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Reference: EC30/5/1/3/3/2/1/0413EM
Date: 9 April 2010

South African Heritage Resources Agency
P.O. Box 758
GRAHAMSTOWN
6140

ATTENTION: MR. T. LUNGILE

CaseID: 2497

Sir

CONSULTATION IN TERMS OF SECTION 40 OF THE MPRDA OF 2002: STONE AGGREGATE; GRAVEL MINING ON THE FARM ZOETKLOOF 187, DIVISION OF HANKEY, EASTERN CAPE

1. The above refers.

2. Attached, a copy of the EMP received from Island House Trading 114 (Pty) Ltd.

3. Any written comments or requirements your department may have in this regard can be forwarded to this office no later than **5 June 2010.** Failure to do so, will lead to the assumption that your department has no objection(s) or comments with regard to the said documents. Comments may be submitted at your earliest convenience e.g. 30 days from the date hereof in order to reduce the turn around time for the application process.

4. Consultation in this regard has also been initiated with other relevant State Departments.

5. Please use the reference numbers as indicated in all future correspondence.

6. Your co-operation is appreciated.

Yours faithfully

REGIONAL MANAGER

EASTERN CAPE

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

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AN ENVIRONMENTAL MANAGEMENT PLAN FOR THE GRAVEL QUARRY ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

Prepared for Island House Trading 114 (Pty) Ltd.

April 2010

Report No. G10197

SYNOPSIS

An Environmental Management Plan (EMP) has been produced for the proposed mining activity on a portion of the Farm Zoet Kloof 187, situated about 5 km south-west of Hankey, in the southern part of the Eastern Cape Province. Gravel from the Enon Formation is to be exploited at this 1,5 hectare site by Island House Trading 114 (Pty) Ltd. The land in question is owned by the Kouga Municipality, and the site has been mined in the past by Stoneman CC.

This EMP is aimed at assessing the environmental implications linked to the proposed continuation of mining activity at this site, and at providing a management programme for the quarrying operation. Post quarrying rehabilitation, and decommissioning of the mined areas, are also addressed.

This investigation commenced with a thorough desk study and walk-over site inspection, followed by a more detailed field investigation. This process included a brief biophysical analysis, covering the remaining flora occurring in the study area. A public participation process was also conducted.

The investigation revealed that the natural environment in the study area has been destroyed by previous mining activity. At this stage, future mining will also be limited to the existing quarry scar.

Mining of the 1,5 hectare site should ideally continue as it has in the past, cutting a series of benches southwards into the hillside. Bench widths should ideally be about 10 metres, with bench heights not exceeding 5 metres. Bench angles should be about 70 degrees, and should slope slightly into the face to facilitate water retention and plant (tree) establishment after closure.

Mined material will be crushed and stockpiled on the northern side of the site, at the foot of the existing quarry face.

In essence, the site has been extensively disturbed by past quarrying activities. Mining is, therefore, not out of character in this area. However, mining procedures and rehabilitation recommendations must be adhered to.

AN ENVIRONMENTAL MANAGEMENT PLAN FOR THE GRAVEL QUARRY ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

1. INTRODUCTION.

1.1 TERMS OF REFERENCE.

This Environmental Management Plan (EMP) has been produced in terms of Section 27 (5) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002). A Mining Permit has been applied for by Island House Trading 114 (Pty) Ltd, for a gravel quarry on a portion of the Farm Zoet Kloof 187, situated about 5 km south-west of Hankey, in the southern part of the Eastern Cape Province. Gravel from the Enon Formation is to be exploited at this 1,5 hectare site.

This study was conducted at the request of the applicant, Island House Trading 114 (Pty) Ltd, represented by Mr Mtobeli Mlahleki, whose contact details are as follows:

- The company registration number is 2007/009028/07.
- The contact person is Mr Mtobeli Mlahleki (ID Number 681213 5662 080)
- The contact details are as follows:
  Fax number: 041 487 0661.
  Telephone number: 041 487 0660
  Cellular number: 082 366 8143
- The address details are as follows:
  Postal Address: P. O. Box 28459, Sunridge Park, 6008.
  Physical Address: 726 Govan Mbeki Avenue, Port Elizabeth.
- The applicant's e-mail address is mtobeli@masikhane.co.za

1.2 OBJECTIVES OF THE INVESTIGATION.

The objectives of the investigation were to:

a) Meet the requirements and directives of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), as specified by the Department of Minerals and Energy.

b) Establish the feasibility of the proposed mining activity, bearing the prevailing baseline environmental factors in mind.

c) Provide a functional environmental management plan for the effective mining of gravel within an environmentally acceptable ambit, including decommissioning and rehabilitation aspects.

1.3 LOCATION.

The proposed mining area is situated on a portion of the Farm Zoetkloof 187, located about 5 km to the south-west of Hankey, in the Eastern Cape Province. The area under consideration comprises approximately 1,5 hectares, and represents an existing disused quarry. The study area topography can be described as steeply undulating. The requisite locality plan is attached in Appendix 1 (Figure 1), and site co-ordinates are provided on Figure 2 in Appendix 1. The land in question, as well as the immediately abutting land, is owned by the Kouga Municipality.

1.4 PROJECT BACKGROUND.

The applicant has previously embarked upon a prospecting programme within the disused quarry, and has ascertained that sufficient material volumes are available to continue mining at this site. Materials quality is also suitable for use in the building industry.

Although no existing valid Mining Right or Mining Permit exists for this site, the previous quarry operators (Stoneman CC) still have a valid lease for the quarry until 1 December 2013. The land is owned by the Kouga Municipality. The applicant has embarked upon discussions with Stoneman CC and the Kouga Municipality, and both were also contacted during the Public Participation Process (see Appendix 3).

