BASIC ASSESSMENT REPORT
IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED)

October 2017

PROJECT TITLE

ATLAS TOWERS (PTY.) LTD: PROPOSED DEVELOPMENT OF A 30m HIGH TELECOMMUNICATIONS LATTICE MAST ON PORTION 7 OF THE FARM JAGERSVLAKTE NO. 292 CALEDON RD, GRABOUW, WESTERN CAPE (MAXWELL FAMILY TRUST)

APRIL 2019

REPORT TYPE CATEGORY	REPORT REFERENCE NUMBER	DATE OF REPORT
Pre-Application Basic Assessment Report (if applicable)[1]	16/3/3/6/7/1/E4/11/1222/18	October 2018
Draft Basic Assessment Report[2]	16/3/3/6/7/1/E4/11/1222/18	April 2019 (This report)
Final Basic Assessment Report[3] or, if applicable Revised Basic Assessment Report[4] (strikethrough what is not applicable)		

Notes:

1. In terms of Regulation 40(3) potential or registered interested and affected parties, including the Competent Authority, may be provided with an opportunity to comment on the Basic Assessment Report prior to submission of the application but must again be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority. The Basic Assessment Report released for comment prior to submission of the application is referred to as the "Pre-Application Basic Assessment Report". The Basic Assessment Report made available for comment after submission of the application is referred to as the "Draft Basic Assessment Report". The Basic Assessment Report together with all the comments received on the report which is submitted to the Competent Authority for decision-making is referred to as the "Final Basic Assessment Report".

2. In terms of Regulation 19(1)(b) if significant changes have been made or significant new information has been added to the Draft Basic Assessment Report , which changes or information was not contained in the Draft Basic Assessment Report consulted on during the initial public participation process, then a Final Basic Assessment Report will not be submitted, but rather a "Revised Basic Assessment Report", which must be subjected to another public participation process of at least 30 days, must be submitted to the Competent Authority together with all the comments received.

DEPARTMENTAL REFERENCE NUMBER(S)

Pre-application reference number:	16/3/3/6/7/1/E4/11/1222/18
File reference number (EIA):	
NEAS reference number (EIA):	
File reference number (Waste):	
NEAS reference number (Waste):	
File reference number (Air Quality):	
NEAS reference number (Air Quality):	
File reference number (Other):	
NEAS reference number (Other):	

CONTENT AND GENERAL REQUIREMENTS

Note that:

1. The content of the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), any subsequent Circulars, and guidelines must be taken into account when completing this Basic Assessment Report Form.
2. This Basic Assessment Report is the standard report format which, in terms of Regulation 16(3) of the EIA Regulations, 2014 (as amended) must be used in all instances when preparing a Basic Assessment Report for Basic Assessment applications for an environmental authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA")and the EIA Regulations, 2014 (as amended) and/or a waste management licence in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("NEM:WA"), and/or an atmospheric emission licence in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA") when the Western Cape Government: Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority/Licensing Authority.
3. This report form is current as of October 2017. It is the responsibility of the Applicant/ Environmental Assessment Practitioner ("EAP") to ascertain whether subsequent versions of the report form have been released by the Department. Visit the Department's website at **http://www.westerncape.gov.za/eadp** to check for the latest version of this checklist.
4. The required information 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 tables may be expanded where necessary.
5. The use of "not applicable" in the report must be done with circumspection. All applicable sections of this report form must be completed. Where "not applicable" is used, this may result in the refusal of the application.
6. While the different sections of the report form only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.
7. Unless protected by law, all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for believing that the information is protected.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this report must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This Report must be submitted to the Department and the contact details for doing so are provided below.
10. Where this Department is also identified as the Licencing Authority to decide applications under NEM:WA or NEM:AQA, the submission of the Report must also be made as follows, for-
    - Waste management licence applications, this report must also (*i.e.*, another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (tel: 021-483-2756 and fax: 021-483-4425) at the same postal address as the Cape Town Office.
    - Atmospheric emissions licence applications, this report must also be (*i.e.*, another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (tel: 021 483 2798 and fax: 021 483 3254) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

CAPE TOWN OFFICE		**GEORGE REGIONAL OFFICE**
REGION 1 **(City of Cape Town & West Coast District)**	**REGION 2** **(Cape Winelands District & Overberg District)**	**REGION 3** **(Central Karoo District & Eden District)**
Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 1) at: Tel.: (021) 483-5829 Fax: (021) 483-4372	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 2) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 2) at: Tel.: (021) 483-5842 Fax: (021) 483-3633	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530 Registry Office 4th Floor, York Park Building 93 York Street George Queries should be directed to the Directorate: Development Management (Region 3) at: Tel.: (044) 805-8600 Fax: (044) 805 8650

TABLE OF CONTENTS:

ACRONYMS USED IN THIS BASIC ASSESSMENT REPORT AND APPENDICES:

BAR	Basic Assessment Report
CBA	Critical Biodiversity Area
DEA	National Department of Environmental Affairs
DEA&DP	Western Cape Government: Environmental Affairs and Development Planning
DWS	National Department of Water and Sanitation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM:ICMA	National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
PPP	Public Participation Process

DETAILS OF THE APPLICANT

Applicant / Organisation / Organ of State:	Atlas Towers (Pty) Ltd.		
Contact person:	Cornelis Wessels		
Postal address:	Cecilia Square, 100 Cecilia Street, Paarl		
Telephone:	(021) 870 1302/ 1368	Postal Code:	7620
Cellular:	072 344 5929	Fax:	
E-mail:	cwessels@Atlastowers.com		

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Name of the EAP organisation:	EnviroAfrica CC		
Person who compiled this Report:	Inge Erasmus/ Bernard de Witt		
EAP Reg. No.:			
Contact Person (if not author):			
Postal address:	P. O. Box 5367		
Telephone:	(021) 851 1616	Postal Code:	7135
Cellular:	0834170800	Fax:	(086) 512 0154
E-mail:	inge@enviroafrica.co.za Bernard@enviroafrica.co.za		
EAP Qualifications:	Inge Erasmus BA Hons - Geography and Environmental Studies Bernard de Witt: B.Sc. Forestry (Stellenbosch); B.A. (Hons) Public Administration (Stellenbosch); National Diploma in Parks and Recreation Management; EIA Short course (UCT); ISO 14001 Auditors course (SABS); and AIAI-SA registration.		

Please provide details of the lead EAP, including details on the expertise of the lead EAP responsible for the Basic Assessment process. Also attach his/her Curriculum Vitae to this BAR.

Inge completed her BA Honours Degree in Geography and Environmental Studies at Stellenbosch University in 2016. Before completing her honours degree Inge gained practical experience as a junior environmental consultant at Hatch Goba in Johannesburg from 2014 until 2015. Inge acted as an environmental control officer on a variety of projects in the Northern Cape, conducting environmental compliance audits, as well as being part of a project team working on a major resettlement project for Kumba Iron Ore.
Inge joined EnviroAfrica in February 2017, generally performing duties as an environmental assessment practitioner with regards to NEMA EIA applications. Inge is currently busy with a variety of projects of which include Basic Assessments and Waste License Applications for mining and development related projects in the Northern Cape. She is also in the process of conducting a variety of Scoping and Environmental Impact Assessments for projects in the Western Cape, obtaining Environmental Authorisation for new storage dams as well as new agricultural developments.

Bernard: After qualifying with a B. Sc. in Forestry and a B. A. (Hons) in Public Administration at the University of Stellenbosch Bernard joined the Department of Forestry as an Indigenous Forest Planner in 1983, going on to become Manager of the Table Mountain Reserve with the Cape Town Council. He then joined Cape Nature Conservation (CNC) and headed its Conservation Planning Section before taking up the position of District Manager of the Boland area (inc. the Hottentots Holland and Kogelberg). As a Regional Ecologist, he co-ordinated managerial and scientific inputs into Provincial Nature Reserves in the Boland, Overberg and West Coast regions. For the last four years of his employment he assessed and evaluated development applications, from an environmental perspective, on behalf of CNC (now DEA&DP). Since he left DEA&DP 10 years ago he has been involved in environmental consulting in the private sector as a member of **EnviroAfrica**.

CVs of the EAP Appendix L.

EXECUTIVE SUMMARY OF THE BASIC ASSESSMENT REPORT:

Proposed Activity

It is proposed that a 30m high telecommunications lattice mast with a 10m x 10m base station be constructed on a flat surface area on Portion 7 of Farm Jagersvlakte 292, Grabouw RD, Cape Town, Western Cape. The base station and mast will be enclosed with a 2.4m high palisade fence with an access gate. Please refer to **Appendix A** for locality maps **Appendix B** for site plans.

Initially, only one site alternative was considered (Alternative A – preferred, on the maps). As per recommendations from Cape Nature, another site alternative was considered (Alternative B – Cape Nature).

A Freshwater specialist was appointed, as per recommendations from BGCMA, to ground truth the desktop findings. Findings from the Freshwater Specialist (discussed in the next section) and as agreed upon by BGCMA concluded that the reasonable and feasible alternative for the construction of the mast would indeed be Alternative A (preferred/ original location). Therefore this report will only focus on Alternative A as the preferred location.

Coordinates for the preferred mast location (Alternative A) is: 34°08'47.7"S 18°59'51.19"E. The area is zoned agriculture and the site is vacant and undeveloped.

Environmental Requirements

The National Environmental Management Act (NEMA, Act 107 of 1998), as amended, makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the competent authority based on the findings of an Environmental Assessment. NEMA is a national act, which is enforced by the Department of Environmental Affairs (DEA). In the Western Cape, these powers are delegated to the Department of Environmental Affairs & Development Planning (DEA&DP).

According to the regulations of Section 24(5) of NEMA, authorisation is required for the following:

Government Notice R327 (Listing Notice 1):

Activity No. 12: "*The development of infrastructure or structures with a physical footprint of 100 m2 or more within 32 m of a watercourse or in front of a development setback".*

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".

i. **Western Cape**:

"i. **All areas outside urban areas**;

ii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas; or

iii. Areas zoned for use as public open space or equivalent zoning within urban areas".

Site Description:

The proposed 30m high telecommunication lattice mast and base station will be located on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The proposed site is zoned agriculture and is vacant and undeveloped. The site has no natural vegetation with grass species dominating the site. The immediate land uses to the north and east of the proposed site consists mainly of agricultural land uses, including horse farming cherry irrigation and chicken farming. Lilly bank farm lies to the eat. The property to the west of the site is a small holding and community/ social centre and further west is an informal settlement. South of the site is also a day care centre.

Environmental considerations:

As described above, initially only one site alternative was considered (Alternative A in the maps). As per recommendations from Cape Nature another site alternative was evaluated (Alternative B – Cape Nature).

Biodiversity:

The site has no natural vegetation. Grass species dominate the site which is a clear sign that the site is previously disturbed. Please refer to Figure 1 below and site photographs **Appendix C**.

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site (Alternative A and B) include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. However, from the site photographs (**Appendix C**) and Figure 1 below it is clear that site has been completely transformed with grass species visible on site.

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicate that the proposed site (Alternative A – preferred) does not fall within any Critical Biodiversity Areas (CBAs) but falls within an Ecological Support Area 2 (ESA2). There areas are not essential for meeting biodiversity targets, but play a role in supporting the functioning of the CBA.

Freshwater:

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative A – preferred) is well away from the 32m buffer. The map also indicates that the site (Alternative A – preferred) falls within a channelled valley-bottom wetland associated with Southwest Sandstone Fynbos.

It is from these findings that Cape Nature suggested (Appendix F1.6 for comments) that an alternative site be evaluated. Cape Nature suggested an alternative location (Alternative B – Cape Nature) 60m southeast of the original alternative (Alternative A – preferred).

BGCMA also provided comment (Appendix F1.7) that the proposed location of the mast (Alternative A) in a wetland will trigger a water use activity in term of Section 21 c & i of the National Water Act (Act 36 of 1998). It was further suggested that a Risk Matrix be submitted to BGCMA to determine the impact of the proposed mast on the wetland.

Based on these comments and recommendations a Freshwater specialist was appointed. The freshwater specialist consulted with BGCMA who recommended that a wetland delineation and Risk Matrix be conducted, considering both proposed alternatives (Alternative A – preferred; Alternative B – Cape Nature).

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicates that the proposed site alternative (Alternative B – Cape Nature) does not fall within an CBA or ESA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative B – Cape Nature) is well away from the 32m buffer. The map also indicates that the alternative site (Alternative B – Cape Nature) does not fall within a channelled valley-bottom wetland.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates both alternatives and concludes:

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a “work plan” from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

Heritage:
Heritage Specialist, CTS Heritage were appointed to conduct a Heritage Screener as well as submit a Heritage NID to HWC. Please refer to Appendix G1 for the Heritage Screener and well as E1 for comments from HWC confirming that the proposed development will not impact on any heritage resources.

Visual:
The visual specialist concluded that a lattice mast is considered the preferred alternative. The principles as set out in the City of Cape Town's Draft Telecommunication Infrastructure Policy: April 2015 states that as a general rule for freestanding telecommunication masts, a slim line monopole should be used in an urban context and lattice mast should be used in a rural context. As the proposed development is situated within the agricultural area of Grabouw, a lattice mast is considered the preferred alternative. The Figure 7 & 8 above (and Appendix G3 in the VIA report) below further indicates that a lattice mast blends in better with the surrounding environment when compared to the monopole mast. The visual specialist recommends a Lattice mast.

The visual specialist further states that if mitigation measures are implemented, the impact of the mast on residents in the area, commuters making use of the N2 and tourists visiting the surrounding tourists attractions, will be low.

Civil and Electrical Services

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

Access:

Access will be gained from Industrial road and an existing gravel road on the property just of Worcester Road (See **Appendix B**). No roads will be constructed.

Conclusion:

The proposed 30m high telecommunication lattice mast will allow for multiple service providers/ mobile network operators to attach and house their equipment (antennas) on the mast, decreasing the need for additional communications masts to be erected in the area. 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 activity would create a more efficient telecommunications service, considered essential to the business and private sector. The data capabilities provided by the proposed mast are also important in business, education and for the public, and has thus become paramount for social and economic development.

The construction of the telecommunications mast is therefore considered as part of the essential services for the greater community. The proposed communications mast is not expected to have any adverse effects on people's health and well-being. It is also 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 the impact is expected to be negligible.

Due to the design and location of the proposed telecommunications mast, the activity is expected to have a low-medium impact on the visual character of the area. The lattice mast blends in better which the surrounding environment when compared to other mast.

Cape Fam mapper indicates that the proposed site is not located within a CBA but within an ESA2 and channel valley bottom wetland (Appendix D). The proposed site has no natural vegetation. No cultural or historical aspects were identified on the site.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates two alternatives considered. BGCMA also conducted a site visit with the freshwater specialist and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative.

Any potential negative impacts during the construction phase are expected to be adequately mitigated through the implementation of the Environmental Management Programme ("EMPr") and the appointment of an Environmental Control Officer ("ECO") during the construction phase.

Considering all the information, it is not envisaged that this proposed development will have a significant negative impact on the environment.

It is therefore recommended that this application be authorised with the necessary conditions of approval as described throughout this BAR.

SECTION A: PROJECT INFORMATION

1. ACTIVITY LOCATION

Location of all proposed sites:	Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape The site is just off Worcester Street, Grabouw
Farm / Erf name(s) and number(s) (including Portions thereof) for each proposed site:	Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape
Property size(s) in m^2 for each proposed site:	5630000m^2 (5,63ha)
Development footprint size(s) in m^2:	Approximately 100m^2
Surveyor General (SG) 21 digit code for each proposed site:	C01300000000029200007

2. PROJECT DESCRIPTION

(a) Is the project a new development? If "NO", explain:

YES	NO

This application is for the installation of a 30m high telecommunications lattice mast with 10m x 10m base station on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape.

(b) Provide a detailed description of the scope of the proposed development (project).

It is proposed that a 30m high telecommunications lattice mast with a 10m x 10m base station be constructed on a flat surface area on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The base station and mast will be enclosed with a 2.4m high palisade fence with an access gate. Please refer to **Appendix A** for locality maps **Appendix B** for site plans.

Initially, only one site alternative was considered (Alternative A – preferred, on the maps). As per recommendations from Cape Nature, another site alternative was considered (Alternative B – Cape Nature).

A Freshwater specialist was appointed, as per recommendations from BGCMA, to ground truth the desktop findings. Findings from the Freshwater Specialist (discussed in the next section) and as agreed upon by BGCMA concluded that the reasonable and feasible alternative for the construction of the mast would indeed be Alternative A (preferred/ original location). Therefore this report will only focus on Alternative A as the preferred location.

Coordinates for the preferred mast location (Alternative A) is: 34°08'47.7"S 18°59'51.19"E. The area is zoned agriculture and the site is vacant and undeveloped.

Electricity supply will be from Eskom and no new roads will be constructed as an existing access road will be utilised to gain access to the proposed site.

<u>Environmental considerations:</u>

As described above, initially only one site alternative was considered (Alternative A in the maps). As per recommendations from Cape Nature another site alternative was evaluated (Alternative B – Cape Nature).

