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Department: Environment & Nature Conservation NORTHERN CAPE PROVINCE REPUBLIC OF SOUTH AFRICA

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	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

Basic Assessment Report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

- This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 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.
- This report format is current as of 08 December 2014. It is the responsibility of the applicant to
 ascertain whether subsequent versions of the form have been published or produced by the
 competent authority
- 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.
- Where applicable tick the boxes that are applicable in the report.
- An incomplete report may be returned to the applicant for revision.
- 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.
- This report must be handed in at offices of the relevant competent authority as determined by each authority.
- No faxed or e-mailed reports will be accepted.
- The signature of the EAP on the report must be an original signature.
- The report must be compiled by an independent environmental assessment practitioner.
- 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.
- A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?YESNOIf YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialistappointed and attach in Appendix I.

ACTIVITY DESCRIPTION

a) Describe the project associated with the listed activities applied for

The proposed development of a 25m high telecommunications mast on Erf 1644, Calvinia Sportsgrounds, Dorp Street, Calvinia, Northern Cape.

The proposed development of a 25m high telecommunications mast and associated infrastructure located on Erf 1644, Calvinia Sportsgrounds, Off Dorp Street, Calvinia, Northern Cape. No new roads will be constructed as an existing access road will be utilised to gain access to the proposed site. The total area of land to be cleared is 56m² to erect a 25m high monopole mast with antennas situated on the top of the proposed structure. The mast's base station will be closed with a steel palisade fence. Electricity to power the mast will be sourced from the land owner. The site has no slope and is located on a flat surface area. The site co-ordinates are **31°28'16.60"S 19°45'42.32"E**.



Figure 1: Arial image showing the location of the proposed site (yellow placemark) and the surrounding areas.

Government Notice R324 (Listing Notice 3):

Activity No. 3: The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower—

(a) is to be placed on a site not previously used for this purpose; and

(b) will exceed 15 metres in height-

but excluding attachments to existing buildings and masts on rooftops.

g. Northern Cape

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 management 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;

(ff) 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; or

(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; or

iii. Inside urban areas:

(aa) Areas zoned for use as public open space; or

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

Site Description

The proposed development of a 25m high telecommunications mast and associated infrastructure located on Erf 1644, Calvinia Sportsgrounds, Off Dorp Street, Calvinia, Northern Cape. No new roads will be constructed as an existing access road will be utilised to gain access to the proposed site. The total area of land to be cleared is 56m² to erect a 25m high monopole mast with antennas situated on the top of the proposed structure. The mast's base station will be closed with a steel palisade fence. Electricity to power the mast will be sourced from the land owner. The site has no slope and is located on a flat surface area. There is no natural vegetation on site, and the site is totally transformed due to past development activities on the property. The site co-ordinates are 31°28'16.60"S 19°45'42.32"E. Please refer to Appendix A1 for the locality map as well as Appendix C (site plans) and Appendix B for photographs of the proposed site.

Civil and Electrical Services

Electricity will be sourced from the land owner. The Proposed development of a telecommunication mast will not produce waste or use water during its operational phase.

<u>Access</u>

Access to the site will be gained off Dorp Street, and later a gravel road towards the site.



Figure 2: Google Earth aerial image showing the access road to the proposed site (yellow placemark).

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327, 325 and	Description of project activity
324	
GN R. 324 – Item 3 : The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower—	The proposed development of a 25m high telecommunications mast and base station on Erf 1644, Calvinia Sportsgrounds, Calvinia, Northern Cape.
(a) is to be placed on a site not previously used for this purpose; and	The proposed site is located within the urban area of Calvinia and the erf/property is zoned Public
(b) will exceed 15 metres in height—	Open Space 2.
but excluding attachments to existing buildings and masts on rooftops.	
g. Northern Cape	
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 management 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;	
(ff) 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; or	
(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; or	
iii. Inside urban areas:	
(aa) Areas zoned for use as public open space; or	
(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.	

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 as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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.

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. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

The current site is the only location considered. It is strategically placed due to its proximity to existing masts, coverage needed and thus the coverage it can provide.

Alternative 1 (preferred alternative)				
Description	Lat (DDMMSS) Long (DDMMSS)			
	Alternative 2			
Description	Lat (DDMMSS) Long (DDMMSS)			
Alternative 3				
Description	Lat (DDMMSS) Long (DDMMSS)			

In the case of linear activities:

Alternative:	Latitude (S):	Longitude (E):
Alternative S1 (preferred)		
Starting point of the activity		
Middle/Additional point of the activity		
End point of the activity		