There is an ongoing demand for building material in the Kouga region. This particular quarry has supplied the region for many years until the mining consent expired a few years ago. The quartzitic sandstone boulders and cobbles are unweathered and when crushed, produce a high quality aggregate. This aggregate is often better than the quartzitic sandstone mined directly from the Table Mountain Group rocks. The only drawback is the matrix between the pebbles and cobbles, which is usually not usable.

Island House Trading 114 (Pty) Ltd have already embarked upon a marketing strategy which targets the construction of roads in the rural and built up areas in the vicinity of the quarry. Island House Trading 114 (Pty) Ltd also confirm that they have already tendered for road construction contracts in excess of eighty million rand.

In addition to road upgrade and road construction projects, a number of other significant infrastructural projects are set to commence in the area within the next 6 to 12 months. These include:

- 220 new RDP houses at Pellsrus (Jeffreys Bay).
- 2500 new RDP houses at Kruisfontein (Humansdorp).
- 139 new RDP houses at Arcadia.
- 400 new RDP houses at Kwanomzamo (Humansdorp).
- 390 new RDP houses at Thornhill.
- 1500 new RDP houses at Ocean View (Jeffreys Bay).
- 990 new RDP houses at Hankey.
- 278 new RDP houses at Patensie.
- 2000 new RDP houses at Sea Vista (St Francis Bay).
- New reservoir in Kruisfontein.
- Development of the Zwartenbosch Golf Estate.

The quarry is well situated to supply construction material for the above projects, as well as the many other private building projects in the region.

This quarry has a projected lifespan of about 2 to 5 years. Mining of the 1,5 hectare site should ideally continue as it has in the past, cutting a series of benches southwards into the hillside. Bench widths should ideally be about 10 metres, with bench heights not exceeding 5 metres. Bench angles should be about 70 degrees, and should slope slightly into the face to facilitate water retention and plant (tree) establishment after closure.

Mined material will be crushed and stockpiled on the northern side of the site, at the foot of the existing quarry face, from where the material will be distributed. A mobile crusher will be utilised.

Remaining reserves at this site would depend on the mining method employed. If the previous method is continued with, whereby the hill is simply removed towards the southern site boundary, available reserves would be based on a wedge (average height of about 25 metres, width of 50 metres and length of about 90 metres). This calculation is conservative, and would provide a minimum of about 56 250 cubic metres of bulk material.

If mining were also to take place downwards into the quarry floor, the available material volumes could be more than doubled.

The application period is thus initially for 2 years, with the option to extend it up to 5 years.

1.5 ENVISAGED LAND IMPROVEMENTS.

The proposed quarrying operation would require no permanent land improvements. Existing office and storage infrastructure at the quarry will be used, and a mobile crushing plant will be employed.

The quarry currently stands in an un-rehabilitated state. Further mining will be undertaken in association with a rehabilitation programme, which will ensure a vast improvement over the current situation.

1.6 AVAILABLE INFORMATION.

a) Aerial photographs obtained from Google Earth.

b) Topographical map, 3324 DD HANKEY, on a scale of 1:50 000.

c) Topographical map, 3324 PORT ELIZABETH, on a scale of 1:250 000.

d) Geological map, 3324 PORT ELIZABETH, produced by the Geological Survey of South Africa on a scale of 1:250 000.

e) Copies of reports by Blue Horizon Consulting covering the prospecting process and the Mining Permit application process.

2. PROJECT DESCRIPTION.

2.1 CONTACT DETAILS.

This study was conducted at the request of the applicant, Island House Trading 114 (Pty) Ltd, represented by Mr Mtobeli Mlahleki, whose contact details are as follows:

- The company registration number is 2007/009028/07.
- The contact person is Mr Mtobeli Mlahleki (ID Number 681213 5662 080)
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  Fax number: 041 487 0661.
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  Postal Address: P. O. Box 28459, Sunridge Park, 6008.
  Physical Address: 726 Govan Mbeki Avenue, Port Elizabeth.
- The applicant's e-mail address is mtobeli@masikhane.co.za

2.2 MINING PROGRAMME.

This EMP covers the 1,5 hectare site depicted on Figures 2 and 4 in Appendix 1. Mining of the site should ideally continue as it has in the past, cutting a series of benches southwards into the hillside. Bench widths should ideally be about 10 metres, with bench heights not exceeding 5 metres (see Figure 5 in Appendix 1).

The total height of the mined face is about 25 metres, which implies 5 benches (each 5 metres high, 10 metres wide and about 90 metres long. Bench angles should be about 70 degrees, and the benches should each slope slightly into the face to facilitate water retention and plant (tree) establishment after closure.

It is recommended that mining re-commences on the upper quarry bench, working downwards.

The vegetated strips on the side of the quarry fall outside the proposed mining area.

3. SITE DESCRIPTION.

3.1 TOPOGRAPHY AND DRAINAGE.

The study area is located in the foothills which form an intermediate landscape between the Gamtoos River flood plain and the higher lying marine terrace towards Humansdorp. These foothills form a steeply undulating topography with numerous incised valleys.

The study area (existing disused quarry) is located on the northern and north-western side of such a hill. A large portion of the hill has already been mined, leaving steep exposed mining faces with about 5 benches.

The site occurs to the east of the Hankey - Humansdorp tar road. The nearest drainage feature occurs on the other (western) side of this road. Run-off from the quarry would thus drain north-westwards towards this ephemeral stream.

3.2 CLIMATE.

Published literature made available by the South African Weather Bureau (Climate of South Africa: WB40 and WB42) do not provide specific climatic data for any weather stations at Hankey.