The site has no natural vegetation. Grass species dominate the site which is a clear sign that the site is previously disturbed. Please refer to Figure 1 below and site photographs **Appendix C**.

Figure 1: Photograph indicating that the site proposed for the mast development, the area is dominated by grass species, indicating disturbance

Figure 2: Photo indicating the vegetation that will be lost from the construction of the proposed mast.

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site (Alternative A and B) include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. However, from the site photographs (**Appendix C**) and Figure1 & 2 it is clear that site has been completely transformed with grass species visible on site.

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicate that the proposed site (Alternative A – preferred) does not fall within any Critical Biodiversity Areas (CBAs) but falls within an Ecological Support Area 2 (ESA2). There areas are not essential for meeting biodiversity targets, but play a role in supporting the functioning of the CBA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative A – preferred) is well away from the 32m buffer. The map also indicates that the site (Alternative A – preferred) falls within a channelled valley-bottom wetland associated with Southwest Sandstone Fynbos.

It is from these findings that Cape Nature suggested (Appendix F1.6 for comments) that an alternative site be evaluated. Cape Nature suggested an alternative location (Alternative B – Cape Nature) 60m southeast of the original alternative (Alternative A – preferred).

BGCMA also provided comment (Appendix F1.7) that the proposed location of the mast (Alternative A) in a wetland will trigger a water use activity in term of Section 21 c & i of the National Water Act (Act 36 of 1998). It was further suggested that a Risk Matrix be submitted to BGCMA to determine the impact of the proposed mast on the wetland.

Based on these comments and recommendations a Freshwater specialist was appointed. The freshwater specialist consulted with BGCMA who recommended that a wetland delineation and Risk Matrix be conducted, considering both proposed alternatives (Alternative A – preferred; Alternative B – Cape Nature).

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicates that the proposed site alternative (Alternative B – Cape Nature) does not fall within an CBA or ESA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative B – Cape Nature) is well away from the 32m buffer. The map also indicates that the alternative site (Alternative B – Cape Nature) does not fall within a channelled valley-bottom wetland.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates both alternatives and concludes:

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

Figure 3: Locality map of the proposed site

Please note: This description must relate to the listed and specified activities in paragraph (d) below.

(c) Please indicate the following periods that are recommended for inclusion in the environmental authorisation:

	Unknown. However, seven calendar days' notice, in

(i)	the period within which commencement must occur,	**writing, will be given to the Competent Authority before commencement of construction activities.**
(ii)	the period for which the environmental authorisation should be granted and the date by which the activity must have been concluded, where the environmental authorisation does not include operational aspects;	**The Environmental Authorisation must be valid for five years form the date of issue, and the development must be concluded within ten years from the date of commencement of the first listed activity.**
(iii)	the period that should be granted for the non-operational aspects of the environmental authorisation; and	**The Environmental Authorisation must be valid for five years form the date of issue, and the development must be concluded within ten years from the date of commencement of the first listed activity.**
(iv)	the period that should be granted for the operational aspects of the environmental authorisation.	**Unknown.**

Please note: The Department must specify the abovementioned periods, where applicable, in an environmental authorisation. In terms of the period within which commencement must occur, the period must not exceed 10 years and must not be extended beyond such 10 year period, unless the process to amend the environmental authorisation contemplated in regulation 32 is followed.

(d) List all the listed activities triggered and being applied for.

Please note: The onus is on the applicant to ensure that all the applicable listed activities are applied for and assessed as part of the EIA process. Please refer to paragraph (b) above.

EIA Regulations Listing Notices 1 and 3 of 2014 (as amended):

Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
12	The development of infrastructure or structures with a physical footprint of 100m² or more within 32m of a watercourse or in front of a development setback.	The proposed development footprint will be 100m² within a 500m radius of a channelled valley bottom wetland.	Development
Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. R. 985)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
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*	The proposed development of a 30 high telecommunications mast that is located outside the urban area.	Development and Operational

	(b) will exceed 15 metres in height- *but excluding attachments to existing buildings and masts on rooftops".* <u>i. Western Cape:</u> "i. All areas outside urban areas; ii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas; or iii. Areas zoned for use as public open space or equivalent zoning within urban areas".		

Waste management activities in terms of the NEM: WA (GN No. 921):

Category A Listed Activity No(s):	Describe the relevant <u>Category A</u> waste management activity in writing as per GN No. 921	Describe the portion of the development that relates to the applicable listed activity as per the project description
N/A		

Note: If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I.**

Atmospheric emission activities in terms of the NEM: AQA (GN No. 893):

Listed Activity No(s):	Describe the relevant atmospheric emission activity in writing as per GN No. 893	Describe the portion of the development that relates to the applicable listed activity as per the project description.
N/A		

(e) Provide details of all components (including associated structures and infrastructure) of the proposed development and attach diagrams (*e.g.,* architectural drawings or perspectives, engineering drawings, process flowcharts, *etc*.).

Buildings Provide brief description below:	~~YES~~	NO
No buildings required. There will only be a steel palisade fence (2.4m high) and access gate around the mast for safety and security reasons. Please refer to **Appendix B** for site plans		
Infrastructure (*e.g.,* roads, power and water supply/ storage) Provide brief description below:	~~YES~~	NO
No roads required, existing roads to be utilised. Electricity supply will be from Eskom. No water required. **Appendix B** site plans.		
Processing activities (*e.g.,* manufacturing, storage, distribution) Provide brief description below:	~~YES~~	NO
N/A		
Storage facilities for raw materials and products (*e.g.,* volume and substances to be stored) Provide brief description below:	~~YES~~	NO
N/A		
Storage and treatment facilities for effluent, wastewater or sewage: Provide brief description below:	~~YES~~	NO
N/A		
Storage and treatment of solid waste	YES	NO

Provide brief description below:		
N/A		
Facilities associated with the release of emissions or pollution. Provide brief description below:	YES	NO
N/A		
Other activities (*e.g.,* water abstraction activities, crop planting activities) – Provide brief description below:	YES	NO
N/A		

3. PHYSICAL SIZE OF THE PROPOSED DEVELOPMENT

(a) Property size(s): Indicate the size of all the properties (cadastral units) on which the development proposal is to be undertaken	5630000	m^2
(b) Size of the facility: Indicate the size of the facility where the development proposal is to be undertaken	100	m^2
(c) Development footprint: Indicate the area that will be physically altered as a result of undertaking any development proposal (*i.e.,* the physical size of the development together with all its associated structures and infrastructure)	100	m^2
(d) Size of the activity: Indicate the physical size (footprint) of the development proposal	100	m^2
(e) For linear development proposals: Indicate the length (L) and width (W) of the development proposal	(L)	m
	(W)	m
(f) For storage facilities: Indicate the volume of the storage facility	N/A	m^3
(g) For sewage/effluent treatment facilities: Indicate the volume of the facility (Note: the maximum design capacity must be indicated	N/A	m^3

4. SITE ACCESS

(a) Is there an existing access road?	YES	~~NO~~
(b) If no, what is the distance in (m) over which a new access road will be built?		m

(c) Describe the type of access road planned:

Existing access roads to be used. Access will be from the gravel road coming from Worcester road.

Please note: The position of the proposed access road must be indicated on the site plan.

5. DESCRIPTION OF THE PROPERTY(IES) ON WHICH THE LISTED ACTIVITY(IES) ARE TO BE UNDERTAKEN AND THE LOCATION OF THE LISTED ACTIVITY(IES) ON THE PROPERTY

5.1 Provide a description of the property on which the listed activity(ies) is/are to be undertaken and the location of the listed activity(ies) on the property, as well as of all alternative properties and locations (duplicate section below as required).

The proposed 30m high telecommunication lattice mast and base station will be located on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The proposed site is zoned agriculture and is vacant and undeveloped. The site has no natural vegetation with grass species dominating the site. The immediate land uses to the north and east of the proposed site consists mainly of agricultural land uses, including horse farming cherry irrigation and chicken farming. Lilly bank farm lies to the eat. The property to the west of the site is a small holding and community/ social centre and further west is an informal settlement. South of the site is also a day care centre.

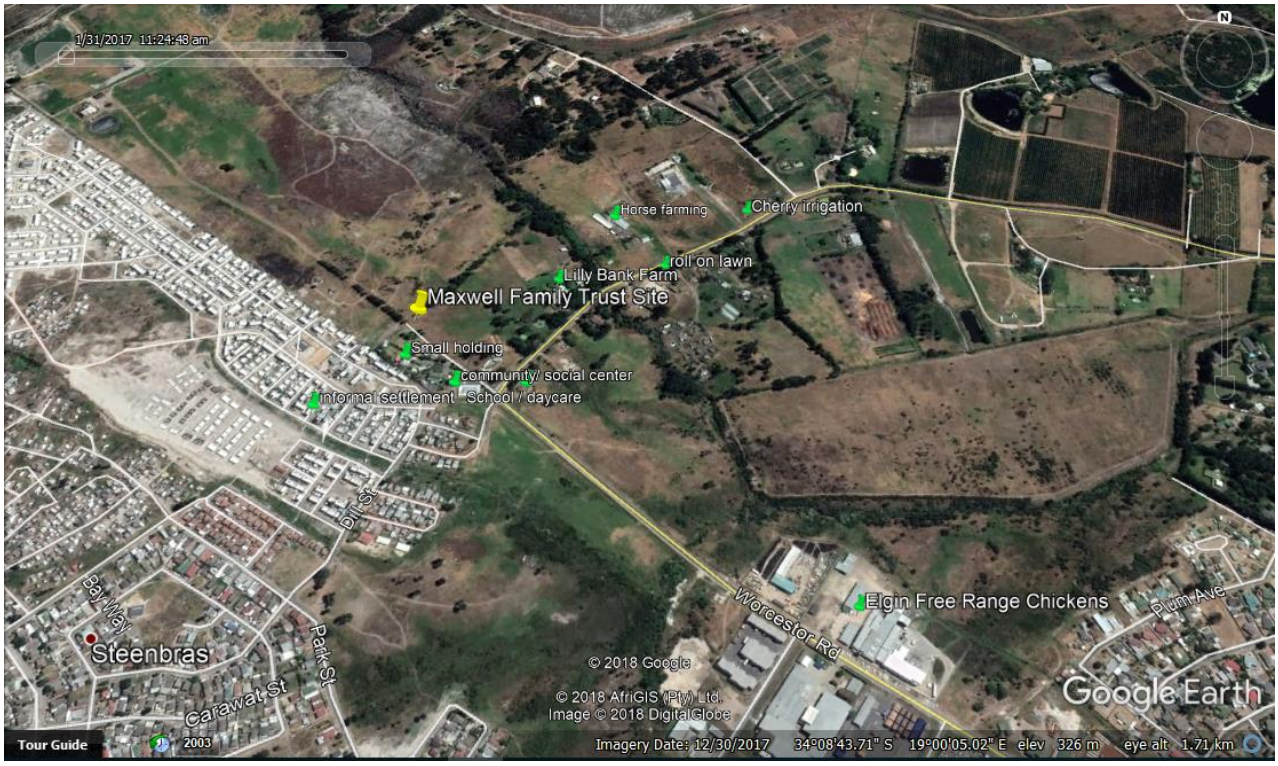

Figure 4: Map indicating the proposed site and surrounding land uses

Coordinates of all the proposed activities on the property or properties (sites):	**Latitude (S):** (deg.; min.; sec)			**Longitude (E):** (deg.; min.; sec.)		
	34°	**08.47'**	**7"**	**18°**	**59'**	**51.19"**

	°	‘	“	°	‘	“
	°	‘	“	°	‘	“
	°	‘	“	°	‘	“

Note: For land where the property has not been defined, the coordinates of the area within which the development is proposed must be provided in an addendum to this report.

5.2 Provide a description of the area where the aquatic or ocean-based activity(ies) is/are to be undertaken and the location of the activity(ies) and alternative sites (if applicable).

N/A

Coordinates of the boundary /perimeter of all proposed aquatic or ocean-based activities (sites) (if applicable):	**Latitude (S):** (deg.; min.; sec)			**Longitude (E):** (deg.; min.; sec)		
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"

5.3 For a linear development proposal, please provide a description and coordinates of the corridor in which the proposed development will be undertaken (if applicable).

N/A

For linear activities:	**Latitude (S):** (deg.; min.; sec)			**Longitude (E):** (deg.; min.; sec)		
• Starting point of the activity	°	‘	“	°	‘	“
• Middle point of the activity	°	‘	“	°	‘	“
• End point of the activity	°	‘	“	°	‘	“

Note: For linear development proposals longer than 1000m, please provide an addendum with co-ordinates taken every 250m along the route. All important waypoints must be indicated and the GIS shape file provided digitally.

5.4 Provide a location map (see below) as **Appendix A** to this report that shows the location of the proposed development and associated structures and infrastructure on the property; as well as a detailed site development plan / site map (see below) as **Appendix B** to this report; and if applicable, all alternative properties and locations. The GIS shape files (.shp) for maps / site development plans must be included in the electronic copy of the report submitted to the competent authority.

Locality Map: **Appendix A**	The scale of the locality map must be at least 1:50 000. For linear development proposals 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; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; • a linear scale; • the prevailing wind direction (during November to April and during May to October); and • GPS co-ordinates (to 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). For an ocean-based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken. Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94; WGS84 co-ordinate system.

Site Plan: **Appendix B**	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be indicated on the site plan. • The position of each element of the application as well as any other structures on the site must be indicated on the site plan.

	• Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the development must be indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): o Watercourses / Rivers / Wetlands - including the 32 meter set back line from the edge of the bank of a river/stream/wetland; o Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable; o Ridges; o Cultural and historical features; o Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas. The GIS shape file for the site development plan(s) must be submitted digitally.

6. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached as **Appendix C** to this report. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.

Appendix C

SECTION B: DESCRIPTION OF THE RECEIVING ENVIRONMENT

Site/Area Description

For linear development proposals (pipelines, *etc*.) as well as development proposals that cover very large sites, it may be necessary to complete copies of 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 that is covered by each copy on the Site Plan.

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Flat	~~Flatter than 1:10~~	~~1:10 – 1:4~~	~~Steeper than 1:4~~

2. LOCATION IN LANDSCAPE

(a) Indicate the landform(s) that best describes the site (highlight the appropriate box(es).

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill / mountain~~	~~Closed valley~~	~~Open valley~~	Plain	~~Undulating plain/low hills~~	~~Dune~~	~~Sea-front~~

(b) Provide a description of the location in the landscape.

The proposed 30m high telecommunication lattice mast and base station will be located on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The proposed site is zoned agriculture and is vacant and undeveloped. The site has no natural vegetation with grass species dominating the site. The immediate land uses to the north and east of the proposed site consists mainly of agricultural land uses, including horse farming cherry irrigation and chicken farming. Lilly bank farm lies to the eat. The property to the west of the site is a small holding and community/ social centre and further west is an informal settlement. South of the site is also a day care centre.

Please see **Figure 3** above, **Appendix A** for locality maps, **Appendix C** for site photographs.

Figure 4 below is a topographical map indicating the contours of the proposed site.

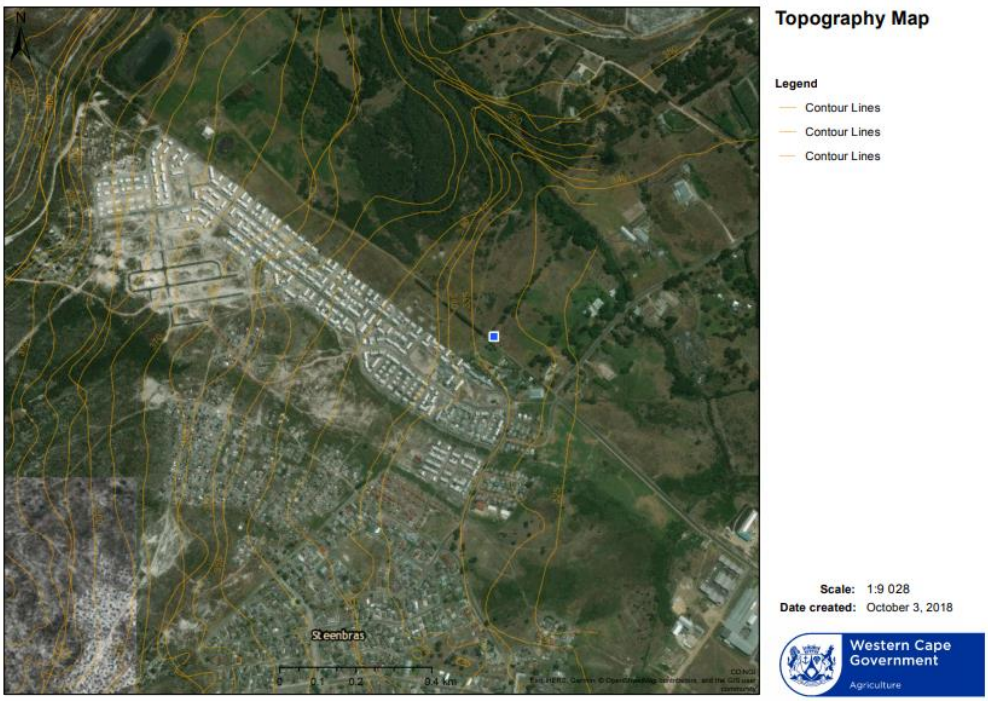

Figure 5: Topographical Map indicating the contours of the chosen site

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

(a) Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)	~~YES~~	NO	~~UNSURE~~
Seasonally wet soils (often close to water bodies)	~~YES~~	NO	~~UNSURE~~
Unstable rocky slopes or steep slopes with loose soil	~~YES~~	NO	~~UNSURE~~
Dispersive soils (soils that dissolve in water)	~~YES~~	NO	~~UNSURE~~
Soils with high clay content	~~YES~~	NO	~~UNSURE~~
Any other unstable soil or geological feature	~~YES~~	NO	~~UNSURE~~
An area sensitive to erosion	~~YES~~	NO	~~UNSURE~~
An area adjacent to or above an aquifer.	~~YES~~	NO	~~UNSURE~~
An area within 100m of a source of surface water	~~YES~~	NO	~~UNSURE~~
An area within 500m of a wetland	YES	~~NO~~	~~UNSURE~~
An area within the 1:50 year flood zone	~~YES~~	NO	~~UNSURE~~
A water source subject to tidal influence	~~YES~~	NO	~~UNSURE~~

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department.

