

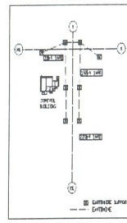
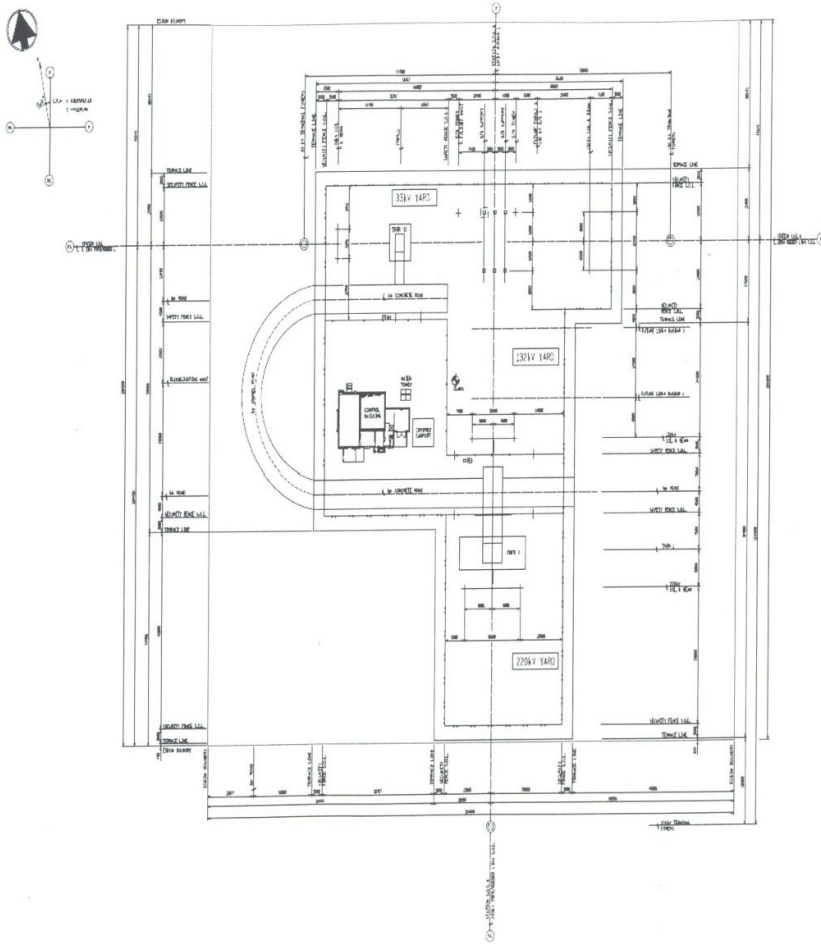
APPENDIX A: SITE PLAN
APPENDIX B: SITE PHOTOGRAPHS
APPENDIX C: FACILITY ILLUSTRATION
APPENDIX D: SPECIALIST REPORT
APPENDIX E: PUBLIC PARTICIPATION

- Appendix E1 - Proof of site notice
- Appendix E2 - Copies of written notice to person
- Appendix E3 - News paper advert
- Appendix E4 - Minutes of the meeting
- Appendix E5 - Comments and respond report
- Appendix E6 - Copy of the register

APPENDIX F: ENVIRONMENTAL MANAGEMENT PLAN
APPENDIX G: BACKGROUND INFORMATION DOCUMENT
APPENDIX H: EXPERTISE OF AN EAP

APPENDIX A – SITE PLAN

PAULPUTS EXISTING KEY PLAN



EXISTING BRANCHES
K.L.

NO	BRANCH	NO
1	BRANCH 1	1
2	BRANCH 2	2
3	BRANCH 3	3
4	BRANCH 4	4
5	BRANCH 5	5
6	BRANCH 6	6
7	BRANCH 7	7
8	BRANCH 8	8
9	BRANCH 9	9
10	BRANCH 10	10

EXISTING STRUCTURE

NO	STRUCTURE	NO
1	STRUCTURE 1	1
2	STRUCTURE 2	2
3	STRUCTURE 3	3
4	STRUCTURE 4	4
5	STRUCTURE 5	5

EXISTING FLOOR

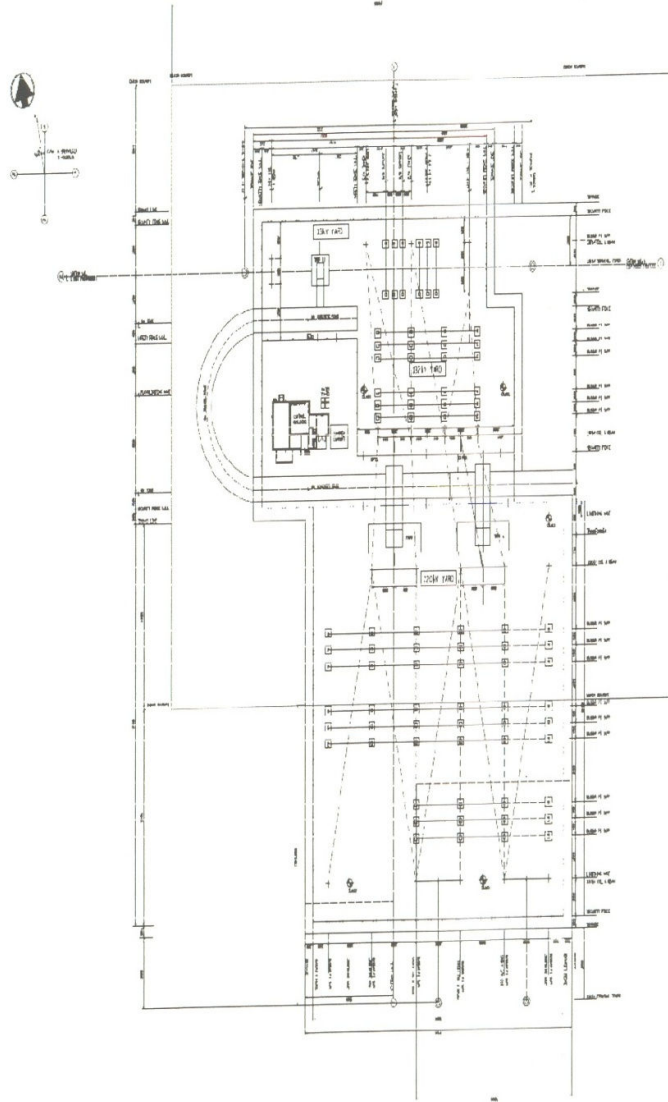
NO	FLOOR	NO
1	FLOOR 1	1
2	FLOOR 2	2
3	FLOOR 3	3

EXISTING WALL

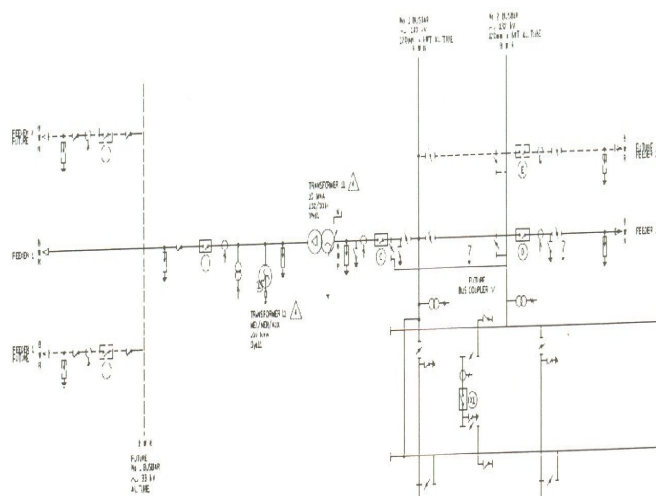
NO	WALL	NO
1	WALL 1	1
2	WALL 2	2
3	WALL 3	3



PAULPUTS NEW KEY PLAN



PAULPUTS NEW STATION ELECTRIC



NOTES:

1. ISOLATOR BLADES OPENING DIRECTION FROM LEFT TO RIGHT
2. ST. B.S. ZONE (MTR)

220KV	1:2000
132KV	1:1000
110KV	1:500
3. STATION BATTERY VOLTAGE LOW I.C.
4. ——— PROPOSED EXISTING
- - - - - INCLUDES POSSIBLE FUTURE EXTENSIONS

No. 1 Busbar
132kV
Ø200 x 6mm

No. 1 Busbar
132kV
Ø200 x 6mm

No. 1 Busbar
220kV
Ø200 x 6mm

No. 1 Busbar
220kV
Ø200 x 6mm

Bypass Busbar
220kV
Ø200 x 6mm

LEGEND

1. DIRECT WHEAT
2. ISOLATOR
3. W/ LINE ISOLATOR
4. SAITH SWITCH
5. SURGE ARRESTER
6. LINE TAP
7. ELECTROMAGNETIC FT
8. TRANSFORMER EXHAUSTION
9. TRANSFORMER
10. AUTOMATIC SWITCHING
11. TRANSFORMER - 415V WITH 110V CHANGED
12. AUXILIARY TRANSFORMER DOUBLE ROUNE
13. GROUNDING TRANSFORMER
14. TRANSFORMER DOUBLE ROUNE
15. VOLTAGE REGULATOR

220 - 110						
C.A. RATING	SW	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
2000	200	FEEDER 1	✓			
2000	200	BUS COUPLER 1		✓		

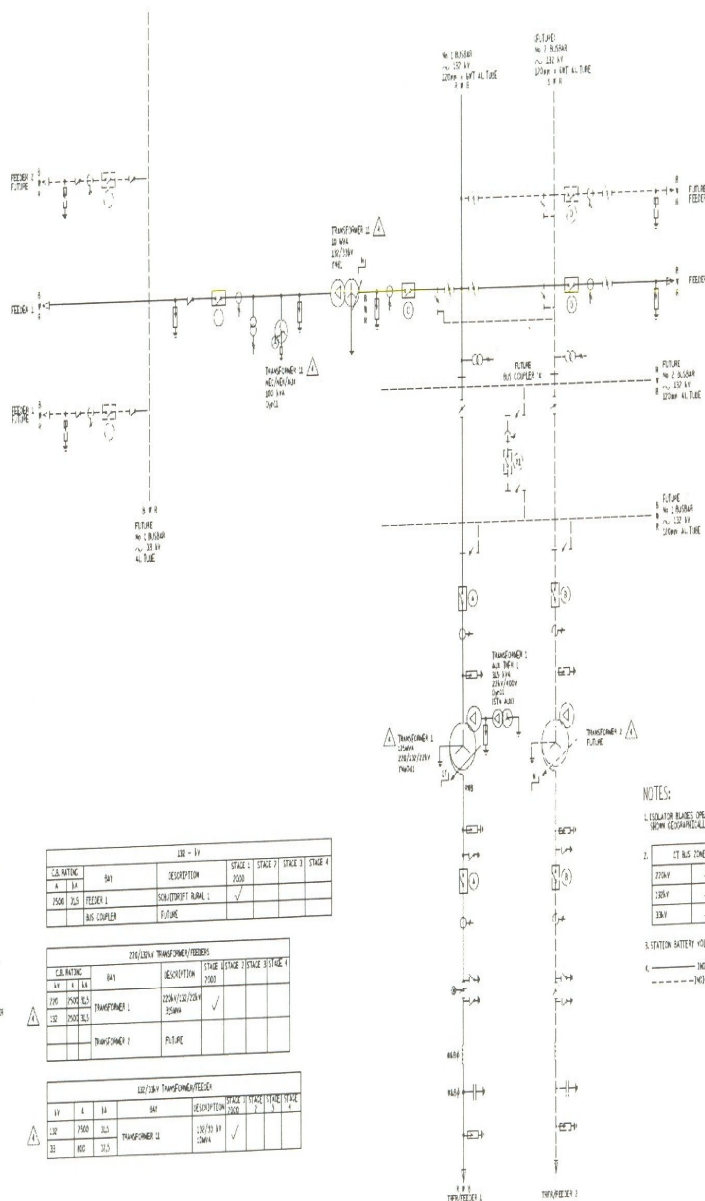
110 - 110						
C.A. RATING	SW	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
2000	200	FEEDER 1	✓			
2000	200	BUS COUPLER		✓		