According to Kopke (1988), the climate in this area is classed as sub-tropical, with temperatures of between 10° and 22,2°C prevailing throughout the year, with at least 60 mm of rainfall each month. The region occurs in a mountainous zone where temperatures are modified by altitude. The presence of local winds, which frequently blow from the south-east, tend to drop the average daily temperatures during summer months. Winters in this area are cool, with cold snaps and gusty south-westerly winds often occurring during the passage of a cold front. The hot dry winds that prevail in the foothills during January and February, are often a cause of mid-summer drought conditions.

The average annual rainfall in the region, which should fall throughout the year but with a spring maximum, should be about 500 mm per annum. Mean annual evaporation rates vary between about 1600 and 1800 mm per annum. Climatic data for the region from the Directorate of Nature Conservation concludes that the annual average rainfall falls consistently throughout the year, but that the average doubles in March and November each year. Furthermore, the proportion of summer rainfall increases gradually towards the east (coastwards). The precipitation is mostly cyclonic (frontal) and orographic in nature, with frequent thunderstorms (between ten and twenty per annum) in the summer months. Long periods of drought are also often followed by raging floods.

In summer, the prevailing wind direction is from the south-east and east, and in winter the dominant wind direction is westerly and south-westerly. Dry hot berg winds can also occur during the autumn and winter months. Wind directions are also affected by the mountainous and valley topography.

Weinert's climatic N number for the Hankey area is approximately 4,5 implying that chemical weathering dominates marginally over mechanical weathering of rock.

3.3 ACCESS.

The site occurs adjacent to the Hankey - Humansdorp tar road (R330). The old quarry has an existing gravel road entrance with a lockable gate. The access road is about 15 metres in length, and the turnoff is sign posted on the tar road.

4. INVESTIGATION PROCEDURE.

4.1 DESK STUDY.

The investigation commenced with a desk study of all available information sources. This study gave an indication of the general geology to be expected, as well as an indication of prevailing fauna and flora in the region. Potential environmental issues could also be identified.

The desk study revealed that the entire study area has been disturbed by previous mining activity and is devoid of vegetation.

4.2 FIELD INVESTIGATION.

The information obtained from the desk study was checked during the field-work stage of the investigation. An initial site reconnaissance was followed by a more detailed field investigation, during which specific information was collected on the geological conditions, surrounding vegetation types, and faunal populations. The biophysical aspects of the field investigation are discussed in Chapter 6 (Environmental Considerations) of this report.

A public participation process was also conducted. Notices were sent to the land owner (Kouga Municipality) and the previous quarry operator and current lease holder (Stoneman CC). Various other potential interested and affected parties were also contacted. A notice was also erected at the entrance to the quarry. See Appendix 3 of this report for further details.

5. GEOLOGY.

5.1 SITE GEOLOGY.

According to the 1:250 000 geological map (3324 PORT ELIZABETH) published by the Geological Survey of South Africa (Council for Geoscience), the study area is underlain by conglomerate of the Enon Formation (Uitenhage Group) - See Figure 3 in Appendix 1.

The Enon Conglomerate Formation generally comprises 3000 metres of unbedded whitish-grey to red-brown conglomerate, interbedded with sub-ordinate lenticular light reddish-brown sandstone and siltstone.

The conglomerate is made up almost exclusively of quartzitic sandstone clasts of the Cape Supergroup, and is characteristically reddish in colour due to iron oxide in the sandy matrix, which often forms a thin veneer around the clasts.

This formation has a transitional and lateral gradational upper contact, often intertonguing with the overlying Kirkwood Formation.

This formation is regarded as a piedmont fanglomerate in certain circles, although evidence of clast imbrication and limited cross-bedding in finer lithologies do exist, indicating a fluvial depositionary environment.

The conglomerate is exposed in the entire face of the disused quarry, with very little evidence of siltstone or excessive sandstone (see Photographs in Appendix 2). This is a positive finding, as the siltstone and sandstone (as well as the sandstone matrix) do not form part of the target material. In essence, the hard quartzitic cobbles and boulders are the only target material.

6. ENVIRONMENTAL CONSIDERATIONS.

6.1 CURRENT ENVIRONMENTAL SITUATION.

The study area is currently a disused quarry. The site is characterised by near vertical open quarry faces and about 4 benches. An old crusher occurs, as well as office buildings, storerooms and a few material stockpiles (see Photographs in Appendix 2). The site is completely devoid of vegetation, with the exception of the eastern and southern site fringes, where disturbed thicket and fynbos occur.

Mining will have a minor additional impact on traffic volumes in the area, with an increase in dust generation.

During the field investigation, no rare or endangered animal species were identified. However, certain species occurring in the region have been identified by the Committee for Nature Conservation Research in the National Programme for Ecosystem Research, and listed in the South African Red Data Book.

6.2 FAUNA AND FLORA.

6.2.1 FLORA.

As already mentioned, the site is completely devoid of vegetation, with the exception of the eastern and southern site fringes, where disturbed thicket and fynbos occur.

6.2.2 FISH.

The perennial Gamtoos River occurs about 3 km to the east of the study area. Existing fish species in the perennial river system will be unaffected by further quarrying activity.

6.2.3 REPTILES AND AMPHIBIANS.

The herptefauna in the region are very diverse, as 140 taxa occur, of which 31 are restricted (endemic) to the Eastern Cape Province. No reptiles were noted in the study area during both the walkover and field investigations.

Red Data Book species, which could possibly occur in the study area, include Hewitt's Ghost Frog and the Yellowbellied House Snake (Branch, 1988).

Hewitt's Ghost Frog (*Heleophryne hewittii*) is a medium sized frog with a very restricted range. This species is regarded as endangered. Although it is restricted to the Elandsberg Mountains to the east, it is generally found in clear, mountain streams, with rocky beds, as occurring in the upper reaches of the Gamtoos Valley.