(Freshwater specialist appointed to conduct a Freshwater report (Appendix G2) for Wetland delineation and General Authorisation (Appendix E3)).

(Information in respect of the above will often be available at the planning sections of local authorities. The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

(c) Indicate the type of geological formation underlying the site.

Granite	Shale	Sandstone	Quartzite	Dolomite	Dolorite	Other (describe)
Provide a description.						
Information from Cape Farm Mapper indicate the geology of the site consist of mainly quarzitic sandstone of the Rietvlei Formation Table Mountain Group.						

4. SURFACE WATER

(a) Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

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 / Lagoon	~~YES~~	NO	~~UNSURE~~

(b) Provide a description.

The Water Resources Map (**Appendix D/** Figure below) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative A – preferred) is well away from the 32m buffer. The map also indicates that the site (Alternative A – preferred) falls within a channelled valley-bottom wetland associated with Southwest Sandstone Fynbos.

It is from these findings that Cape Nature suggested (Appendix F1.6 for comments) that an alternative site be evaluated. Cape Nature suggested an alternative location (Alternative B – Cape Nature) 60m southeast of the original alternative (Alternative A – preferred).

The Water resources Map indicates that Alternative B (as Cape Nature suggested) does not fall within the valley bottom wetland or ESA. Alternative B is more than 32m away from the Klipdrift river.

A freshwater specialist was appointed to ground truth Cape Farm Mapper and to conduct a Wetland Delineation and Freshwater Impact Report, as per recommendations from BGCMA (**Appendix F1.7**). Detailed findings from the specialist is discussed later in the report.

It was concluded, with the inputs from BGCMA, that Alternative A is the only feasible and reasonable alternative.

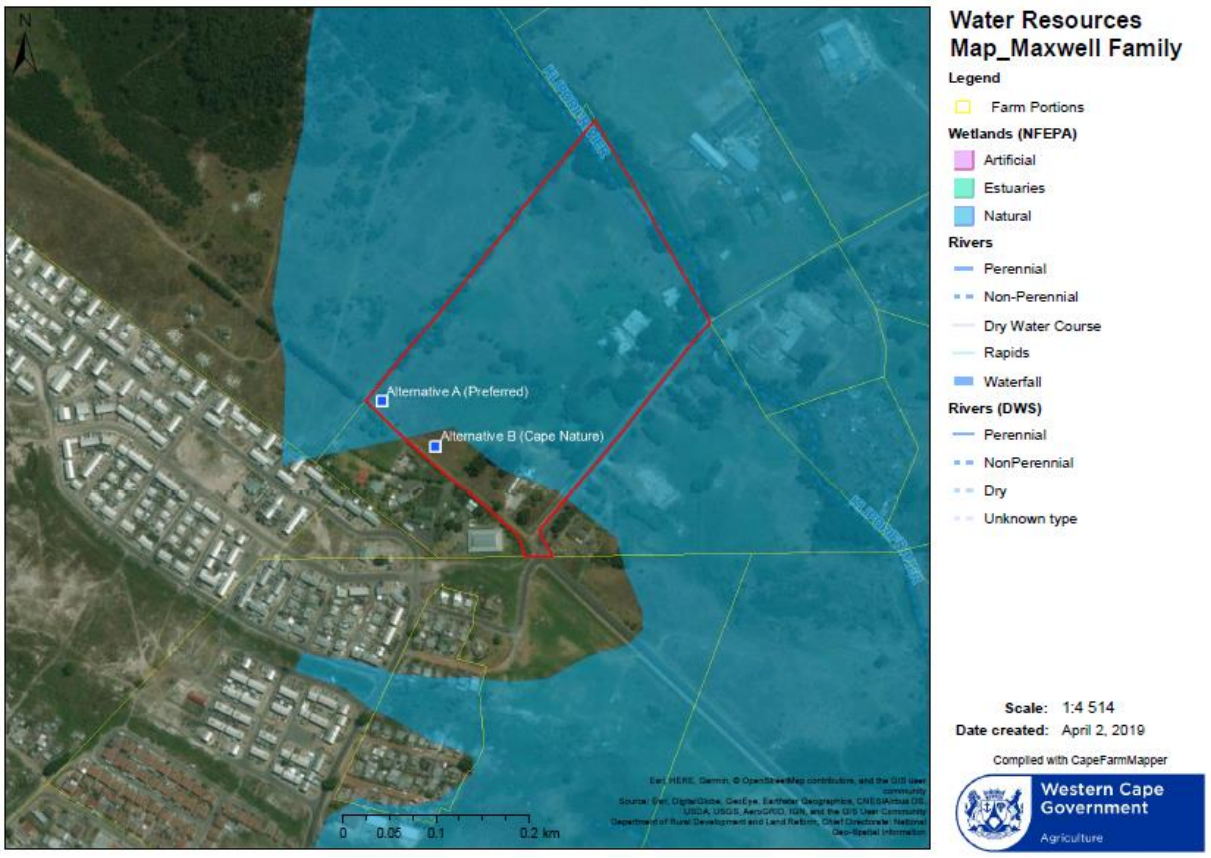

Figure 6: Water Recourses Map

5. THE SEAFRONT / SEA

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).
If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	~~YES~~	NO	~~UNSURE~~	
An area within 100m of the high water mark of an estuary/lagoon	~~YES~~	NO	~~UNSURE~~	
An area within the littoral active zone	~~YES~~	NO	~~UNSURE~~	
An area in the coastal public property	~~YES~~	NO	~~UNSURE~~	
Major anthropogenic structures	~~YES~~	NO	~~UNSURE~~	
An area within a Coastal Protection Zone	~~YES~~	NO	~~UNSURE~~	
An area seaward of the coastal management line	~~YES~~	NO	~~UNSURE~~	
An area within the high risk zone (20 years)	~~YES~~	NO	~~UNSURE~~	
An area within the medium risk zone (50 years)	~~YES~~	NO	~~UNSURE~~	
An area within the low risk zone (100 years)	~~YES~~	NO	~~UNSURE~~	
An area below the 5m contour	~~YES~~	NO	~~UNSURE~~	
An area within 1km from the high water mark of the sea	~~YES~~	NO	~~UNSURE~~	
A rocky beach	~~YES~~	NO	~~UNSURE~~	
A sandy beach	~~YES~~	NO	~~UNSURE~~	

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

6. BIODIVERSITY

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 development. To assist with the identification of the biodiversity occurring on site and the ecosystem status, consult http://bgis.sanbi.org or BGIShelp@sanbi.org . Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Tel.: (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) must be provided as an overlay map on the property/site plan as **Appendix D** to this report.

(a) Highlight the applicable biodiversity planning categories of all areas on preferred and alternative sites and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category. Also describe the prevailing level of protection of the Critical Biodiversity Area ("CBA") and Ecological Support Area ("ESA") (how many hectares / what percentages are formally protected).

Systematic Biodiversity Planning Category	~~CBA~~	ESA	~~Other Natural Area ("ONA")~~	No Natural Area Remaining ("NNR")
If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan and the conservation management objectives	The Biodiversity Overlay Map (**Appendix D**) show that The site (Alternative A - preferred/ original location) falls within an ESA2. The objective of an ESA2 is to restore and or manage to minimise impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services and to allow for faunal movement. The site is considered transformed with no natural areas remaining.			
Describe the site's CBA/ESA quantitative values (hectares/percentage) in relation to the prevailing level of protection of CBA and ESA (how many hectares / what percentages are formally protected locally and in the province)				

(b) Highlight and describe the habitat condition on site.

Habitat Condition	**Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m^2)**		**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	0%	m^2	
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	m^2	
Degraded (includes areas heavily invaded by alien plants)	0%	m^2	
Transformed (includes cultivation, dams, urban, plantation, roads, *etc*.)	100%	m^2	The site is considered transformed and disturbed with no natural vegetation present. Please refer to **Appendix C** for site photographs.

(c) Complete the table to indicate:
(i) the type of vegetation present on the site, including its ecosystem status; and
(ii) whether an aquatic ecosystem is present on/or adjacent to the site.

Terrestrial Ecosystems		**Description of Ecosystem, Vegetation Type, Original Extent, Threshold (ha, %), Ecosystem Status**
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critically	From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA)*, *National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. From the site photographs (**Appendix C**) it is clear that site has been transformed with grass visible on site. No natural vegetation remains.
	~~Endangered~~	
	~~Vulnerable~~	
	~~Least Threatened~~	

Aquatic Ecosystems						
Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
YES	~~NO~~	~~UNSURE~~	~~YES~~	NO	~~YES~~	NO

(d) Provide a description of the vegetation type and/or aquatic ecosystem present on the site, including any important biodiversity features/information identified on the site (e.g. threatened species and special habitats). Clearly describe the biodiversity targets and management objectives in this regard.

Initially only one site alternative was considered (Alternative A in the maps). As per recommendations from Cape Nature another site alternative was evaluated (Alternative B – Cape Nature).

The site has no natural vegetation. Grass species dominate the site which is a clear sign that the site is previously disturbed. Please refer to Figure 1 and site photographs **Appendix C**.

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site (Alternative A and B) include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. However, from the site photographs (**Appendix C**) and Figure 1 below it is clear that site has been completely transformed with grass species visible on site.

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicate that the proposed site (Alternative A – preferred) does not fall within any Critical Biodiversity Areas (CBAs) but falls within an Ecological Support Area 2 (ESA2). There areas are not essential for meeting biodiversity targets, but play a role in supporting the functioning of the CBA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative A – preferred) is well away from the 32m buffer. The map also indicates that the site (Alternative A – preferred) falls within a channelled valley-bottom wetland associated with Southwest Sandstone Fynbos.

It is from these findings that Cape Nature suggested (Appendix F1.6 for comments) that an alternative site be evaluated. Cape Nature suggested an alternative location (Alternative B – Cape Nature) 60m southeast of the original alternative (Alternative A – preferred).

BGCMA also provided comment (Appendix F1.7) that the proposed location of the mast (Alternative A) in a wetland will trigger a water use activity in term of Section 21 c & i of the National Water Act (Act 36 of 1998). It was further suggested that a Risk Matrix be submitted to BGCMA to determine the impact of the proposed mast on the wetland.

Based on these comments and recommendations a Freshwater specialist was appointed. The freshwater specialist consulted with BGCMA who recommended that a wetland delineation and Risk Matrix be conducted, considering both proposed alternatives (Alternative A – preferred; Alternative B – Cape Nature).

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicates that the proposed site alternative (Alternative B – Cape Nature) does not fall within an CBA or ESA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative B – Cape Nature) is well away from the 32m buffer. The map also indicates that the alternative site (Alternative B – Cape Nature) does not fall within a channelled valley-bottom wetland.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper findings. The freshwater report (Appendix G2) evaluates both alternatives.

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NFEPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

7. LAND USE OF THE SITE

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

~~Untransformed area~~	~~Low density residential~~	~~Medium density residential~~	~~High density residential~~	~~Informal residential~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~	~~Heavy industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~	~~Tourism and Hospitality facility~~
~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~	~~Dam or reservoir~~
~~Hospital/medical centre~~	~~School~~	~~Tertiary education facility~~	~~Church~~	~~Old age home~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes and more)~~	~~Airport~~
~~Harbour~~	~~Sport facilities~~	~~Golf course~~	~~Polo fields~~	~~Filling station~~
~~Landfill or waste treatment site~~	~~Plantation~~	Agriculture	River, stream or wetland	~~Nature conservation area~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~	~~Archaeological site~~
Other land uses (describe):				

(a) Provide a description.

The proposed site is zoned agriculture and is vacant and undeveloped. The site has no natural vegetation with grass species dominating the site. The immediate land uses to the north and east of the proposed site consists mainly of agricultural land uses, including horse farming cherry irrigation and chicken farming. Lilly bank farm lies to the east which also belong to the property owner.

Please refer to the explanation above regarding the wetland.

8. LAND USE CHARACTER OF THE SURROUNDING AREA

(a) Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

~~Untransformed area~~	Low density residential	~~Medium density residential~~	~~High density residential~~	~~Informal residential~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~	~~Heavy industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~	~~Tourism and Hospitality facility~~
~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~	~~Dam or reservoir~~
~~Hospital/medical centre~~	School	~~Tertiary education facility~~	~~Church~~	~~Old age home~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes and more)~~	~~Airport~~
~~Harbour~~	~~Sport facilities~~	~~Golf course~~	~~Polo fields~~	~~Filling station~~
~~Landfill or waste treatment site~~	~~Plantation~~	Agriculture	~~River, stream or wetland~~	~~Nature conservation area~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~	~~Archaeological site~~
~~Other land uses (describe):~~	The proposed site is zoned agriculture generally surrounded by agriculture, farms and small holdings. The property to the west of the site is a small holding and community/ social centre and further west is an informal settlement. South of the site is also a day care centre.			

(b) Provide a description, including the distance and direction to the nearest residential area, industrial area, agri-industrial area.

The proposed 30m high telecommunication lattice mast and base station will be located on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The proposed site is zoned agriculture and is vacant and undeveloped. The site has no natural vegetation with grass species dominating the site. The immediate land uses to the north and east of the proposed site consists mainly of agricultural land uses, including horse farming cherry irrigation and chicken farming. Lilly bank farm lies to the east and also belongs to the property owner. The property to the west of the site is a small holding and community/ social centre and further west is an informal settlement. South of the site is also a day care centre.

Please also see **Appendix A** for locality maps.

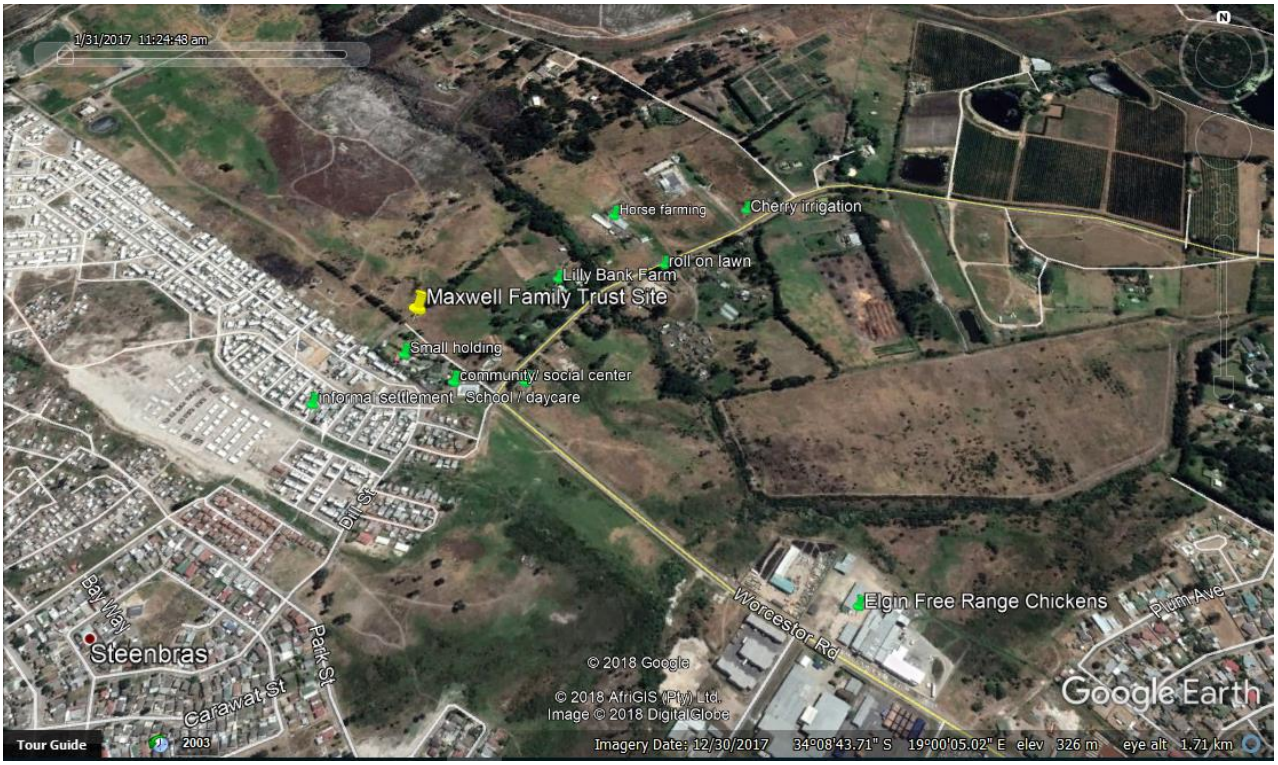

Figure 7: Proposed site with surrounding land uses

9. SOCIO-ECONOMIC ASPECTS

a) Describe the existing social and economic characteristics of the community in the vicinity of the proposed site, in order to provide baseline information (for example, population characteristics/demographics, level of education, the level of employment and unemployment in the area, available work force, seasonal migration patterns, major economic activities in the local municipality, gender aspects that might be of relevance to this project, *etc.*).

