



FLORA OF CONSERVATION CONCERN: TRANSLOCATION/ DESTRUCTION METHOD STATEMENT

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ABBREVIATIONS

DFFE	Department of Forestry, Fisheries and the Environment
IEMP	Integrated Environmental Management Plan
RFI	Radio Frequency Interference
SARAO	South African Radio Astronomy Observatory
SKA	Square Kilometre Array
SKA1_MID	Square Kilometre Phase 1 Mid Frequency Array Project



1 INTRODUCTION

1.1 PURPOSE

Method statement for the translocation and/or destruction of plants of conservation concern identified and falling within the MeerKAT Extension construction footprint.

1.2 SCOPE

This document applies to the plants of conservation concern falling within the MeerKAT Extension construction footprint. This method statement is advised by the search and rescue report produced by Dr. Gareth Coombs of Umsintsi Consulting (CC) and advice provided in consultation with SANParks Park Management and Scientific Services.

1.3 BACKGROUND

The MeerKAT Extension project will see the construction of 24 dish antennae and related support infrastructure as well as the Visserskloof construction camp by the end of 2022. Prior to construction the MeerKAT Extension contractor is required to appoint a suitably qualified and experienced plant ecologist to undertake a search and rescue of the construction footprint for any plants of conservation concern as identified in accordance with the Northern Cape Nature Conservation Act (Act no 9 of 2009) and the National Forest Act (Act no 84 of 1998) as well as related regulations.

The objective of the search and rescue process is to mitigate the risks associated with the permanent removal or damage of plant species of conservation concern (species listed as threatened, vulnerable or endangered in the Red Data List or protected by national/Provincial legislation) during the MeerKAT Extension construction activities, as well as prevent the further reduction of the abundance of these species.

The National Environmental Management Biodiversity Act (Act no 10 of 2004) must be complied with when conducting any activity related to the permanent removal or damage of plant species of conservation concern. The Northern Cape Nature Conservation Act (Act no 9 of 2009) makes provision for restricting activities concerning "Specially Protected and Protected species" of fauna and flora; Schedule 1 and 2 of the Act respectively. In terms of Section 49 of the Act, no person may, without a permit (a) pick; (b) import; (c) export; (d) transport; (e) possess; (f) cultivate; or (g) trade in, a specimen of a specially protected plant. All these restrictions (with the exception of possession) also apply to "protected plants" (Section 50 of the Act).

In accordance with the National Forest Act (Act no 84 of 1998), Section 15, no person may— (a) cut. disturb. damage, destroy or remove any protected tree; or collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree. Except under a licence granted by the Minister. The trees declared as protected inline with the National Forest Act are published in Government Notice no. 155 in Government Gazette no. 44204.

Ecological walkthrough assessments have been undertaken on site for the larger SKA1_MID footprint (in which MeerKAT Extension will be incorporated) as well as the Search and Rescue for the MeerKAT Extension project. The plants of conservation concern identified in these assessments were done in consultation with the legislated lists of species described above. These studies have allowed for a comprehensive identification of the species of conservation concern falling within the MeerKAT Extension construction footprint.

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1.4 APPLICABLE DOCUMENTS

The following documents are applicable to the extent stated here in. In the event of conflict between the contents of these applicable documents and this document, the applicable documents shall take precedence.

- Integrated Environmental Management Plan (IEMP) for the SKA Phase 1 midfrequency array (SKA1_MID) in South Africa Revision 1 – CSIR/02100/EMS/ER/2016/15241/B
- [2] The National Environmental Management Biodiversity Act (Act no 10 of 2004)
- [3] The Northern Cape Nature Conservation Act (Act no 9 of 2009)
- [4] The National Forest Act (Act no 84 of 1998)
- [5] Notice of the List of Protected Tree Species Under the National Forests Act, 1998 -Government Notice no. 155 in Government Gazette no. 44204
- [6] Flora Harvesting Permit FLORA 0037/2022

1.5 REFERENCE DOCUMENTS

The following documents are referenced in this document.

- [1] Flora Search and Rescue MeerKAT Extension Project; 2021.
- [2] Ecological Sensitivity Assessment of Terrestrial and Aquatic Environments Impacted by SKA Phase 1 Infrastructure in the Nama-Karoo, South Africa; 2018.
- [3] SKA Phase 1 Infrastructure Fauna and Flora Preconstruction Walk-through Report; 2020.