Alternative S2 (if any)	
Starting point of the activity	
 Middle/Additional point of the activity 	
End point of the activity	
Alternative S3 (if any)	
Starting point of the activity	
Middle/Additional 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 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Design or Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The proposed development of a 25m high telecommunications monopole mast on Erf 1644, Calvinia Sportsgrounds, Dorp Street, Calvinia, Northern Cape.	31°28'8.18"S	19°46'12.63"E
<u>Monopole Mast – (Preferred design)</u>		
A monopole mast is the preferred design for the applicant, as it can hold more equipment than a tree mast but is less visually intrusive than a lattice mast.		
In summary:		
A lattice mast was considered the preferred alternative option for the following reasons:		
 It will be able to hold more equipment if required by other service providers. 		
 It will be less visually intrusive and more aesthetically pleasing. 		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
The proposed development of a 25m high telecommunications lattice mast on Erf 1644, Calvinia Sportsgrounds, Dorp Street, Calvinia, Northern Cape	31°28'8.18"S	19°46'12.63"E
Lattice Mast – (Alternative design)		
A lattice mast is a viable option for the applicant, as it is able to hold more equipment and is considered as an alternative.		
However, the construction of a lattice mast was not considered as the best practicable option as it would be more visually intrusive and less aesthetically pleasing. Due to the location of the communication mast,		

	1	
a lattice mast was not considered appropriate, as it would be out of context with the surrounding area and a more expensive design.		
In summary:		
A lattice mast was considered a viable option for the following reasons:Able to hold more equipment if required;		
 A lattice mast was rejected as the preferred alternative for the following reasons: A lattice mast will not blend in with the surrounding area; and Due to the nature of the surrounding area, visually, the lattice mast would be out of context with the surroundings More expensive 		
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
	31°28'8.18"S	19°46'12.63"E
<u>Tree Mast – (Alternative design)</u>		
A tree mast is also considered as a viable option for the applicant. However, the mast cannot hold as much equipment as a lattice mast, and the tree mast will not blend in as well with the surrounding area as there are no other tall trees on the site and will therefore look out of place.		
In summary:		
 A Tree mast was considered as an alternative design for the following reasons: The design will be able to hold the necessary required equipment for now; and The proposed mast will be less visually intrusive than a lattice mast, due to a lack of tall trees on site. 		
However, the Tree mast design was rejected as the preferred alternative for the following reasons:		
 A tree mast will not blend in as well with the surrounding area as there are no other tall trees on the site; and It is not able to hold as much equipment (for other service providers) as the monopole mast can, if required in future. 		

c) Technology alternatives

No technology alternatives were considered.

Alternative 1 (preferred alternative)	
 Alternative 2	

Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives) No other alternatives were considered.

Alternative 1 (preferred alternative)	
Alternative 2	
Alternative 3	

e) No-go alternative

This is the option of not installing the proposed mast, and its associated infrastructure. Although this option would result in no potential negative environmental impacts, the social benefits from implementing the activity would not be achieved. A more efficient telecommunications service, considered as essential for the business sector and private/social communication, would therefore not be achieved. The proposed activity is not expected to have any negative environmental impacts; therefore, there are no environmental benefits from not implementing the activity.

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

PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	Size of the activity:
Alternative A1 (preferred activity alternative)	Approximately 56m ²
Alternative A2 (if any)	
Alternative A3 (if any)	

or, for linear activities:

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	m
Alternative A2 (if any)	m
Alternative A3 (if any)	m

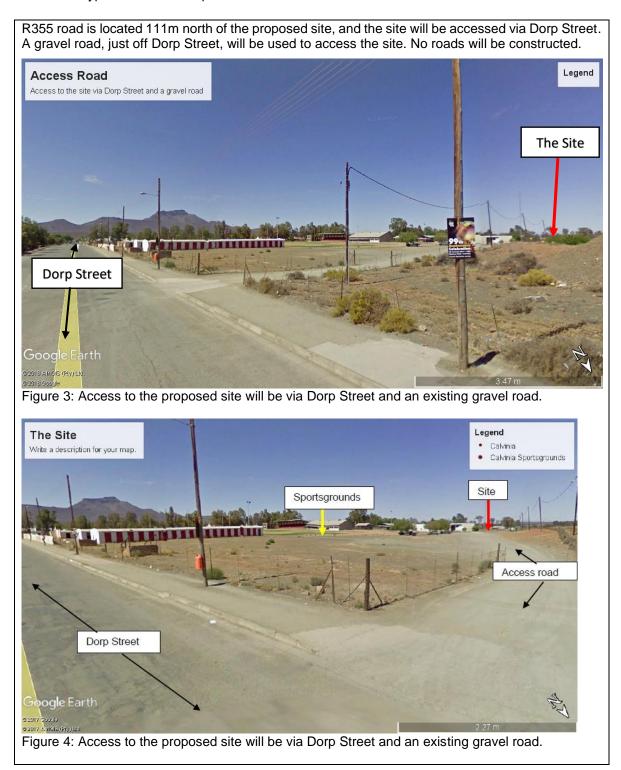
b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	m ²
Alternative A2 (if any)	m²
Alternative A3 (if any)	m ²

• SITE ACCESS

Does ready access to the site exist?	YES	NO
f NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:



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.

LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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).

LAYOUT/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:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

• 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.

FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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.

ACTIVITY MOTIVATION

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

• Is the activity permitted in terms of the property's existing land use rights?	YES	NO	Please explain		
The property is zoned Public Open Space 2, and Calvinia Sportsfields is located on the property. A consent-use application will be submitted once an Environmental Authorization has been issued.					
• Will the activity be in line with the following?					
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain		
The proposed activity is not considered to cause Development Framework ("PSDF") of the Norther application will be lodged. This application is for the which is considered as part of the essential services	n Capo e const	e Province. However, a co ruction of a telecommunica	onsent use		
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain		
The proposed site is located within the urban edge (I premises of Calvinia Sportsfields. Please see figure			ated on the		
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO	Please explain		
The proposed development is not considered to have a negative impact on Hantam Municipality's IDP. According to the Hantam Municipality IDP 2015-2016, the Hantam area consists largely of non- arable, low potential grazing land and is therefore ideally suited to sheep farming.					
This application is for the construction of a telecommunications mast, which is considered as part of the essential services for the greater community. A consent-use application will be submitted once an Environmental Authorization has been issued.					

(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
Unknown	1	I	
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NQ	Please explain
The Namakwa Environmental Management Framew The approval will not compromise the integrity of the for the area, because the site is already completely t	existin	g environmental manageme	
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
According to the Namakwa District Municipality's technology throughout the district is limited to the u limited towards the eastern side with majority of the a An alarming statistic is that the majority of the hous telecommunications. It is therefore imperative that te developed to cater for this specific need.	rban a reas ha seholds	reas and the National routs aving no access to cell phone s on average does not have	Access is e coverage. e access to
 Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)? 		NO	Please explain
The proposed development of a 25m high telecom Municipality's IDP or SDF. The property is zoned Put located on the property. A consent-use applicatio Authorization has been issued. The site is completely development activities on the property. Due to the availability of cellular communication, and	olic Ope n will y transf	en Space 2, and Calvinia Sp be submitted once an Env ormed from its natural state	ortsfields is /ironmental due to past
telecommunication mast, it is considered to form p infrastructure of the greater community.			
• Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
 The benefits of telecommunications services in modern society are potentially limitless. The proposed activity will increase the coverage of these telecommunications services, including providing a more reliable and wider coverage. The social benefits are considered to greatly outweigh any potential negative environmental impacts from the proposed activity. The activity would create a more efficient telecommunications service, considered as essential to the business and private sector. The construction of the 			

telecommunications mast is therefore considered as part of the essential services for the greater community. Are the necessary services with adequate • capacity currently available (at the time of application), or must additional capacity be Please YES NO created to cater for the development? explain (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.) The proposed activity will only require minimal amounts of power, which will be sourced directly from the land owner. The proposed activity will not require water, solid waste removal, storm water or sewerage services from the local council. Is this development provided for in the • infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality Please YES (priority and placement of services and NO explain opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.) The proposed development is unlikely to have a negative impact on the municipality's infrastructure planning. A consent-use application will be submitted once an Environmental Authorization has been issued. The site is completely transformed from its natural state due to past development activities on the property. Is this project part of a national programme • Please YES NO to address an issue of national concern explain or importance? N/A Do location factors favour this land use • (associated with the activity applied for) at Please YES NO (This relates this place? to the explain contextualisation of the proposed land use on this site within its broader context.) The site has been identified as an ideal location for the proposed project as it will provide the necessary coverage required. Please Is the development the best practicable • YES NO environmental option for this land/site? explain The best practicable environmental option for the site would be the no-go option. However, any potential benefits would be considered minimal. Due to the nature of the activity, and the size and location of the site, any potential negative environmental impacts are expected to be negligible. The socio-economic benefits of the activity to the community are considered to greatly outweigh any environmental benefits of not implementing the activity. • Will the benefits of the proposed land Please YES NO use/development outweigh the negative explain impacts of it? The social benefits are considered to greatly outweigh any potential negative environmental impacts from the activity. The activity would create a more efficient telecommunications service, considered