220/132KV TRANSFORMER FEEDER						
C.A. RATING	SW	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
2200	220	TRANSFORMER 1	✓			
2200	220	TRANSFORMER 2		✓		

132/110KV TRANSFORMER FEEDER						
C.A. RATING	SW	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
1320	132	TRANSFORMER 1	✓			
1320	132	TRANSFORMER 2		✓		



PAULPUTS EXISTING STATION ELECTRIC



LEGEND

1. (CIRCUIT) METER
2. ISOLATOR (MECHANICAL CONTACT POINT)
3. 3-Phase Isolator (MECHANICAL CONTACT POINT)
4. CIRCUIT BREAKER
5. CIRCUIT BREAKER
6. LINE TAP
7. ELECTROMAGNETIC VT
8. COUPLING CAPACITOR
9. CURRENT TRANSFORMER
10. METERS/SIGNAL DEVICES
11. TRANSFORMER - AUTO WITH NO CHANGES
12. 400/10KV TRANSFORMER DOUBLE WOUND SCHEMATIC WITH POINT
13. WINDING TRANSFORMER
14. TRANSFORMER DOUBLE WOUND
15. SINGLE BREAK ISOLATOR

110/11KV

SL. NO.	BAI	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
100	FEEDER 1	SCHEMATIC RURAL 1	✓			
101	BUS COMPLEX	FEEDER				

220/11KV TRANSFORMER/FEEDER

SL. NO.	BAI	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
100	FEEDER 1	CONVERTER RURAL 1	✓			
101	TRANSFORMER 1	FEEDER				
102	TRANSFORMER 2	FEEDER				

110/11KV TRANSFORMER/FEEDER

SL. NO.	BAI	DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
100	FEEDER 1	CONVERTER RURAL 1	✓			
101	TRANSFORMER 1	FEEDER				
102	TRANSFORMER 2	FEEDER				

NOTES

1. ISOLATOR BLADES OPENING DIRECTION SHOWN GEOMETRICALLY CORRECT.
2.

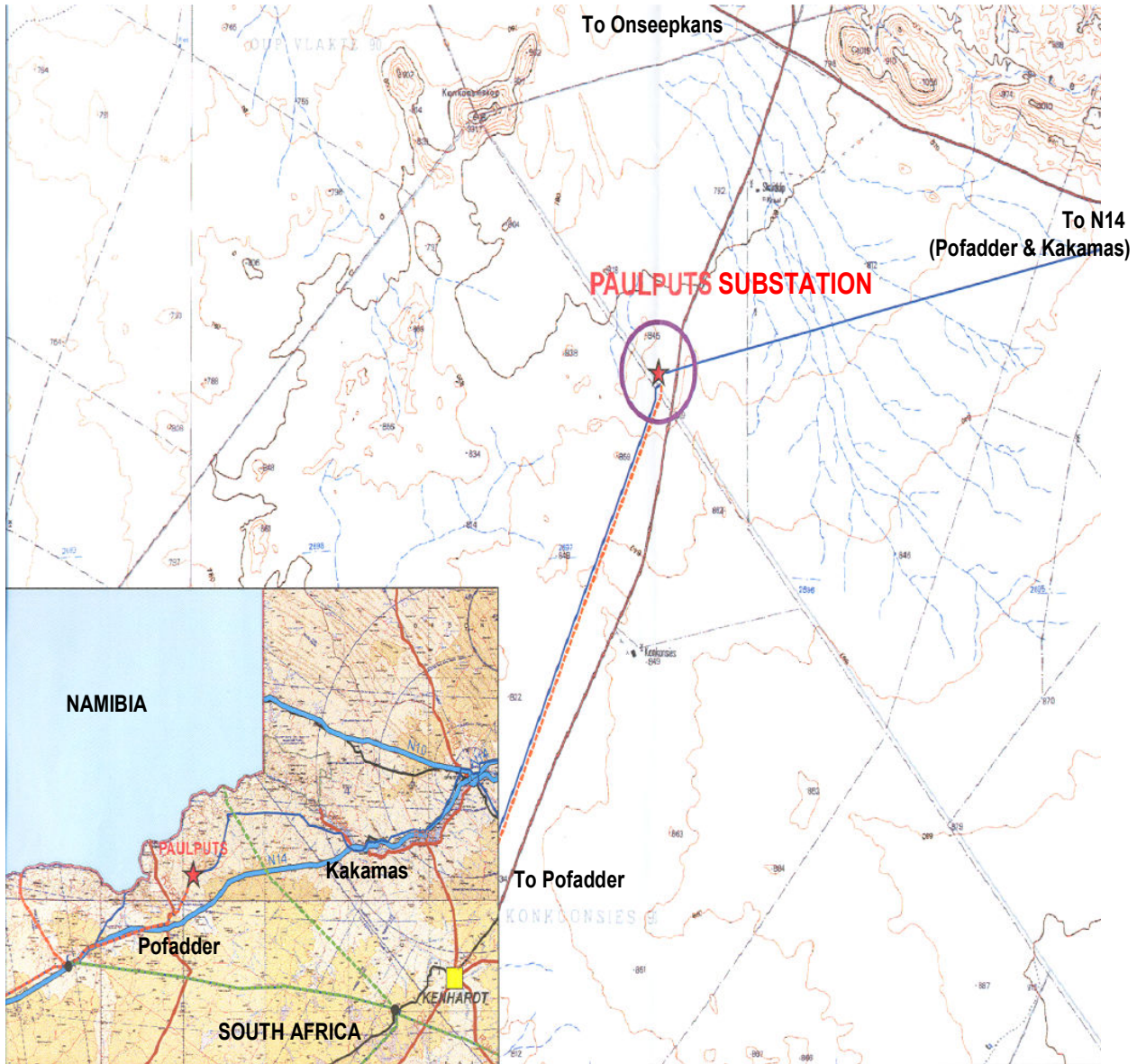
ITEM	QTY
10KV	1/2000
11KV	1/2000
12KV	1/2000
3. STATION BATTERY VOLTAGE 12V D.C.
4. ——— INDICATES EXISTING
- - - - - INDICATES PROPOSED FEEDER EXTENSION

APPENDIX B: SITE PHOTOGRAPHS





APPENDIX C: FACILITY ILLUSTRATION



APPENDIX D: SPECIALIST REPORTS

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**TYPE OF DOCUMENT: VEGETATION
ASSESSMENT FOR THE PROPOSED EXTENSION
OF THE PAULPUTS SUBSTATION ON PORTION 4
THE FARM SCHUITKLIP 92**

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**VEGETATION ASSESSMENT FOR THE PROPOSED
EXTENSION OF THE PAULPUTS SUBSTATION ON
PORTION 4 THE FARM SCHUITKLIP 92**

September 2008



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SECTION 1: INTRODUCTION

The loss, transformation and degradation of natural habitat are one of the most important casual mechanisms of biodiversity loss (UNEP, 2002). Conversion of natural habitat types by cultivation, grazing, urban development, afforestation, mining, dams, industry and alien plant invasions results in ecosystem degradation and species loss. The impact on biodiversity has been substantial, and significant proportions of South Africa's flora and fauna are threatened.

Historically, the planning and implementation of developments did not consider the natural environment and consequently lead to the wasteful exploitation, destruction and contamination of many natural environments within South Africa. In order to prevent further degradation, operations that may harm the environment should be planned in such a way, that they make the best possible use of natural resources and avoid degradation of the environment. It is therefore necessary that environmental factors be considered. These should include studies relating to floral communities, in order to identify and allocate the areas potential for conservation and development. This report highlights the finding of a vegetation assessment that was conducted in area that has been earmarked for development.

1.1 PROJECT DESCRIPTION

THE DEVELOPER PROPOSES TO EXPAND THE CURRENT PAULPUTS SUBSTATION. THIS WILL INCLUDE:

- **INSTALLATION OF A SECOND 250 MVA TRANSFORMER;**
- **INSTALLATION OF DOUBLE BUSBARS FOR 220 AND 132 KV YARDS;**
- **INSTALLATION OF A NEW BUS COUPLE BAY;**
- **EXTENSION OF THE 220KV YARD BY 73 M FROM THE EXISTING ESKOM BOUNDARY TO THE SOUTH OF THE SUBSTATION; AND**
- **EXTENSION OF THE EASTERN PART OF THE SUBSTATION BY 41.5 M (WITHIN THE ESKOM BOUNDARY FENCE).**

1.2 TERMS OF REFERENCE

THE TERMS OF REFERENCE FOR THIS ASSESSMENT WERE AS FOLLOWS:

- To provide a vegetation survey, including plants species list of each community and alien invasive species;
- To provide a Red Data plants species survey; and
- To provide an indication of the relative conservation importance and ecological function of the study site in terms of vegetation (to be incorporated into a sensitivity map).

1.3 LIMITATIONS

IN ORDER TO OBTAIN A COMPREHENSIVE UNDERSTANDING OF THE DYNAMICS OF COMMUNITIES AND THE STATUS OF ENDEMIC, RARE OR THREATENED SPECIES IN AN AREA, ECOLOGICAL STUDIES SHOULD IDEALLY BE REPLICATED OVER SEVERAL SEASONS AND OVER A NUMBER OF YEARS. HOWEVER, DUE TO TIME CONSTRAINTS SUCH LONG-TERM STUDIES ARE NOT FEASIBLE. CONSEQUENTLY, THE RESULTS OF THIS REPORT ARE BASED ON DATA AND OBSERVATION COLLECTED DURING A ONE-DAY FIELD SURVEY, A LITERATURE REVIEW AND EXPERIENCE GAINED BY THE AUTHOR THROUGH INVESTIGATIONS OF OTHER AREAS SIMILAR TO THE STUDY AREA IN QUESTION.

