the rejection of the application as provided for in the regulations.
- 6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 7. No faxed or e-mailed reports will be accepted.

- 8. The report must be compiled by an independent environmental assessment practitioner.
- 9. 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.
- 10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

## **SECTION A: ACTIVITY INFORMATION**

Has	а	specialist	been	consulted	to	assist	with	the	completion	of	this	YES	NO
secti	on	?											

If YES, please complete form XX for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

#### 1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail

107560 Lootsberg Pass East - Erection of a 45m high telecommunication mast painted red & white on The farm Farm 305 Middelburg RD.

#### 2. 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 application. 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.

Paragraphs 3 – 13 below should be completed for each alternative.

## 3. 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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites if applicable.

Alternative:	Latitude (	S):	Longitude (E):		
Alternative S1 <sup>1</sup> (preferred or only site alternative)	31º	50.142'	240	51.874'	
Alternative S2 (if any)	310	50.142'	24°	51.874'	
Alternative S3 (if any)	0	6	0	1	
In the case of linear activities:		•	•		
Alternative:	Latitude (	S):	Longitude	: (E):	
Alternative S1 (preferred or only route alternative)					
<ul> <li>Starting point of the activity</li> </ul>	0	6	0	1	
<ul> <li>Middle point of the activity</li> </ul>	0		0	"	
<ul> <li>End point of the activity</li> </ul>	0	6	0	(	
Alternative S2 (if any)			•	•	
<ul> <li>Starting point of the activity</li> </ul>	0	6	0	(	
Middle point of the activity	0	6	0	í	
<ul> <li>End point of the activity</li> </ul>	0		0	4	
Alternative S3 (if any)		•	1		
Starting point of the activity	0	6	0	ı	
Middle point of the activity	0	6	0	í	
End point of the activity	0	'	0	(	

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

## 4. PHYSICAL SIZE OF THE ACTIVITY

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

activities/technologies (tootprints):			
Alternative:	Size of the	e activi	ity:
Alternative A1 <sup>2</sup> (preferred activity alternative)	m <sup>2</sup>		
Alternative A2 (if any)	m <sup>2</sup>		
Alternative A3 (if any)	m <sup>2</sup>		
or, for linear activities:			
Alternative:	Length	of	the
	activity:		
Alternative A1 (preferred activity alternative)	45m		
Alternative A2 (if any)	45m		
Alternative: Alternative A1 (preferred activity alternative)	activity: 45m	of	the

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

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

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

Alternative:

Size of the

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any)

Alternative A3 (if any)

Site/Servitude:	
100m <sup>2</sup>	
100m <sup>2</sup>	
-	

#### 5. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	NO
287m	

Describe the type of access road planned:

2 track access road (4x4 vehicle only)

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.

#### 6. 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 document.

The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites:
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 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;
- 6.6 all trees and shrubs taller than 1.8 metres:
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
  - rivers:
  - the 1:100 year flood line (where available or where it is required by DWA);
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 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
- 6.10 the positions from where photographs of the site were taken.

#### 7. 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 form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

#### 8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

#### 9. ACTIVITY MOTIVATION

#### 9(a) Socio-economic value of the activity What is the expected capital value of the activity on completion? 0R What is the expected yearly income that will be generated by or as a result of the 0R activity? YES Will the activity contribute to service infrastructure? NO Is the activity a public amenity? YES NO 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 0R development phase? 0% 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 0R first 10 years? What percentage of this will accrue to previously disadvantaged individuals? 0%

#### 9(b) Need and desirability of the activity

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

Cellular telecommunication technology is an integral part of modern daily life and licensed cellular telecommunication service operators have an obligation in terms of their license agreements, as stipulated by national government, to provide the services throughout South Africa within the allocated bandwidth spectrum. The cellular telecommunication user base is still increasing (quantitative growth) and users must be enabled to choose the services rendered by any of the licensed operators anywhere in South Africa (choice and availability). The expansion of service types and content (content & technology growth) furthermore requires continuous equipment and network fine-tuning, upgrades and expansion. The user base also expects a continuous quality service to be provided and therefore network capacity and capabilities are under constant review to maintain or improve quality coverage (qualitative growth).

Cell C (Pty) Ltd network and radio planners have identified an essential requirement in terms of the above objectives in the immediate surroundings of

the planned base station in this area. Cell C (Pty) Ltd is committed to preventing the proliferation of telecommunication installations and the sharing of the infrastructure by other telecommunication service providers is promoted wherever possible and existing structures will be utilized if such supports and is suitable for the establishment of a required base station.