as essential to the business and private sector. No sexpected by the proposed development; therefore, the negative impacts of it. The implementation of the improve the positive impacts during its operational private sector.	the benefits of the EMPr will manag	e development wi	ill outweigh	
• Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain	
The proposed activity is not expected to set a preced more and more for data transfer and not only voice business, education and for the public/private user, and economic development. The proposed telecome the socio-economics of the surrounding area as it wit faster internet coverage and affordable cellular rates	calls. Such data and have thus be nunication mast w Il also provide cell	capabilities are in ecome paramour ill have a positive	mportant in it for social e impact on	
Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain	
The rights of residents, local farmers, the community as the proposed activity is expected to have positive and surrounding areas.				
• Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain	
The activity is not expected to compromise the urban	n edge.			
• Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain	
"Provide for broadband coverage to all households by (POPs) in district municipalities, extend new Infraco fi establish POPs and fibre connectivity at local level rural areas. While the private sector will invest in networks, government will co-invest for township ar school and health connectivity".	bre networks acros , and further pene n ICT infrastructur	ss provinces linki trate the networl e for urban and	ng districts, < into deep d corporate	
• What will the benefits be to society in gener communities?	ral and to the loc	Please	Please explain	
The benefits of telecommunications services in modern society are potentially limitless. The proposed activity will increase the coverage of these telecommunications services, including providing a more reliable and wider coverage. Cellular communication is used more and more for data transfer and not only voice calls. Such data capabilities are important in business, education and for the public/private user, and have thus become paramount for social and economic development. The proposed telecommunication mast will have a positive impact on the socio-economics of the surrounding area as it will also provide cellular users with the option of faster internet coverage and affordable cellular rates.				
Any other need and desirability considerati proposed activity?	ons related to t	he Please	explain	
 N/A How does the project fit into the National De 2030? 	velopment Plan f	or Please	explain	
The NDP indicate that South Africa needs to minfrastructure in order to support economic growth				

imperative that local municipalities explore the option of developing more telecommunications infrastructure within their municipal boundaries in order to achieve the telecommunication ideals as captured in the NDP.

• Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

The general objectives of Integrated Environmental Management have been taken into account through the following:

- The actual and potential impacts of the activity on the environment, socio-economic conditions and cultural heritage have been identified, predicted and evaluated, as well as the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impact, maximizing benefits and promoting compliance with the principles of environmental management please refer to Section D below.
- The effects of the activity on the environment have been considered before actions taken in connection with them.
- Adequate and appropriate opportunity for public participation was ensured through the public participation process please refer to Section C and Appendix E for the public participation information, including the list of identified Interested and Affected parties, as well as the methods for identifying and informing I&APs of the application and proposed activity.
- The environmental attributes have been considered in the management and decisionmaking of the activity – an EMPr has been included (Appendix G) with the proposed activity and must adhere to the requirements of all applicable state Authorities.
- Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

The principles of environmental management as set out in section 2 of NEMA have been taken into account. The principles pertinent to this activity include:

- People and their needs have been placed at the forefront while serving their physical, psychological, developmental, cultural and social interests the proposed activity will have a significant beneficial impact on people, as it will provide much needed economic opportunities.
- Development must be socially, environmentally and economically sustainable. Where disturbance of ecosystems, loss of biodiversity, pollution and degradation, and landscapes and sites that constitute the nation's cultural heritage cannot be avoided, are minimised and remedied.
- Where waste cannot be avoided, it is minimised and remedied through the implementation and adherence of EMPr.
- The use of non-renewable natural resources is responsible and equitable no exploitation of non-renewable natural resources occurs with the proposed activity.
- The negative impacts on the environment and on people's environmental rights have been anticipated and prevented, and where they cannot be prevented, are minimised and remedied *refer to Section D below*.
- The interests, needs and values of all interested and affected parties have been taken into account in any decisions through the Public Participation Process *please refer to Section C and Appendix E for the public participation information.*
- The social, economic and environmental impacts of the activity have been considered, assessed and evaluated, including the disadvantages and benefits *refer to Section B below.*

The effects of decisions on all aspects of the environment and all people in the environment have been taken into account, by pursuing what is considered the best practicable environmental option – the proposed activity is expected to have minimal/negligible environmental impacts, especially after mitigation measures as described under Section D, Section E, and in the EMPr are implemented.

• 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	Applicability to the project	Administering authority	Date
National Environmental Management Act, 1998 (Act 107 of 1998) ("NEMA")	Environmental Authorisation	Department of Environment and Nature Conservation ("DENC").	This EIA application for environmental authorisation.
Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)	Consent-use	Local Municipality	Not yet

WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	¥E\$	NO
If YES, what estimated quantity will be produced per month?	Unknow	n m³

Minimal amount of building rubble will be generated due to construction activities.

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

The general solid waste generated during construction will be consolidated on site during construction, and disposed of at the nearest approved municipal landfill site.

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

The general solid waste generated during construction will be consolidated on site during construction and disposed of at the nearest approved municipal landfill site.

Will the activity produce solid waste during its operational phase?	YES	NO
If YES, what estimated quantity will be produced per month?		m ³
How will the solid waste be disposed of (describe)?		

N/A

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

N/A

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

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 whether it is necessary to change to an application for scoping and EIA. Can any part of the solid waste be classified as hazardous in terms of the NEM:WA? <u>YES</u> NO If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

N/A, the activity will not produce waste.