SECTION 2: BACKGROUND INFORMATION

2.1 LOCATION

The site is situated approximately 50 km north-east of Pofadder, on Portion 4 of the farm SchuitKlip No. 92, Northern Cape (Figure 1).

2.2 LAND USE

THE SITE IS CURRENTLY USED AS A SUBSTATION, BUT THE AREA SURROUNDING IT IS CURRENTLY OPEN SPACE USED FOR SHEEP FARMING.

2.3 CLIMATE

THE NORTHERN CAPE SEMI-ARID REGION CLIMATE HAS LITTLE RAINFALL (VARYING FROM 150 TO 350 MM PER YEAR WHICH OCCURS IN LATE AUTUMN). THE WEATHER CONDITIONS ARE EXTREME COLD AND FROSTY IN WINTER, AND EXTREMELY HIGH TEMPERATURES IN SUMMER. IN SUMMER THE AVERAGE MINIMUM IS 17.8°C AND AVERAGE MAXIMUM IS 34.6°C. IN WINTER THE AVERAGE MINIMUM IS 3.5°C AND AN AVERAGE MAXIMUM IS 20.6°C

2.4 REGIONAL VEGETATION

THE STUDY SITE FALLS WITHIN A REGION CLASSIFIED AS BUSHMAN ARID GRASSLAND (MUCINA AND RUTHERFORD, 2005), ORANGE RIVER NAMA KAROO (LOW AND REBELO, 1996) OR NAMAQUALAND BROKEN VELD (ACOCKS, 1988). IN PLACES, THE REGION IS VERY ROCKY AND POSSESSES A "BROKEN" TOPOGRAPHY WITH QUIVER TREE *ALOE DICHOTOMA*, BUSHMAN POISON TREE *EUPHORBIA AVASMONTANA* AND AGGENYS MILKBUSH *E. GREGARIA* NORMALLY ASSOCIATED WITH THE STEEP SLOPES OF THE MOUNTAINS AND HILLS OF THE AREA. ON THE PEDIMENTS, SPIKE-FLOWERED BLACK THORN *ACACIA MELIFERA*, THREETHORN *RHIGZUM TRICHOTOMUM*, SHEPARD'S TREE *BOSCIA ALBITRUNCA* AND STINK SHEPARD'S TREE *B. FOETIDA* ARE COMMON TREES AND SHRUBS, WHILE SILKY BUSHMAN GRASS *STIPAGROSTIS UNIPLUMIS* OFTEN DOMINATES THE PLAINS, ESPECIALLY AFTER GOOD SUMMER RAINS. THERE ARE ABUNDANT THICKETS ALONG THE BANKS OF THE ORANGE RIVER ITSELF, WITH WILD TAMARISK *TAMARIX USNEOIDES*, BUFFALO THORN *ZIZIPHUS MUCRONATA* AND CAMEL THORN *ACACIA ERIOLOBA* COMMON ALONG THE DRY RIVER BEDS OF THE TRIBUTARIES AS WELL (LOW AND REBELO, 1996) .

THE COMPLEX GEOLOGY AND BROKEN, ROCKY TERRAIN RESULT IN A LARGE NUMBER OF DISTINCT VEGETATION COMMUNITIES WITHIN THIS REGIONAL VEGETATION TYPE. THIS TYPE TENDS TO OCCUR ON THE GRANITE-DERIVED SOILS RATHER THAN THE SHALE-DERIVED, CLAYEY SOILS OF THE OTHER NAMA KAROO TYPES. NOTHING IS KNOWN OF THE ROLE WILD ANIMALS, ESPECIALLY

NOMADIC SPECIES, PLAYED IN THE ECOLOGICAL FUNCTIONING OF THIS VEGETATION TYPE.

THE AUGRABIES FALLS NATIONAL PARK IS THE LARGEST CONSERVATION AREA WITHIN THIS REGIONAL VEGETATION TYPE. ALTHOUGH ONLY A SMALL PORTION OF THE AREA IS OFFICIAL CONSERVED, CAREFUL FARMING SHOULD PRESERVE MOST OF THE PLANT SPECIES (LOW AND REBELO, 1996).

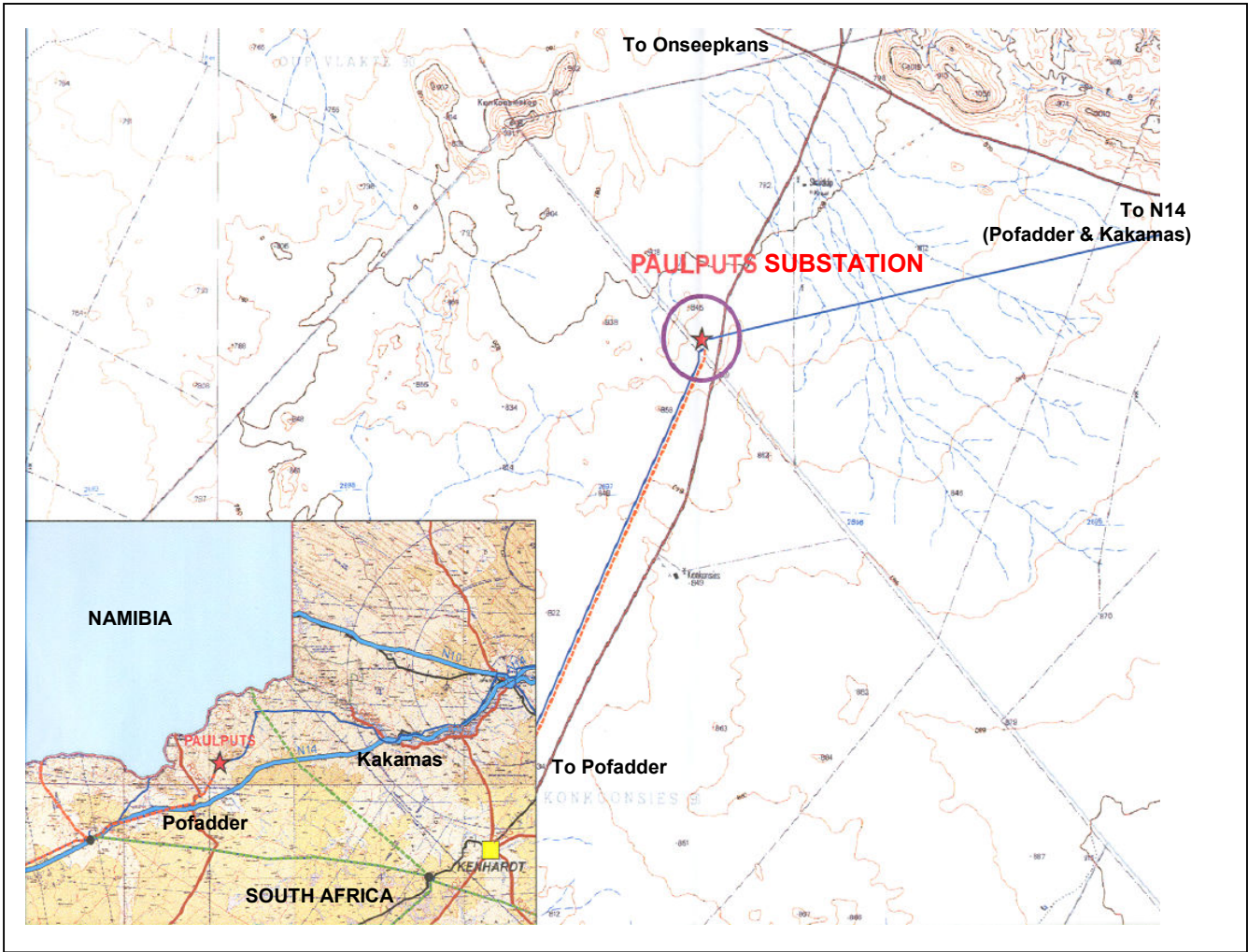


Figure 1: Locality map

SECTION 3: METHODOLOGY

The site visit took place on 25 September 2008. This is not an ideal time of year to conduct a vegetation survey as much of the flora is no longer in flower. Consequently, if the presence of sensitive habitats or sensitive species is suspected, a follow-up survey will be necessary in the summer months (November to March) to confirm or dismiss these suspicions.

The following investigations were conducted:

- With the aid of an orthophoto, preliminary ecological zones were identified. Five 10 x 10 m quadrates were sampled within each of these eco-zones, to determine the plant species composition and to assist in the delineation of different vegetation categories.
- Stratified line transects were walked over the entire study area, to:
 - identify additional plant species;
 - search for alien/exotic plants species; and
 - to search for Red Data species.

Based on all of the above findings, the ecological sensitivity of the study area was determined. This sensitivity was quantified by assessing the ecological function and conservation importance of the different ecological zones. These were defined as follows:

High ecological function: Sensitive ecosystems with either low inherent resistance or resilience towards disturbance factors or highly dynamic systems considered to be stable and important for the maintenance of ecosystems integrity and offering ecosystem services (e.g. large pristine grasslands, wetlands and ridge systems).

Medium ecological function: Relatively important ecosystems at gradients of intermediate disturbances. An area may also be considered to be of medium ecological function if it is directly adjacent to sensitive/pristine ecosystem.

Low ecological function: Degraded and highly disturbed systems with no ecological function.

High conservation importance: Ecosystems with high species richness and usually provide suitable habitat for a number of threatened species. Usually termed 'no-go' areas and unsuitable for development, and should be protected.

Medium conservation importance: Ecosystems with intermediate levels of species diversity without any threatened species. Low-density development may be allowed, provided the current species diversity is conserved.

Low conservation importance: Areas with little or no conservation potential and usually species poor (most species are usually exotic). These areas are considered suitable for development.

SECTION 4: VEGETATION ASSESSMENT RESULTS

4.1 DESCRIPTION OF AFFECTED ENVIRONMENT

THE ENTIRE STUDY AREA WAS COVERED BY ONE VEGETATION ZONE, NAMELY DISTURBED *SCHMIDTIA KALAHARIENSIS* GRASSLAND (FIGURE 1). AS THE NAME SUGGESTS THE VEGETATION IS DOMINATED BY *SCHMIDTIA KALAHARIENSIS*. OTHER COMMON GRASSES INCLUDED *STIPAGROSTIS CILIATA*, *CENTROPODIA GLAUCA* AND *ERAGROSTIS LEHMANNIANA*. THE HERBACEOUS LAYER SUPPORTED SPECIES SUCH AS *CITRULLUS AMNATUS*, *CHRYSANTHEMOIDES INCANA*, *CUCUMIS AFRICANUS*, *FELICA NAMAQUANA* AND *SESAMUM TRIPHYLLUM*. THE TREE/SHRUB LAYER SUPPORTS SCATTERED INDIVIDUALS OF *BOSCIA FOETIDA* SUBSP. *FOETIDA*, *LYCIUM BOSCIIFOLIUM* AND *RHIGOZUM TRICHOTOMUM*.