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

The immediate benefits of the activity to society in general can be summarized as follows:

- Increased and improved national Cell C coverage footprint enabling users to communicate on the Cell C network wherever they are.
- Additional fulfilment of one of government's objectives to ensure the establishment of national communication network grids and services as part of a sustainable economic growth pattern.

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

The motivation and benefits to society in general above apply to the local community directly. It will furthermore ensure that the communication capability and capacity of the local community will keep pace with the ever growing and availability of communication facilities nationwide.

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

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

Title of legislation, policy or guideline:	Administering authority:	Date:
National Environmental Managment Act	Eastern Cape	27/11/1998
(NEMA) No. 107 of 1998 & related	Province Department	
regulations & guidelines	of Economic	
	Development,	
	Environment and	
	Tourism	
Civil Aviation Act, 2009 (Act No. 13 of 2009)	South African Civil Aviation Authority	2009
Approval in terms of town planning	Chris Hani District	2007
schemes and/or National Building	Municipality (Inxuba	
Regulations	Yethemba Local	
	Municipality)	
Occupational Health and Safety Act (No. 85 of 1993)	Department of Labour	1993
National Veld and Forest Fire Act (No. 101	Department of Water	1998
of 1998)	and Environmental	
	Affairs	
National Heritage Resources Act (No. 25 of	South African	1999
1999)	Heritage Resources	
	Agency	

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

11(a) Solid w	aste managemei	nt						
Will the actionstruction/inition	ivity produce ation phase?	solid	construction	waste	during t	he [	YES	NO
If yes, what esting	nated quantity wil	l be pro	duced per moi	nth?			2m³ (6	
							weeks	
							constr	
How will the con	struction solid wa	ste be d	lisposed of (de	escribe)?		L	period	Offig
	transported by				commerci	al v	ehicle	to the
nearest regist	ered landfill si	te.	•					
	onstruction solid v							
	registered land					I	YES	NO
• •	produce solid was mated quantity wil		•	•		-	m <sup>3</sup>	NO
•	d waste be dispos	•	•	IUI!		Ĺ	111	
-	a waste be dispos	seu oi (u	iescine):					
Where will the (describe)?	solid waste be	dispose	d if it does r	not feed i	nto a mun	icipa	l waste	stream
-								
If the solid was	te (construction o	or opera	ational phases	) will not	be dispose	d of	in a rec	gistered
	taken up in a mu			,	•		•	-
competent author	ority to determine	whethe	r it is necessa	ry to chan	ge to an ap	plica	ation for s	scoping
and EIA.						г		
Can any part of relevant legislation	f the solid waste on?	be cla	ssified as haz	ardous in	terms of t	he	YES	NO
If yes, inform th EIA.	e competent auth	nority ar	nd request a d	change to	an applicat	tion	for scopi	ng and
Is the activity the facility?	nat is being appl	lied for	a solid waste	handling	or treatme	ent	YES	NO
•	applicant should ange to an applica				nority to det	termi	ine whet	her it is
44(1) 1: :1	661 4							
11(b) Liquid 6	effluent							
•	produce effluer			al sewage	e, that will	be	YES	NO
•	municipal sewage	•					3	
•	nated quantity wil		•				m <sup>3</sup>	NO
site?	produce any efflu				-		YES	NO
•	icant should cons ange to an applica		•		ity to deteri	mine	whethe	r it is
•	produce effluen	t that v	vill be treated	l and/or o	disposed of	at	YES	NO
another facility?								
	e particulars of th	e facility	y:					
Facility name:	-							
Contact	-							
person:	1							

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

## 11(c) 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, 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 emissions in terms of type and concentration:

Non-ionised electromagnetic fields with power density < 10W/m<sup>2</sup> (Department of Health Guidelines based on International Commission on Non-Ionising Radiation Protection (ICNIRP) and World Health Organisation (WHO) guidelines.

## 11(d) 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:

Minimum noise generation will emanate from the installed air conditioners at a <60dB noise level. The level of noise generation is well within the acceptable norm and will not cause a disturbance to the surrounding environment.

#### 12. 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	
			dam or I	ake		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?

litres
YES NO

YES

YES

NO

NO

NO

NO

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

#### 13. ENERGY EFFICIENCY

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

High technological mobile telecommunication operating systems are in principle designed for minimum, cost effective energy consumption in order to preserve resources and to optimise the financial yield generated by the base station.