2 **RESPONSIBILITY**

2.1 MEERKAT EXTENSION CONTRACTORS

The MeerKAT Extension Contractor must:

- Appoint a suitably qualified plant ecologist to undertake a walkthrough of the MeerKAT Extension construction footprint and identify any plants of conservation concern;
- Demarcate all identified plants of conservation concern;
- Ensure protection of the demarcated plants until a flora harvesting permit is issued by the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform (if necessary);
- Ensure protection of the demarcated plants until a translocation/destruction license is issued by the Department of Forestry, Fisheries and the Environment (DFFE) (if necessary);
- Ensure compliance with the conditions of the approved flora permit/license;
- Operate only within the defined MeerKAT Extension construction footprint; and



• Once translocation and or destruction is complete, remove and dispose of the demarcation stakes and tape in an appropriate manner in line with the IEMP conditions on waste management.

2.2 SHEQ MANAGER

The SHEQ Manager shall ensure that the following is done:

- Provide personnel protective clothing as requested by the site manager to personnel undertaking the necessary activities in-line with this document (if necessary);
- Ensure that all necessary records are filed and managed according to environmental management requirements; and
- Ensure monthly inspections of the MeerKAT Extension construction footprint are undertaken

2.3 CONSTRUCTION PLANNING ENVIRONMENTAL

Construction planning environmental shall ensure the following is done:

- Walkthroughs reports provided by the MeerKAT Extension contractors are reviewed and verified for the purposes required;
- Consultation with SANParks regarding the plants of conservation concern that fall within the Meerkat National Park;
- Consultation with the infrastructure team to reroute infrastructure where possible to avoid unnecessary need for plant translocation and/or destruction;
- The necessary permit/license applications are made for the identified plants of conservation concern to be translocated or destroyed;
- Ensure issued permits/licenses are disseminated to the required personnel;
- Manage the plant translocation and or destruction process in accordance with the issued permit/license; and
- Produce a report following the plant translocation and or destruction on the outcomes of the process, inclusive of coordinates and photographs of translocated plants.

2.4 ENVIRONMENTAL OFFICER

The Environmental Officer shall be responsible for the following:

• Undertaking monthly inspections of the MeerKAT Extension footprint to ensure compliance with the applicable Method Statements, IEMP Conditions, assessment report requirements, issued permits and licenses.

2.5 SANPARKS

SANParks is responsible for:

Consultation, advisory services and assistance in translocation and/or destruction of the plants
of conservation concern in line with the approved and issued permit/license for translocation
and/or destruction.



3 MEERKAT EXTENSION FLORA OF CONSERVATION CONCERN

3.1 ECOLOGICAL WALKTHROUGH ASSESSMENTS

A Search and Rescue walkthrough assessment must be undertaken for the MeerKAT Extension footprint by a suitably qualified plant ecologist, as appointed by the MeerKAT Extension contractor.

An independent ecologist, Dr. Gareth Coombs of Umsintsi Consulting (CC), was appointed to undertake a walkthrough of the MeerKAT Extension footprint and develop a Search and Rescue report. Prior to this assessment various other walkthrough assessments had been undertaken including:

- 1. SAEON Ecological and Biodiversity walkthrough of the SKA1_MID construction footprint (2018); and
- 2. GAEA Enviro Ecological walkthrough gap assessment of the SKA1_MID construction footprint (2020).

The relevant findings from these assessments, particularly the plants of conservation concern identified during these respective walkthrough assessments, were included and where necessary verified on site in the Search and Rescue report. The outcome included a list of species of conservation concern that fall within the MeerKAT Extension footprint and that need permits or licenses in order for them to be translocated or destroyed.

3.2 INFRASTRUCTURE REROUTING

Following the identification of species of conservation concern, the MeerKAT Extension infrastructure must be rerouted as much as possible to try and avoid the plants of conservation concern. The infrastructure routing is based primarily on the SKA dish antenna positions which are determined to ensure optimal scientific functionality of the instrument and therefore not all infrastructure can be rerouted, or only minimal shifting will be permissible. Once infrastructure is rerouted as far as possible, a reduced list of species that cannot be avoided and will need to be translocation and/or destroyed must be compiled (Refer to Appendix A).

3.3 AUTHORISATIONS FOR PLANT TRANSLOCATION AND/OR DESTRUCTION

Based on the plants identified for translocation/destruction (Appendix A), it must be determined which permit/license application process needs to be followed. Whether an application needs to be made to the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform or to the Department of Forestry, Fisheries and the Environment (DFFE).

In accordance with Appendix A, a total of 51 plants were identified for translocation/destruction. The following species where identified:

- Aloidendron dichotomum;
- Hoodia gordonii and
- Euphorbia rudis.