ALL PLANTS SPECIES OBSERVED DURING THE SURVEY ARE LISTED IN TABLE 1 AND GRAPHIC DESCRIPTION OF THE STUDY AREA IS ILLUSTRATED IN PHOTO PLATE 1.

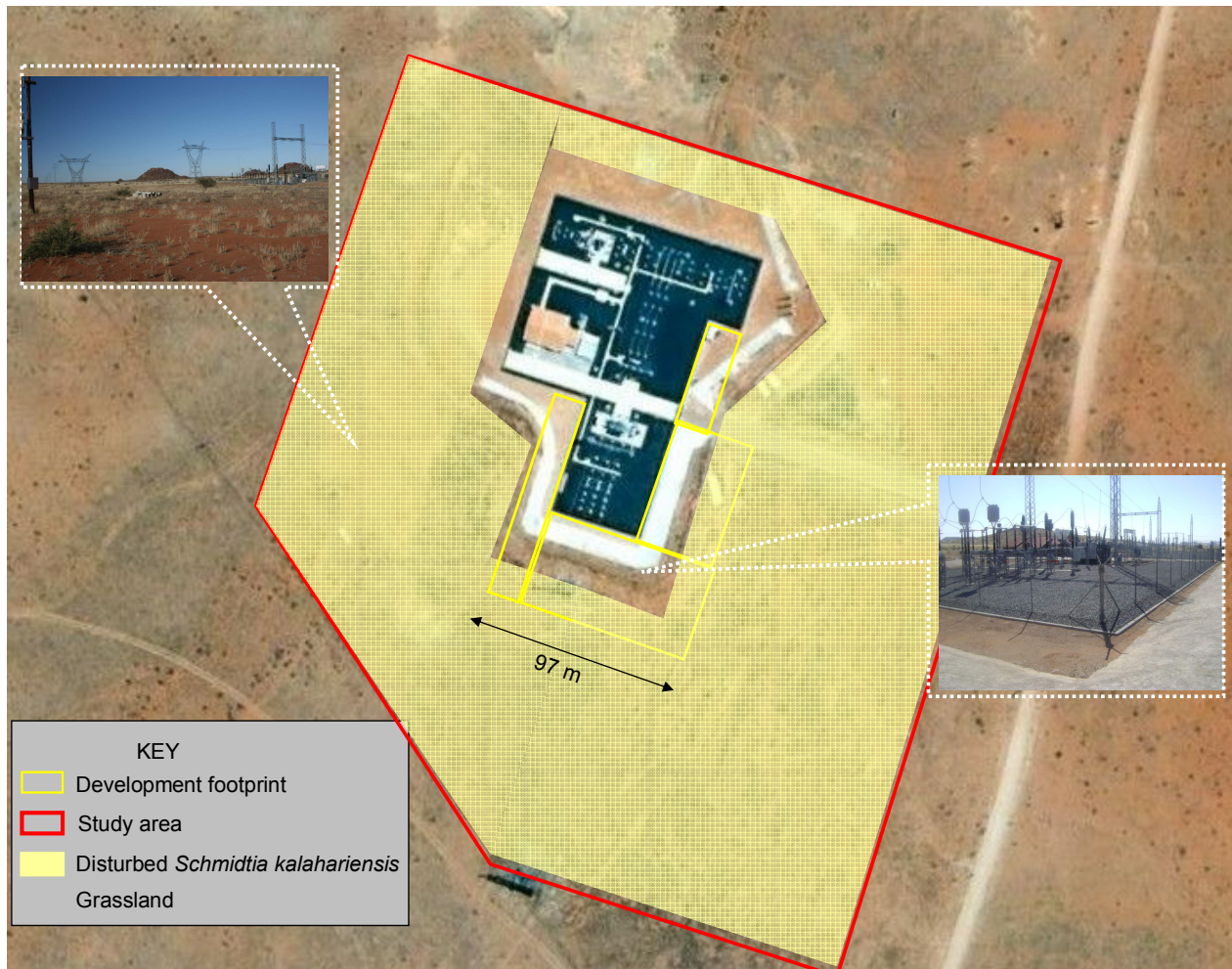


Figure 2: Vegetation Map

Table 1: Species observed within the study area

Scientific Name	Common Name
Forbs	
<i>Citrullus amnatus</i>	Tsamma melon
<i>Chrysanthemoides incana</i>	
<i>Cucumis africanus</i>	Wild cucumber
<i>Felica namaquana</i>	
<i>Sesamum triphyllum</i>	Wild sesame
Grasses	
<i>Aristida junciformis</i>	Gongoni three-awn
<i>Aristida congesta subsp congesta</i>	Tassel three-awn grass
<i>Chloris virgata</i>	Feather-top chloris grass
<i>Centropodia glauca</i>	Gha grass
<i>Enneapogon cenchroides</i>	Nine-wned grass
<i>Enneapogon desvauxii</i>	Eight day grass
<i>Eragrostis lehmanniana</i>	Lehmans love grass
<i>Schmitia kalahariensis</i>	Kalahari sour grass
<i>Stipagrostis ciliata</i>	Tall bushman grass
<i>Stipagrostis obtuse</i>	Smal bushman grass
Shrubs	
<i>Lycium bosciifolium</i>	
<i>Rhigozum trichotomum</i>	Three awn
Trees	
<i>Boscia foetida subsp. foetida</i>	Stink bush



PHOTO PLATE 1: THE DISTURBED *SCHMIDTIA KALAHARIENSIS* GRASSLAND OCCURRING WITHIN THE STUDY AREA

4.2 RED DATA PLANTS

COMPARED WITH OTHER REGIONS IN SOUTHERN AFRICA THE KALAHARI HAS THE LOWEST SPECIES/AREA RATIO OF ALL REGIONS AND IS FLORISTICALLY REGARDED AS RELATIVELY DEPAUPERATE (VAN ROOYEN, 2001). THERE ARE ALSO VERY FEW ENDEMIC SPECIES, WITH LESS THAN 3 % OF THE TOTAL NUMBER OF PLANT SPECIES CONSIDERED TO BE ENDEMIC TO THE SOUTHERN KALAHARI. THE KALAHARI IS THEREFORE NOT A 'HOT SPOT' IN TERMS OF PLANT SPECIES RICHNESS OR ENDEMISM. DESPITE A LOW DIVERSITY, DESERT COMMUNITIES, AND SEMI-ARID AREAS SUCH AS THE KALAHARI, ARE IMPORTANT IN THE GLOBAL EFFORT TO CONSERVE DIVERSITY (VAN ROOYEN, 2001).

THE FOLLOWING SPECIES ARE LISTED IN THE RED DATA LIST OF SOUTHERN AFRICA PLANTS (HILTON-TAYLOR, 1996), AND ARE KNOWN TO OCCUR WITHIN THE KALAHARI.

- *Adenia repanda*

- *Adenium olefolium*
- *Gethylis spiralis*
- *Harpagophytum procumbens* subsp. *procumbens*
- *Helichrysum micropoides*
- *Hoodia gordonii*
- *Orbeopsis knobelii*
- *Stapelia barklyi*
- *Tridentia marientalensis* subsp. *marientalensis*

NO RED DATA PLANT SPECIES WERE OBSERVED ON SITE, AND DUE TO THE PREVIOUS DISTURBANCE WITHIN THE STUDY AREA IT IS UNLIKELY THAT ANY OF THESE SPECIES OCCUR ON SITE.

4.3 PROTECTED PLANTS

NO PROTECTED PLANT SPECIES WERE OBSERVED ON SITE. THE LIKELIHOOD OF SUCH SPECIES OCCURRING ON THE SITE IS CONSIDERED TO BE LOW

4.4 DECLARED WEEDS AND INVADER PLANTS

CONCERN IS GROWING OVER THE WAY IN WHICH ALIEN/EXOTIC PLANTS ARE INVADING LARGE AREAS WITHIN SOUTH AFRICA. INVASIVE SPECIES ARE A MAJOR THREAT TO THE ECOLOGICAL FUNCTIONING OF NATURAL SYSTEMS AS WELL AS THE PRODUCTIVE USE OF THE LAND, AND SHOULD IDEALLY BE REMOVED IF THEY ARE SERVING NO ECOLOGICAL FUNCTION. HOWEVER, FORTUNATELY NO INVASIVE ALIEN PLANT SPECIES WERE OBSERVED WITHIN THE STUDY AREA.

SECTION 5: ECOLOGICAL SENSITIVITY

The *Schmidtia kalahariensis* Grassland appears to have been exposed to disturbance. This is probably related to construction activities at the time of when the existing substation was being built. The species diversity is low and primarily supports pioneer species. No Red Data or Protected plant species were observed, and the likelihood of such species occurring within the study area is very low. The area does however still function as a grassland and is likely to support small faunal species such as birds and rodents. This vegetation category has been classified as being of **low Ecological Function** and **low Conservation Importance**.

A sensitivity map that visually illustrates the sensitivity of the site is displayed in Figure 3.



Figure 3: Sensitivity Map

SECTION 6: IDENTIFICATION OF RISK SOURCES

Table 2 and Table 3 summarises the main risk sources associated with the proposed development.

Table 2: Risks during construction phase

Possible Risks	Source of the risk	Site to be affected
Loss of natural vegetation	Construction activities	Development footprint
Erosion	Construction activities	Development footprint
Dust	Construction activities Movement of vehicles	Development footprint Access routes

Table 3: Risks during operation phase

Possible Risks	Source of the risk	Site to be affected
Increased run-off	Non-permeable surfaces (e.g. roads & buildings)	Development footprint

SECTION 7: IMPACT DESCRIPTION, ASSESSMENT & MITIGATION MEASURES

7.1 CONSTRUCTION PHASE

7.1.1 Loss of natural vegetation

Impact	Area	Extent	Duration	Intensity	Probability of occurrence	Significance		Confidence
						WOMM	WMM	
Loss of natural vegetation	Development footprint & nearby surrounds	Local	Permanent	High	Definite	Medium-Low	Low	High

WOMM – without mitigation measures
WMM – with mitigation measures

NATURAL VEGETATION WILL BE DESTROYED BY THE MOVEMENT OF VEHICLES, MOVEMENT OF THE WORK FORCE AND THROUGH THE CONSTRUCTION OF PERMANENT STRUCTURES. IN ORDER TO MINIMISE THIS, IT IS SUGGESTED THAT THE DEVELOPMENT FOOTPRINT BE DEMARCATED AND THE DESTRUCTION OF VEGETATION BE LIMITED TO THESE AREAS.