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

Alternative energy sources have not been taken into account in the design of the activity.

## SECTION B: SITE/AREA/PROPERTY DESCRIPTION

### Important notes:

1. 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):				

- 2. Paragraphs 1 6 below must be completed for each alternative.
- 3. Has a specialist been consulted to assist with the completion of YES NO this section?

If YES, please complete form XX for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

#### 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

#### **Alternative S1:**

Flat	1:50 –	1:20 –	<del>1:15 – 1:10</del>	1:10 —	<del>1:7,5 – 1:5</del>	Steeper than
	1:20	1:15		<del>1:7,5</del>		<del>1:5</del>
<b>Alternativ</b>	Alternative S2 (if any):					
Flat	1:50 –	1:20 –	<del>1:15 – 1:10</del>	1:10 —	<del>1:7,5 – 1:5</del>	Steeper than
	1:20	1:15		<del>1:7,5</del>		<del>1:5</del>
Alternative S3 (if any):						
Flat	1:50 -	1:20 -	<del>1:15 – 1:10</del>	1:10 -	<del>1:7,5 – 1:5</del>	Steeper than
	<del>1:20</del>	<del>1:15</del>		<del>1:7,5</del>		<del>1:5</del>

#### 2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

- 2.1 Ridgeline
- 2.2 Plateau
- 2.3 Side slope of hill/mountain
- 2.4 Closed valley
- 2.5 Open valley
- 2.6 Plain
- 2.7 Undulating plain / low hills
- 2.8 Dune
- 2.9 Seafront

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

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	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

Indicate the types of groundcover present on the site:

- 4.1 Natural veld good condition E
- 4.2 Natural veld scattered aliens <sup>E</sup>
- 4.3 Natural veld with heavy alien infestation E
- 4.4 Veld dominated by alien species E
- 4.5 Gardens
- 4.6 Sport field

- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure
- 4.10 Bare soil

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>	Veld dominated by alien species <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.

#### 5. LAND USE CHARACTER OF SURROUNDING AREA

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

## 5.1 Natural area

- 5.2 Low density residential
- 5.3 Medium density residential
- 5.4 High density residential
- 5.5 Informal residential
- 5.6 Retail commercial & warehousing
- 5.7 Light industrial
- 5.8 Medium industrial AN
- 5.9 Heavy industrial AN
- 5.10 Power station
- 5.11 Office/consulting room
- 5.12 Military or police base/station/compound
- 5.13 Spoil heap or slimes dam<sup>A</sup>
- 5.14 Quarry, sand or borrow pit
- 5.15 Dam or reservoir
- 5.16 Hospital/medical centre
- 5.17 School
- 5.18 Tertiary education facility
- 5.19 Church
- 5.20 Old age home
- 5.21 Sewage treatment plant<sup>A</sup>
- 5.22 Train station or shunting yard N
- 5.23 Railway line N
- 5.24 Major road (4 lanes or more) N
- 5.25 Airport N
- 5.26 Harbour
- 5.27 Sport facilities

5.28 Golf course				
5.29 Polo fields 5.30 Filling station <sup>H</sup>				
5.31 Landfill or waste treatment site				
5.32 Plantation				
5.33 Agriculture				
5.34 River, stream or wetland				
5.35 Nature conservation area				
5.36 Mountain, koppie or ridge				
5.37 Museum 5.38 Historical building				
5.39 Protected Area				
5.40 Graveyard				
5.41 Archaeological site				
5.42 Other land uses (describe) - Farmland				
If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by	the			
proposed activity.				
If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by	the			
proposed activity.	110			
If YES, specify and explain:				
If YES, specify:				
If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by	the			
proposed activity.				
If YES, specify and explain:				
If YES, specify:				
C CHITHDAL //HCTODICAL FEATURES				
6. CULTURAL/HISTORICAL FEATURES				
Are there any signs of culturally or historically significant elements, as YES NO				
defined in section 2 of the National Heritage Resources Act, 1999, (Act				
No. 25 of 1999), including				
Archaeological or palaeontological sites, on or close (within 20m) to the site?				
If YES, -				
explain:				
If uncertain, conduct a specialist investigation by a recognised specialist in the field to				
establish whether there is such a feature(s) present on or close to the site.				
Briefly -				
explain the findings of				
findings of the specialist:				
Will any building or structure older than 60 years be affected in any way? YES NO				

Is it necessary to apply for a permit in terms of the National Heritage YES Resources Act, 1999 (Act 25 of 1999)?