Grabouw is a town located in the Western Cape province of South Africa and located about 65km south-east of Cape Town, over Sir Lowry's Pass from Somerset West along the N2 highway. The racial make-up of Klipheuwel according to Wikipedia consists of 38.5% Black African, 55.8% Coloured, 0.2% Indian/ Asian, 4.6% white and 0.9% other. First languages consist of Afrikaans, followed by Xhosa, Sotho, English and other.

Grabouw falls under the Theewaterskloof Local Municipality and the Overberg District Municipality.

The following social and economic characteristics was taken from the Theewaterskloof Municipality's Social Economic Profile (SEP)for 2017

The Theewaterskloof Municipality's population is expected to expand across the next 5 years, growing from 119 052 people in 2018 to 125 505. An internet search indicates that the population of Grabouw is currently at 30 337.

Learner enrolment decreased from 18 245 to 18 815 in 2015 while remaining steady in 2016 which is an indication that access to education has improved in the Theewaterskloof area.

The drop-out rates of learners within Theewaterskloof that enrolled between 2015 and 2016 remained unchanged at 31.7 per cent. These high levels of drop-outs are influenced by a wide array of economic factors including unemployment, poverty, indigent households, high levels of households with no income or rely on less than R515 a month and teenage pregnancies.

Theewaterskloof's matric pass rate improved from 88.8 per cent to 94.9 per cent between 2014 and 2015. However, the matric pass decreased to 92.4 per cent in 2016, which is a concern for the area as access to employment rates are improved with a matric pass.

The unemployment rate within the municipality also increased with11.9%.

The municipalities largest contributors to the GDP includes wholesale and retail trade, catering and accommodation at 17,8%; Finance, insurance, real estate and business service at 16,6% and Agriculture, forestry and fisheries at 14,1%.

10. HISTORICAL AND CULTURAL ASPECTS

(a) Please be advised that if section 38 of the NHRA is applicable to your proposed development, you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Heritage Western Cape must be given an opportunity, together with the rest of the I&APs, to comment on any Pre-application BAR, a Draft BAR, and Revised BAR.

Section 38 of the NHRA states the following:
"*38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-*
(a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
(b) the construction of a bridge or similar structure exceeding 50m in length;
(c) any development or other activity which will change the character of a site-
(i) exceeding 5 000m² in extent; or
(ii) involving three or more existing erven or subdivisions thereof; or
(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
(d) the re-zoning of a site exceeding 10 000m² in extent; or
(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development".

(b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the NHRA, must also be investigated, assessed and evaluated. Section 3(2) states the following:
"*3(2) Without limiting the generality of subsection (1), the national estate may include—*
(a) places, buildings, structures and equipment of cultural significance;
(b) places to which oral traditions are attached or which are associated with living heritage;
(c) historical settlements and townscapes;
(d) landscapes and natural features of cultural significance;
(e) geological sites of scientific or cultural importance;

(f) archaeological and palaeontological sites;
(g) graves and burial grounds, including—
(i) ancestral graves;
(ii) royal graves and graves of traditional leaders;
(iii) graves of victims of conflict;
(iv) graves of individuals designated by the Minister by notice in the Gazette;
(v) historical graves and cemeteries; and
(vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including—
(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
(ii) objects to which oral traditions are attached or which are associated with living heritage;
(iii) ethnographic art and objects;
(iv) military objects;
(v) objects of decorative or fine art;
(vi) objects of scientific or technological interest; and
(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)".

Is Section 38 of the NHRA applicable to the proposed development?	~~YES~~	NO	~~UNCERTAIN~~
If YES or UNCERTAIN, explain:	N/A. However, please note that a Heritage Screener and NID (**Appendix G**) was submitted to Heritage Western Cape. HWC came back with comments (**Appendix E1**) concluding that there is no reason to believe that the construction of the mast would impact on any heritage resources and that no further studies are required.		
Will the development impact on any national estate referred to in Section 3(2) of the NHRA?	~~YES~~	NO	~~UNCERTAIN~~
If YES or UNCERTAIN, explain:			
Will any building or structure older than 60 years be affected in any way?	~~YES~~	NO	~~UNCERTAIN~~
If YES or UNCERTAIN, explain:			
Are there any signs of culturally or historically significant elements, as defined in section 2 of the NHRA, including Archaeological or paleontological sites, on or close (within 20m) to the site?	~~YES~~	NO	~~UNCERTAIN~~
If YES or UNCERTAIN, explain:	Please note that a Heritage Screener and NID (**Appendix G**) was submitted to Heritage Western Cape. HWC came back with comments (**Appendix E1**) concluding that there is no reason to believe that the construction of the mast would impact on any heritage resources and that no further studies are required.		

Note: If uncertain, the Department may request that specialist input be provided **and** Heritage Western Cape must provide comment on this aspect of the proposal. (Please note that a copy of the comments obtained from the Heritage Resources Authority must be appended to this report as Appendix E1).

11. APPLICABLE LEGISLATION, POLICIES, CIRCULARS AND/OR GUIDELINES

(a) Identify all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to the development proposal and associated listed activity(ies) being applied for and that have been considered in the preparation of the BAR.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	**ADMINISTERING AUTHORITY and how it is relevant to this application**	**TYPE Permit/license/authorisation/comment / relevant consideration** (*e.g.* rezoning or consent use, building plan approval, Water Use License and/or General Authorisation, License in terms of the SAHRA and CARA, coastal discharge permit, *etc.*)	**DATE** (if already obtained)**:**
National Environmental Management Act, 1998 (Act No. 107 of 1998) – NEMA EIA Regulations 2014, as amended	Department of Environmental Affairs and Development Planning ("DEA&DP")	Environmental Authorisation	The Basic Assessment process (this report) is currently underway.
Cape Town Municipality: Municipal Land Use Planning By-Law, 2015	Breede Valley Local Municipality	Consent use	The Land Use Planning ("LUPA") Application will be submitted once an Environmental Authorization has been issued.
South African Civil Aviation Authority	South African Civil Aviation Authority	Obstacle Approval Permit	Granted 24/04/2018 Appendix E2
BGCMA	BGCMA	General Authorisation	Granted 28/03/2019 Appendix E3

(b) Describe how the proposed development **complies with and responds** to the legislation and policy context, plans, guidelines, spatial tools, municipal development planning frameworks and instruments.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	**Describe how the proposed development complies with and responds:**
Breede Valley Municipality: Municipal Land Use Planning By-Law, 2015	The proposed development will be located on Portion 108 of Farm Doornrivier No. 369, Aan De Doorns, Western Cape. The property is Agriculture zoned and are being used for agricultural purposes. The primary land use right of the site is Agricultural, and a consent use application will be lodge after the environmental authorisation is received.
Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System"	Circular and guidelines consulted and adhered to when undertaking this Basic Assessment Report.
Guidelines on EIA Regulations 2014	Guideline was consulted while compiling the BAR.
Guidelines on Public Participation, 2014	Guideline was consulted while compiling the BAR.
Guidelines on Need and Desirability, 2013	Guideline was consulted while compiling the BAR.
Guidelines on Alternatives, 2014	Guideline was consulted while compiling the BAR.
Guideline for involving visual and aesthetic specialists in EIA processes (June 2005)	Guideline was consulted while compiling the BAR.

Note: Copies of any comments, permit(s) or licences received from any other Organ of State must be attached to this report as **Appendix E**.

Section C: PUBLIC PARTICIPATION

The PPP must fulfil the requirements outlined in the NEMA, the EIA Regulations, 2014 (as amended) and if applicable, the NEM: WA and/or the NEM: AQA. This Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must also be taken into account.

1. Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was an exemption applied for.

In terms of Regulation 41 of the EIA Regulations, 2014 (as amended) -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates, is or is to be undertaken; and	YES	~~EXEMPTION~~	
(ii) any alternative site	YES	EXEMPTION	N/A
(b) giving written notice, in any manner provided for in Section 47D of the NEMA, to –			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	~~EXEMPTION~~	~~N/A~~
(ii) owners, persons in control of, 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;	YES	~~EXEMPTION~~	
(iii) 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;	YES	~~EXEMPTION~~	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	~~EXEMPTION~~	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	~~EXEMPTION~~	
(vi) any other party as required by the Department;	YES	EXEMPTION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	~~EXEMPTION~~	
(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;	~~YES~~	~~EXEMPTION~~	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	~~YES~~	~~EXEMPTION~~	N/A
(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	~~YES~~	~~EXEMPTION~~	N/A
If you have indicated that "EXEMPTION" is applicable to any of the above, proof of the exemption decision must be appended to this report.			
Please note that for the NEM: WA and NEM: AQA, a notice must be placed in at least two newspapers circulating in the area where the activity applied for is proposed.			
If applicable, has/will an advertisement be placed in at least two newspapers?	YES	NO	
If "NO", then proof of the exemption decision must be appended to this report.			

2. Provide a list of all the State Departments and Organs of State that were consulted:

State Department / Organ of State	Date request was sent:	Date comment received:	Support / not in support
Department of Agriculture	05/10/2018 02/04/2019	No comment	No comment
CapeNature	05/10/2018	28/07/2018	Support
Department of Health	05/10/2018	No comment	Support
Department of Water and Sanitation	05/10/2018	No comment	No comment
BGCMA	05/10/2018	10/07/2018 28/03/2019	Comment on Pre-App BAR Granted GA
South African Civil Aviation	05/10/2018		Obstacle Approval granted 24/04/2018
DEA&DP	05/10/2018	02/11/2018	Acknowledge receipt of NOI
Heritage Western Cape	05/10/2018	13/08/2018	Support

Please refer to Appendix F1

3. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated, or the reasons for not including them.
(The detailed outcomes of this process, including copies of the supporting documents and inputs must be included in a Comments and Response Report to be attached to the BAR (see note below) as **Appendix F**).

Please refer to the comments and response report Appendix F1

4. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.

Please refer to the comments and response report Appendix F1
Appendix F1.6
Comments Cape Nature:

1. If the application is authorised as it stands, the development must take place in the dry summer months.

Appendix E1
Comments Heritage Wester Cape:

1. Should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and HWC must be notified without delay.

Appendix E2:
Approval conditions SACAA Obstacle approval:

1. Night markings

Appendix E3:
Comments BGCMA on Granting of General Authorisation:

1. Mitigation measures as stipulated in the Freshwater Report dated January 2019 must implemented.
2. The water use must not detrimentally affect the use if water of any other lawful water use including the environment.
3. Construction should take place during the summer months, when the flow is low.

Note:
Even if pre-application public participation is undertaken as allowed for by Regulation 40(3), it must be undertaken in accordance with the requirements set out in Regulations 3(3), 3(4), 3(8), 7(2), 7(5), 19, 40, 41, 42, 43 and 44.

If the "exemption" option is selected above and no proof of the exemption decision is attached to this BAR, the application will be refused.

A list of all the potential I&APs, including the Organs of State, notified and a list of all the registered I&APs must be submitted with the BAR. The list of registered I&APs must be opened, maintained and made available to any person requesting access to the register in writing.

The BAR must be submitted to the Department when being made available to I&APs, including the relevant Organs of State and State Departments which have jurisdiction with regard to any aspect of the activity, for a commenting period of at least 30 days. Unless agreement to the contrary has been reached between the Competent Authority and the EAP, the EAP will be responsible for the consultation with the relevant State Departments in terms of Section 24O and Regulation 7(2) – which consultation must happen simultaneously with the consultation with the I&APs and other Organs of State.

All the comments received from I&APs on the BAR must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** of the BAR. If necessary, any amendments made in response to comments received must be effected in the BAR itself. The Comments and Responses Report must also include a description of the PPP followed.

The minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded, must also be submitted as part of the public participation information to be attached to the final BAR as **Appendix F.**

Proof of all the notices given as indicated, as well as notice to I&APs of the availability of the Pre-Application BAR (if applicable), Draft BAR, and Revised BAR (if applicable) must be submitted as part of the public participation information to be attached to the BAR as **Appendix F**. In terms of the required "proof" the following must be submitted to the Department:

- a site map showing where the site notice was displayed, a dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
    - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
    - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
    - if a facsimile was sent, a copy of the facsimile report;
    - if an electronic mail was sent, a copy of the electronic mail sent; and
    - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

Interested and Affected Parties (I&APs) were identified throughout the process. Landowners adjacent to the proposed site, relevant organs of state, organizations, ward councillors and the Local and District Municipality were added to this database. A complete list of organisations and individual groups identified to date is shown in **Appendix F5.**

Public Participation was conducted for this proposed dam in accordance with the requirements outlined in Regulation 41, 42, 43 and 44 of the NEMA EIA Regulations 2014 as amended, as well as the Department of Environmental Affairs and Development Planning's guideline on Public Participation 2011. The issues and concerns raised during the scoping phase will be dealt with in the EIA phase of this application.

As such each subsection of Regulation 54 contained in Chapter 6 of the NEMA EIA Regulations will be addressed separately to thereby demonstrate that all potential Interested and Affected Parties (I&AP's) were notified of the proposed development.

Please refer to the table below which indicate the public participation process conducted this far

R41	**Posters, Advertisement & Notification letters**
(2) (a) (i)	Posters were displayed on the site property gate; Shoprite in Grabouw, Theewaterskloof municipality, Budget Food Market Cash and Carry in Main Street, Grabouw. Posters were A2 and A3 Please see **Appendix F2 & F3**
(ii)	N/A No viable alternative site
(2) (b) (iii)	Notification letters were sent to the municipal ward councilor at Thee Waterkloof Municipality Please see **Appendix F4**
(iv)	Notification letters were sent to Theewaterskloof Local Municipality and Overberg District Municipality. Notification letters were also left at the Theewaterskloof Local Municipality for the public to take. Please see **Appendix F4**
(v)	Notification letters were sent to the following organs of state: • Department of Environment and Development Planning • Department of Water and Sanitation • BGCMA • Cape Nature • Heritage Western Cape • WC Department of Agriculture and Land Use Management • South African Civil Aviation Authority (SACAA) Please see **Appendix F4**
(vi)	Notification letters were delivered via maildrops to as many neighbours as possible Please see **Appendix F3**
(2) (c) (i)	An advert was placed in the Theewaterskloof Gazette 19 June 2018 Please see **Appendix F6**
R42 & 34	**Register of I&AP**
(a), (b), (c), (d)	A register of interested and affected parties was opened and maintained and is available to any person requesting access to the register in writing Please see **Appendix F5**
R43	**Registered I&AP entitled to comments**
3	I&AP were given 30 days for comments during the initial public participation phase and will be given 30 day to comment on the Pre-Application BAR (this report).
R44	**I&AP to be recorded**
	A summary of issues raised by I&AP are addressed in the comments and response report (C&RR). Please see **Appendix F1** for the C&RR and **F1.1 – F1.7** and **E** for the original comments received this far.

SECTION D: NEED AND DESIRABILITY

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website: **http://www.westerncape.gov.za/eadp**). In this regard, it must be noted that the *Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010* published by the national Department of Environmental Affairs on 20 October 2014 (GN No. 891 on Government Gazette No. 38108 refers) (available at: http://www.gov.za/sites/www.gov.za/files/38108__891.pdf) also applied to EIAs in terms of the EIA Regulations, 2014 (as amended).