Is the activity that is being applied for a solid waste handling or treatment facility? YES NO If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO
If YES, what estimated quantity will be produced per month?		m³
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO

Will the activity	y produce effluent that will be treated and/or disposed of at another	YES	NO
facility?			
If YES, provide	e the particulars of the facility:		
Facility			
name:			
Contact			
person:			
Postal			
address:			
Postal code:			
Telephone:	Cell:		
E-mail:	Fax:		

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions	YES	NO
and dust associated with construction phase activities?		
If YES, is it controlled by any legislation of any sphere of government?	YES	NO
If YES, the applicant must consult with the competent authority to determine whether	it is neces	ssary to
change to an application for scoping and EIA.		
If NO, describe the emissions in terms of type and concentration:		

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

NO

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?	YES	NO		
If YES, is it controlled by any legislation of any sphere of government?	YES	NO		
Describe the noise in terms of type and level:				
The proposed communications mast is not expected to produce any noise or odours during the operational phase. Some noise can be expected during the construction phase, but this will be temporary and is expected to be negligible.				

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, dam or lake	Other		ivity will e water
-						
If water is to be extracted from groundwater, river, stream, dam, lake or any other					N/A	
natural feature, please indicate the volume that will be extracted per month:						
Does the activity require a water use authorisation (general authorisation or water					YES	NO
use license) from the Department of Water Affairs?						
If YES, please provide proof that the application has been submitted to the Department of Water Affairs						Affairs.

ENERGY EFFICIENCY

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

All equipment is ISO 14001 compliant.

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

N/A - All equipment is ISO 14001 compliant.

SECTION B: 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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

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

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property	Province	Northern Cape					
description/physical	District	-	Namakwa District Municipality				
address:	Municipality						
	Local	Hantam Municipality					
	Municipality						
	Ward Number(s)	Ward 2					
	Farm name and	Erf 1644					
	number						
	Portion number	Erf 1644					
	SG Code	C01500020000164400000					
	•	nber of properties are involved (e.g. list to this application including the san		<i>,</i> .			
Current land-use zoni local municipality IDP		lic Open Space 2 zoned					
	zon also	In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.					
Is a change of land-use	s a change of land-use or a consent use application required? YES			NO			
	consent-use application will be submitted to the local municipality upon receipt an environmental decision.						

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	1:7,5 – 1:5	Steeper
							than 1:5
Α	Iternative S2	(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
A	Iternative 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

LOCATION IN LANDSCAPE

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

2.2 Plateau	2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain	2.6 Plain	Х	2.9 Seafront	
2.10 At sea				

GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		Alte	rnative	S2	Alternative S3		
			(if a	าу):		(if a	ny):	
Shallow water table (less than 1.5m deep)	YES	NO	YE	S N	0	YE	ES	NO
Dolomite, sinkhole or doline areas	YES	NO	YE	S N	0	YE	ES	NO
Seasonally wet soils (often close to water	YES	NO	YE	S N	0	YE	S	NO
bodies)								
Unstable rocky slopes or steep slopes with	YES	NO	YE	S N	0	YE	ES	NO
loose soil								
Dispersive soils (soils that dissolve in water)	YES	NO	YE	S N	0	YE	ES	NO
Soils with high clay content (clay fraction more	YES	NO	YE	S N	0	YE	S	NO
than 40%)								
Any other unstable soil or geological feature	YES	NO	YE	S N	0	YE	S	NO
An area sensitive to erosion	YES	NO	YE	S N	0	YE	ES	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.

• GROUNDCOVER

Indicate the types of groundcover present on the site. 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 [⊭]	Natural veld with scattered aliens [⊭]	Natural veld with heavy alien infestation [⊑]	Veld dominated by alien species ^E	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.

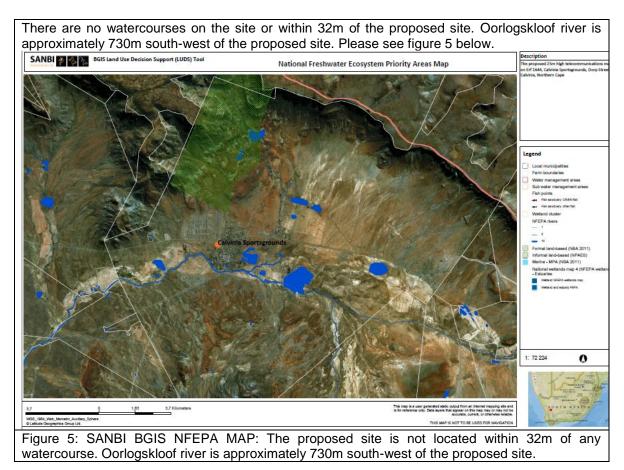
• SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO	UNSURE
-----------------	------------	----	--------

Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.