The Yellow-bellied House Snake, *Lamprophis fuscus*, is associated with the mountainous and grassland areas of the Eastern Cape Province, and is a pale olive colour with a light yellow belly. The snake is secretive and nocturnal, occurring in old termitaria and beneath stones. This species is considered rare, and could also occur within the study area, although unlikely.

It should be noted that the Nature Conservation Ordinance (1974) prohibits any person from hunting wild animals, or removing them from land of which he is not the owner, unless he has the owner's written permission. Eastern Cape reptiles and amphibians are classed as Schedule II protected wild animals.

6.2.4 MAMMALS

Of the 292 terrestrial mammal species in southern Africa, 128 occur in the Eastern Cape Province. Most of the larger species occur in game reserves, and only the smaller mammals could occur in the vicinity of the study area.

Species listed as vulnerable in the Red Data Book, where the study area is included in their range, include the Honey Badger (*Mellivora capensis capensis*), African Wild Cat (*Felis lybica cafra*), and the Antbear or Aardvark (*Orycteropus afer afer*).

Rare species occurring in this region, and listed in the Red Data Book, include the Spectacled Dormouse (*Graphiurus ocularis*), African Striped Weasel (*Poecilogale albinucha albinucha*), Aardwolf (*Proteles cristatus cristatus*), Serval (*Felis serval serval*), Leopard (*Panthera pardus melanotica*), Tree Dassie (*Denrohyrax arboreus arboreus*), and Blue Duiker *(Philantomba monticola monicola*).

The study area cannot, however, be considered as a viable habitat for any of these species, and it is doubtful if they occur in close proximity.

Other more common mammals occurring in the region include the Bushbuck (*Tragelaphus scriptus*), Grey Duiker (*Sylvicapra grimmia*), Bushpig (*Potamochoerus porcus*), Vervet monkeys (*Cercopithecus pygerythrus*), Caracal lynx (*Felis caracal*), hedgehogs (*Erinaceous frontalis*) and Chacma Baboons (*Papio ursinus*).

No mammals were identified in the study area during the field investigation.

6.2.5 BIRDS.

Past records indicate that about 500 bird species occur in the Eastern Cape Province, of which about 300 species breed, including 20 species currently listed as rare or endangered in the South African Red Data Book.

The major factor determining current bird distribution in the region is man's modification of the habitat. The area around the quarry is still fairly undisturbed, and provides good habitat for bird populations. The quarry should thus have little impact in this regard.

6.3 POSSIBLE AFFECT OF THE PROJECT ON THE ENVIRONMENT.

As mentioned in Chapter 6.1, the study area is already in a completely disturbed state due to previous quarrying activity. The mining scars have cut into the hillside, and represent long term permanent damage to this environment. Further mining is only envisaged in the existing scars at this stage, thus limiting further large scale environmental impacts.

Although certain endangered animal species are documented to occur within the region, it is highly unlikely that any of these species occur on site or in the surrounding area.

Of more significance to this project is the impact that the quarry would have on the social environment. Linked issues include:

- Noise and dust generation.
- Increased traffic volumes and vehicle emissions.
- Generation of sewerage and waste.

Other potential impacts include:

- Disturbance of drainage channels in the area.
- Groundwater contamination.

Mitigating measures can, however, be implemented to eliminated or reduce the above potential impacts.

Considering that the quarry currently represents an un-rehabilitated scar, a significant positive environmental benefit of further mining would be an opportunity to implement rehabilitation measures, which would cover both the past and future mining area..

In terms of the National Heritage Resources Act (No. 25 of 1999), the following is confirmed:

- Bedrock occurs at surface, and the associated geological formation is generally devoid of fossils due to its high energy depositional environment.
- Most of the land surface has already been disturbed by previous quarrying activity.
- Inspection of the site revealed no archaeological activity.
- No grave sites were found
- There are no existing structures in the study area, other than mining infrastructure.
- There are no living heritage sites.

Once mining operations have ceased and rehabilitation has been effectively completed, the site would be vastly improved from the current situation.

7. HYDROLOGICAL ENVIRONMENT.

7.1 SUB-SURFACE WATER.

Perched water tables may occur after periods of heavy or prolonged precipitation. These perched water tables would generally occur above the conglomerate, which is fairly impermeable. These water tables will, however, dissipate fairly rapidly after rainfall events and will not be impacted upon.

The permanent water table will also not be affected by the quarrying activity in the study area. The permanent water table occurs in the Cape Supergroup rocks which occur at depth beneath the Enon Formation.

8. ENVIRONMENTAL MANAGEMENT PLAN.

Mining will continue along 5 benches starting at the upper bench in the quarry. Topsoil has long since been removed from the area, and an alternative source of topsoil will need to be obtained for rehabilitation of the bench surfaces

The disturbed nature of the environment has already been addressed in this report. The environmental implications associated with further quarrying in the study area are considered to be relatively insignificant, and fall within environmentally acceptable limits, bearing the value and strategic importance of the building material deposit in mind. It is, however, recommended that mining activities be conducted in a controlled and systematic manner, with due cognisance of the prevailing environmental parameters.

8.1 OPERATIONAL PHASE.

Mining of the site should ideally continue as it has in the past, cutting a series of benches southwards into the hillside. Bench widths should ideally be about 10 metres, with bench heights not exceeding 5 metres (see Figure 5 in Appendix 1).

The total height of the mined face is about 25 metres, which implies 5 benches (each 5 metres high, 10 metres wide and about 90 metres long. Bench angles should be about 70 degrees, and the benches should each slope slightly into the face to facilitate water retention and plant (tree) establishment after closure.