THE SIGNIFICANCE OF THIS IMPACT IS CONSIDERED TO BE MEDIUM TO LOW, HOWEVER IF MITIGATED CORRECTLY IT WILL BE OF LOW SIGNIFICANCE.

7.1.2 Erosion

Impact	Area	Extent	Duration	Intensity	Probability of occurrence	Significance		Confidence
						WOMM	WMM	
Erosion	Development footprint & nearby surrounds	Site specific	Short term	High	Probable	Low	-	High

WOMM – without mitigation measures
WMM – with mitigation measures

EROSION MAY TAKE PLACE WHEN VEGETATION IS REMOVED AND THE TOP SOIL IS EXPOSED, WHICH IS THEN MORE SUSCEPTIBLE TO EROSION DURING RAINFALL EVENTS AND FROM STRONG WINDS. SIMILARLY, TRAMPLING OF VEGETATION BY THE CONTINUAL MOVEMENT OF VEHICLES AND PEOPLE MAY ALSO LEAD TO THE REMOVAL OF VEGETATION AND EXPOSURE OF THE TOP SOIL. FORTUNATELY DUE TO THE LOW RAINFALL IN THE AREA, THE CHANCES OF EROSION ARE GREATLY MINIMISED, HOWEVER CARE SHOULD STILL BE TAKEN TO AVOID SUCH EROSION. IT IS RECOMMENDED THAT THE REMOVAL OF VEGETATION BE KEPT TO A MINIMUM, AND ALL CLEARED AREAS ARE RE-VEGETATION WITH LOCAL PLANT GRASS SPECIES AS SOON AS

PRACTICALLY POSSIBLE. THE RE-USE OF EXCAVATED TOP-SOIL WILL ASSIST IN THE REGENERATION OF INDIGENOUS SPECIES, AS THE TOPSOIL IS LIKELY TO CONTAIN VIABLE SEED BANKS AND GEOPHYTES.

THE SIGNIFICANCE OF THIS IMPACT IS CONSIDERED TO BE LOW, HOWEVER IF MITIGATED CORRECTLY IT WILL BE OF ALMOST NEGLIGIBLE.

7.1.3 Dust

Impact	Area	Extent	Duration	Intensity	Probability of occurrence	Significance		Confidence
						WOMM	WMM	
Dust	Development footprint & nearby surrounds	Local	Short	Low	Probable	Low	Low	High

WOMM – without mitigation measures
WMM – with mitigation measures

THE MOVEMENT OF CONSTRUCTION VEHICLES AND THE BUILDING ACTIVITIES IS LIKELY TO CREATE DUST. THIS DUST WILL SETTLE ON PLANTS, AND MAY IMPAIR THEIR PHOTOSYNTHESIS ABILITIES. IT IS THEREFORE SUGGESTED THAT IF PRACTICALLY POSSIBLE ROAD AND EXPOSED SURFACES SHOULD BE KEPT MOIST TO MINIMISE DUST POLLUTION.

THE IMPACT IS ANTICIPATED TO BE LOW

7.2 OPERATIONAL PHASE

7.2.1 Increased run-off

Impact	Area	Extent	Duration	Intensity	Probability of occurrence	Significance		Confidence
						WOMM	WMM	
Increased run-off	Area containing hardened surfaces	Site specific	Permanent	High	Definite	Medium	Low	High

WOMM – without mitigation measures
WMM – with mitigation measures

THE DEVELOPMENT WILL REDUCE THE AMOUNT OF VEGETATION THAT CURRENTLY ACTS AS A SOAK-AWAY DURING AND AFTER RAINFALL EVENTS. THIS REDUCTION IN VEGETATION AND THE INCREASE IN NON-PERMEABLE SURFACES (E.G. ROADS, CONCRETE SURFACE) WILL RESULT IN INCREASED RUN-OFF VELOCITIES, WHICH WILL INCREASE THE

TRANSPORTATION OF SEDIMENTS. THIS MAY ULTIMATELY RESULT IN EROSION WHICH WILL BE OF MEDIUM SIGNIFICANCE. IT IS THEREFORE RECOMMENDED THAT WHERE POSSIBLE, PERMEABLE SURFACES SHOULD BE USED TO ALLOW FOR THE INFILTRATION OF WATER. FOR EXAMPLE BRICK PAVEMENTS AND ARMOURTEX ARE MORE BENEFICIAL THAN TARRERD SURFACES. ALL STORM WATER RUN-OFF SHOULD ALSO BE CHANNELLED IN SUCH A MANNER THAT IT DOES NOT CAUSE EROSION WHEN IT COMES INTO CONTACT WITH THE GROUND OR NATURAL AREAS.

SECTION 8: CONCLUSION

The entire study area was classified as being Disturbed *Schmidtia kalahariensis* Grassland. The overall plant species diversity was low and No Red Data plant species or Protected Plants species were observed on site, nor is any suitable habitat present. Consequently, the area has been classified as being of *low* Ecological Function and *low* Conservation Importance.

Construction is likely to result in the loss of natural vegetation, erosion and dust, however if mitigated corrected these impact will be low. During the operation phase, the increase in hardened surfaces may lead to an increase in surface run-off velocities which may result in erosion. Once again, if mitigated correctly these impacts will be low.

SECTION 9: GLOSSARY

Alien species:	Plant taxa in a given area, whose presence there, is due to the intentional or accidental introduction as a result of human activity
Biodiversity:	Biodiversity is the variability among living organisms from all sources including inter alia terrestrial, marine and other aquatic ecosystems and ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
Conservation:	The management of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. The wise use of natural resources to prevent loss of ecosystem function and integrity.
Ecosystem:	Organisms together with their abiotic environment, forming an interacting system, inhabiting an identifiable space.
Ecosystem services:	Activities that help to maintain an ecosystem but are not directly part of energy flows and nutrient cycles. Examples include pollination, dispersal, population regulation, provision of clean water and the maintenance of liveable climates (carbon sequestration).
Forb:	A herbaceous plant other than grasses
Habitat:	Type of environment in which a plant or animal lives.
Indigenous:	Any species of plant, shrub or tree that occurs naturally in South Africa
Invasive species:	Naturalised alien plants that have the ability to reproduce, often in large numbers. Aggressive invaders can spread and invade large areas
Red Data:	A list of species, fauna and flora that require environmental protection. Based on the IUCN definitions.
Soil:	A mixture of organic and inorganic substances, the composition and structure of the latter is derived from the parent rock material. Soil also contains bacteria, fungi, viruses and micro-arthropods, nematodes and worms.
Species diversity:	A measure of the number and relative abundance of species (see biodiversity).
Species richness:	The number of species in an area or habitat.

Appendix C – Public Participation Consultation.

Appendix C1 - Proof of site notice

**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT
PROCESS.**

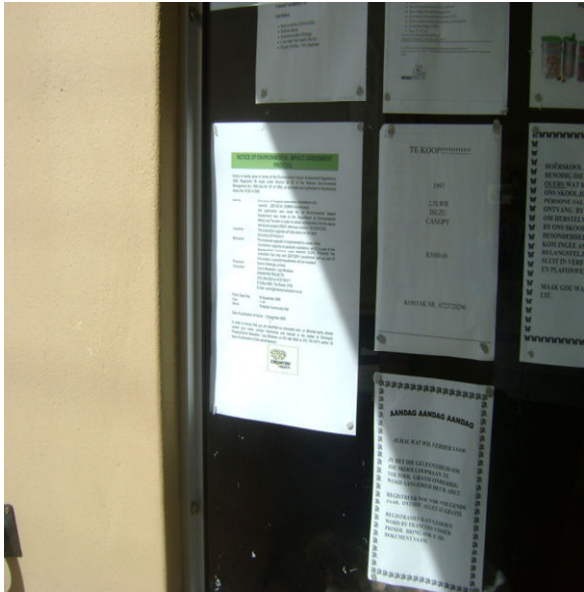
Notice is hereby given in terms of the Environmental Impact Assessment Regulations, 2006, Regulation 56 made under Section 24 (5) of the National Environmental Management Act, 1998 (Act No 107 of 1998), as amended and published in Government Notice No. R.385 of 2006.

- Activity** : Extension of Paulputs Substation (Installation of a second 220/132 kV, 250MVA transformer)
(An application was made for an Environmental Impact Assessment was made to the Department of Environmental affairs and Tourism in order to obtain authorization for the above mentioned project (DEAT reference number 12/12/20/1239)
- Locations** : The substation upgrade will take place on the farm Schuitklip 92 Portion 4
- Motivation** : The proposed upgrade is implemented to create a firm transformer capacity at paulputs substation, which is part of the Namaqualand Customer Load Network (CLN). Presently the substation has only one 220/132KV transformer and as part of this project, a second transformer will be installed.
- Proponent** : Eskom Holdings Limited
- Consultant** : Calvin Mawelela / Jojo Mmakwa
ENKANYINI PROJECTS
(012) 440 8830 or 0721749171
P.O Box 4983, The Reeds, 0158
E-mail: calvin@enkanyiniprojects.co.za
- Public Open Day** : 18 September 2008
- Time** : 17:00
- Venue** : Pofadder Community Hall

Date of publication of notice: 3 September 2008

In order to ensure that you are identified as interested and / or affected party, please submit your name, contact information and interest in the matter to Enkanyini Projects(Calvin Mawelela / Jojo Mmakwa on 012 440 8830 or 072 174 9171) within 30 days of publication of this advertisement.





Appendix C2 - Proof of News paper advertisement

Jaco Kotzé as deel van die voltydse bemarkingspan.

Kontak hom gerus vir enige navrae, pryse en uitstekende diens.

Tel: 083 402 0871



KENNISGEWING: In die Boedel van Wvle Willem Petrus Strauss, oortreders op die 11/07/2004, Pansoanommer 161011 5026 08 5, van Pansoanommer 206, Volgraafplig, Grobelaarspoort, Boedel N. 206/2004. Die Eerw. & Finaal Likhouders en Die Bemarkingspan in die bogenoemde boedel sal ten kantore van die Meester van die Hooggeregshof, Kimberley, en die Landdroes, Grobelaarspoort ter sake 18 v. 11 tydens van 21 die vanaf 05/09/2008, P.18 Tyd Sessies, Postbus 25472, Oos-Rand, 1462.