Based on these species, a permit application in accordance with the Northern Cape Nature Conservation Act (Act no 9 of 2009) is required. The *Aloidendron dichotomum* will not be removed as that would require an additional permit in terms of the National Forest Act (Act no. 84 of 1998). The *Aloidendron dichotomum* identified have been demarcated for avoidance during construction.



The permit application was submitted to the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform in April 2022. The issued permit was received on the 25th of May 2022 (FLORA 0037/2022) (Appendix B). When undertaking plant translocation/destruction the conditions of this permit must be adhered to.

3.4 SEARCH AND RESCUE METHODOLOGY FOR TRANSLOCATION

All Translocation on site must be undertaken with adherence to the Site Information Document and in particular Radio Frequency Interference (RFI) conditions and requirements on site. This pertains to the use of all electronic equipment on site.

As derived from the Search and Rescue report. The method statement will be discussed with the team before this activity starts.

Hoodia gordonii, Ghaap

Individuals of this species have been successfully transplanted on previous search and rescue projects with the methods described below:

Individuals of *Hoodia gordonii* should be excavated using a pick axe taking care to keep as much of the root stock unbroken. This can be done by digging approximately 40cm away from the stems and carefully lifting the roots and the entire plant. When doing this care should be taken accidentally break the succulent above ground stems. Another planting excavation of the same size and depth should be excavated at least 30m away from the outermost edge of the footprint in with similar characteristics to where the plant was excavated. Once the plant has been placed in the hole the roots can be covered with the soil removed during excavation. If water is available, a single watering of the roots can be provided, until the soil is well soaked, alternatively plants can just be left and should recover naturally. All transplanted plants should either be marked with a stake or a GPS coordinate to allow for later survival monitoring if possible.

Aloidendron dichotomum, Kokerboom

It is preferred that these plants be skirted or circumvented. As is the case with all transplants, plants would need to be excavated taking care to keep as much of the rootstock intact. Once plants have been excavated, a replanting hole should be excavated at least 30m off the footprint edge and the plant roots carefully set in the planting hole before the roots are covered. Plants should only be planted as deep as they were originally found growing and the stem should not be set deeply in the soil. If necessary plants should be staked to maintain an upright position while they establish. A single watering can be provided, as with Hoodia gordonii, previously, alternatively plants can be left to naturally re-establish. All transplanted plants should either be marked with a stake or a GPS coordinate to allow for later survival monitoring if possible.

3.5 SANPARKS CONSULTATION

The MeerKAT Extension project will be located within the Meerkat National Park, managed by SANParks. As such, all translocation/destruction of plants of conservation concern within the National Park will be done in consultation with SANParks Management and Scientific Services.

In accordance with the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform permit conditions, SARAO needs to consult SANParks when undertaking any plant translocation/destruction within the Meerkat National Park and the procedure for such activities must be agreed on with SANParks.



In accordance with the issued permit (Appendix B), SANParks was actively consulted regarding translocation:

- SANParks consulted on procedure for translocation of identified *Euphorbia rudis* individuals;
- SANParks Meerkat National Park Manager identified the locations for translocation within the Meerkat National Park; and
- SANParks staff undertook the required translocation process including removal of plants from the construction footprint and translocation to their new positions.

For the transplanting of *Euphorbia rudis* the following methodology was employed as prescribed by SANParks Scientific Services:

- Transplanting will take place in the same area and soil type as the original location and so no soil mixture is necessary.
- The plants should not be watered for at least 3 weeks after transplanting, plants must be left to naturally re-establish
- The roots can be washed with a solution of lime sulphur-water mixture to kill any fungus. This can be explored if the plants are out of the soil for several hours. The mixture is to prevent rot on the roots.
- After about 4 weeks SANParks will be able to see if the transplanting process was successful.

3.6 **REPORTING REQUIREMENTS**

Once translocation is complete a report on the outcomes of the translocation process needs to be developed inclusive of coordinates of the translocated individuals and before and after photographic evidence.

Appendix A: Plants to be translocated/destroyed falling within the MeerKAT Extension project.

Table 1: Plants of conservation concern falling within the MeerKAT Extension footprint permitted to be translocated or destroyed.