YES NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

## SECTION C: 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 municipality which has jurisdiction in the area;
  - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; 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 local 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-
  - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
  - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation:
  - (iii) the nature and location of the activity to which the application relates;
  - (iv) where further information on the application or activity 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 MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note 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 the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

#### 6. AUTHORITY PARTICIPATION

Authorities are 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 the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

South African Heritage Resources Agency (SAHRA)
Inxuba Yethemba Local Municipality
Chris Hani District Municipality
The Ward Councillor, Inxuba Yethemba Local Municipality, Ward 6
South African Civil Aviation Authority (SACAA)

List of authorities from whom comments have been received:

No comments were received from any authorities

#### 7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub regulation to the extent and in the manner as may be agreed to by the competent authority.

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 at least 30 (thirty) calendar days before the submission 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):

No comments were received from any stakeholders

## **SECTION D: IMPACT ASSESSMENT**

The assessment of impacts must adhere to the minimum 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.

Mr Bradley Gibbons of the African Crane Conservation Program registered as Interested & Affected party on behalf of the Endangered Wildlife Trust. No specific issues were raised yet.

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 to this report):

A copy of the Draft Basic Assessment Report was sent to Mr Gibbons for his perusal and comments.

## 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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

#### Alternative 1 (preferred alternative)

#### Direct impacts:

(Planning & design phase)

#### PHYSICAL:

- 1. Safety aspects: The following safety aspects were taken into consideration in planning the base station:
  - Position & height in terms of official airports, helipads and air traffic routes as determined by SACAA. Mitigated in terms of the CAA required day & night markings.
  - General installation safety for the general public, owners, technicians etc.: Engineering services incorporated in the design of the mast, foundations and other design and construction safety aspects of the base station;
  - Base station to be surrounded with a 2.4m high galvanised steel palisade fence to prevent unauthorised access to the base station area and mast.
- 2. Visual impact: Evaluation of structure type, height & position, taking into consideration the purpose and objective of the planned activity in terms of mobile telecommunication coverage area and quality of coverage. New base station with a 45m lattice telecommunication mast painted red and white selected as most appropriate based on:

Investigation of sharing existing infrastructure: The specific site requirements needed by, Cell C are:

> Physical space for two sets of antennae, three microwave dishes and 15

feeder cables:

- Wind load capacity for above mentioned equipment;
- ➤ Minimum height of 45m; and
- > Space and load capacity for future upgrading or advances in technology. These specifications are not available on any existing structure within the establishment area required in terms of the coverage objectives;
- 45m height required to achieve maximum coverage objectives in the specific environment and therefore reducing the need for additional base stations to achieve/maintain the same coverage within the coverage target area;
- Facility sharing capacity incorporated in design to make provision for and promote the sharing of infrastructure in order to prevent the proliferation of masts;
- Lattice type structure most suitable to fulfil the coverage objectives of the base station due to the coverage range required and the high flexibility of utilising the mast height for varying antennae installation configurations;
- Lattice design mast painted red & white provides maximum mitigation with maximum visibility from the air to prevent aircraft accidents (day & night markings, prescribed by the SACAA). Red & white lattice mast provides no mitigation of the short range visibility from the ground. However due to the low population density this impact is regarded of low significance. Red & white lattice mast provides medium to high mitigation of the medium to long range visual impact from the ground due to the blending capability of the more transparent type mast against the sky background.

#### **BIOLOGICAL:**

Little expected or proven biological impacts will result from the proposed development. The base station is situated in an area that is already disturbed by human activity. Only the 100m<sup>2</sup> footprint size will be disturbed by the proposed development.

#### SOCIO-ECONOMIC:

Site position has been determined based on the requirement to deliver mobile telecommunication signal coverage and availability within the target area enabling the residents, business entities and the general public within the area to select and maintain quality telecommunication services and connectivity via the Cell C mobile telecommunication network. Cell C (Pty) Ltd is obliged to fulfil their licence terms and conditions, as determined by government, in providing mobile telephony and related services on a reliable national network grid.