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:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ⁺
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial AN	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line ^N	Museum

Power station	Major road (4 lanes or more) N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe) Calvinia Correctional Services

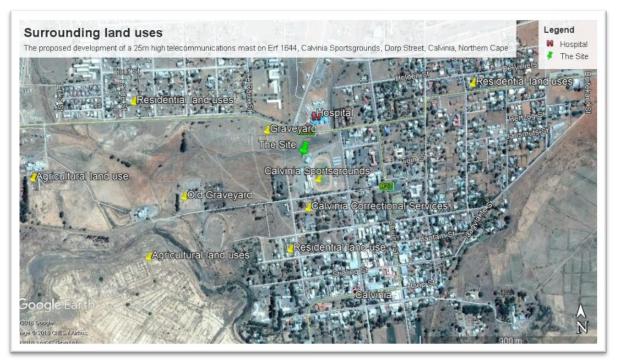


Figure 6: The site (green placemark) and surrounding land uses (yellow placemarks).

If any of the boxes marked with an "^N "are ticked, how this impact will / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?		NO
Buffer area of a protected area?		NO
Planned expansion area of an existing protected area?	YES	NO

Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A. Please refer to Appendices A1 and A2.

The proposed site is not located within a Critical Biodiversity Area (CBA) or Ecological Support Area (ESA). The site is totally transformed due to past development activities. There is no natural vegetation on site.

CULTURAL/HISTORICAL FEATURES

section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the Un	it elements, as defined in YES NO
including Archaeological or paleontological sites, on or close (within 20m) to the Un	99, (Act No. 25 of 1999),
	close (within 20m) to the Uncertain
site? If YES, explain:	

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the 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 Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If YES, please provide proof that this permit application has been submitted to SA provincial authority.	HRA or the	e relevant

A copy of the draft Basic Assessment Report ("BAR") will be provided to the South African Heritage Resources Agency ("SAHRA") to provide comment on the draft BAR.

SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

The Hantam Local Municipality is a Category B municipality situated within the Namakwa District in the Northern Cape Province. It is the largest municipality of six in the district, making up a third of its geographical area.

Of the 7 085 economically active (employed and unemployed but looking for work) people in the municipality, 11,8% are unemployed. Unemployment and poverty affects a large number of people within the municipal area. The unemployment rate for the youth is 15, 3% according to the 2011 census.

Economic profile of local municipality:

According to the Hantam Municipality IDP 2015-2016, agriculture forms the backbone of the economy in the municipal area and this sector has the most employment opportunities. Despite the harsh climate and poor carrying capacity of the veld, it still offers opportunities for growth and employment creation. 11% of the GDP contribution in the Hantam Municipality is attributed to Agriculture.

Northern Cape Namakwa DM Hantam LM Agriculture, forestry & fishing 6.2% 4.5% 11.0% 34.9% 23.4% Mining & quarrying 1.2% Manufacturing 3.6% 2.2% 4.5% Electricity, gas & water 2.1% 1.1%3.4% 1.7% 2.4% 3.0% Construction Wholesale & retail trade. catering & 11.7% 9.5% 9.9% accommodation Transport, storage & communication 10.2% 10.7% 10.8% Finance, insurance, real estate & business 15.3% 11.0% 23.1% services Community, social & personal services 10.7% 11.9% 14.7%

Hantam - Integrated Development Plan: 2015-2020

General government	15.1%	11.8%	18.4%
Total	100%	100%	100%

Figure 7: Showing the GDP contribution of Hantam.

The sectors that contributed the most to the Hantam Local Municipality, according to the draft Hantam Integrated Development Plan 2015 – 2020, are:

- 1) Finance, insurance, real estate and business services;
- 2) General Government;
- 3) Community, social and personal services;
- 4) Agriculture, forestry and fishing;
- 5) Transport, storage and communication.

Level of education:

According to CENSUS 2011, Hantam Municipality has a total population of 21 578. Of those aged 20 years and older, 18,8% completed Grade 12; 19,7% have some primary education; 8,4% completed primary education; 30,6% completed some secondary education; 8,1% have some higher education and only 14,4% had no schooling.

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	±R 500 000.00	
What is the expected yearly income that will be generated by or as a result of the activity?		nown
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO

How many new employment opportunities will be created in the development and construction phase of the activity/ies?	10
What is the expected value of the employment opportunities during the development and construction phase?	±R 120 000.00
What percentage of this will accrue to previously disadvantaged individuals?	65%
How many permanent new employment opportunities will be created during the operational phase of the activity?	None
What is the expected current value of the employment opportunities during the first 10 years?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	None

BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <u>http://bgis.sanbi.org</u> or <u>BGIShelp@sanbi.org</u>. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systemati	Systematic Biodiversity Planning Category			If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	According to the SANBI BGIS website, the proposed site is not located within a Critical Biodiversity Area (CBA) or Ecological Support Area (ESA). The site is totally transformed due to past town development activities. There is no natural vegetation on site. Please see Appendix A for the Biodiversity Map

According to the SANBI BGIS website, the proposed site is not located within a Critical Biodiversity Area (CBA) or Ecological Support Area (ESA). The site is totally transformed due to past town development activities. There is no natural vegetation on site. The site falls within a National threatened ecosystem where Bokkeveld Sandstone Fynbos Vegetation occur which is classifies as a vulnerable vegetation type. Please see figure 8 and Appendix A for the Biodiversity Map. However, because of the property being completely transformed the impacts will not be of significance because there is no natural vegetation present on the site.