			Farm	Decimal o	degrees	Protected	
No.	Species	Farm Name	no.	Latitude (y)	Longitude (x)	category	Pre-application comment
1	Aloidendron dichotomum	Meysdam	RE68	30°43'2.35"S	21°26'55.45"E	Schedule 1	Currently in a very bad state due to natural causes- Approximately 10m from the planned dish platform.
2	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'30.98"S	21°24'0.42"E	Schedule 1	Inside the road
3	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'40.65"S	21°24'19.15"E	Schedule 1	Inside the road
4	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'40.32"S	21°24'21.48"E	Schedule 1	Inside the road
5	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'41.29"S	21°24'23.81"E	Schedule 1	Completely Damaged due to road clearing activities.
6	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'39.92"S	21°24'20.91"E	Schedule 1	Partially damaged due to road clearing activities.
7	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'41.28"S	21°24'24.41"E	Schedule 1	Partially damaged due to road clearing activities.
8	Hoodia gordonii	Groot Paarde Kloof	RE74	30°47'41.51"S	21°24'24.37"E	Schedule 1	Located a few meters from the road and might be impacted
9	Aloidendron dichotomum	Groot Paarde Kloof	RE74	30°47'47.07"S	21°24'34.19"E	Schedule 1	Located a few meters from the road and might be impacted through cable laying activities.
10	Aloidendron dichotomum	Groot Paarde Kloof	RE74	30°47'53.93"S	21°24'32.3"E	Schedule 1	Located a few meters from the road and might be impacted through cable laying activities.
11	Hoodia gordonii	Visserskloof	69/3	30°40'27.9"S	21°35'29.28"E	Schedule 1	Inside of planned construction camp
12	Hoodia gordonii	Visserskloof	69/3	30°40'24.12"S	21°35'23.84"E	Schedule 1	Inside of planned construction camp
13	Euphorbia rudis	Visserskloof	69/3	30°40'31.68"S	21°35'23.98"E	Schedule 2	Inside of planned construction camp
14	Euphorbia rudis	Visserskloof	69/3	30°40'31.42"S	21°35'23.78"E	Schedule 2	Inside of planned construction camp
15	Euphorbia rudis	Visserskloof	69/3	30°40'31.35"S	21°35'23.85"E	Schedule 2	Inside of planned construction camp
16	Euphorbia rudis	Visserskloof	69/3	30°40'30.66"S	21°35'23.94"E	Schedule 2	Inside of planned construction camp
17	Euphorbia rudis	Visserskloof	69/3	30°40'29.14"S	21°35'25.14"E	Schedule 2	Inside of planned construction camp
18	Euphorbia rudis	Visserskloof	69/3	30°40'24.38"S	21°35'29.83"E	Schedule 2	Inside of planned construction camp
19	Euphorbia rudis	Visserskloof	69/3	30°40'24.79"S	21°35'29.28"E	Schedule 2	Inside of planned construction camp
20	Euphorbia rudis	Visserskloof	69/3	30°40'28.65"S	21°35'24.82"E	Schedule 2	Inside of planned construction camp
21	Euphorbia rudis	Visserskloof	69/3	30°40'28.65"S	21°35'25.3"E	Schedule 2	Inside of planned construction camp
22	Euphorbia rudis	Visserskloof	69/3	30°40'24.56"S	21°35'29.18"E	Schedule 2	Inside of planned construction camp