#### (Construction phase)

Construction of the telecommunication base station will extend over a period of approximately 6 weeks only;

- 1. Increased activity and traffic at the property including material delivery and work team movements.
- 2. Minimum disruption of operations within the vicinity as the base station is located in an area with relatively low activity.
- 3. Increased workplace accident risk due to the mere occurrence of the activity.
- 4. Creation of dust and disturbance of specific soil layers due to earthwork activities.
- 5. Erosion and contamination of topsoil.
- 6. Generation of standard building rubble & the transportation thereof to the

- appropriate licensed landfill site.
- 7. Generation of construction noise created by earthwork machinery and other applicable tooling used for the establishment of the base station.

#### (Operational phase)

- 1. Increased electricity consumption on the existing supply grid.
- 2. Noise generation by air conditioning units and by backup generator if electricity supply fails.
- 3. Non-ionised electromagnetic fields emissions on allocated frequency.
- 4. Increase in potential air traffic obstacles.
- 5. Visual impact of the 45m lattice mast painted red & white on short, medium and long distance observation.
- 6. Increased mobile telecommunication network capacity.

#### Indirect impacts:

## (Planning & design phase)

The property coverage and development potential has been taken into consideration in selecting the position of the activity. The exact position of the activity on the property was determined, in consultation with the property owner, to minimise the possible impact on existing operations and future development plans or phases. Therefore the commercial value of the property is maintained.

Electricity will be supplied from the existing electricity grid. Minimum usage due to economical and energy efficient design.

## (Construction phase)

Additional waste at appropriately certified dumping site.

### (Operational phase)

- 1. Minute increase in electricity generation base material usage.
- 2. Increased use of quality telecommunication services with the appropriate revenue increase and potential increased economic activity and financial returns.

#### Cumulative impacts:

(Planning & design phase)

No cumulative impacts relating to the design and planning phases are applicable.

(Construction phase)

Construction activity.

(Operational phase)

Increased telecommunication infrastructure availability and quality.

## (Decommissioning & closure phase)

## **Direct impacts:**

- 1. Establishment of new mobile telecommunication infrastructure elsewhere to fill the network coverage gap caused by decommissioning.
- 2. Creation of waste due to decommissioning.
- 3. Disturbed area.

#### Indirect impacts:

Potential waste of resources.

#### Cumulative impacts:

None

#### Alternative 2

## Direct impacts:

(Planning & design phase)

#### PHYSICAL:

- 3. Safety aspects: The following safety aspects were taken into consideration in planning the base station:
  - Position & height in terms of official airports, helipads and air traffic routes as determined by SACAA. Mitigated in terms of the CAA required day & night markings.
  - General installation safety for the general public, owners, technicians etc.: Engineering services incorporated in the design of the mast, foundations and other design and construction safety aspects of the base station;
  - Base station to be surrounded with a 2.4m high galvanised steel palisade fence to prevent unauthorised access to the base station area and mast.
- 4. Visual impact: Evaluation of structure type, height & position, taking into consideration the purpose and objective of the planned activity in terms of mobile telecommunication coverage area and quality of coverage. New base station with a 45m monopole telecommunication mast painted red and white selected as most appropriate based on:

Investigation of sharing existing infrastructure: The specific site requirements needed by, Cell C are:

- Physical space for two sets of antennae, three microwave dishes and 15 feeder cables;
- > Wind load capacity for above mentioned equipment;
- ➤ Minimum height of 45m; and
- > Space and load capacity for future upgrading or advances in technology.

These specifications are not available on any existing structure within the establishment area required in terms of the coverage objectives;

- 45m height required to achieve maximum coverage objectives in the specific environment and therefore reducing the need for additional base stations to achieve/maintain the same coverage within the coverage target area;
- Facility sharing capacity incorporated in design to make provision for and promote the sharing of infrastructure in order to prevent the proliferation of masts;
- Monopole type structure less suitable to fulfil the coverage objectives of the base station due to the coverage range required and the lower flexibility of utilising the mast height for varying antennae installation configurations;
- Monopole design mast painted red & white provides high mitigation with high visibility from the air to prevent aircraft accidents (day & night markings, prescribed by the SACAA). Red & white monopole mast provides no mitigation of the short range visibility from the ground. Red & white monopole mast provides low mitigation of the medium to long range visual impact from the ground due to less blending capability of the more solid type mast against the sky background.

## **BIOLOGICAL:**

Little expected or proven biological impacts will result from the proposed development. The base station is situated in an area that is already disturbed by human activity. Only the 100m<sup>2</sup> footprint size will be disturbed by the proposed

development.