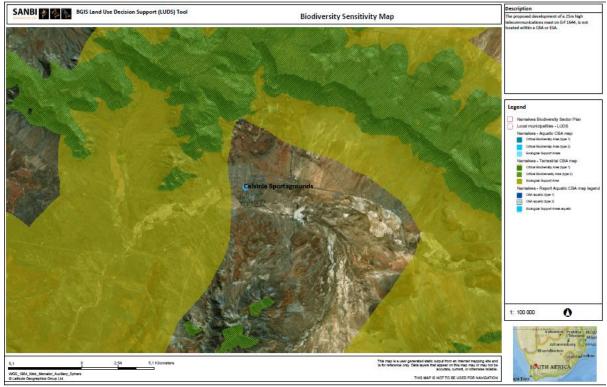


Figure 8: SANBI BGIS Biodiversity Map. The proposed site is not located within an CBA or ESA.

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100 %	The entire site is completely transformed from its natural state due to past development activities on the property. The proposed site has no natural vegetation. See Appendix B for site photographs.

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecos	ystems			Aquatic Ecosystems				
Ecosystem threat	Critical	Wetland (including rivers,		Wetland (including rivers,				
status as per the	Endangered	depressions, channelled and		depressions, channelled and				
National	Vulnerable	unchanneled wetlands, flats,		Esti	Estuary		Coastline	
Environmental		seeps pans, and artificial						
Management:	Least	wetlands)						
Biodiversity Act (Act	Threatened	YES	NO	UNSURE	YES	NO	YES	NO
No. 10 of 2004)			NO	ONCORE	120		120	110

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

In accordance with the National Vegetation map 2012 beta2 of South Africa, the site would historically be covered by Bokkeveld Sandstone Fynbos and this vegetation's ecosystem status is classified as vulnerable. However, there are no natural vegetation left on the already transformed land. The site is completely transformed from its natural state due to past development activities on the property and has no natural vegetation. Please see figure 9 below.

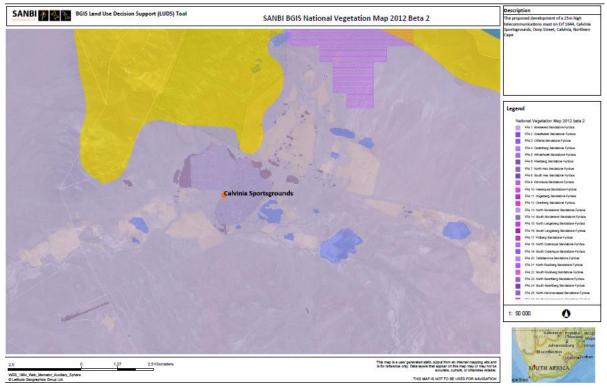


Figure 9: SANBI BGIS map showing the vegetation cover of the area. The site is indicated by the orange dot.

SECTION C: PUBLIC PARTICIPATION

ADVERTISEMENT AND NOTICE

Publication name	Noordwester	
Date published	26 January 2018	
Site notice position	Latitude	Longitude
	See Appendix E	See Appendix E
Date placed	26 January 2018	

Include proof of the placement of the relevant advertisements and notices in Appendix E2 and Appendix E4.

• DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ status	key	stakeholder	Contact details (tel number or e-mail address)

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E5. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

• ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
Please refer to Appendix E	

COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as **Appendix E3**.

AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Department of Agriculture, Forestry & Fisheries	Ms. J. Mans	054 338 5909	054 334 0030		P.O. Box 2782, Upington, 8800
Department of Water Affairs- Northern Cape	Ms. J. Van Wyk- Towell	053 338 5819	053 334 0205		Private Bag X5912, Upington, 8800
Department of Health (HOD)	Ms. Carla Engelbrecht	027 712 1601	027 712 3421		7 Rivier Street, Springbok, 8240
SAHRA	Ms. N. Higgitt	021 462 4502	021 462 4509		P.O. Box 4637, Cape Town, 8000
Namakwa District Municipality: Environmental Health	Mr. Denver Smith	027 712 8000	027 712 8040		Private Bag X20, Van Riebeeck Street, SPRINGBOK, 8240
Hantam Municipality	Mr.J. Swartz	027 341 8500	027 341 8501		Private Bag X14, Calvinia, 8190

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) 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.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5. Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 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.