1. Is the development permitted in terms of the property's existing land use rights?	~~YES~~	NO	~~Please explain~~
The property is zoned Agriculture. A consent use application will be required in terms of Overberg District Municipality: Municipal Land Use Planning By-Law, 2015.			
2. Will the development be in line with the following?			
(a) Provincial Spatial Development Framework ("**PSDF**").	~~YES~~	~~NO~~	Please explain
The proposed development of a 30m high telecommunication mast is not likely to have a negative impact on the Province's PSDF. A consent use application will be submitted upon finalisation of this NEMA EIA application. 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.			
(b) Urban edge / edge of **built environment** for the area.	~~YES~~	~~NO~~	Please explain
The site is located in an agricultural area surrounded by small holdings and agricultural activities. outside			
(c) Integrated Development Plan and Spatial Development Framework 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 will be in line with the IDP and SDF of the municipality. A consent use application will be submitted upon finalisation of this NEMA EIA application. 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. This application is for the construction of a telecommunications mast, which is considered as part of the essential services for the greater community.			
(d) An Environmental Management Framework ("**EMF**") adopted by this 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~~	~~NO~~	Please explain
Unknown If the local municipality has an EMF. However, the proposed development will be in line with the SDF of Overberg District Municipality. A consent use application will be submitted upon finalisation of this NEMA EIA application. 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. This application is for the construction of a telecommunications mast, which is considered as part of the essential services for the greater community.			
(e) Any **other** Plans (*e.g.,* Integrated Waste Management Plan (for waste management activities), *etc.*)).	~~YES~~	NO	~~Please explain~~
N/A.			
3. Is the land use (associated with the project being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (in other words, is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	~~NO~~	~~Please explain~~
This application is for the construction of a telecommunications mast, which is considered as part of the essential services for the greater community.			
4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur on the proposed site at this point in time?	YES	~~NO~~	~~Please explain~~
This application is for the construction of a telecommunications mast, which is considered as part of the essential services for the greater community and should occur at this point in time due to the increased demand for these services. The proposed activity will not lead to the expansion of the town.			
5. Does the community/area need the project 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 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.			
6. Are the necessary **services** available together with adequate unallocated municipal capacity (at the time of application), or must additional capacity be created to cater for the project? (Confirmation by the relevant municipality in this regard must be attached to the BAR as **Appendix E**.)	YES	~~NO~~	~~Please explain~~
The proposed activity will only require minimal amounts of power, which will be sourced existing Eskom connections. The proposed activity will not require water, solid waste removal, storm water or sewerage services from the local council.			
7. Is this project provided for in the **infrastructure planning** of the municipality and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant municipality in this regard must be attached to the BAR as **Appendix E**.)	~~YES~~	~~NO~~	Please explain
A consent use application will be submitted to the municipality after this NEMA EIA application. 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 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.			
8. Is this project part of a **national programme** to address an issue of national concern or importance?	~~YES~~	NO	~~Please explain~~
N/A			
9. Do location factors favour this land use (associated with the development proposal and associated listed activity(ies) applied for) at this place? (This relates to the contextualisation of the proposed land use on the proposed site within its broader context.)	YES	~~NO~~	~~Please explain~~
The site has been identified as an ideal location for the proposed project as it will provide the necessary coverage required. In addition, the proposed site is located on an area that causes the least harm to the environment due to the transformed nature of the site.			
10. Will the development proposal or the land use associated with the development proposal applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	~~YES~~	NO	~~Please explain~~
No sensitive natural or cultural areas were identified on site. The proposed site is not located within an CBA or but within an ESA and the site is degraded and transformed with no natural vegetation remaining, due to past development activities on the property. Please refer to **Appendix D**. A General Authorisation was obtained from BGCMA as the site falls within the 500m radius of a wetland (**Appendix E3**).			
11. Will the development impact on people's health and well-being (*e.g.,* in terms of noise, odours, visual character and 'sense of place', *etc.*)?	~~YES~~	~~NO~~	Please explain
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. A Visual Impact Assessment was conducted (Appendix G3). Findings concluded that a lattice mast will be the preferred mast alternative as it blends in better with the surrounding environment. The specialist stated that if all mitigation measures are implemented the visual impact will be low for the area.			
12. Will the proposed development or the land use associated with the proposed development applied for, result in unacceptable opportunity costs?	~~YES~~	NO	~~Please explain~~
The nature, size and location of the site would mean that there are no unacceptable opportunity costs due to the proposed activity.			
13. What will the **cumulative impacts** (positive and negative) of the proposed land use associated with the development proposal and associated listed activity(ies) applied for, be?			

The activity is not expected to have any negative cumulative impacts. The mast will allow for multiple service providers to attach and house their equipment on the mast, creating more efficient telecommunications service in the area and decreasing the need for additional masts in the area. This will therefore have a positive cumulative impact on the area.

14. Is the development the **best practicable environmental option** for this land/site?	YES	~~NO~~	~~Please explain~~

The best practicable environmental option for the site would be the no-go option. However, any potential benefits would be considered lost. 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.

15. What will the benefits be to society in general and to the local communities?	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 multiple cellular users with the option of faster internet coverage and cheaper cellular rates.

16. Any **other** need and desirability considerations related to the proposed development?	Please explain

N/A

17. Describe how the **general objectives of Integrated Environmental Management** as set out in Section 23 of the 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 F below.
- The effects of the activity on the environment have been considered before actions taken in connection with them alternatives have been considered and investigated (please refer to Section E below).
- Adequate and appropriate opportunity for public participation is ensured through the public participation process.
- The environmental attributes have been considered in the management and decision-making of the activity – an EMPr has been included (Appendix H) with the proposed activity and must adhere to the requirements of all applicable state Authorities.

18 Describe how the **principles of environmental management** as set out in Section 2 of the 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 beneficial impact on people, especially developmental, cultural and social benefits due to increased coverage and reliability of communications.
- 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.
- Although the activity is expected to have little to no environmental impact, these impacts have been considered, and mitigation measures have been put in place.
- 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 F below.
- The interests, needs and values of all interested and affected parties will be taken into account in any decisions through the Public Participation Process - refer to Section F below.
- The social, economic and environmental impacts of the activity have been considered, assessed and evaluated, including the disadvantages and benefits – refer to Section F 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 F and in the EMPr are implemented. The social benefits are considered to outweigh any potential negative environmental impacts from the activity.

Please refer to Appendix K for Atlas Tower Need & Desirability document as well as a letter from Department of health regarding the health impact of cellular base stations.

SECTION E: DETAILS OF ALL THE ALTERNATIVES CONSIDERED

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website **http://www.westerncape.gov.za/eadp**.

The EIA Regulations, 2014 (as amended) defines "*alternatives*" as " *in relation to a proposed activity, means different means of fulfilling the general purpose and requirements of the activity, which may include alternatives to the—*
(a) property on which or location where the activity is proposed to be undertaken;
(b) type of activity to be undertaken;
(c) design or layout of the activity;
(d) technology to be used in the activity; or
(e) operational aspects of the activity;
(f) and includes the option of not implementing the activity;"

The NEMA (section 24(4)(a) and (b) of the NEMA, refers) prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in the NEMA and the National Environmental Management Principles set out in the NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management (section 23 of NEMA, refers) is, *inter alia*, to "*identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management*" set out in the NEMA.

The identification, evaluation, consideration and comparative assessment of alternatives directly relate to the management of impacts. Related to every identified impact, alternatives, modifications or changes to the activity must be identified, evaluated, considered and comparatively considered to:

- in terms of negative impacts, firstly avoid a negative impact altogether, or if avoidance is not possible alternatives to better mitigate, manage and remediate a negative impact and to compensate for/offset any impacts that remain after mitigation and remediation; and
- in terms of positive impacts, maximise impacts.

1. DETAILS OF THE IDENTIFIED AND CONSIDERED ALTERNATIVES AND INDICATE THOSE ALTERNATIVES THAT WERE FOUND TO BE FEASIBLE AND REASONABLE

Note: A full description of the investigation of alternatives must be provided and motivation if no reasonable or feasible alternatives exists.

(a) Property and **location/site** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

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.

Initially only one site alternative was considered (Alternative A in the maps). As per recommendations from Cape Nature another site alternative was evaluated (Alternative B – Cape Nature).

The site has no natural vegetation. Grass species dominate the site which is a clear sign that the site is previously disturbed. Please refer to Figure 1 below and site photographs **Appendix C**.

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site (Alternative A and B) include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. However, from the site photographs (**Appendix C**) and Figure 1& 2 indicated that site is transformed with grass species visible on site.

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicate that the proposed site (Alternative A – preferred) does not fall within any Critical Biodiversity Areas (CBAs) but falls within an Ecological Support Area 2 (ESA2). There areas are not essential for meeting biodiversity targets, but play a role in supporting the functioning of the CBA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative A – preferred) is well away from the 32m buffer. The map also indicates that the site (Alternative A – preferred) falls within a channelled valley-bottom wetland associated with Southwest Sandstone Fynbos.

It is from these findings that Cape Nature suggested (Appendix F1.6 for comments) that an alternative site be evaluated. Cape Nature suggested an alternative location (Alternative B – Cape Nature) 60m southeast of the original alternative (Alternative A – preferred).

BGCMA also provided comment (Appendix F1.7) that the proposed location of the mast (Alternative A) in a wetland will trigger a water use activity in term of Section 21 c & i of the National Water Act (Act 36 of 1998). It was further suggested that a Risk Matrix be submitted to BGCMA to determine the impact of the proposed mast on the wetland.

Based on these comments and recommendations a Freshwater specialist was appointed. The freshwater specialist consulted with BGCMA who recommended that a wetland delineation and Risk Matrix be conducted, considering both proposed alternatives (Alternative A – preferred; Alternative B – Cape Nature).

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicates that the proposed site alternative (Alternative B – Cape Nature) does not fall within an CBA or ESA.

The Water Resources Map (**Appendix D**) shows that the Klipdrif river flows to the North East of the property, but that the site (Alternative B – Cape Nature) is well away from the 32m buffer. The map also indicates that the alternative site (Alternative B – Cape Nature) does not fall within a channelled valley-bottom wetland.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates both alternatives and concludes:

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a “work plan” from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E2.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

(b) **Activity** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

N/A. This is the only activity that can increase the telecommunication coverage for the area.

(c) **Design or layout** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Alternative mast designs have been considered:

A Visual Impact Assessment was conducted (**Appendix G3 for the report**)

Lattice Mast – (Alternative 1, Preferred Alternative)
The visual specialist concluded that a lattice mast is considered the preferred alternative. The principles as set out in the City of Cape Town's Draft Telecommunication Infrastructure Policy: April 2015 states that as a general rule for freestanding telecommunication masts, a slim line monopole should be used in an urban context and lattice mast should be used in a rural context. As the proposed development is situated within the agricultural area of Grabouw, a lattice mast is considered the preferred alternative. The figures below further indicates that a lattice mast blends in better with the surrounding environment when compared to the monopole mast. The visual specialist recommends a Lattice mast.

It can further be argued that a lattice mast is the preferred alternative for the applicant, as it is able to hold the necessary amount of equipment, allowing for equipment from various service providers and is cheaper to construct than a monopole or tree mast. The construction of a lattice mast will reduce the possibility to erect other mast in the vicinity and is therefore considered the preferred alternative for this site.

Monopole Mast – (Alternative 2)
A monopole mast is also considered as a suitable alternative. However, the mast will not be able to hold as much equipment when compared lattice mast and is more expensive to erect.

Tree Mast – (Alternative 3)
A tree mast is also considered an alternative. However, this mast cannot hold as much equipment as a lattice mast, increasing the need to erect more masts for coverage in the vicinity.

Figure 8: Example of a lattice mast on the site (VIA Report, 2018)

Figure 9: Example of a monopile mast (VIA report, 2018)

(d) **Technology** alternatives (*e.g.,* to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

N/A

(e) **Operational** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

N/A

(f) The option of **not implementing** the activity (the '*No-Go*' Option):

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.

(g) **Other** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

N/A

(h) Provide a **summary** of all alternatives investigated and the outcome of each investigation:

N/A

(i) Provide a detailed **motivation for not further considering** the alternatives that were found not feasible and reasonable, including a description and proof of the investigation of those alternatives:

Please refer to the design/layout alternatives on in section c above. Reasons are given for the consideration of alternatives.

2. PREFERRED ALTERNATIVE

(a) Provide a **concluding statement** indicating the preferred alternative(s), including preferred location, site, activity and technology for the development.

Lattice Mast (Alternative 1, Preferred Alternative)

It is proposed that a 30m high telecommunications lattice mast with a 10m x 10m base station be constructed on a flat surface area on Portion 7 of Farm 292, Jagersvlakte, Caledon RD, Grabouw, Western Cape

The base station and mast will be enclosed with a 2.4m high palisade fence with an access gate. Please refer to **Appendix A** for locality maps **Appendix B** for site plans.

Site coordinate for the proposed mast are: 34°08'40.48"S 18°59'51.19"E. The area is zoned agriculture and the site is vacant and undeveloped.

The proposed site has no natural vegetation left. Grass species dominate the site which is a clear sign that the site is previously disturbed. Please refer site photographs **Appendix C**.

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. However, from the site photographs (**Appendix C**) it is clear that site has been transformed with grass species visible on site. No natural vegetation remains.

The Biodiversity overlay map from Cape Farm Mapper (**Appendix D**) indicate that the proposed site does not fall within any Critical Biodiversity Areas (CBAs) but falls within an Ecological Support Area 2 (ESA2). There areas are not essential for meeting biodiversity targets, but play a role in supporting the functioning of CBA.

The National Freshwater Ecosystems Priority Areas (NFEPA) Map (**Appendix D**) shows that the Klipdrifriver flows to the North East of the site (a non-perennial river), but that the site is well away from the 32m buffer. The map also indicates that the site falls within a channelled valley-bottom wetland.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates two alternatives considered as described in the section above and concludes:

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

No habitat vegetation will be lost due to the construction of the proposed lattice mast as the site is already transformed.

Electricity supply will be from Eskom and no new roads will be constructed as an existing access road will be utilised to gain access to the proposed sit.

A lattice mast is considered the preferred alternative as it can hold the necessary amount of equipment from various service providers, reducing the need to erect more masts in the vicinity for coverage.

SECTION F: ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE ALTERNATIVES

Note: The information in this section must be DUPLICATED for all the feasible and reasonable ALTERNATIVES.

1. DESCRIBE THE ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT AND ITS ALTERNATIVES, FOCUSING ON THE FOLLOWING:

(a) Geographical, geological and physical aspects:

The activity is not expected to have any impacts on any geographical and/or physical aspects. The site is largely transformed.

(b) Ecological aspects:

Will the proposed development and its alternatives have an impact on CBAs or ESAs? If yes, please explain: Also include a description of how the proposed development will influence the quantitative values (hectares/percentage) of the categories on the CBA/ESA map.	YES	~~NO~~

The Biodiversity overlay map from Cape Farm Mapper (**Appendix F**) indicate that the preferred site (Alternative A) does not fall within any Critical Biodiversity Areas (CBAs) but does fall within an Ecological Support Area 2 (ESA2). Due to agricultural activities on the site the area is transformed.

Will the proposed development and its alternatives have an impact on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)? If yes, please explain:	YES	~~NO~~

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. The site has been transformed with grass species visible on site. No natural vegetation remains (**Appendix C** for site photos)

The Water Resources Map (**Appendix D**) shows that the a non-perennial river, the Klipdrif river flows to the North East of the property ,the site is well away from the 32m buffer. The map also indicates that the site falls within a channelled valley-bottom wetland.

<u>The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper. The freshwater report (Appendix G2) evaluates two alternatives considered and concludes:</u>

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

<u>It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.</u>

Will the proposed development and its alternatives have an impact on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species? If yes, please explain:	~~YES~~	NO

From the vegetation map from Cape Farm mapper (**Appendix D**), vegetation that would have been present on site include Kogelberg Sandstone Fynbos. According to the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA), National List of Ecosystems that are threatened and in need of protection*, this type of vegetation is classified as critically endangered. The site has been transformed with grass species visible on site. Please refer to **Appendix C.**

No threatened plant or animal species are expected on site.

Describe the manner in which any other biological aspects will be impacted:

The proposed development is not expected have any impact on any other biological aspects.

Will the proposed development also trigger section 63 of the NEM: ICMA?	~~YES~~	NO

If yes, describe the following:
(i) the extent to which the applicant has in the past complied with similar authorisations;
(ii) whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development proposal or listed activity is consistent with the purpose for establishing and protecting those areas;
(iii) the estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area;
(iv) the likely socio-economic impact if the listed activity is authorised or is not authorised;
(v) the likely impact of coastal environmental processes on the proposed development;
(vi) whether the development proposal or listed activity—
(a) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations;
(b) is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17 of NEM: ICMA;
(c) is situated within coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18 of NEM: ICMA;
(d) is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot satisfactorily be mitigated;
(e) is likely to be significantly damaged or prejudiced by dynamic coastal processes;
(f) would substantially prejudice the achievement of any coastal management objective; or
(g) would be contrary to the interests of the whole community;
(vii) whether the very nature of the proposed activity or development requires it to be located within coastal public property, the coastal protection zone or coastal access land;
(viii) whether the proposed development will provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area; and
(ix) the objects of NEM: ICMA, where applicable.

(c) Social and Economic aspects:

What is the expected capital value of the project on completion?	R 500 000.00	
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	TBC	
Will the project contribute to service infrastructure?	YES	~~NO~~
Is the project a public amenity?	YES	~~NO~~
How many new employment opportunities will be created during the development phase?	5	
What is the expected value of the employment opportunities during the development phase?	R 120 000.00	
What percentage of this will accrue to previously disadvantaged individuals?	65%	
How will this be ensured and monitored (please explain):		
N/A		
How many permanent new employment opportunities will be created during the operational phase of the project?	N/A	
What is the expected current value of the employment opportunities during the first 10 years?	TBC	
What percentage of this will accrue to previously disadvantaged individuals?	N/A	
How will this be ensured and monitored (please explain):		

N/A
Any other information related to the manner in which the socio-economic aspects will be impacted:
N/A

(d) Heritage and Cultural aspects:

A Heritage Screener and NID (**Appendix G**) was submitted to Heritage Western Cape. HWC came back with comments (**Appendix E1**) concluding that there is no reason to believe that the construction of the mast would impact on any heritage resources and that no further studies are required.