It is recommended that mining re-commences on the upper quarry bench, working downwards.

At this point in time, it is presumed that the material can be quarried by mechanical means, and that blasting will not be required.

8.1.1 GEOLOGY.

The target mineral is quartzitic sandstone cobbles representing the Enon Formation. This material is to be sorted and crushed on site, using a mobile crushing and screening plant. The crushed rock will be used as aggregate for the construction industry.

The quarrying of this material will have a long term permanent impact on the geology in the study area.

Finding: The operational phase of the quarry will have a long term permanent effect on the geology of the study area.

8.1.2 TOPOGRAPHY.

The prevailing topography in the study area is dealt with in Chapter 3.1 of this report. The mining operations will predominantly taken place within the existing mining scar during the next 2 to 5 years. Removal of the target material will reduce the hill in a southerly direction.

Finding: The prevailing topography in the study area will be altered permanently as the hill will be reduced towards the south.

8.1.3 SOILS.

A thin overlying topsoil horizon once occurred in the study area. The topsoil has, however, long since been removed during pervious quarrying activity.

Finding: Further mining activity will have no further impact on soils in the area. For mine rehabilitation purposes, topsoil will have to be imported.

8.1.4 LAND USE.

The old quarry has remained dormant for a number of years and was never rehabilitated. At this point in time, the land cannot be used for any other purpose.

Finding: After further mining and rehabilitation, this site would still have limited use for any other purpose. The focus of rehabilitation would be on safety and aesthetics.

8.1.5 NATURAL VEGETATION.

The site is currently completely devoid of vegetation, with the exception of the eastern and southern site fringes, where disturbed thicket and fynbos occur.

Vegetation in the study area has been dealt with in Chapters 6.1 (Current Environmental Situation) and 6.2.1 (Flora), whilst effects of the mining activities on the vegetation are addressed in Chapter 6.3 (Possible Effects of the Project on the Environment).

Vegetation disruption by mining at this site is not, therefore, considered a botanically sensitive issue.

Finding: Grass will be re-established on the mining benches. The following seed mix should be used during March / April at an application rate of 5 kg per hectare for each specie: *Cloris gayana, Aragrostis curvula, and Cynodon dactylon*, whilst the same species along with *Panicum maximum* can be used during September / October.

It may also be worthwhile to re-establish some indigenous vegetation on these benches where possible. The following species can be planted randomly: *Schotia afra, Euclea undulata, Olea europaea, Rhus refracta, Carissa bispinosa,* and *Portulacaria afra.* This should take place after cessation of all mining activities. Rehabilitation will not be possible at an earlier stage.

8.1.6 ANIMAL LIFE.

The faunal populations occurring in the study area were dealt with in Chapters 6.2.2 (Fish), 6.2.3 (Reptiles and Amphibians), 6.2.4 (Mammals), and 6.2.5 (Birds) of this report. The effects that mining activity would have on these faunal populations were also addressed in Chapter 6.3 (Possible Effects of the Project on the Environment).

Due to the previous mining activity at this site, most forms of wildlife have probably already moved into the adjacent areas where disturbances are less. Any forms of wildlife still occurring in the study area, will probably also migrate to these less disturbed areas.

Finding: Remaining terrestrial faunal populations would migrate into the adjacent areas where disturbances are less. However, few existing populations are expected in the immediate area.

8.1.7 SURFACE WATER.

The surface water in the study area has been dealt with in Chapter 3.2 (Drainage) of this report. Surface run-off will be temporarily disrupted in the study area during quarrying operations.

Finding: The disruptions to surface water flow will be of a temporary nature. The post-mining landscape will facilitate near-normal run-off and should be free-draining. The site is also situated away from the nearest drainage feature, which implies that little impact on these systems is expected.

8.1.8 GROUND WATER.

Ground water in the study area was dealt with in Chapter 7.1 (Sub-surface water) of this report. The quarrying operations in the study area will have no impact on the permanent ground water table in the region, as the permanent water table occurs fairly dep in the underlying Cape Supergroup rocks.

Perched water tables will be of a brief and temporary nature after periods of heavy or prolonged precipitation, and will occur on top of the Enon conglomerate.

Finding: The permanent water table will not be affected by mining activity, and perched water table activity will be limited.

8.1.9 AIR QUALITY.

Air quality was mentioned in Chapter 6.1 (Current Environmental Situation) of this report. Existing dust levels are low in the area, and renewed quarrying implies that dust will be generated. Air quality may also be affected by heavy vehicle emissions. However, the scale of the proposed mining activity is relatively small, and emissions are not expected to rise significantly in the area. Agricultural traffic also accounts for dust and vehicle emissions.

Finding: Although vehicle emissions and dust levels will have an impact on the air quality in the area, the impact will be relatively low, and should not be viewed as a significant environmental constraint. Levels of pollution will fall within acceptable environmental limits, and should not be seen as a fatal flaw with regards to the mining activity in the study area. Dust monitoring and adequate wetting will, nevertheless, assist in the control of this environmental issue.

8.1.10 **NOISE.**

Noise pollution is an inevitable by-product of the mining process. Noise pollution associated with vehicles and earth moving equipment, will occur. These noises will, however, be confined to business hours. Quarry related noise has occurred in this area for many years. The nearest dwelling is situated in excess of 1,5 km from the site, and will not be impacted upon by the noise.

Findings: Noise pollution is an inevitable by-product of the quarrying operations. Noise levels must be restricted to business hours, however. More specifically, this implies a working day commencing at 07:00 and ending at 18:00. Working hours on a Saturday will be from 07:00 until 14:00. No work will be allowed at the quarry on Sundays or South African Public Holidays. Should additional working hours be required outside these recommended time frames, then special permission should be obtained in writing from the Department of Minerals and Energy. Should mining recommendations be adhered to, noise pollution levels will fall within acceptable environmental limits.