#### SOCIO-ECONOMIC:

Site position has been determined based on the requirement to deliver mobile telecommunication signal coverage and availability within the target area enabling the residents, business entities and the general public within the area to select and maintain quality telecommunication services and connectivity via the Cell C mobile telecommunication network. Cell C (Pty) Ltd is obliged to fulfil their licence terms and conditions, as determined by government, in providing mobile telephony and related services on a reliable national network grid.

#### (Construction phase)

Construction of the telecommunication base station will extend over a period of approximately 6 weeks only;

- 8. Increased activity and traffic at the property including material delivery and work team movements.
- 9. Minimum disruption of operations within the vicinity as the base station is located in an area with relatively low activity.
- 10. Increased workplace accident risk due to the mere occurrence of the activity.
- 11. Creation of dust and disturbance of specific soil layers due to earthwork activities.
- 12. Erosion and contamination of topsoil.
- 13. Generation of standard building rubble & the transportation thereof to the appropriate licensed landfill site.
- 14. Generation of construction noise created by earthwork machinery and other applicable tooling used for the establishment of the base station.

#### (Operational phase)

- 7. Increased electricity consumption on the existing supply grid.
- 8. Noise generation by air conditioning units and by backup generator if electricity supply fails.
- 9. Non-ionised electromagnetic fields emissions on allocated frequency.
- 10. Increase in potential air traffic obstacles.
- 11. Visual impact of the 45m monopole mast painted red & white on short, medium and long distance observation.
- 12. Increased mobile telecommunication network capacity.

#### Indirect impacts:

## (Planning & design phase)

The property coverage and development potential has been taken into consideration in selecting the position of the activity. The exact position of the activity on the property was determined, in consultation with the property owner, to minimise the possible impact on existing operations and future development plans or phases. Therefore the commercial value of the property is maintained.

Electricity will be supplied from the existing electricity grid. Minimum usage due to economical and energy efficient design.

## (Construction phase)

Additional waste at appropriately certified dumping site.

#### (Operational phase)

- 3. Minute increase in electricity generation base material usage.
- 4. Increased use of quality telecommunication services with the appropriate revenue

increase and potential increased economic activity and financial returns.

## Cumulative impacts:

(Planning & design phase)

No cumulative impacts relating to the design and planning phases are applicable.

(Construction phase)

Construction activity.

(Operational phase)

Increased telecommunication infrastructure availability and quality.

### (Decommissioning & closure phase)

#### Direct impacts:

- 4. Establishment of new mobile telecommunication infrastructure elsewhere to fill the network coverage gap caused by decommissioning.
- 5. Creation of waste due to decommissioning.
- 6. Disturbed area.

## **Indirect impacts**:

Potential waste of resources.

Cumulative impacts:

None

#### Alternative 3 – APPLIED FOR EXEMPTION

#### 3. ENVIRONMENTAL IMPACT STATEMENT

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 1 (preferred alternative)

The positive impact of the proposed activity will, taking into consideration the implementation of mitigating measures to minimise the negative impacts on the environment, have a positive overall impact.

## Physical impacts:

- The planning & design of the telecommunication base station is considerate of operational and public demand needs and is done on the principle of minimising any negative impacts on the receiving environment.
- The negative impacts during the construction phase, as indicated earlier in the assessment report, are temporary and will not have a long term effect on the proposed development or immediate area. These impacts will last for a maximum of 6 weeks only.
- 3. The permanent visual impact of the lattice mast is the highest contributing negative impact of the proposed activity on the receiving environment. Lattice design mast painted red & white provides maximum mitigation with maximum visibility from the air to prevent aircraft accidents (day & night markings prescribed by the SACAA). 45m Red & white lattice mast provides low mitigation of the short range visual impact from the ground. However the population density is low and therefore this impact is

- regarded of low significance. 45m Red & white lattice mast provides high mitigation of the medium to long range visual impact from the ground due to the blending capability of the transparent mast against the sky background.
- 4. The site is designed for use by additional telecommunication service providers. This mitigation measure will possibly prevent the establishment of additional base stations by other operators within the immediate area.

### **Biological impacts:**

5. No expected or proven biological impacts will result from the proposed development. The base station is situated in an area that is already disturbed by human activity. Only 100m² of disturbed grassland and shrublets will be removed from the footprint area.

## Socio-economic impacts:

The local electricity supply grid can accommodate the additional load required by the base station. The base station design requires a 3-phase electricity supply at a maximum demand of 80A.