		Earm Decimal degrees		degrees	Protected		
No.	Species	Farm Name	no.	Latitude (y)	Longitude (x)	category	Pre-application comment
23	Euphorbia rudis	Visserskloof	69/3	30°40'26.3"S	21°35'27.43"E	Schedule 2	Inside of planned construction camp
24	Euphorbia rudis	Visserskloof	69/3	30°40'24.5"S	21°35'29.07"E	Schedule 2	Inside of planned construction camp
25	Euphorbia rudis	Visserskloof	69/3	30°40'27.38"S	21°35'26.08"E	Schedule 2	Inside of planned construction camp
26	Euphorbia rudis	Visserskloof	69/3	30°40'24.83"S	21°35'28.49"E	Schedule 2	Inside of planned construction camp
27	Euphorbia rudis	Visserskloof	69/3	30°40'24.83"S	21°35'28.41"E	Schedule 2	Inside of planned construction camp
28	Euphorbia rudis	Visserskloof	69/3	30°40'24.88"S	21°35'28.35"E	Schedule 2	Inside of planned construction camp
29	Euphorbia rudis	Visserskloof	69/3	30°40'27.22"S	21°35'28.51"E	Schedule 2	Inside of planned construction camp
30	Euphorbia rudis	Visserskloof	69/3	30°40'24.59"S	21°35'28.51"E	Schedule 2	Inside of planned construction camp
31	Euphorbia rudis	Visserskloof	69/3	30°40'26.93"S	21°35'25.94"E	Schedule 2	Inside of planned construction camp
32	Euphorbia rudis	Visserskloof	69/3	30°40'24.66"S	21°35'27.99"E	Schedule 2	Inside of planned construction camp
33	Euphorbia rudis	Visserskloof	69/3	30°40'29.25"S	21°35'23.38"E	Schedule 2	Inside of planned construction camp
34	Euphorbia rudis	Visserskloof	69/3	30°40'26.08"S	21°35'26.5"E	Schedule 2	Inside of planned construction camp
35	Euphorbia rudis	Visserskloof	69/3	30°40'29.58"S	21°35'22.96"E	Schedule 2	Inside of planned construction camp
36	Euphorbia rudis	Visserskloof	69/3	30°40'24.9"S	21°35'27.6"E	Schedule 2	Inside of planned construction camp
37	Euphorbia rudis	Visserskloof	69/3	30°40'24.91"S	21°35'27.59"E	Schedule 2	Inside of planned construction camp
38	Euphorbia rudis	Visserskloof	69/3	30°40'23.93"S	21°35'28.31"E	Schedule 2	Inside of planned construction camp
39	Euphorbia rudis	Visserskloof	69/3	30°40'28.71"S	21°35'23.03"E	Schedule 2	Inside of planned construction camp
40	Euphorbia rudis	Visserskloof	69/3	30°40'29.04"S	21°35'22.68"E	Schedule 2	Inside of planned construction camp
41	Euphorbia rudis	Visserskloof	69/3	30°40'29.04"S	21°35'22.68"E	Schedule 2	Inside of planned construction camp
42	Euphorbia rudis	Visserskloof	69/3	30°40'25.34"S	21°35'25.41"E	Schedule 2	Inside of planned construction camp
43	Euphorbia rudis	Visserskloof	69/3	30°40'25.41"S	21°35'25.21"E	Schedule 2	Inside of planned construction camp
44	Euphorbia rudis	Visserskloof	69/3	30°40'25.07"S	21°35'24.32"E	Schedule 2	Inside of planned construction camp
45	Euphorbia rudis	Visserskloof	69/3	30°40'23.58"S	21°35'25.07"E	Schedule 2	Inside of planned construction camp
46	Euphorbia rudis	Visserskloof	69/3	30°40'23.46"S	21°35'25.01"E	Schedule 2	Inside of planned construction camp
47	Euphorbia rudis	Visserskloof	69/3	30°40'23.56"S	21°35'24.61"E	Schedule 2	Inside of planned construction camp
48	Euphorbia rudis	Visserskloof	69/3	30°40'23.55"S	21°35'24.3"E	Schedule 2	Inside of planned construction camp
49	Euphorbia rudis	Visserskloof	69/3	30°40'21.8"S	21°35'25.83"E	Schedule 2	Inside of planned construction camp

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			Farm	Decimal degrees		Protoctod	
No	o. Species	Farm Name	no.	Latitude (y)	Longitude (x)	category	Pre-application comment
50	Euphorbia rudis	Visserskloof	69/3	30°40'21.61"S	21°35'24.6"E	Schedule 2	Inside of planned construction camp
5′	Euphorbia rudis	Visserskloof	69/3	30°40'21.65"S	21°35'24.48"E	Schedule 2	Inside of planned construction camp



Appendix B: SARAO Flora Harvesting Permit (FLORA 0037/2022)

Tracking #: 0644/2022



Issued in terms of the provisions of: National Environmental Management: Biodiversity Act 10 of 2004

Permit No: FLORA 0037/2022

Application ID: 765

Biodiversitv

Northern Cape Province

Integrated Competence

Permit

Ordinary



Issued in terms of the provisions of: Northern Cape Nature Conservation Act, 9 of 2009

None

Flora Harvesting - Development

SPECIES AND NUMBERS, RESTRICTED ACTIVITIES AND PERMIT CONDITIONS AS PER ADDENDUM 1 AND PAGES ATTACHED

Authorising Entity / Institute / Company National Research Foundation

Fulufhelo Nelwamondo - ID or Passport 8209185332086 - Farm name: - Physical Address: 2 Fir Street, Black River Park Observatory (North Gate) - Cape Town - Western Cape Province - 7925

Postal address: 2 Fir Street, Black River Park Observatory (North Gate), Cape Town, Western Cape, 7925

Contact details: Office: - Home: - Cell: +27828471787 - Fax: - E-mail: gduncan@sarao.ac.za

Region in which restricted activity will take place

Northern Cape Province

Address / Place / Fixed Property where restricted activity will be carried out, conducted or take place