8.1.11 **SENSITIVE LANDSCAPES.**

No sensitive landscapes occur within the study area, nor in close proximity. However, sediment from the quarry should not be allowed to migrate into the drainage features to the north. Run-off in the quarry can be controlled by a series of low soil berms around the northern perimeter.

Findings: The quarry area is not deemed a sensitive environment. The site is already disturbed.

8.1.12 **VISUAL ASPECTS.**

The mining area is visible from the Humansdorp - Hankey tar road (R330). It is recommended that trees be planted along the western edge of the quarry, with the aim of softening the view.

Findings: The study area is visible to passing traffic. Although this is not a significant constraint, trees should be planted along the western edge of the quarry boundary. Species such as *Schotia afra, Euclea undulata, Olea europaea, Rhus refracta, Carissa bispinosa,* and *Portulacaria afra* could be considered.

8.1.13 REGIONAL SOCIO-ECONOMIC STRUCTURE.

The owners of Island House Trading 114 (Pty) Ltd were disadvantaged under the previous political dispensation. Island House Trading 114 (Pty) Ltd is thus 100 % HDSA owned. The mining venture will empower these individuals and their dependants. The mining activity in the study area will also result in a few additional job opportunities.

The quarry will also produce quality aggregate for the construction industry in this part of the Eastern Cape Province.

Findings: The establishment of a quarry in the study area will have a positive socio-economic impact on the local labour force, as the quarry can form a stable source of employment.

8.1.14 INTERESTED AND AFFECTED PARTIES.

A public participation process was also conducted (see Appendix 3). Notices were sent to the land owner (Kouga Municipality) and the previous quarry operator and current lease holder (Stoneman CC). Various other potential interested and affected parties were also contacted. A laminated A3 size notice was also erected at the entrance to the quarry.

Findings: To date, limited feedback was received from the public participation process. The Kouga Municipality forwarded a letter confirming receipt of the notice, but no further feedback has been received.

Mr Miles Cuffe of Stoneman CC subsequently made telephonic contact with Blue Horizon Consulting. Mr Cuffe promised to provide written feedback regarding the application by Island House Trading 114 (Pty) Ltd, but this has not yet materialised. Mr Cuffe raised the following issues during the telephonic contact.

- Stoneman CC have no intention of further quarrying at this site.
- Their lease is still valid for a few years.
- They plan to oppose the application until some form of agreement is reached regarding compensation for the existing lease.

- Stoneman CC would ideally prefer being bought out by Island House Trading 114 (Pty) Ltd.

Due to the already disturbed state of this site, the proposed quarry will probably not result in any further public response of significance.

8.1.15 **BUFFER ZONE.**

The mining area does not directly abut the adjacent tar road (R330). A 30 metre buffer zone has been left between the mining area and the road (See Figure 2 in Appendix 1).

Findings: Passing traffic will not be adversely impacted upon.

8.1.16 **MAINTENANCE.**

A mining operation of this nature will always require a maintenance plan to ensure cost effective and successful long-term operation.

It is important to ensure that fuels and other petroleum based products do not spill onto the soil from the quarry machinery. Adequate pollution control measures, such as waste fuel collection points, and regular maintenance of machinery to ensure no leaks, are essential.

Should accidental leakage and soil contamination occur, the situation must be dealt with immediately. Contaminated gravel must be removed from the study area and disposed of at a suitable waste disposal facility in the Kouga area. Domestic waste should be confined to bins located adjacent to the site. The nature of the operation implies minimal waste generation at this site, however. A portable toilet should also be located in the area where the bins will be located (northern side of mining area).

Findings: Site maintenance must include preventative measures to ensure that the environment is not polluted by petroleum based fluids from vehicles and infrastructure. A contingency plan should also be in place should contamination of the soil occur. Rehabilitation and maintenance measures for newly generated vegetation growth must also be implemented where mining has been completed.

8.2 DECOMMISSIONING PHASE AND CLOSURE.

The mining operation has a projected lifespan of two to five years, depending on material demand. Mining operations will result in the hill been systematically removed in a southerly direction.

Material removed from the quarrying area will be crushed and screened by a portable plant, to be parked along the base of the workings (northern side). No major permanent quarry infrastructure will thus be needed.

Once the area has been mined, a process of mine closure should be undertaken. Mine closure will only be approved by the authorities once adequate quarry rehabilitation has been carried out. The various issues regarding decommissioning of a quarry are addressed below.

8.2.1 CLOSURE OBJECTIVES.

Mine closure will be conducted once all of the quarried material has been removed from the study area. Closure of a mine must be authorised by the relevant authorities once certain criteria have been satisfactorily adhered to. These criteria are discussed in more detail in the remainder of this chapter.

The mine operators will be held responsible for any environmental misconduct in the area upon completion of mining activity, especially if the decommissioning phases are not adhered to. Sensitive quarrying procedures with due cognisance of certain environmental parameters, have been recommended throughout this report.

It is the objective of mine closure, therefore, to ensure that all of the mining and environmental recommendations contained in the EMP, are adhered to, including sensitive rehabilitation of the quarry scars and the adjacent environment.

8.2.2 INFRASTRUCTURE AREAS.

Mobile machinery should be withdrawn from the site after mining has ceased. Mine closure will also entail the removal of any permanent infrastructure from the site, including the office and store room.

8.2.3 MINE RESIDUE DEPOSITS.

All waste disposal facilities that were in operation during mining activity will have to be removed from the site once quarrying operations have ceased. These would probably represent disposable drums at the site.