• 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation	
Alternative 1 (preferred alternative)				
	Direct impacts:	Low-negative	The following measures should be implemented amongst others:	
	Noise impact: Noise from machinery on the property and neighbouring residential properties during construction		 The Contractor shall endeavour to keep noise generating activities to a minimum. 	
			 Construction only to take place during normal working hours. 	
			 Compliance with the appropriate legislation with respect to noise shall be mandatory. 	
	Visual Impact: Unsightly views due to construction site.	Medium – Low Negative	Visual impact mitigation measures will be dealt with in the EMPr The EMPr must be enforced and monitored by the ECO.	
			 The Contractor shall restrict all his activities, materials, equipment and personnel to within the area specified. 	
			 Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. The Contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been 	

Image:				
aspects during construction: Due to the site location and nature of the activity, the activity is not expected to have any impacts on cultural-historical aspects. (including but not limited to fossil bones and/ossil shells, colonial ceramics, any articles of value or antiquity, stone antefacts and bone remains, structures and other built features, rock att and nock engravings) are discovered during construction and operational phase they must immediately be reported to SAHRA. Indirect impacts: Low-Positive Indirect impacts: Low-Positive Socioe-economic inpact Temporary jobs will be created in the construction industry during the construction phase. I. We-Positive Alternative 2 Direct impacts: I.		The loss of cultural or historic	Negligible	cleaned to the satisfaction of the ECO. Immediately after the demolition of the camp site, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape.
Indirect impacts:Low-Positive• No mitigation measures are required.Socio-economic impact Temporary jobs will be created in the construction industry during the construction phase.• Temporary jobs will be created during the construction phase.Alternative 2Impacts:Impacts:ImpactDirect impacts:Impacts:ImpactImpactDirect impacts:ImpactImpactImpactDirect impacts:Impacts:ImpactImpactDirect impacts:ImpactImpactImpactDirect impacts:ImpactImpactImpactDirect impacts:ImpactImpactImpactDirect impacts:Impact <th></th> <td>aspects during construction: Due to the site location and nature of the activity, the activity is not expected to have any impacts on</td> <td></td> <td> (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction and operational phase they must immediately be reported to SAHRA and must not be disturbed further until the necessary approval has been obtained from SAHRA. Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to to the South African Heritage </td>		aspects during construction: Due to the site location and nature of the activity, the activity is not expected to have any impacts on		 (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction and operational phase they must immediately be reported to SAHRA and must not be disturbed further until the necessary approval has been obtained from SAHRA. Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to to the South African Heritage
Indirect impacts: • No mitigation measures are required. Socio-economic impact • Temporary jobs will be created in the construction industry during the construction phase. Cumulative impacts: • Temporary jobs will be created during the construction phase. Alternative 2 • Direct impacts: Indirect impacts: • Indirect impacts: Direct impacts: • Direct impacts: Direct impacts: • Indirect impacts:			Low Desitive	-
Alternative 2 Direct impacts: Indirect impacts: Cumulative impacts: Direct impacts:		Socio-economic impact Temporary jobs will be created in the construction industry during the		required. • Temporary jobs will be created during the
Direct impacts: Indirect impacts: Cumulative impacts: Direct impacts:		Cumulative impacts:		
Indirect impacts: Cumulative impacts: Direct impacts:	Alternative 2			
Cumulative impacts: Direct impacts:		-		
Direct impacts:				
ιηαιrect impacts:		•		
		Indirect impacts:		

	Cumulative impacts:		
Alternative 3			
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go option		L	
	Direct impacts: No development of the proposed mast and its associated infrastructure is undertaken. Indirect impacts:	Low-negative	N/A
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 733 must be included as Appendix F.

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 <u>after</u> 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 A (preferred alternative)

The following is a summary of the potential impacts, and their ratings after mitigation, and probability of occurrence:

Construction phase.

Noise impact - Low (Negative), definite, only during construction phase

Visual impact - Low (Negative), definite, during construction

Loss of cultural or historic aspects - Negligible, Possible

Socio-economic (Job creation) - Low (Positive), definite

Operational Phase

Noise impact – The activity is not expected to have noise impacts during the operational phase

Visual impacts - Medium (Negative), definite, during operational phase

Loss of cultural or historic aspects –The activity is not expected to have any impact on cultural or heritage aspects on the site

Socio-economic - Increased coverage of telecommunications services and its associated benefits – Medium (Positive)

Decommissioning

The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.

Alternative B

Alternative C

No-go alternative (compulsory)

No development of the proposed telecommunications mast and its associated infrastructure will be undertaken - Low-Negative, probable

SECTION E. RECOMMENDATION 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)?

es no

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).

N/A

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.

Compliance with the Environmental Management Programme ("EMPr") and appointment of an Environmental Control Officer during the construction phase.

Is an EMPr attached?

YES NO

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

NAME OF EAP

SIGNATURE OF EAP

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

- Appendix B: Photographs
- Appendix C: Facility illustration(s)
- Appendix D: Specialist reports (including terms of reference)
- Appendix E: Public Participation
- Appendix F: Impact Assessment
- Appendix G: Environmental Management Programme (EMPr)
- Appendix H: Details of EAP and expertise
- Appendix I: Specialist's declaration of interest
- Appendix J: Additional Information