KENNISGEWING: In die boedel van Andries Jacobus Burger (identifikasienommer 240327 5020 08 3) van Tophouss, Uptington, 5800 wie oortreders is op 18 September 2007, (Boedelnommer 2236/2007), Kennis gegee hiermee dat die Eerw. en Finaal Likhouders en Die Bemarkingspan in bogenoemde boedel ter sake 18 v. 11 by die kantore van die Meester van die Hooggeregshof te Kimberley en by die Landdroes te Uptington vir 'n tydperk van 21 dae vanaf 5 September 2008, Du 708 v. 11 van die Meester, Agente vir die Eksekuteurs Testamentar, Postbus 204, Uptington, 5800.

KENNISGEWING: In die boedel van Wvle: Hermanus Gollath, identifikasienommer: 161018 5023 08 3. Geleidelik omme gelyktydig aan gelyktydig met Johannes Francis Gollath, identifikasienommer: 300414 0050 08 3, word verklaar dat die Eerw. en Finaal Likhouders en Die Bemarkingspan in bogenoemde boedel ter sake 18 v. 11 tydens van 21 die vanaf 05/09/2008, P.18 Tyd Sessies, Postbus 25472, Oos-Rand, 1462.

KENNISGEWING: In die eersgesproke boedel van Wvle: Bylandt Albert Strauss - identifikasienommer 480522 5049 08 7 - Volwasse man van Voorloerstraat, Kaserne, Alkating Kerkhart, Provinsiale Noord-Kaap en reguleer agterste Herthe Elizabeth Adriaans Strauss - identifikasienommer 48112 0041 000 - Volwasse vrouwe: Herthe Adriaans op 23, Uptington, Alkating Gordons, Provinsiale Noord-Kaap, Krediteure en Deleureurs in die bogenoemde boedel word versoek om hul voorloer te h. te lever en hul sake te betaal aan die kantore van die ondergetekende binne 'n tydperk van 30 dae gelyktydig vanaf datum van publikasie hiervan naamak 5 September 2008. La Flour en Coers Ing, Voorloerstraat 30, Postbus 138, Kalsmas, 6870, Tel: 054-431 0823/4, Faks: 054-431 0793.

KENNISGEWING: In die boedel van Wvle Johannes Jakobus van Rood (identifikasienommer 362916 0101 01) van Beersdamm 18 Uptington wat op 8 Februarie 2008 te Uptington oortreders is. Boedelnommer: 850/2008. Kennis gegee hiermee dat die Eerw. en Finaal Likhouders en Die Bemarkingspan in bogenoemde boedel ter sake 18 v. 11 by die kantore van die Meester van die Hooggeregshof te Kimberley en by die Landdroes te Uptington vir 'n tydperk van 21 dae vanaf 5 September 2008, Makon & Vermeulen, Prokureurs v. Eksekuteurs, Postbus 27, Schodderstraat 5, Uptington, 5800.

Loans arranged by:

ASC FINANCIAL SERVICES

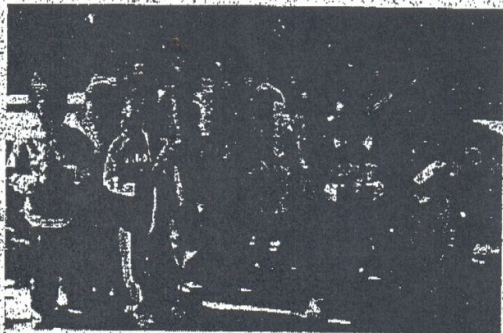
Money for Home Owners!
High Interest Rates!
High Petrol prices!
High food prices! Cannot make ends meet! Now is the time to consolidate all debts, credit cards, etc! Improve your cash-flow and life-style now! If non-home owner, we can arrange a personal loan for you. Blacklisted clients welcome.

EXAMPLE CALCULATION BASED ON CERTAIN CRITERIA

R20 000	@	R189 pm
R40 000	@	R379 pm
R60 000	@	R569 pm
R100 000	@	R948 pm

Call: 053 832 5176/053 832 4547
All E-mails to: arthur.asc@telkomsa.net

Die versorging van perde. Die hoogtepunt was toe almal op Jan Bloukors ry en almal is dit eens: "Ons gaan weer!"



KLH VOERE
UPINGTON

Vervaardig deur Transboegoe

* AFROND * EKONO * STOET
* WILDS * DROEGTE
* ENERGIE-LEK
* PROTEIEN-LEK

Beste Pryse

Nou beskikbaar te Ses Brugges, Aflewering vir grootbest, Verafak deur KLH. Kontak vir Annette 083 638 0560/054 491 1054

Gesonde tandjies vir Rakkertjies

Hier staan die "Rakkers" van ACVV se Rakker Akker Kleuterskool op Leerkrans met hulle splinter nuwe tande borseljies wat hulle ontvang het.

Sedert sy opening op 14 Julie 2008 kom die "Rakkers" nog gretig skool toe om by Juffrou Anta te leer.

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is hereby given in terms of the Environmental Impact Assessment Regulations, 2006, Regulation 58 made under Section 24 (5) of the National Environmental Management Act, 1989 (Act No. 107 of 1989), as amended and published in Government Notice No. R.985 of 2006.

Activity: Extension of Pulpits Substation (Installation of a second 220/132 KV, 250MVA transformer) (An application was made for an Environmental Impact Assessment was made to the Department of Environmental Affairs and Tourism in order to obtain authorization for the above mentioned project (DEAT reference number 12/12/20/1239)

Locations: The substation upgrade will take place on the farm Schuikop 92 Porton 4

Motivation: The proposed upgrade is implemented to create a firm transformer capacity at pulpits substation, which is part of the Namaqualand Customer Load Network (CLN). Presently the substation has only one 220/132KV transformer and as part of this project, a second transformer will be installed.

Proponent: Eskom Holdings Limited
Consultant: Calvin Mawelela / Jojo Mmalwa
ENKANYINI PROJECTS
(012) 440 8830 or 0721 749 171
P.O. Box 4983, The Reeds, 0158
E-mail: calvin@enkanyiniprjects.co.za

Public Open Day: 18 September 2008
Time: 17:00
Venue: Pofadder Community Hall

Date of publication of notice: 3 September 2008

In order to ensure that you are identified as interested and / or affected party, please submit your name, contact information and interest in the matter to Enkanyini Projects (Calvin Mawelela / Jojo Mmalwa on 012 440 8830 or 072 174 9171) within 30 days of publication of this advertisement.

NG Kerk Noord hou ete

Met ontbeende varkrib en bobotie op die spyskaart, beplan NG Kerk-Noord weer 'n heerlike gemeentete op Sondag 14 September om 12:00 in die kerksaal.

Die prys is baie billik. Vir meer besonderhede, skakel die kerkkantoor by 054 332 3201.

Appendix C 3 –Communication to and from person

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 or 086 503 1670 Email: calvin@enkanyinprojects.co.za Web: www.enkanyinprojects.co.za</p>
---	--

Name: Calvin Mawelela
Cell: 0721749171
Date: 30 July 2008
Ref: 30/07/08

Attention: Mr G Visser

Dear Sir

**PAULPUTS SUBSTATION EXTENSION, REFERENCE NUMBER
12/12/20/1239**

Enkanyini Projects has been appointed by Eskom Holdings Limited to conduct an Environmental Impact Assessment (EIA) for the extension of the Paulputs substation (Schuitklip 92 portion 4) to accommodate the second 220/132KV 250 MVA transformer. As part of the EIA process we are required to consult with the public of which the purpose is the following:

1. To inform the public about the proposed projects.
2. To provide the community in general (interested and affected) an opportunity to comment or raise any concern or recommendation regarding the proposed project.
3. To provide interested and affected parties with an opportunity to forward comments/opinions/suggestion and ways of avoiding/reducing or mitigating negative impacts associated with an activity in order to enhancing positive impacts.

In terms of the National Environmental Management Act we are required to consult with stakeholder, authorities and the community in general within the affected area. As per

telephonically conversation regarding the scheduled public open day I would like to confirm that the date is the 18th of September 2008 in the Pofadder Community Hall at 17H00. We will appreciate your presence in the public open day if it is possible.

Please should there be any questions, do not hesitate to contact us on the above numbers.

Sincerely

Calvin Mawelela

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 or 086 503 1670 Email: calvin@enkanyinprojects.co.za Web: www.enkanyinprojects.co.za</p>
---	---

Name: Calvin Mawelela
Cell: 0721749171
Date: 30 July 2008
Ref: 30/07/2008

Attention: Mr L.D Beukes
Municipal Manager
Khaima Local Municipality

Dear Sir

**PAULPUTS SUBSTATION EXTENSION, REFERENCE NUMBER
12/12/20/1239**

Enkanyini Projects has been appointed by Eskom Holding Limited to conduct an Environmental Impact Assessment (EIA) for the extension of the Paulputs substation to accommodate the second 220/132KV 250 MVA transformer. As part of the EIA process we are required to consult with the public of which the purpose is the following:

1. To inform the public about the proposed projects.
2. To provide the community in general (interested and affected) an opportunity to comment or raise any concern or recommendation regarding the proposed project.
3. To provide interested and affected parties with an opportunity to forward comments/opinions/suggestion and ways of avoiding/reducing or mitigating negative impacts associated with an activity in order to enhance positive impacts.

In terms of the National Environmental Management Act we are required to consult with land owners, stakeholder, authorities and the community in general within the proposed

development area. We have intention to conduct the public open day on the 18th of September 2008 in the Pofadder Community Hall at 17H00. We will appreciate your presence in the public open day if it is possible.

Please should there be any questions, do not hesitate to contact us on the above numbers.

Sincerely

Calvin Maweela

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 or 086 503 1670 Email: calvin@enkanyinprojects.co.za Web: www.enkanyinprojects.co.za</p>
---	---

Name: Calvin Mawelela
Cell: 0721749171
Date: 09 September 2008
Ref: 09/09/2008

Attention: Secretary, Mr Jacob
Pofadder Landbou Vereenige

Dear Sir

**PAULPUTS SUBSTATION EXTENSION, REFERENCE NUMBER
12/12/20/1239**

Enkanyini Projects has been appointed by Eskom Holdings Limited to conduct an Environmental Impact Assessment (EIA) for the extension of the Paulputs substation (Schuitklip 92 portion 4) to accommodate the second 220/132KV 250 MVA transformer. As part of the EIA process we are required to consult with the public of which the purpose is the following:

1. To inform the public about the proposed projects.
2. To provide the community in general (interested and affected) an opportunity to comment or raise any concern or recommendation regarding the proposed project.
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In terms of the National Environmental Management Act we are required to consult with land owners, stakeholder, authorities and the community in general within the proposed

development area. We have intention to conduct the public open day on the 18th of September 2008 in the Pofadder Community Hall at 17H00. We will appreciate your presence in the public open day if it is possible.

Please should there be any questions, do not hesitate to contact us on the above numbers.