2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Will the development proposal produce waste (including rubble) during the development phase?	~~YES~~	NO
If yes, indicate the types of waste (actual type of waste, *e.g.* oil, and whether hazardous or not) and estimated quantity per type?		m^3
Minimal amounts of building rubble will be produced due to construction activities and must be disposed of at the correct, registered landfill site.		

Will the development proposal produce waste during its operational phase?	~~YES~~	NO
If yes, indicate the types of waste (actual type of waste, *e.g.* oil, and whether hazardous or not) and estimated quantity per type?		m^3
N/A, The activity will not produce waste.		

Will the development proposal require waste to be treated / disposed of on site?	~~YES~~	NO
If yes, indicate the types of waste (actual type of waste, *e.g.* oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?		m^3
If no, where and how will the waste be treated / disposed of? Please explain. Indicate the types of waste (actual type of waste, *e.g.* oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?		m^3
Minimal amounts of building rubble due to construction activities. Construction waste will be disposed of at a registered municipal landfill site.		
Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? If yes, provide written confirmation from the municipality or relevant authority. **N/A**	~~YES~~	NO
Will the development proposal produce waste that will be treated and/or disposed of at another facility other than into a municipal waste stream? **N/A**	~~YES~~	NO
If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? Provide written confirmation from the facility. **N/A**	YES	NO
Does the facility have an operating license? (If yes, please attach a copy of the licence.) **N/A**	YES	NO

Facility name:	
Contact person:	
Cell:	Postal address:
Telephone:	Postal code:
Fax:	E-mail:

Describe the measures that will be taken to reduce, reuse or recycle waste:
N/A

(b) Emissions into the atmosphere

Will the development proposal produce emissions that will be released into the atmosphere?	~~YES~~	NO
If yes, does this require approval in terms of relevant legislation?	YES	NO
If yes, what is the approximate volume(s) of emissions released into the atmosphere?		m^3
Describe the emissions in terms of type and concentration and how these will be avoided/managed/treated/mitigated:		
N/A. The activity will not generate emissions into the atmosphere.		

3. WATER USE

(a) Indicate the source(s) of water for the development proposal by highlighting the appropriate box(es).

~~Municipal~~	~~Water board~~	~~Groundwater~~	~~River, Stream, Dam or Lake~~	~~Other~~	The project will not use water

Note: Provide proof of assurance of water supply (e.g. Letter of confirmation from the municipality / water user associations, yield of borehole)

(b) If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	N/A	m^3

(c) Does the development proposal require a water use permit / license from DWS?	YES	NO
If yes, please submit the necessary application to the DWS and attach proof thereof to this application as an Appendix.		

(d) Describe the measures that will be taken to reduce water demand, and measures to reuse or recycle water:

4. POWER SUPPLY

(a) Describe the source of power *e.g.* municipality / Eskom / renewable energy source.

Electricity will be sourced from Eskom. The power requirements are relatively low for such a development.

(b) If power supply is not available, where will power be sourced?

5. ENERGY EFFICIENCY

(a) Describe the design measures, if any, that have been taken to ensure that the development proposal will be energy efficient:

All equipment is ISO 14001 compliant.

(b) Describe how alternative energy sources have been taken into account or been built into the design of the project, if any:

N/A.

6. TRANSPORT, TRAFFIC AND ACCESS

Describe the impacts in terms of transport, traffic and access.

Access to the proposed site will be restricted to construction personal only. The proposed development will not have a negative impact in terms of local traffic. No roads will be constructed as an existing access road will be used to access the site. The EMPr will be implemented to mitigate any potential negative impact.

7. NUISANCE FACTOR (NOISE, ODOUR, etc.)

Describe the potential nuisance factor or impacts in terms of noise and odours.

A Visual Impact Assessment was conducted (Appendix G3). Findings concluded that a lattice mast will be the preferred mast alternative as it blends in better with the surrounding environment. The specialist stated that if all mitigation measures are implemented the visual impact will be low for the area.

The proposed activity will not produce any odours. Localised construction noise can be expected. However, the construction noise will be temporary in nature and as a mitigation measure, construction activities will be limited to normal working hours. The proposed development will have an insignificant impact on the surrounding areas in terms of nuisance.

Note: Include impacts that the surrounding environment will have on the proposed development.

8. OTHER

N/A

SECTION G: IMPACT ASSESSMENT, IMPACT AVOIDANCE, MANAGEMENT, MITIGATION AND MONITORING MEASURES

1. METHODOLOGY USED IN DETERMINING AND RANKING ENVIRONMENTAL IMPACTS AND RISKS ASSOCIATED WITH THE ALTERNATIVES

(a) Describe the **methodology** used in determining and ranking the nature, significance consequences, extent, duration and probability of potential environmental impacts and risks associated with the proposed development and alternatives.

The following impact rating approach used by EnviroAfrica CC is a basic exponential rating system to assess actual and potential negative and positive environmental impacts.

Environmental activities or aspects are identified, based on:

- the phases of the project,
- the nature (or description) of the actual and potential impacts of the activities.

For every project activity or aspect, various environmental impacts are listed. Every negative impact is allocated a
-value as per each of the following criteria:

- Probability (Likelihood)
- Extent
- Duration (Frequency)
- Consequence (Receiving Environment)
- Magnitude (Intensity/severity)

Every negative impact is allocated a +value as per each of the following criteria:

- Probability (Likelihood)
- Extent
- Duration (Frequency)
- Magnitude (Intensity/severity)

Once a value is allocated for each of the criterion, the scores are averaged to determine the final impact rating see Table 1 below.

EnviroAfrica then further assesses environmental significance, based on the nature of the impact, as per the score and colour key which forms part of Table 1 below. This results in impacts having either a low (indicated in green), medium (indicated in yellow) or high (indicated in orange and red) negative significance, and a low (light blue), medium (blue) or a high (dark blue) positive significance.

Note: i. As a baseline, impact rating values/scores are allocated taking the worst case scenario into account i.e. with no mitigation. The baseline rating is compared with those after mitigation has been taken into account i.e. the post-mitigation rating. Post mitigation rating is used for the actual impact assessment.

SIGNIFICANCE CRITIERIA	Very High	High	Medium	Low	Negligible (very-low)	Score
Value	**16**	**8**	**4**	**2**	**1**	
Probability (likelihood) **(P)**	Definite. Impact will definitely occur (impact will occur regardless of any prevention measures)	Highly probable. Very likely for impact to occur.	Probable. Impact may likely occur.	Improbable. Impact may occur. Distinct Possibility	Improbable. Low likelihood/unlikely for impact to occur.	
Extent (E)	Impact potentially reaches beyond national boundaries	Impact has definite provincial/potential national consequences	Impact confined to regional area/ town	Impact confined to local region and impact on neighbouring properties	Impact confined to project property / site	
Duration (D)	Permanent	Long-Term	Medium-term	Short-term	Very short/ temporary	
Magnitude (Intensity/ Severity) **(M)**	It is expected that the activity will have a very severe to permanent impact on the surrounding environment. Functioning irreversibly impaired. Rehabilitation often impossible or unfeasible	It is expected that the activity will have a severe impact on the surrounding environment. Functioning may be severely impaired and may be temporarily cease. Rehabilitation will be needed to restore system integrity	It is expected that the activity will have an impact on the surrounding environment, but it will maintain its function, even if moderately modified (overall integrity not compromised). Rehabilitation easily achieved	It is expected that the activity will have a perceptible impact on the surrounding environment, but it will maintain its function, even if slightly modified (overall integrity not compromised). Rehabilitation easily achieved	It is expected that the impact will have little or no effect on the integrity of the surrounding environment	
Receiving environment (Consequence): **(RE)**	Very sensitive, pristine area – protected site or species permanently or seasonally present	Unused area containing only indigenous fauna / flora species	Unused area containing indigenous and alien fauna / flora species	Semi-disturbed area already rehabilitated / recovered from prior impact, or with moderate alien vegetation	Disturbed area/ transformed/ heavy alien vegetation	
FINAL RATING (average score)						

Table 1: Environmental Significance Rating Methodology

(b) Please describe any gaps in knowledge.

There are no significant gaps of knowledge that have been identified.

(c) Please describe the underlying assumptions.

The following assumptions are made:

- The information on which the report is based (i.e. project information) is correct.
- The construction and management of this proposed development will be in line with the recommendations in this report, which will be enforced by the implementation of a detailed Environmental Management Programme ("EMPr").
- That an Environmental Control Officer ("ECO") be appointed as per the EMPr.
- Much of the long-term success lies in the effective implementation of the measures prescribed in the EMPr.

(d) Please describe the uncertainties.

There are no uncertainties that we are aware of at present.

(e) Describe adequacy of the assessment methods used.

The Basic Assessment Report for the proposed telecommunication mast is being undertaken with sustainable development as a goal. The assessment looked at the impacts of the proposals on the environment and assesses the significance of these, as well as the possible avoidance of negative impacts. Where negative impacts could not be avoided, mitigation measures have been proposed, to reduce the anticipated impacts to acceptable levels. This is to ensure that the development makes "equitable and sustainable use of environmental and natural resources for the benefit of present and future generations".

2. IDENTIFICATION, ASSESSMENT AND RANKING OF IMPACTS TO REACH THE PROPOSED ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE WITHIN THE SITE

Note: In this section the focus is on the identified issues, impacts and risks that influenced the identification of the alternatives. This includes how aspects of the receiving environment have influenced the selection.

(a) List the identified impacts and risks for each alternative.

Alternative 1:	Lattice Mast - Preferred Alternative: Noise (low negative) Visual (low-medium negative); Socio-economic (Low positive) Heritage (Low negative) Ecological (Negligible) Water resources (Negligible)
Alternative 2:	Monopole Mast: Preferred Alternative: Noise (low negative) Visual (low-medium negative); Socio-economic (Low positive) Heritage (Low negative) Ecological (Negligible) Water resources (Negligible)
Alternative 3:	Tree Mas : Preferred Alternative: Noise (low negative) Visual (low-medium negative); Socio-economic (Low positive) Heritage (Low negative) Ecological (Negligible) Water resources (Negligible)
No-go Alternative:	Socio-economic (Low-negative)

(b) Describe the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated.

The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. (The EAP has to select the relevant impacts identified in blue in the table below for each alternative and repeat the table for each impact and risk).

Alternative 1:	**30m High Lattice Mast – preferred**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Noise Low-negative
Nature of impact:	Noise impact from machinery on the property and neighbouring residential properties during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Lo-negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – Low negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	

Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	**30m High Lattice Mast – preferred**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impact: Medium-negative**
Nature of impact:	Unsightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Low
Cumulative impact prior to mitigation:	Low-Medium negative

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Visual impact mitigation measures will be dealt with in the Environmental Management Programme ("EMPr"). The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • 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. • Reduce the time of construction through careful planning of logistics and ensure the productive implementation of resources; • Limit disturbance of the environment to the development footprint; • Limit construction activities to business hours; • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	The visual specialist (Appendix G3 for the report) recommended the following mitigation measures: • Access roads are to be kept clean and dust suppression techniques should be implemented to minimise impacts of vehicle movement; • Site offices and structures should be limited to one location and carefully situated to reduce visual intrusions. Roofs should be grey and non-reflective; • Construction camps as well as development areas should be screened with netting; • Lights within the construction camp should face directly down (angle of 90˚); • Minimum vegetation should be removed to ensure the visual absorption capacity remain high; • Litter should be strictly controlled, as the spread thereof through wind could have a very negative visual impact; • Avoid shiny materials in structures. Where possible shiny metal structures should be darkened or screened to prevent glare; • The proposed mast should be galvanised and glare must be prevented in order to blend with the surrounding environment; and, • The containers should be painted a brownish colour to ensure it blends in with the natural environment. • Mitigation to minimise lighting impacts include the following:

	- Shielding the sources of light by physical barriers (walls, vegetation or structures itself); - Limit mounting heights of lighting fixtures, or alternatively using foot-lights or bollard level lights); - Make use of downward directional lighting fixtures; - Make use of minimum lumen or wattage in lights; - Uses motion sensors to activate lighting ensuring light is available when needed The following additional measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	
Potential impact and risk:	**Visual impact: Medium-negative**
Nature of impact:	The development of the mast will most probably have a visual impact because of the type and height of the mast (30m in height) located within an the area.
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low – negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Medium – negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	• Restrict the height of the mast to only 30m; • Construct a lattice mast; and • Implementation of the EMPr.
Residual impacts:	Very Low – negative
Cumulative impact post mitigation:	Very Low – negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	

Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	**30m High Lattice Mast – preferred**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socio-Economic (Low - Positive)**
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)
Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.

Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium – Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.
Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low - Positive
Cumulative impact post mitigation:	Low - Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	**30m High Lattice Mast - preferred**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is not expected to have any impacts on heritage and cultural-historic aspects.**
Nature of impact:	The loss of heritage, cultural or historic aspects during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Very Low - negative
Probability of occurrence:	Highly unlikely, no cultural or historic aspects of significance were identified on site.
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Negligible; activity unlikely to have a negative indirect impact
Cumulative impact prior to mitigation:	Very Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very - Low Negative

Degree to which the impact can be avoided:	Low (Likely)
Degree to which the impact can be managed:	• If any archaeological remains (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 they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	**Medium (Likely)**
Proposed mitigation:	• **If any archaeological remains (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 they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC.** • **Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed.** • **Implementation of the EMPr.**
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low - Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	No heritage or cultural aspects are expected to be impacted during the operational phase since no cultural or historic aspects were identified on site.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	**30m High Lattice Mast - preferred**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Ecological aspect**
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. Even though the site is located within a degraded ESA, the activity will have no impact on the ESA as the site is totally transformed from its natural state due to past agricultural activities on the property.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take during normal working hours. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	

Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	**Proposed 30m high Lattice Mast – (Preferred)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Water resources aspect**
Nature of impact:	The Freshwater report (Appendix G2) states that the proposed mast is location (Alternative A) will be located outside of the wetland area but with the 500m buffer zone. The buffer zone is very dry, with ground water moving deeper down underneath, or perhaps around the proposed site. The specialist states that the impact of the mast on aquatic environment would be negligible. BGCMA granted a General Authorisation for the proposed mast location (Alternative A). Appendix E3.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented.

	• The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist: • Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used. • If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site. The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented. • The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist:

	• Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used. • If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site. The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on water resources aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant. Should the tower's lifetime be expired, it is assumed that the tower, together with its foundation, can be removed. In this event, ecological functioning that has been lost because of the cell phone tower, would be naturally restored.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise Low-negative**
Nature of impact:	Noise impact from machinery on the property and neighbouring residential properties during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on the site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Low-negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - Low negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	
Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	

Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impact: Medium-negative**
Nature of impact:	Unsightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Low
Cumulative impact prior to mitigation:	Low-Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Visual impact mitigation measures will be dealt with in the Environmental Management Programme ("EMPr"). The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	The visual specialist (Appendix G3 for the report) recommended the following mitigation measures: • Access roads are to be kept clean and dust suppression techniques should be implemented to minimise impacts of vehicle movement; • Site offices and structures should be limited to one location and carefully situated to reduce visual intrusions. Roofs should be grey and non-reflective; • Construction camps as well as development areas should be screened with netting; • Lights within the construction camp should face directly down (angle of 90˚); • Minimum vegetation should be removed to ensure the visual absorption capacity remain high; • Litter should be strictly controlled, as the spread thereof through wind could have a very negative visual impact; • Avoid shiny materials in structures. Where possible shiny metal structures should be darkened or screened to prevent glare; • The proposed mast should be galvanised and glare must be prevented in order to blend with the surrounding environment; and, • The containers should be painted a brownish colour to ensure it blends in with the natural environment. • Mitigation to minimise lighting impacts include the following: - Shielding the sources of light by physical barriers (walls, vegetation or structures itself); - Limit mounting heights of lighting fixtures, or alternatively using foot-lights or bollard level lights); - Make use of downward directional lighting fixtures; - Make use of minimum lumen or wattage in lights; - Uses motion sensors to activate lighting ensuring light is available when needed The following additional measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Low - negative

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	
Potential impact and risk:	Visual impact: Medium-negative
Nature of impact:	The development of the mast will most probably have a visual impact because of the height of the mast (30m in height).
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low - negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Medium - negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	• Restrict the height of the mast to only 30m; • Construct a monopole mast; and • Implementation of the EMPr.
Residual impacts:	Very Low – negative
Cumulative impact post mitigation:	Very Low – negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socio-Economic (Low - Positive)**
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.

Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low – Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)
Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.
Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium – Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.
Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low – Positive
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	

Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is not expected to have any impacts on heritage and cultural-historic aspects.**
Nature of impact:	The loss of heritage, cultural or historic aspects during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Very Low – negative
Probability of occurrence:	Highly unlikely, no cultural or historic aspects of significance were identified on site.
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Negligible; activity unlikely to have a negative indirect impact
Cumulative impact prior to mitigation:	Very Low – Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very - Low Negative
Degree to which the impact can be avoided:	Low (Likely)
Degree to which the impact can be managed:	• If any archaeological remains (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 they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	• If any archaeological remains (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 they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed

	further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low - Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	No heritage or cultural aspects are expected to be impacted during the operational phase since no cultural or historic aspects were identified on site.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Ecological aspect**
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. The site is not located within a CBA, and no natural vegetation remains on site. The site is totally transformed from its natural state due to past development activities on the property.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take during normal working hours. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	

Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	**Monopole Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Water resources aspect**
Nature of impact:	The Freshwater report (Appendix G2) states that the proposed mast is location (Alternative A) will be located outside of the wetland area but with the 500m buffer zone. The buffer zone is very dry, with ground water moving deeper down underneath, or perhaps around the proposed site. The specialist states that the impact of the mast on aquatic environment would be negligible. BGCMA granted a General Authorisation for the proposed mast location (Alternative A). Appendix E3.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented. • The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist: • Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used. • If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site.

	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented. • The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist: • Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the western border of the property to be used. • If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site. The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated.

	• Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on water resources aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant. Should the tower's lifetime be expired, tt is assumed that the tower, together with its foundation, can be removed. In this event, ecological functioning that has been lost because of the cell phone tower, would be naturally restored.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	

Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise Low-negative**
Nature of impact:	**Noise impact from machinery on the property and neighbouring residential properties during construction.**
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on the site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Low-negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - Low negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – negative
OPERATIONAL PHASE	
Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	

Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impact: Medium-negative**
Nature of impact:	Unsightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Low
Cumulative impact prior to mitigation:	Low-Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – negative
Degree to which the impact can be avoided:	Medium

Degree to which the impact can be managed:	Visual impact mitigation measures will be dealt with in the Environmental Management Programme ("EMPr"). The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	The visual specialist (Appendix G3 for the report) recommended the following mitigation measures: • Access roads are to be kept clean and dust suppression techniques should be implemented to minimise impacts of vehicle movement; • Site offices and structures should be limited to one location and carefully situated to reduce visual intrusions. Roofs should be grey and non-reflective; • Construction camps as well as development areas should be screened with netting; • Lights within the construction camp should face directly down (angle of 90˚); • Minimum vegetation should be removed to ensure the visual absorption capacity remain high; • Litter should be strictly controlled, as the spread thereof through wind could have a very negative visual impact; • Avoid shiny materials in structures. Where possible shiny metal structures should be darkened or screened to prevent glare; • The proposed mast should be galvanised and glare must be prevented in order to blend with the surrounding environment; and, • The containers should be painted a brownish colour to ensure it blends in with the natural environment. • Mitigation to minimise lighting impacts include the following: - Shielding the sources of light by physical barriers (walls, vegetation or structures itself); - Limit mounting heights of lighting fixtures, or alternatively using foot-lights or bollard level lights); - Make use of downward directional lighting fixtures; - Make use of minimum lumen or wattage in lights; - Uses motion sensors to activate lighting ensuring light is available when needed

	The following additional measures should be implemented amongst others: • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – negative
OPERATIONAL PHASE	
Potential impact and risk:	Visual impact: Medium-negative
Nature of impact:	The development of the tree mast will have a visual impact because of the height of the mast (30m in height).
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low – negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Medium – negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	• Restrict the height of the mast to only 30m; • Construct a tree mast; and • Implementation of the EMPr.
Residual impacts:	Very Low – negative
Cumulative impact post mitigation:	Very Low – negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	

Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socio-Economic (Low - Positive)**
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)
Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.
Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.
Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low - Positive
Cumulative impact post mitigation:	Low - Positive

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is not expected to have any impacts on heritage and cultural-historic aspects.**
Nature of impact:	The loss of heritage, cultural or historic aspects during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Very Low – negative
Probability of occurrence:	Highly unlikely, no cultural or historic aspects of significance were identified on site.
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Negligible; activity unlikely to have a negative indirect impact
Cumulative impact prior to mitigation:	Very Low – Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very - Low Negative
Degree to which the impact can be avoided:	Low (Likely)
Degree to which the impact can be managed:	• If any archaeological remains (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, all work must be stopped and findings must be reported to Heritage Western Cape (HWC) immediately. Findings must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, works should be stopped, Findings should immediately be reported to the South African Heritage

	Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	• If any archaeological remains (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 , all work must be stopped. Findings to be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low - Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	No heritage or cultural aspects are expected to be impacted during the operational phase since no cultural or historic aspects were identified on site.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	

Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Ecological aspect**
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. The site dos not fall within a CBA with no natural vegetation remaining. The site is totally transformed from its natural state due to past development activities on the property.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium

Proposed mitigation:	The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take during normal working hours. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	

Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	**Tree Mast**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Water resources aspect**
Nature of impact:	The Freshwater report (Appendix G2) states that the proposed mast is location (Alternative A) will be located outside of the wetland area but with the 500m buffer zone. The buffer zone is very dry, with ground water moving deeper down underneath, or perhaps around the proposed site. The specialist states that the impact of the mast on aquatic environment would be negligible. BGCMA granted a General Authorisation for the proposed mast location (Alternative A). Appendix E3.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented. • The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist: • Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used.

	• If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site. The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The following conditions as set out by BGCMA must be adhered to: • Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented. • The water use must not detrimentally affect the use of water of any other lawful water user, including the environment. • Construction should take place during the summer months when flow is low. Mitigation measures as set out by the Freshwater specialist: • Keep vehicles, machinery, building material and rubble out of wetland area • Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils. • No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used. • If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude. • The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from

	elsewhere. Apart from assembling the tower, no parts will be made on site. • The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site. The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others: • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction activities to be clearly restricted to demarcated construction area. • 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 completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on water resources aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	

Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant. Should the tower's lifetime be expired, tt is assumed that the tower, together with its foundation, can be removed. In this event, ecological functioning that has been lost because of the cell phone tower, would be naturally restored.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

No-Go Alternative	No-go alternative is the option of not constructing the mast
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**No impact**
Nature of impact:	No impact
Extent and duration of impact:	No impact
Consequence of impact or risk:	No impact
Probability of occurrence:	No impact
Degree to which the impact may cause irreplaceable loss of resources:	No impact
Degree to which the impact can be reversed:	No impact
Indirect impacts:	No impact
Cumulative impact prior to mitigation:	No impacts
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	No impact
Degree to which the impact can be avoided:	The implementation of the no-go alternative would mean that the status quo of the environment will remain the same. no mitigation measures recommended.
Degree to which the impact can be managed:	The implementation of the no-go alternative would mean that the status quo of the environment will remain the same. no mitigation measures recommended.
Degree to which the impact can be mitigated:	The implementation of the no-go alternative would mean that the status quo of the environment will remain the same. no mitigation measures recommended.
Proposed mitigation:	The implementation of the no-go alternative would mean that the status quo of the environment will remain the same. no mitigation measures recommended.
Residual impacts:	No impacts
Cumulative impact post mitigation:	No impacts
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	The implementation of the no-go alternative would mean that the status quo of the environment will remain the same.
OPERATIONAL PHASE	

Potential impact and risk:	The implementation of the no-go alternative would mean that the operational phase is not applicable.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The implementation of the no-go alternative would mean that the decommissioning phase is not applicable.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Note: The EAP may decide to include this section as Appendix J to the BAR.

(c) Provide a summary of the site selection matrix.

The proposed site was identified due to the following criteria:

- Preferred site (Alternative A) is considered transformed with no natural vegetation cover present;
- The preferred site does not fall within a CBA
- The preferred site does however fall within a degraded ESA
- The preferred site does fall within the 500m radius of a wetland, however from the Freshwater specialist findings (Appendix G2) the mast will not have an impact on the aquatic area.
- The preferred site will not impact on heritage or cultural resources
- The visual impact of the mast is considered. From the Visual specialist findings (Appendix G3) a lattice mast is considered the preferred alternative and a monopole mast considered the suitable alternative. The impact of the lattice mast is considered low if mitigation measures are implemented.

- There is an existing access road towards the proposed site, thus no need to construct a new road;
- Site located on a flat surface area;
-

(d) Outcome of the site selection matrix.

The current location of the proposed site is best situated to avoid potential negative environmental impacts. As mentioned above, the proposed site is considered transformed from its natural state due to past and current agricultural development activities on the property. The proposed site will be accessed via an existing road on the property. The proposed site would cause the least environmental impact and will be managed through the implementation of the Environmental Management Programme ("EMPr").

3. SPECIALIST INPUTS/STUDIES, FINDINGS AND RECOMMENDATIONS

Note: Specialist inputs/studies must be attached to this report as **Appendix G** and must comply with the content requirements set out in Appendix 6 of the EIA Regulations, 2014 (as amended). Also take into account the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "*One Environmental Management System*" and the EIA Regulations, 2014, any subsequent Circulars, and guidelines available on the Department's website (**http://www.westerncape.gov.za/eadp**).

Provide a summary of the findings and impact management measures identified in any specialist report and an indication of how these findings and recommendations have been included in the BAR.

Botanical:

The site does not fall within any CBAs and is because the site is transformed and does not contain any natural vegetation, a Botanical Specialist was not appointed.

Freshwater:

After recommendations from Cape Nature that alternative sites must be evaluated and comments from BGCMA (Appendix F1.6/F1.7), a freshwater specialist was appointed to conduct an assessment, including a wetland delineation, as described in sections above.

The Freshwater specialist conducted a site visits to ground truth Cape Farm Mapper findings. The freshwater report (Appendix G2) evaluates two alternatives considered and concludes:

Findings from the Freshwater impact report and wetland delineation (Appendix G2 for the report) concludes that Alternative A (original location) is still considered the preferred location when compared to Alternative B (Cape Nature suggested location). The report states that both site alternatives are located outside of the wetland area, but within the 500m buffer zone, the buffer zone is considered very dry. Alternative A (original location) is slightly more preferred when compared to Alternative B (Cape Nature), even though Alternative B is out of the official NEFPA wetland (as indicated on the map). Alternative A is considered to be slightly further away from the verge of the delineated wetland. Alternative A is also further away from a spring that was observed on site (157m away) when compared to Alternative B (which is 136m away).

BGCMA also conducted a site visit with the freshwater specialist (refer to attached attendance register Appendix K) and agreed that Alternative A would be the preferred location. BGCMA considered the Freshwater impact report and asked for a "work plan" from the client, after which they granted a General Authorisation for the proposed Alternative A site. Please see attached **Appendix E3.**

It is therefore concluded that Alternative A (preferred) is the only feasible and reasonable alternative. Only Alternative A will be evaluated this Basic Assessment Report.

The specialist further states that given that economic housing as well as the worst of shanty towns are located within the 500m buffer zone and even right on water courses in Grabouw, the addition of a cell phone transmission tower can hardly be viewed as incrementally deleterious.

The Freshwater report (Appendix G2) concludes that the proposed mast is location (Alternative A) will be located outside of the wetland area but with the 500m buffer zone. The buffer zone is very dry, with ground water moving deeper down underneath, or perhaps around the proposed site. The specialist states that the impact of the mast on aquatic environment would be negligible.

Mitigation measures as set out by the Freshwater specialist include:

- Keep vehicles, machinery, building material and rubble out of wetland area
- Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils.
- No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the wester border of the property to be used.
- If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude.
- The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site.
- The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site.

BGCMA sets out the following conditions in the granted General Authorisation for Alternative A:

- Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented.
- The water use must not detrimentally affect the use of water of any other lawful water user, including the environment.
- Construction should take place during the summer months when flow is low.

Heritage:

Heritage Specialist, CTS Heritage were appointed to conduct a Heritage Screener as well as submit a Heritage NID to HWC. Please refer to Appendix G1 for the Heritage Screener and well as E1 for comments from HWC confirming that the proposed development will not impact on any heritage resources.

Heritage Western Cape prescribed the following conditions:

- Should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and HWC must be notified without delay.

Visual:

The visual specialist concluded that a lattice mast is considered the preferred alternative. The principles as set out in the City of Cape Town's Draft Telecommunication Infrastructure Policy: April 2015 states that as a general rule for freestanding telecommunication masts, a slim line monopole should be used in an urban context and lattice mast should be used in a rural context. As the proposed development is situated within the agricultural area of Grabouw, a lattice mast is considered the preferred alternative. The Figure 7 & 8 above (and Appendix G3 in th VIA report) below further indicates that a lattice mast blends in better with the surrounding environment when compared to the monopole mast. The visual specialist recommends a Lattice mast.

The visual specialist further states that if mitigation measures are implemented, the impact of the mast on residents in the area, commuters making use of the N2 and tourists visiting the surrounding tourists attractions, will be low.

The Visual Specialist recommends the following mitigation measures:

- Access roads are to be kept clean and dust suppression techniques should be implemented to minimise impacts of vehicle movement;
- Site offices and structures should be limited to one location and carefully situated to reduce visual intrusions. Roofs should be grey and non-reflective;
- Construction camps as well as development areas should be screened with netting;
- Lights within the construction camp should face directly down (angle of 90˚);
- Minimum vegetation should be removed to ensure the visual absorption capacity remain high;
- Litter should be strictly controlled, as the spread thereof through wind could have a very negative visual impact;

- Avoid shiny materials in structures. Where possible shiny metal structures should be darkened or screened to prevent glare;
- The proposed mast should be galvanised and glare must be prevented in order to blend with the surrounding environment; and,
- The containers should be painted a brownish colour to ensure it blends in with the natural environment.
- Mitigation to minimise lighting impacts include the following:
- Shielding the sources of light by physical barriers (walls, vegetation or structures itself);
- Limit mounting heights of lighting fixtures, or alternatively using foot-lights or bollard level lights);
- Make use of downward directional lighting fixtures;
- Make use of minimum lumen or wattage in lights;
- Uses motion sensors to activate lighting ensuring light is available when needed
- The Contractor must control the movement of all vehicles and plant including that of his suppliers so that they remain on designated routes. In addition, such vehicles and plant must be so routed and operated as to minimise disruption to regular users of the routes not on the Site. On public roads adjacent to the Site, vehicles will adhere to municipal and provincial traffic regulations. The Contractor must take all reasonable measures to minimize the generation of dust as a result of construction activities to the satisfaction of the ECO and Local Authority.
- Construction of a lattice mast, keeping the height at 30m.

4. ENVIRONMENTAL IMPACT STATEMENT

Provide an environmental impact statement of the following:

(i) A summary of the key findings of the EIA.

The potential impacts associated with the proposed development of a 30 high telecommunications lattice mast, includes noise and visual impacts during the construction phase. The visual impact would remain during the operational phase but is considered to be a low negative visual impact. The proposed development will have a low positive socio-economic impact as the network coverage in the area would be improved. The proposed development will have an insignificant impact on Heritage and Cultural-Historic aspects during the construction and operational phases.

The proposed development has an insignificant impact on ecological aspects. The site does not fall within a CBA and is clear of any natural vegetation and is considered transformed from it. The impact of the proposed mast on the wetland is considered negligible.

The potential or associated negative environmental impacts mentioned above, can be satisfactorily mitigated by the implementation of the Environmental Management Programme ("EMPr'"). An Environmental Control Officer to be appointed during the construction phase to oversee construction activities, and to see that construction activities are aligned with the EMPr.

(ii) Has a map of appropriate scale been provided, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers?	YES	~~NO~~

Appendix B2.

(iii) A summary of the positive and negative impacts that the proposed development and alternatives will cause in the environment and community.

From the risk assessments conducted it can be summarised that the alternatives considered (Alternative 1- Lattice Mast (Preferred); Alternative 2 – Tree Mast; Alternative 3 – Monopole Mast), would have the same impact on the receiving environment.

Construction phase:
Noise aspects – Low (Negative)
Visual aspects – Low (Negative)
Socio-economic aspects – Low (Positive): job creation and improved cellular network coverage.

Heritage and Cultural or historic aspects – Negligible
Ecological / Biodiversity aspects – Negligible - The activity is not expected to have any impact on ecological or biodiversity aspects on the site, as the site is located within a transformed ESA, no natural vegetation present.

Water resources – Negligible – the activity is not expected to impact on the wetland or aquatic habitat on the site.

Operational Phase:

Noise aspects – The activity is not expected to have noise impacts during the operational phase.
Visual aspects – Low - Medium (Negative)
Socio-economic aspects – Low-Medium (Positive): Increased coverage of telecommunications services and its associated benefits.
Heritage and Cultural or historic aspects –The activity is not expected to have any impact on cultural or heritage aspects on the site.
Ecological / Biodiversity aspects – The activity is not expected to have any impact on ecological or biodiversity aspects on the site.

Water resources – Negligible – the activity is not expected to impact on the wetland or aquatic habitat on the site.

Decommissioning:

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

Should the tower's lifetime be expired, it is assumed that the tower, together with its foundation, can be removed. In this event, ecological functioning that has been lost because of the cell phone tower, would be naturally restored.

5. IMPACT MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Based on the assessment, describe the impact management, mitigation and monitoring measures as well as the impact management objectives and impact management outcomes included in the EMPr. The EMPr must be attached to this report as Appendix H.