No pipelines and concrete trenches are deemed necessary during the lifespan of the quarry, so removal and rehabilitation of such structures are not envisaged as part of the mine closure.

Unused soil and rock stockpiles, should they exist, will be removed from the study area upon completion of quarrying operations. No unused stockpiles of topsoil or waste products must remain in the worked mine area once the lifespan of the quarry has been realised.

The quarry benches should be levelled where possible, sloping slightly into the quarry face. This will assist with water retention and vegetation rehabilitation.

8.2.4 FINAL REHABILITATION.

Final rehabilitation must ensure that the destruction to the natural environment in the quarry area is softened. This will require a sensitive approach to the environment throughout the quarrying operation. Potential impacts must be assessed as an ongoing process. Responsible and considerate mining management will ensure that all of the environmental recommendations contained in this EMP are adhered to. The following rehabilitation recommendations are proposed prior to closure of the quarry:

- Topsoil must be sourced and placed on the quarry benches. Topsoil should be spread in horizons of at least 150 mm.
- Attention should be given to the removal of alien fauna and flora from the study area throughout the quarrying operation.
- All mining infrastructure and any other anthropogenic related structure must be removed from the mining area once quarry operations have ceased.
- Contamination of the natural environment must be addressed as per recommendations contained in Chapter 8.1.16 (Maintenance).
- The access road (if not to be utilised any further) should be softened and where possible vegetation should be encouraged to cover the road surface. The same seed mix should be used as advocated for the benches.

- The entire area must, as far as possible, be cleaned up so that the only evidence of quarry activity is the partly vegetated rock faces.

8.2.5 MAINTENANCE.

The quarry operator is obliged to continue with site maintenance once closure of the quarry has been acknowledged by the authorities. Once decommissioning of the quarried area has been completed, mine operators must still ensure that the rehabilitated topsoil layers are afforded a reasonable time to stabilise, and allow vegetation to germinate and grow, and that alien plant species are removed (every six months).

8.2.6 TIME FRAMES FOR REHABILITATION.

The nature of this mining operation implies that rehabilitation cannot commence until all mining activities have ceased. A period of six months should be set aside after the quarry has been closed, to facilitate rehabilitation.

As already mentioned, the benches will be re-vegetated with grass species and indigenous trees, with the aim of softening the quarry face.

8.2.7 FINANCIAL PROVISION.

A R60 000-00 financial guarantee by Island House Trading 114 (Pty) Ltd is advocated for this specific mining area.

Bearing in mind the proposed condition of the site prior to Island House Trading 114 (Pty) Ltd commencing with their operations, and the possible remedial measures advocated in this report, the guarantee amount seems adequate to complete any additional decommissioning work.

The R60 000-00 guarantee is based on the following:

• Softening of the quarry faces to 70 degrees	R15 000-00
• Removal of infrastructure	R10 000-00
• Sourcing and spreading of topsoil	R18 000-00
• Seeding	R 2 000-00
• Supervision fees	R 5 000-00
• Aftercare	R 5 000-00
• Miscellaneous	R 5 000-00

8.2.8 ENVIRONMENTAL MONITORING AND AUDITING.

The Department of Minerals and Energy should receive an annual environmental report prepared by independent environmental consultant. All conditions and recommendations contained in the authorised mining permit should be strictly adhered to by the quarry operators. The environmental consultant should monitor the implementation of the proposed quarrying activities, and compliance thereof with the conditions of the approved EMP.

9. CONCLUSIONS AND RECOMMENDATIONS.

The proposed mining operation must follow a pre-determined mining programme in order to fulfill certain environmental conditions. The mining operation and rehabilitation programme recommended in Chapter 8 of this report must be adhered to. The environmental impacts are summarised in the following table:

Environmental Component	Impact without and with Mitigation		Significance	Comments
Viability of the Mining Activity	positive	positive	high	Facilitating mining operations by a HDSA group
Desirability of the Mining Activity	negative	neutral	high	Biophysical and social impacts reduced by EMP guidelines.
Impacts on Surrounding Landowners	neutral	neutral	high	As above.
Health Impacts	negative	neutral	low	Short term dust and noise during mining.
Impacts on Fauna and Flora	neutral	neutral	high	Vegetation already removed during previous mining activity.
Geology and Groundwater	negative	negative	low	Conglomerate destruction associated with mining.
Integration with Infrastructure	neutral	neutral	low	No significant impact on existing infrastructure.
Engineering Geological Considerations	neutral	neutral	low	Geotechnical constraints controlled by effective planning.
Public Participation Process	neutral to date	positive	high	Public aware of proposed mining activity. No serious objections to date.

The EMP recommendations must be addressed to the satisfaction of the responsible authorities. Sensible mining within the framework of this EMP will reveal no major reason to withhold authorisation for the proposed removal of conglomerate from the study area. Mining in the study area will have an impact on the area, but this site is already impacted upon by past mining activity.

A responsible mining operation within a predefined set of environmental parameters, will, therefore, be of benefit to the natural environment in the study area in the long-term. This EMP indicates that the proposed mining operation will fall within acceptable environmental limits, as long as all conditions are adhered to.

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APPENDIX 1:

MINING PERMIT - FARM ZOET KLOOF 187:

Figures.