Northern Cape Farms (as indicated in the additional conditions) in the Carnarvon-Brandvlei-Williston area, Pixley ka Seme District within the Northern Cape Province

Digital signature of verifier



Issuing authority

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Signature of Issuing Authority

2012

Ba

Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

(HQ - Kby) Tel: 053-807 7430 Fax: 086 5151 769 (Kuruman) Tel: 053-712 0702 Fax: 053-712 0936

(Cal) Tel: 027-341 1779 Fax: 027-341 1718 (Upt) Tel: 054-3322885 Fax: 054-3311155

TOPS Reg #:

ADDENDUM 1

PRESCRIBED FEES

The prescribed fees paid for the issuing of this document shall not be refunded

Tariff: 40 - Amendment (provincial) - Amount currently owed: R100 - Debit amount: R100 on 24/05/2022 with receipt number: TN 0644/2022 - VCQS93JJ

Tariff: 39 - Amendment (TOPS) - Amount currently owed: R200 - Debit amount: R200 on 24/05/2022 with receipt number: TN 0644/2022 - VCQS93JJ

SPECIES AND NUMBERS PERMITTED

Live, Albuca spp., ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Aloidendron dichotomum, Quiver Tree, KokerboomSpecies sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed as per the valid national Forest Act licence.
Live, Aridaria noctiflora, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Aridaria noctiflora, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Brownanthus ciliatus, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Brunsvigia namaquana, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Bulbine frutescens, , - 3 -Species sex: Not applicable, Three (3) plants found within the development footprint may be translocated / damaged
Live, Crassula muscosa, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Deverra denudata, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Drosanthemum sp., Vygies,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Euphorbia rudis, , - 39 -Species sex: Not applicable, Thirty nine (39) plants found within the development footprint may be translocated / damaged
Live, Galenia sarcophylla, Beslyn, porselyn, t'gouboedana,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Gethyllis transkarooica, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Gethyllis villose, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Hoodia gordonii, Hoodia, Ghaap Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Jamesbrittenia atropurpurea,, -7 -Species sex: Not applicable, Seven (7) plants found within the development footprint may be translocated / damaged
Live, Lachenalia maughanii, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Lessertia frutescens (Sutherlandia frutescens), Kankerbos, Cancer BushSpecies sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Malephora crocea, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Microloma armatum, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Nerine lacticoma, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Ornithoglossum spp., , Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Oxalis spp., ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Pleiospilos compactus,,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Plinthus karooicus, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Psilocaulon juncii, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Ruschia intricata, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed

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Signature of Issuing Authority

105/2022

Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

(HQ - Kby) Tel: 053-807 7430 Fax: 086 5151 769 (Kuruman) Tel: 053-712 0702 Fax: 053-712 0936 (Cal) Tel: 027-341 1779 Fax: 027-341 1718 (Upt) Tel: 054-3322885 Fax: 054-3311155

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Permit No: FLORA 0037/2022

TOPS Reg #:

0644/2022

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Live, Ruschia spinescens, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Sceletium emarcidum (Mesembryanthemum emarcidum), ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Schedule 3 (Trees, Shubs, herb and grass species), ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Trachyandra saltii, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroyed
Live, Tylecodon walichii, ,Species sex: Not applicable, Specimens found within the development footprint may be cut/damaged/destroved

STANDARD RESTRICTED ACTIVITIES AND METHODS PERMITTED

Gathering, collecting or plucking by using approved collection methods as stipulated under "species and numbers permitted" and under "additional conditions".

SPECIAL RESTRICTED ACTIVITIES AND METHODS PERMITTED

None

ADDITIONAL RESTRICTED ACTIVITIES AND METHODS PERMITTED

None - by using the following prohibited method and/or instrument namely: None

GENERAL PERMIT CONDITIONS APPLICABLE

1) This permit is not transferable to any individual person or any other legal identity.

2) Any alterations to this permit shall immediately render it invalid.

3) This permit is deemed valid only:

a) in the original format as issued by the Director.

b) for the period as specified on the permit.

c) once the signature of the holder thereof has been endorsed thereon in ink.

d) while the Commitment Letter is being implemented by the permit holder

4) The Director reserves the right to amend, withhold, withdraw or cancel any permit at any time.

5) This permit shall lapse / be deemed invalid when it is lost or destroyed and no copy thereof shall be issued.

6) This permit, unless otherwise stated, is valid only within the boundaries of the Northern Cape Province and then specifically only for the property as specified on the permit.