Sincerely

Calvin Mawelela

Appendix C4 - Minutes of the public meetings



PAULPUTS SUBSTATION UPGRADE EIA REFERENCE NUMBER 12/12/20/1349

**PUBLIC PARTICIPATION HELD ON THE 18/09/2008 AT 17H00
MINUTES**

Project	PAULPUTS SUBSTATION UPGRADE
Date	18 September 2008
Time	17h00
Venue	Pofadder Community Hall

AGENDA

- 1. OPENING**
- 2. WELCOME**
- 3. ATTENDANCE REGISTER AND APPOLOGIES**
- 4. PRESENTATION**
 - 4.1 ESKOM PRESENTATION**
 - 4.2 ENKANYINI PROJECT PRESENTATION**
- 5. QUESTIONS AND COMMENTS**
- 6. CLOSING REMAKS**
- 7. CLOSURE**

Item	Description	Action
1.	OPENING	
	Mr T Bezuidenhoud introduced himself and then afterwards officially opened the meeting	
2.	WELCOME	
	Mr. T.Bezuidenhoud welcomed everyone	
3.	ATTENDANCE REGISTER AND APOLOGIES	
	The local council forwarded an appology and the Khaima Municipal Maneger.	
	The represantative from DEAT also forwarded an appology.	
4.	PRESENTATION	
4.1	ESKOM PRESENTATION	
	Ms. L Chauke started the presentation by introducing Eskom delagetes that were present in the public participation and went on explaining the types of impacts associated with substation establishment.	
4.2	ENKANYINI PROJECTS PRESENTATION	
	Mr. T Maluka presented the project, explaining the purpose and the intepretation of Pauputs substation. He continued by explaining the EIA process,public participation, how to register as an Interested and Affected Party.	
5.	QUESTIONS AND COMMENT	
	Mr. C Mawelela facilitated this sesion of the meeting.	
	Mr. T.Bezuidenhoud asked a question as to when will the draft scoping report be made available.	
	It was agreed that it will be made availble by the second week of September 2008.	
	Mr.T.Bezuidenhoud requested that small miners association should be contacted and local associations.	
	Mr.T.Bezuidenhoud made a commitment that he will ensure that they are registered and interested and affected	
6.	CLOSING REMARKS	
	Mr.C.Mawelela in his closing remarks he encouraged the attendats to continue suporting such events and requested them to	

	access the draft scoping report.	
7.	CLOSURE	
	The meeting was officially closed	



CONTRACT NO: 4500067400 PAULPUTS SUBSTATION UPGRADE

AGENDA

- 1. INTRODUCTION & WELCOME**
- 2. APOLOGIES**
- 3. APPROVAL OF PREVIOUS MINUTES**
- 4. PROGRESS REPORTS FROM THE PROJECT LEADER**
- 5. SCOPE OF WORK**
- 6. WATER AND VISUAL SPECIALIST**
- 7. GEOLOGY SPECIALIST**
- 8. GENERAL**
- 9. NEXT MEETING**



CONTRACT NO: 4500067400 PAULPUTS SUBSTATION UPGRADE

ATTENDANCE REGISTER MEETING 2 : 24 JULY 2008 AT 09H00

NAME	ORGANIZATION	CONTACT NO	EMAIL ADDRESS	SIGNATURE
TSEPO MACHUKO	Enkanyini	012 440 8830	tsepo@enkanyini.co.za	<i>Tsepo</i>
Humbulani Mubeni		011 469 5819	humbulani@eskom.co.za	<i>Humbulani</i>
Hennie Steyn	ESKOM	083 979 0530	Hennie.steyn@eskom.co.za	<i>Hennie Steyn</i>
LUCIA CHAUKE	ESKOM	082 874 5901	lucia.chauke@eskom.co.za	<i>Lucia Chauke</i>
GERHARD VISOOR	OWNER	081 615 8971	gvisoor@telkom.co.za	<i>Gerhard Visoor</i>
EPPIE AGENBAG	ESKOM	083 544 632	edmund.agenbag@eskom.co.za	<i>Eppie Agenbag</i>
SOLOMON TSOLO	ESKOM	082 806 0518	solomon@eskom.co.za	<i>Solomon Tsole</i>
Calvin Mawela	Enkanyini	072 174 917	Calvin@enkanyini.co.za	<i>Calvin Mawela</i>
WIM NINECLA		078 500 5556 / 011 800 1044	WIMNINECLA@ESKOM.CO.ZA	<i>Wim Ninecla</i>



**CONTRACT NO: 4500067400 PAULPUTS
SUBSTATION UPGRADE**

**INTRODUCTION MEETING NO.2 HELD ON THE 25/07/2008 AT
12H00**

MINUTES

Project	PAULPUTS SUBSTATION UPGRADE
Date	25 July 2008
Time	12h00
Venue	Paulpit

Name	Firm	Telephone	Email address	Cell
Present				
Calvin Mawelela	Enkanyini Projects	012 440 8830	calvin@enkanyiniprojects.co.za	072 174 9171
Tsepo Maluka	Enkanyini Projects	012 440 8830	tsepo@enkanyiniprojects.co.za	079 185 6993
Humbulani Mudau	Enkanyini Projects	012 440 8830	-	083 288 4406
Rantshalin gwa Mulaudzi	Enkanyini Projects	012 440 8830	-	078 181 3922
Lucia Chauke	Eskom Limited Holdings	011 800 4427	lucia.chauke@eskom.co.za	082 874 5901
Steven Mafela	Eskom Limited Holdings	011 800 6644	mafelast@eskom.co.za	078 300 5556
Solomon Tsolo	Eskom Limited Holdings	-	tsoloms@eskom.co.za	082 806 0512
Gerald Visser	Land owner	054 933 0475	tgnvisser@telkomsa.net	084 645 8971
Eppie	Eskom	-	Edmund.agenbag@eskom.co.za	083 544 4632

Agenbag				
Hernie Sticnood	Eskom	-	herniesticnood@eskom.co.za	083 979 0530

Distribution to the following:

- Mr. Calvin Mawelela
- Steven Mafela
- Lucia Chauke

AGENDA

- 8. INTRODUCTION & WELCOME**
- 9. APOLOGIES**
- 10. APPROVAL OF PREVIOUS MINUTES**
- 11. PROGRESS REPORTS FROM THE PROJECT LEADER**
- 12. SCOPE OF WORK**
- 13. WATER AND VISUAL SPECIALIST**
- 14. GEOLOGY SPECIALIST**
- 15. GENERAL**
- 16. NEXT MEETING**

Item	Description	Action
1.	INTRODUCTION AND WELCOME	
	Mr C Mawelela welcomed attendants to the meeting.	
2.	APOLOGIES	
	Mr Jojo Mmakwa was on leave.	

	Flora and Fuana specialist.	
3.	APPROVAL AND CORRECTION OF PREVIOUS MINUTES	
	Minutes of the previous meeting were approved.	
4.	PROGRESS REPORTS FROM THE PROJECT LEADER	
	Mr Mawelela stated that the application has been launched with DEAT. He indicated that specialist studies will commence.	
5.	SCOPE OF WORK	
	Mr C Mawelela stated that the scope of work will be discussed as the meeting progresses.	
6.	WATER AND VISUAL SPECIALIST	
	Mr R Mulaudzi made a presentation on the importance of storm water management and the visual aspects in the project.	
	Mr G Visser indicated that there is problems of water blockages in substation area.	Noted
	Mr H Sticnood added the substation itself is situated in the part of water in the area and during rain season water blockage is evident.	Noted
	Mr S Tsola suggested that the current structural design should be considered during the investigation in order to solve the water blockage problem.	
	Mr S Mafela requested that the specialist should proposed a water management design so that it could be included in the overall design of the substation. He indicated that in all the work that is to be perform in the project he expect not less than 85 % accuracy.	Noted
7.	GEOLOGY SPECIALIST	
	Mr H Mudau made a presentation regarding the geological study and importance of the study in this project. He furthely requested that he will require further data for him to able to complete the work.	
	Mrs L Chauke questioned that what will this study contribute in the project.	
	Mr H Mudau explained in details the role of this study which is mainly to determine the impact that the upgrade will have on the soil. He futherly indicated that the study is necessary in order to assist in the designing of the final structure. He also clarified the issue of time that it might possibly take to produce a report taking into consideration laboratory analysis.	Urgent
	Mr S Mafela requested that this study be conducted as soon as possible hence the outcome will be important in the final design	Noted

	and also for budget.	
8.	GENERAL	
	Mr G Visser question that what is going to happen next from Eskom's side regarding the land purchasing.	
	Mr S Tsolo explained that now they have to prepare all the necessary paper work that is required from Eskom side. Mrs L Chauke indicated to Mr G Visser that decision of whether to or not to purchase the land will be influenced by the outcome of the EIA results(Record of Decision) from the DEAT.	
	Mr G Visser indicated that if they decide to go ahead with the upgrade he want the fencing around the substation to be made in a manner that will prevent his sheeps from entering the area(sheepproof), and that the water blockage problem should be addressed.	Noted
	Mr T Maluka stated that the proposed public participation dates is the week of the 18-22 August 2008 and he indicated that no contact have been made with the local municipality therefore the dates will remain as proposed dates. He furtherly indicated that the challenge in the public participation in this regard is that there is no public in the nearby substation vicinity, however he said its not a milestone alternative measure will be considered.	
	Mrs L Chauke requested that the information regarding the process of suitable site selection be made available so that it could be motivated to DEAT that the preffered site is the best in all alternatives identified.	
	Mr S Mafela stated that he will forward all the information that is required regarding the project and requested that the Eskom guys on site(Paulputs) should be kept informed at all times when certain work is to be conducted on site. He further made a request to everyone that he needs to be kept informed about the progress on the activities on site.	
	Mr C Mawelega in closing the meeting he indicated that Enkanyini project will ensure that work is done in a shortest time as possible.	
9.	NEXT MEETING	
	Will be scheduled at the later stage.	

Mr C Mawelega
Chairperson

APPENDIX E6: COPY OF THE REGISTER



INTERESTED AND AFFECTED PARTIES REGISTER ON THE 18TH OF
 SEPTEMBER 2008 IN POFFADER COMMUNITY HALL AT 17H00.
 PAULPUTS SUBSTATION EXTENTION EIA REFERENCE NUMBER
 12/12/20/1239.