There is only one other feasible design alternative for the purposes of this activity as described under Alternative 2. The proposed position is based on the radio planning of Cell C (Pty) Ltd. The location of this site is the position to provide optimum coverage on the Cell C (Pty) Ltd network.

#### Alternative 2

The positive impact of the proposed activity will, taking into consideration the implementation of mitigating measures to minimise the negative impacts on the environment, have a positive overall impact.

### Physical impacts:

- 7. The planning & design of the telecommunication base station is considerate of operational and public demand needs and is done on the principle of minimising any negative impacts on the receiving environment.
- 8. The negative impacts during the construction phase, as indicated earlier in the assessment report, are temporary and will not have a long term effect on the proposed development or immediate area. These impacts will last for a maximum of 6 weeks only.
- 9. The permanent visual impact of the monopole mast is the highest contributing negative impact of the proposed activity on the receiving environment. Monopole design mast painted red & white provides maximum mitigation with maximum visibility from the air to prevent aircraft accidents (day & night markings prescribed by the SACAA). 45m Red & white monopole mast provides no mitigation of the short range visual impact from the ground. 45m Red & white monopole mast provides low mitigation of the medium to long range visual impact from the ground due to no blending capability of the more solid type mast against the sky background.
- 10. The site is designed for use by additional telecommunication service providers. This mitigation measure will possibly prevent the establishment of additional base stations by other operators within the immediate area. However, due to more limitations regarding equipment capacity and wind load capacity on a monopole mast, sharing options on this mast are very limited.

### **Biological impacts:**

11. No expected or proven biological impacts will result from the proposed development. The base station is situated in an area that is already disturbed by human activity. Only 100m<sup>2</sup> of disturbed grassland and shrublets will be removed from the footprint area.

#### Socio-economic impacts:

12. The local electricity supply grid can accommodate the additional load required by the base station. The base station design requires a 3-phase electricity supply at a maximum demand of 80A.

There is only one other feasible design alternative for the purposes of this activity as described under Alternative 1 (Preferred Alternative. The proposed position is based on the radio planning of Cell C (Pty) Ltd. The location of this site is the position to provide optimum coverage on the Cell C (Pty) Ltd network.

#### Alternative 3

#### APPLIED FOR EXEMPTION

## No-go alternative (compulsory)

## Direct impacts:

- Status quo: Unacceptable mobile telecommunication coverage and quality standards on the Cell C (Pty) Ltd network within the target area;
- Status quo: Limitations in terms of mobile telecommunication network choice for residents, businesses and the general public;
- No visual impact on the base station, specifically the mast structure, on the short, medium and long distance visual impact.

#### Indirect impacts:

- Non performance in terms of the Cell C (Pty) Ltd license conditions as prescribed by government.
- Potential loss of income for businesses and individuals in the area currently contracted on the Cell C (Pty) Ltd network as well as potential losses on commercial opportunities, clients etc. for the network operator.

### Cumulative impacts:

- Potential negative economical impact on the mobile telecommunication coverage target area.
- Cell C (Pty) Ltd not fulfilling the applicable required license conditions.
- Incomplete Cell C (Pty) Ltd mobile telecommunication network.

## SECTION E. RECOMMENDATIONS OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
YES	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

-

If "YES", please 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:

 107560 Lootsberg Pass East - Telecommunication base station with a 45m lattice mast painted red and white to be established on the Alternative 1 (preferred) proposed position as indicated on the attached plans - The farm Farm 305 Middelburg RD, at the following coordinates:

LATITUDE (S) 31° 50.142'

LONGITUDE (E) 24° 51.874'

- 2. Measures to be implemented for the duration of the construction period to prevent unauthorised access to the construction site.
- 3. Dust suppression measures to be implemented during earthworks.
- 4. Appropriate arrangements to be made with the property owner for the use of existing sanitation facilities by construction workers or otherwise for the provision of chemical toilets during the construction phase.
- 5. Telecommunication base station to be enclosed with a 2.4m high galvanised steel palisade fence.
- 6. Top soil to be stored separately for appropriate landscaping distribution on completion of construction.
- 7. Required electricity connection point to be established in consultation with the property owner and electricity supplier.
- All the prevention and mitigation measures described in this report and in the EMPr must be implemented and monitored.

## **SECTION F: APPENDICES**

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: Environmental Management Programme (EMPr)

Appendix G: Other information