Noise
Objectives: To minimise potential negative noise impacts during the construction phase.
Mitigation measures:

- Effective noise control measures must be in place and acceptable working hours must be kept;
- Construction work will be restricted to normal working hours; and
- Implementation of the Environmental Management Programme ("EMPr").

Visual
Objectives: Minimise potential negative visual impacts during construction phase
Mitigation measure:

- Access roads are to be kept clean and dust suppression techniques should be implemented to minimise impacts of vehicle movement;
- Site offices and structures should be limited to one location and carefully situated to reduce visual intrusions. Roofs should be grey and non-reflective;
- Construction camps as well as development areas should be screened with netting;
- Lights within the construction camp should face directly down (angle of 90˚);
- Minimum vegetation should be removed to ensure the visual absorption capacity remain high;
- Litter should be strictly controlled, as the spread thereof through wind could have a very negative visual impact;
- Avoid shiny materials in structures. Where possible shiny metal structures should be darkened or screened to prevent glare;
- The proposed mast should be galvanised and glare must be prevented in order to blend with the surrounding environment; and,
- The containers should be painted a brownish colour to ensure it blends in with the natural environment.
- Mitigation to minimise lighting impacts include the following:

- Shielding the sources of light by physical barriers (walls, vegetation or structures itself);
- Limit mounting heights of lighting fixtures, or alternatively using foot-lights or bollard level lights);
- Make use of downward directional lighting fixtures;
- Make use of minimum lumen or wattage in lights;
- Uses motion sensors to activate lighting ensuring light is available when needed

- The Contractor must control the movement of all vehicles and plant including that of his suppliers so that they remain on designated routes. In addition, such vehicles and plant must be so routed and operated as to minimise disruption to regular users of the routes not on the Site. On public roads adjacent to the Site, vehicles will adhere to municipal and provincial traffic regulations. The Contractor must take all reasonable measures to minimize the generation of dust as a result of construction activities to the satisfaction of the ECO and Local Authority.
- Construction of a lattice mast, keeping the height at 30m.

Socio-economic aspects
Objectives: To improve the positive socio-economic impact and to avoid any potential negative aspects on site and surrounding area.
Mitigation measures:

- Adjacent, and nearby Property owners or property occupiers must be treated with respect and courtesy at all times. The cultural lifestyles of the communities living near the construction areas must be respected. Cognisance of the visual and noise impacts of construction activities must be taken, and all possible efforts to minimise these impacts must be taken.

Heritage and Cultural-Historic aspects
Objectives: Protect heritage resources should any be discovered during construction.

Mitigation measures:

- If remains or artefacts are discovered on Site during earthworks, work in the vicinity must cease and the Contractor must immediately inform the Engineer and the ECO who must contact Heritage Western Cape and/or the South African Heritage Resources Agency (SAHRA) for information on the appropriate course of action to be taken.
- In the event that previously unknown archaeological features are exposed during the construction phase, the Contractor should inform the Engineer and the ECO who will advise the applicant on the necessary course of action.
- Note that the Contractor may not, without a permit issued by the responsible heritage resource authority; destroy, damage, excavate, alter, deface or otherwise disturb any archaeological site or archaeological material. The latter is a criminal offence under the National Heritage Resources Act (No. 25 of 1999).

Ecological/ Biodiversity aspects
Objectives: To avoid the destruction of sensitive ecological or biodiversity features present on site and surrounding area and to mitigate any potential negative impacts.
Mitigation measures:

- The Contractor must not deface, paint, damage or mark any natural features (e.g. trees, rock formations, buildings, etc.), if these should be situated in or around the Site, for survey or other purposes unless agreed beforehand with the Engineer and the ECO. Any features affected by the Contractor in contravention of this clause must be restored/rehabilitated to the satisfaction of the Engineer and the ECO.

- Except to the extent necessary for the carrying out of the works, flora must not be removed, damaged or disturbed nor must any vegetation be planted. Any removal of vegetation that is necessary should be kept strictly to the demarcated area. The planted trees on site that are within the development footprint should be carefully removed and replanted elsewhere on the property.

- Staff and plant movement to be restricted to the disturbed areas. Construction material must be stored in areas designated by the site agent and must not damage natural vegetation. Only the existing roads/tracks are to be used.

- Trapping, poisoning and/or shooting of animals is strictly forbidden. No domestic pets or livestock are permitted on Site. Where the use of herbicides, pesticides and other poisonous substances are to be used, the Contractor must submit a Method Statement.

- All incidents of harm to any animal or natural vegetation (apart from the agreed upon areas) must be reported to the ECO.
- The removal of fauna from the site must be done in accordance with the requirements of the Nature Conservation Ordinance regulating these activities and should be conducted by a suitably qualified and experienced person. The necessary permits that may be required from CapeNature should first be obtained.
- If required, any flora identified during construction to be rescued must be removed and placed in an area specifically allocated for these plants to ensure that the necessary care thereof will take place until being relocated and planted in designated areas.
- The areas of vegetation that are to be protected during construction must be demarcated and indicated on a site plan. A Method Statement is to be submitted to the ECO by the Contractor, detailing the method of fencing for protection of the conservation areas.
- A Method Statement must be submitted detailing the methods to be used for vegetation clearing if required. All cleared areas must be stabilised as soon as possible. Burning of cleared vegetation on site is prohibited. The burying of cleared vegetation or use as part of backfill or landscape shaping is prohibited unless written approval is obtained from the ECO.
- Cleared vegetation may be used for mulch or slope stabilisation of the Site. Should bulk vegetation be removed from the designated working areas (foot print area) then tall vegetation shall first be removed through brush cutting and chipping of larger shrub material; this may be added to the topsoil material stockpiles as mulch. Unless otherwise agreed upon, only indigenous plant material shall be used for this purpose.
- Prior to any activities within the demarcated work areas, topsoil material shall be removed to a depth of 200 mm or deeper if specified by the engineer in consultation with the ECO and stockpiled in a designated area for use in rehabilitation of the site post construction. Any area where the topsoil will be impacted by construction activities, including the construction offices and storage areas, must have the topsoil stripped and removed and covered with herbaceous vegetation (other than alien species), overlying grass and other fine organic matter and stockpiled for subsequent use in rehabilitation.
- Topsoil storage areas must be convex and should not exceed 2 m in height. The Contractor must ensure that the material does not blow or wash away. Topsoil must be treated with care, must not be buried or in any other way be rendered unsuitable for further use (e.g. by mixing with spoil) and precautions must be taken to prevent unnecessary handling and compaction. In particular, topsoil must not be subject to compaction greater than 1 500 kg/m² and must not be pushed by a bulldozer for more than 50 m. Trucks may not be driven over the stockpiles.
- Topsoil from different soil types must be stockpiled separately and replaced in the same areas from which they were taken if this proves to be the case. Specific attention should be given to the areas that may house rare and threatened species. Topsoil areas must be demarcated in order to ensure the safekeeping of topsoil and to separate different stockpile types.

Water resources

Objective: To avoid the destruction of sensitive wetland/ aquatic features present on site and surrounding area and to mitigate any potential negative impacts.
Mitigation measures:

- Keep vehicles, machinery, building material and rubble out of wetland area
- Complete the development prior to rainy season to prevent washing down of sediments by storm water onto hydromorphic soils.
- No new roads to be constructed over the property and over the hydromorphic soils, the existing road servitude along the western border of the property to be used.
- If cranes are required to lift the tower and other equipment into position, these will take up position on the road servitude.
- The cell phone tower and accessory components are to be manufactures off-site and transported with trucks from elsewhere. Apart from assembling the tower, no parts will be made on site.
- The concrete foundation must be sourced from outside and transported to the site. No concrete to be mixed on site.

BGCMA sets out the following conditions in the granted General Authorisation for Alternative A:

- Mitigation measures as stipulated in the Freshwater Report dated January 2019 must be implemented.
- The water use must not detrimentally affect the use of water of any other lawful water user, including the environment.
- Construction should take place during the summer months when flow is low.

The Environmental Management Programme (EMPr) is required to address the protection and ongoing management of the natural resources both on and off the site during the operational stages of the development. The overarching goal is to ensure that undue or reasonably avoidable impacts of the proposed development are avoided and that positive impacts of the development are enhanced.

The following points of action must be considered during the operational phase (maintenance activities) to avoid any environmental impacts:

- All maintenance activities will consider the environment and surrounding businesses, residences and residents.
- The Applicant will ensure that any maintenance activities that are undertaken are carried out in line with the specifications and recommendations set out in section 17 of this document.
- Any incidents that have resulted in a significant negative impact on the environment are to be reported to the Department of Environmental Affairs and Development Planning ("DEA&DP").
- The site must be securely fenced off, with no public access to the installation.

(b) Describe any provisions for the adherence to requirements that are prescribed in a Specific Environmental Management Act relevant to the listed activity or specified activity in question.

N/A. The proposed activity involves the proposed development of a 30m high telecommunications lattice mast on Portion 7 of Farm 292 Jagersvlakte, Grabow RD, Western Cape. No other National Environmental Management Act or Specific Environmental Management Act ("SEMA") are applicable to this listed activity. The proposed site is does not involve waste management activities or air quality listed activities requiring authorisation.

(c) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

Under South African environmental legislation, the Applicant is accountable for the potential impacts of the activities that are undertaken and is responsible for managing these impacts. Atlas Towers SA (Pty) Ltd. as the Applicant therefore has overall and total environmental responsibility to ensure that the implementation of the construction phase of this EMPr complies with the relevant legislation and the conditions of the environmental authorisation.

The developer will be responsible for the development and implementation of the conditions of the Environmental Authorisation in terms of the design of the development and construction thereof. The developer will thus be responsible for the implementation of this EMPr. The applicant has shown commitment to implement management, mitigation and monitoring measures as specified in the recommendations in and the EMPr.

(d) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

Atlas Towers SA (Pty) Ltd., as the applicant, has the financial ability/provision to manage and mitigate any potential negative environmental impacts through the implementation of the EMPr, should they occur.

(e) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

Atlas Towers SA (Pty) Ltd., as the applicant, has the financial ability/provision to manage and mitigate any potential negative environmental impacts through the implementation of the EMPr, should they occur.

(f) Describe any assumptions, uncertainties, and gaps in knowledge which relate to the impact management, mitigation and monitoring measures proposed.

There are no significant gaps of knowledge that have been identified.

SECTION H: RECOMMENDATIONS OF THE EAP AND SPECIALISTS

(a) In my view as the appointed EAP, the information contained in this BAR and the documentation attached hereto is sufficient to make a decision in respect of the listed activity(ies) applied for.	YES	~~NO~~

(b) If the documentation attached hereto is sufficient to make a decision, please indicate below whether, in your opinion, the listed activity(ies) should or should not be authorised:		
Listed activity(ies) should be authorised:	YES	~~NO~~

Provide reasons for your opinion

The proposed activity should be authorised for the following reasons:

- The proposed communication mast, allows for multiple service providers to attach and house their equipment on the mast, decreasing the need for additional communications masts to be erected in the area.
- 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 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 considered as part of the essential services for the greater community. The data capabilities provided by the proposed mast are important in business, education and for the public, and has thus become paramount for social and economic development.
- The impact on the visual character of the area is expected to be low but acceptable if mitigation measures as implemented.
- The proposed site falls within 500m of a wetland, however, according the freshwater specialist the development of the mast will have a negligible impact on the wetland and aquatic environment.
- The proposed site is not located within a Critical Biodiversity Area ("CBA") and no populations of threatened plant or animal species were observed on site.
- No heritage, cultural or historical aspects were identified on the site.
- 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 expected to be negligible.

Considering all the information, it is not envisaged that this proposed development will have a negative impact on the environment.

It is therefore recommended that this application be authorised with the necessary conditions of approval as described throughout this BAR.

(c) Provide a description of any aspects that were conditional to the findings of the assessment by the EAP and Specialists which are to be included as conditions of authorisation.

The mitigation measures as contained in the Basic Assessment Report ("BAR") and EMPr must be implemented to mitigate any potential negative environmental impacts.

Please refer to the comments and response report Appendix F1
Appendix F1.6
Comments Cape Nature:

1. If the application is authorised as it stands, the development must take place in the dry summer months.

Appendix E1
Comments Heritage Wester Cape:

1. Should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and HWC must be notified without delay.

Appendix E2:
Approval conditions from SACAA Obstacle approval:

1. Night markings

Appendix E3:
Comments BGCMA on Granting of General Authorisation:

1. Mitigation measures as stipulated in the Freshwater Report dated January 2019 must implemented.
2. The water use must not detrimentally affect the use if water of any other lawful water use including the environment.
3. Construction should take place during the summer months, when the flow is low.

(d) If you are of the opinion that the activity should be authorised, please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an environmental authorisation.

Compliance with the EMPr and appointment of an ECO during the construction phase.

(e) Please indicate the recommended periods in terms of the following periods that should be specified in the environmental authorisation:

i.	the period within which commencement must occur;	5 years
ii.	the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects;	5 years
iii.	the period for which the portion of the environmental authorisation that deals with non-operational aspects is granted; and	5 years
iv.	the period for which the portion of the environmental authorisation that deals with operational aspects is granted.	N/A

SECTION I: APPENDICES

The following appendices must be attached to this report:

APPENDIX			Confirm that Appendix is attached
Appendix A:	**Locality map**		√
Appendix B:	**Site development plan(s)**		√
	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;		√
Appendix C:	**Photographs**		√
Appendix D:	**Biodiversity overlay map**		√
Appendix E:	**Permit(s) / license(s) from any other Organ of State, including service letters from the municipality.**		
	Appendix E1:	**Copy of comment from HWC.**	√
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses report, proof of notices, advertisements and any other public participation information as is required in Section C above.**		√
Appendix G:	**Specialist Report(s)**		√
Appendix H :	**EMPr**		
Appendix I:	**Additional information related to listed waste management activities (if applicable)**		
Appendix J:	**If applicable, description of the impact assessment process followed to reach the proposed preferred alternative within the site.**		√
Appendix K:	**Any Other (if applicable).**		√

SECTION J: DECLARATIONS

THE APPLICANT

Note: Duplicate this section where there is more than one applicant.

I ……..……., in my personal capacity or duly authorised thereto, hereby declare/affirm all the information submitted as part of this Report is true and correct, and that I –

- am aware of and understand the content of this report;
- am fully aware of my responsibilities in terms of the NEMA, the EIA Regulations in terms of the NEMA (Government Notice No. R. 982, refers) (as amended) and any relevant specific environmental management Act and that failure to fulfil these requirements may constitute an offence in terms of relevant environmental legislation;
- have provided the EAP and Specialist, Review EAP (if applicable), and Review Specialist (if applicable), and the Competent Authority with access to all information at my disposal that is relevant to the application;
- will be responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority;
- will be responsible for the costs incurred in complying with the conditions that may be attached to any decision(s) issued by the Competent Authority;

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant: _____

Name of Organisation: _____

Date: _____

THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I ……., as the appointed EAP hereby declare/affirm:

- the correctness of the information provided as part of this Report;
- that all the comments and inputs from stakeholders and I&APs have been included in this Report;
- that all the inputs and recommendations from the specialist reports, if specialist reports were produced, have been included in this Report;
- any information provided by me to I&APs and any responses by me to the comments or inputs made by I&APs;
- that I have maintained my independence throughout this EIA process, or if not independent, that the review EAP has reviewed my work (Note: a declaration by the review EAP must be submitted);
- that I have throughout this EIA process met all of the general requirements of EAPs as set out in Regulation 13;
- I have throughout this EIA process disclosed to the applicant, the specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared as part of the application;
- have ensured that information containing all relevant facts in respect of the application was distributed or was made available to I&APs and that participation by I&APs was facilitated in such a manner that all I&APs were provided with a reasonable opportunity to participate and to provide comments;
- have ensured that the comments of all I&APs were considered, recorded and submitted to the Department in respect of the application;
- have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, if specialist inputs and recommendations were produced;
- have kept a register of all I&APs that participated during the PPP; and
- am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014 (as amended).

Signature of the EAP: _____

Name of Company: _____

Date: _____

THE REVIEW ENVIRONMENTAL ASSESSMENT PRACTITIONER

I ……., as the appointed Review EAP hereby declare/affirm:

- that I have reviewed all the work produced by the EAP;
- the correctness of the information provided as part of this Report;
- that I have, throughout this EIA process met all of the general requirements of EAPs as set out in Regulation 13;
- I have, throughout this EIA process disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared as part of the application; and
- am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014 (as amended).

Signature of the Review EAP: _____

Name of Company: _____

Date: _____

THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I ……, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I :

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- in terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014 (as amended).

Signature of the Specialist: _____

Name of Company: _____

Date: _____

THE REVIEW SPECIALIST

I ……., as the appointed Review Specialist hereby declare/affirm:

- that I have reviewed all the work produced by the Specialist(s);
- the correctness of the specialist information provided as part of this Report;
- that I have, throughout this EIA process met all of the general requirements of specialists as set out in Regulation 13;
- I have, throughout this EIA process disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014 (as amended).

Signature of Review Specialist: _____

Name of Company: _____

Date: _____