7) This permit does not grant the permit holder automatic access to any Protected area, National Park, Provincial Nature Reserve or privately owned land. Any other / further conditions or restrictions that the manager / landowner may stipulate at his / her discretion must also be adhered to.

8) The permit holder must at all times while performing any restricted activity have the permit and all relevant documentation in his / her possession.

9) Permits must be made available upon request of any authorized person. This person must also be allowed access onto the property at any reasonable time for any inspection needed and can remain on such property as long as it is needed to do the inspection.

10) If applicable, the permit holder must within 21 days after performing the restricted activity furnish the Director with a written return as prescribed, with feedback on the results of the activity conducted.

11) If applicable, the permit holder shall apply for the renewal of the permit to the Director, on the appropriate application form, at least 3

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Signature of Issuing Authority

25/05/2022

Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

(HQ - Kby) Tel: 053-807 7430 Fax: 086 5151 769 (Kuruman) Tel: 053-712 0702 Fax: 053-712 0936 (Cal) Tel: 027-341 1779 Fax: 027-341 1718 (Upt) Tel: 054-3322885 Fax: 054-3311155

(De Aar) Tel: 053-6310 601 Fax: 053-6310 343

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NNO 1/10/3/ 765

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ADDENDUM 1

months prior to the expiry date thereof.

12) The holder of this permit shall return the original to The Director: Permit Administration, Private Bag X6102, Kimberley, 8300, within fourteen days from the date of expiry thereof.

13) No new permit applications will be processed prior to the return of the original permit, once it has been used or once it has expired.

14) This permit is subject to the provisions of any law in force, during the period of validity of the permit, in respect of the specific area to which the permit applies.

15) This permit is subject to any applicable norms and standards in existence at the time of issuance of this permit.

16) It is the permit holder's responsibility to obtain information on any other legislation or changes thereto and any specifications or permit requirement that may be needed or required from any other department / organization / institute, for any activity as authorized by this permit.

17) It should be noted that any transgression, failure to render the required reports and or the return of the original permit, can jeopardize any future applications by the permit holder.

18) If the holder of this permit contravenes or fails to comply with any permit condition or requirement to which this permit is subject, he or she shall be guilty of an offence.

STANDARD PERMIT CONDITIONS APPLICABLE

1) The permit holder will be responsible for the supervision during the harvesting process.

2) The number of plants and weight of seeds mentioned on this permit is the maximum authorized to be harvested.

3) Detailed records of harvesting and trade must be supplied to the Director: Private Bag X6102, Kimberley 6300, upon expiry of this permit on the register provided.

4) The permit holder will be responsible for semester reporting to the Director: Private Bag X6102, Kimberley 6300 as per Commitment Letter agreement.

5) A summary, upon lapsing / renewal of this permit, should be submitted to the Permit Unit and Scientific Manager Gr B: Research and Development Support (cc dencpermitreports@gmail.com), DENC, on the following:

a) The GPS coordinates of the original location of the protected species as well as the GPS coordinates of the new location,

b) Detailed explanations of the methods used to remove and transplant the plants,

c) Photo(s) of the transplanted plants,

d) Current health status of plants (i.e. how well did the plants acclimatize after being transplanted),

e) GPS coordinates of plants and details of methods used to transplant the plant.

SPECIAL PERMIT CONDITIONS APPLICABLE

None

ADDITIONAL PERMIT CONDITIONS APPLICABLE

1) Other people included on this permit:

a) SJ Dean (Renu-Karoo Veld Restoration Nursery)

b) Gareth Coombs

c) Hendrik Malgas, SANPARKSd) Workers responsible for construction and clearing

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Signature of Issuing Authority

25/05/2002

Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

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(HQ - Kby) Tel: 053-807 7430 Fax: 086 5151 769 (Kuruman) Tel: 053-712 0702 Fax: 053-712 0936 (Cal) Tel: 027-341 1779 Fax: 027-341 1718 (Upt) Tel: 054-3322885 Fax: 054-3311155