NUMBERS	FULL NAMES	ORGANIZATION	CONTACT NUMBERS	POSTAL ADDRESS	COMMENTS
1	LEON BLOWERS	ANC	—	LANGSLEAT 378 POFADDER	
2	Bradley Vosipi	ANC	—	Langsleat 365 Pofadder	
3	Jean Muller	ANC	—	Langsleat 380 Pofadder	
4	Gerardo Chete	ANC	—	Watsonkruis St No 9 Pofadder.	
5	Rouge Chete	ANC	—	Watsonkruis No 12 Pofadder	
6	THEODOR BEZUIDENHOUT	Khomoa Mun	054 933066/18	Mayor@khoma. gov.za. P.O. Box 1081 of Pofadder	8870 072755 6152
7	TSEPO MALUKU	Entkanyini Project	012 440 8830	206 College Galleries Sunnyside Pretoria	
8	Solomon Tsolo	estom	011 8006475	P O Box 347 Woodridge 1687	

NUMBERS	FULL NAMES	ORGANIZATION	CONTACT NUMBERS	POSTAL ADDRESS	COMMENTS
9	Dathan Mqshida	ESKOM	0825249555	Pestrel Suite 124 Private bag 137 Lynnwood 1990 0540	
10	Calvin Naudela	Ekangini Projects	012 4408830	P.O. Box 4983 The Reeds D15 2	No objection to the projects
11	STEVEN MAREE	ESKOM	011 800 6644 078 300 5556	D1748 MAGAWATI PARK MAXWELL DRIVE	NO OBJECTION TO THE PROJECT
12	ELISHA TEKALAL	ESKOM	011 800 5091	D1738 ESKOM MAGAWATI PARK	-
13	LUCIA CHAUKE	ESKOM L&R	011 800 4427 032 874 5901	D1739 ESKOM, TX MWP	-
14	G. Visser	JANAGRI	084658971	Box 331 Babdal 5590	Repeal Agricultural Unia - no objection.
15	D. Monameli	Khai Ma	073 4710 320	P.O. Box 108	No objection to the project
16	B. Simbaya	Khai-ma	073 5515 1585	P.O. Box 108	-
17					
18					



ENKANYINI PROJECTS
P. O. Box 4983, The Reeds 0158
Tel: +27 12 440 8830
Fax: +27 12 440 8829
Telefax: 086 503 1670
Web: www.enkanvinprojects.co.za
Email: calvin@enkanyiniprojects.co.za

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I, Zuko Daniel Maramelle, confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

I believe this is the best project. We are living in a community of about 70% of indigent people. They live only on gov. grants. This is a wake-up call to our community. I therefore support this project 100%.

Signature

Date .. 18/09/2008

Telephone .. 054 933 0066

Mobile .. 083 4760 320

Address .. 347 Main Road

Poplar

8890

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 Telefax: 086 503 1670 Web: www.enkanvinprojects.co.za Email: calvin@enkanyiniprojects.co.za</p>
---	--

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I B. E Simboga..... confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

This will be a good project for RUP AREA.
Res. envt.
.....
.....
.....
.....

Signature *Simboga*.....

Date 2008-09-18.....

Telephone ~~073 513 1845~~ 054 933 066.....

Mobile 073 513 1845.....

Address Main Road.....
..... Pofa Jele.....
..... 8870.....

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 Telefax: 086 503 1670 Web: www.enkanvinprojects.co.za Email: calvin@enkanyiniprojects.co.za</p>
---	--

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I, Gesahle Cloete confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

*It's a very good presentation
It's but will they do it
They must do it as soon as
possible.*

Signature *Gesahle Cloete*
Date 18/09/2008
Telephone
Mobile 0820792560
Address Watson/laan 19
Dofadder
8890



ENKANYINI PROJECTS
P. O. Box 4983, The Reeds 0158
Tel: +27 12 440 8830
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Web: www.enkanvinprojects.co.za
Email: calvin@enkanyiniprojects.co.za

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I, Sean Blowars..... confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

No comments at this stage
.....
.....
.....
.....
.....


Signature [Handwritten Signature].....

Date 18/09/08.....

Telephone

Mobile 0848892450.....

Address LANGSTRAAT 373
POFALLER
8890.....

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 Telefax: 086 503 1670 Web: www.enkanyinprojects.co.za Email: calvin@enkanyinprojects.co.za</p>
---	--

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I, Eugene Muller..... confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

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.....
.....
.....
.....
.....

Signature *Eugene Muller*
Date 18/09/2002
Telephone ..
Mobile ..
Address Longsteet 350
Pofadder
8890

	<p>ENKANYINI PROJECTS P. O. Box 4983, The Reeds 0158 Tel: +27 12 440 8830 Fax: +27 12 440 8829 Telefax: 086 503 1670 Web: www.enkanyinprojects.co.za Email: calvin@enkanyiniprojects.co.za</p>
---	--

Ref number: 12/12/20/1239

Comment letter for the Extension of Eskom Paulputs Substation Project

I BRADLEY Vioq.gie confirm that the proposed Extension of Paulputs Substation activity was explained and discussed by the representatives of Environmental Consultants (Enkanyini Projects).

Comments/Recommendations regarding Extension of Paulputs Substation

None

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.....

.....

.....

.....

.....

Signature [Handwritten Signature]

Date 18/09/05

Telephone

Mobile 0786686090

Address Langstraat 365
Pofadder
8890

Appendix E5 - Comments and response report

1 Comments and Response Report

The Scoping Report and the EIA plan of study were sent on site for public comments (30 days which ended on the 7th of December 2008) and there were no comments forwarded regarding the documents on site.

Appendix C7 - Consent letter

**LETTER OF CONSENT FOR THE ENVIRONMENTAL IMPACT ASSESSMENT AND
ENVIRONMENTAL MANAGEMENT PLAN FOR
THE PROPOSED EXTENSION OF THE SUBSTATION TO ACCOMMODATE THE SECOND
220/132KV 125MVA TRANSFORMER**

With respect to Regulation No. 385 of the National Environmental Management Act (107 of 1998), item number 16(1), if the applicant is not the owner of the land on which the activity is to be undertaken, the applicant must, before applying for an environmental authorisation in respect of that activity, obtain the written consent of the landowner to undertake the proposed activity on that land.

I/We, the undersigned

of Identity Number / Registration Number _

am the registered owner/s of the property (*include property description & title deed numbers*)

hereby give consent to the applicant Eskom Holdings Limited

of Identity Number/Registration Number **2002/015527/06**



to undertake an Environmental Impact Assessment, Geohydrological studies and surveying of the land for the following activity/activities on the property:

1. Activity 1 (I): The construction of facilities or infrastructure, including associated structures or infrastructure, for the transmission and distribution of above ground electricity with a capacity of 120 kilovatts or more (this will include the study of different alternatives for the location of the proposed substation).

Activity 12: The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered

2. ~~endangered ecosystem~~ **listed in terms of section 52 of the National Environmental Management: Biodiversity Act 2004 (Act No. 10 of 2004).**

3. Activity 14: The construction of masts of any material of type and of any height, including those used for telecommunications broadcasting and radio transmission, but excluding (a) masts of 15m and lower exclusively used by (i) radio amateurs; or (ii) for lightening purposes (b) flagpoles; and (c) lightening conductor poles.

4. Activity 15: The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

5. Activity 16(a): The transformation of undeveloped, vacant or derelict land to residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare.

6. Activity 7: The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site.



Handwritten signature and date: 09. 2008

Signed:
Date:

Landowner Contact Information:

Name of Landowner:

Trading Name (if any)

Contact Person:

Physical Address:

Postal Address:

Telephone:

Appendix C8 - EAP expertise

Name : Abel Calvin Mawelela

Qualifications :

STD 10 [Vuxeni High School]

ND Environmental Management [TUT]

B Tech Environmental Management [TUT][Pending]

Present Position : SHERQ & Operations Director

Present Company : Enkanyini Projects

Years of Professional Experience : 9

Years with Firm : September 2006

Date of Birth : 29 October 1974

Nationality : South African

Contact Numbers : (087) 808 6174 or **0721749171** or **0829013041**

Email:calvin@enkanyiniprojects.co.za

Physical & Postal Address: Enkanyini Projects, PO BOX 4983, The Reeds, 0158

RELEVANT EXPERIENCE

- Environmental Pollution Control or Quality Management of surface and ground water.
- Employee health impact surveys and studies.
- Integrated Waste management and waste site rehabilitation.
- Design and implementation of hazardous management systems.
- Audit, implementation and coordination of Occupational Health and Safety Act, Mine Health and Safety Act ISO 18000.
- Audit, implementation and Coordination of ISO 14000 system
- Environmental Management systems, projects and administrations
- NEMA 1998, NWA 1998, MPRDA, AIDE MeMOIRE 1991, AGENDA 21 and ECA 1989.
- Safety and Environmental Assessments of Mining, Social Development and Industries.
- Air, Dust, and Noise surveys and Management.
- Environmental Impact Assessments, compliance monitoring and management.
- Environmental Management Plan and Report.
- Dam or land use zoning studies.
- Water Reserve and Flood-lines Determination/Analysis.
- Prospecting of minerals rights or permit and management (Environment).
- Social Impact Assessments, co-ordination and public participations.

- Social needs studies of community development projects.
- Cultural heritage studies for community development projects.
- Environmental technical Assessments or feasibility studies.
- Municipal integrated development plan (IDP) and water service development plan (WSDP) Assessment studies.
- I am experienced in Capacity Assessment of Municipalities, Water Services Providers, Water Authorities and Transfer processes.
- I was involved in business plan appraisals for South African Water Service Providers.
- I am experienced in research, data collection, liaison with communities and government (DME, DWAF, SALGA, DEAT) structures.
- I am experienced in project management, monitoring, non-compliance management, administrations and financial Management.
- I have managed number of environmental projects, including management of all environmental consultants and projects employed by the Province Department of Roads and Transport in North West.

AREAS OF EXPERIENCE

- Rural, Township and Urban development
- Bulk water, Water and Sewage treatment Plant or schemes
- Waste transfer station and Waste site
- Air Quality Monitoring Station
- Graveyards and Recreational facilities
- Roads, Weir and Bridges
- Borrow pits and Wells
- Reservoirs and Water reticulation
- Power stations and Lines
- Municipalities and Private developers
- Streams, Rivers and Dams
- Factories
- Industries
- Open cast and Underground mining

EXPERIENCE RECORD:

2005-to date: Enkanyini Projects: SHERQ & Operations Director
 2004-2005 : EcoSat Environmental Service Group: SHERQ & Operations Director
 2003-2004 : PD Naidoo & Associates: Environmental & Water technologist
 2001-2003 : Mzondi Environmental and Social Consultants: SHERQ Manager
 2000-2001 : Independent Consulting Services: SHEQ Consultant

1999-2000 : Palaborwa Mining Company: SHERQ Officer
1997-1998 : Palabora Mining Company: SHERQ Trainee during and after studies

References:

1. Annelize Grobler

Director Landscape Dynamics

Tel: (012) 460 6043 or 0825664530

2. Viktoria Jansen-Gotchev

Environmentalist

Tel: 0823363497

3. Thabo Sethsedi

Air Quality Director C&M Consulting Engineers

Tel: (012) 803 5124 or 0829299966

LANGUAGES

10 South African Official Languages: Read, Write, Speaking

I hereby certify the correctness of the information above and my availability to undertake this assignment.

Signature

Date