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ADDENDUM 1

2) Restricted activity properties: a) South African Radio Astronomy Observatory (Farm Mey's Dam No 68, Portion 1 (Waaipunt) of the Farm Los Berg No 73) b) Remainder of the Farm Los Berg No 73 c) Farm Blauuw Heuvel No 96 d) Farm Groot Paarde Kloof No 74 e) Portion 1 of the Farm Schiet Poort No 64 f) Farm Waterkloof No 69 g) Farm De Hoek No 70 h) Portion 2 of the Farm Schiet Poort No 64 i) Portion 2 (Lovedale) of the farm Bater Leegte No 65 j) Portion 3 of the Farm Visserskloof No 69 k) Portion 2 of the Farm Zout Rivier No 71 I) Remainder of the Farm Zout Rivier No 71 m) Portion 1 (Rooisand) of the Farm Rooi Zand No 72 n) Remainder of the Rooizand No 72 o) Portion 2 of the Farm Visserskloof No 69 p) Remainder of the Farm Dubbelde Vlei No 63 q) Portion 3 of the Farm Zout Rivier No 71 r) Remainder of the Farm Jas Kloof No 76 s) Portion 1 (Saai Laagte) of the Farm Jas Kloof No 76 t) Portion 1 of the Farm Visserskloof No 69 u) Remainder of Portion 1 of the Farm Swartfontein 496 v) Portion 1 (Varsrivier) of the Farm Zout Rivier No 71 w) Portion 1 (Snelskloof) of the Farm Pofadderfontein No 494 x) Portion 2 (Janseboom) of the Farm Pofadderfontein No 494 y) Portion 2(Rivierplaas) of the Farm Poffadderfontein No 495 z) Portion 3(Onverwags) of the Farm Poffadderfontein No 495 aa) Remainder of the Farm Schiet Poort No 64 ab) Remainder of the Farm Pofadderfontein No 495 ac) Remainder of Portion 1 (Swartfontein) of the Farm Bitter Water No 67 ad) Remainder of the Farm Swartfontein No 496 ae) Remainder of the Farm Boter Leegte No 65 af) Portion 2 of the Farm Swartfontein No 496 ag) Portion 1 of the Farm Brakputs No 66 ah) Portion 2 (Swart Fontein) of the Farm Bitter Water No 67 ai) Remainder of the Farm Brak Puts No 66 aj) Portion 1 of the Farm Botterleegte No 65 3) The permit is only valid for the MeerKAT Extension (MK+) project footprint (SKA phase 1 project) for the development of infrastructure i.e. radio telescopes, the photovoltaic stations, power lines, fibre optic cable lines, access roads, quarries and borrow pits. 4) The following species at the following localities may be translocated: a) 21,400118 - 30,791939 b) 21,405319 - 30,794624 c) 21,405968 - 30,794532 d) 21,406615 - 30,794803 e) 21,405807 - 30,794422 f) 21,448736 - 30,71732 g) 51,40678 - 30,7948 h) 21,406769 - 30,794865 i) 21,409498 - 30,796409 j) 21,408973 - 30,79315 5) In terms of the species translocation on site, the permit holder must ensure he/she/ they obtain necessary approval from the management authority if the translocation areas falls within the gazette protected areas boundaries. Protected areas in some instances do not want any disturbances such as species translocations due to the fact that translocation introduces diseases and changes in genetics into existing populations.

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Signature of Issuing Authority

25/05/20

Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

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(HQ - Kby) Tel: 053-807 7430 Fax: 086 5151 769 (Kuruman) Tel: 053-712 0702 Fax: 053-712 0936 (Cal) Tel: 027-341 1779 Fax: 027-341 1718 (Upt) Tel: 054-3322885 Fax: 054-3311155

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6) The permit holder must note that;

a) this permit only authorises the activity you applied for in terms of the Northern Cape Nature Conservation Act, 9 of 2009, and does not supersede Regulation R480 or any other "Lockdown regulations" in place.

b) permits issued by the Northern Cape: Department of Agriculture, Environmental Affairs, Rural Development and Land Reform does not authorise any activity in terms of Regulation R480 proclaimed in terms of section 27(2) of the Disaster Management Act, 2002 (Act 57 of 2002).

c) permits issued in terms of the Northern Cape Nature Conservation Act, 9 of 2009, does not replace any permits required in terms of Regulation R480.

d) this permit does not authorise any activity as an "essential service" or "permitted service" as proclaimed in terms of Regulation R480.

e) a permit issued by the Northern Cape: Department of Agriculture, Environmental Affairs, Rural development and Land Reform cannot be regarded as a permit to perform an essential or permitted service in terms of regulation 16(2)(b) and regulation 28(4) of Regulation R480.

f) permits in terms of Regulation R480 must be applied for in addition to any Northern Cape: Department of Agriculture, Environmental Affairs, Rural Development and Land Reform permit issued.

7) This permit replaces the prevous permit TN 1745/2021 FLORA 0008/2022 F Nelwamondo, issued by the department

Signature of Issuing Authority

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Signature of Permit Holder

Date of Signature

Department of Environment and Nature Conservation - 90 Long Street - Private Bag X 6102, Kimberley 8300

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