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

TEL: (041) 776 1171 FAX: (041) 776 1171 CELL: 082 572 9159

P. O. BOX 22727, PORT ELIZABETH, 6000

2 GOUSBLOM STREET, BLUE HORIZON BAY

CK 97/39490/23

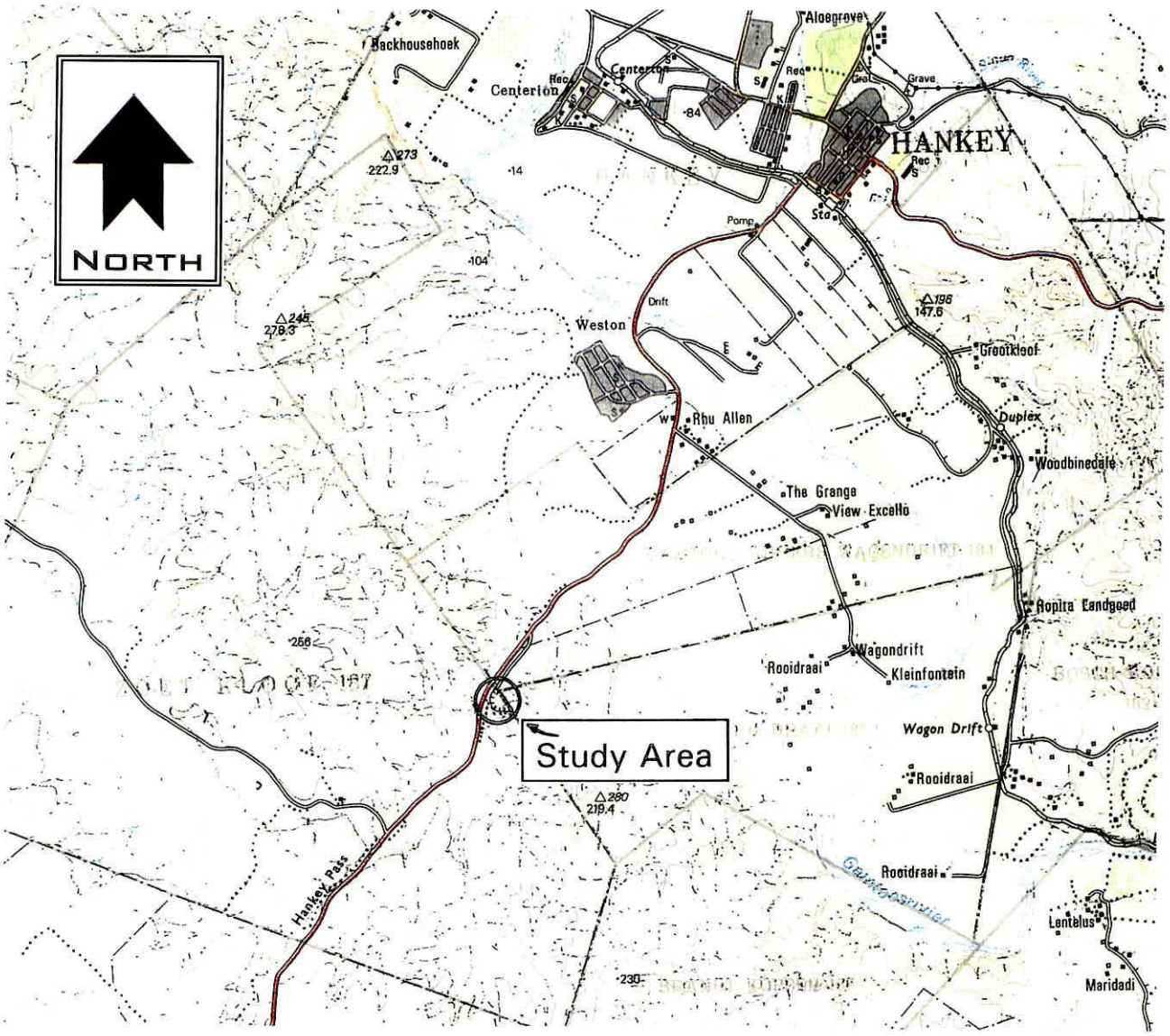


FIGURE 1: PROPOSED ZOET KLOOF 187 MINING PERMIT: Locality Map.

SCALE: 1:50 000

SOURCE: 3324 DD HANKEY

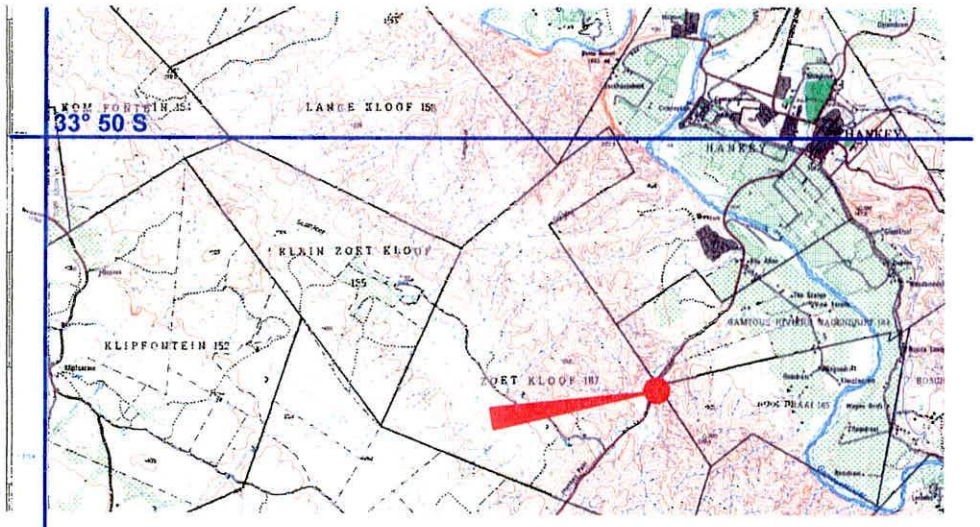
0 1 000 2 000 3 000 4 000 m

LEGEND:

◯ Proposed Mining Permit Area (1,5 Ha)

FIGURE 2: PROPOSED ZOET KLOOF 187 MINING PERMIT

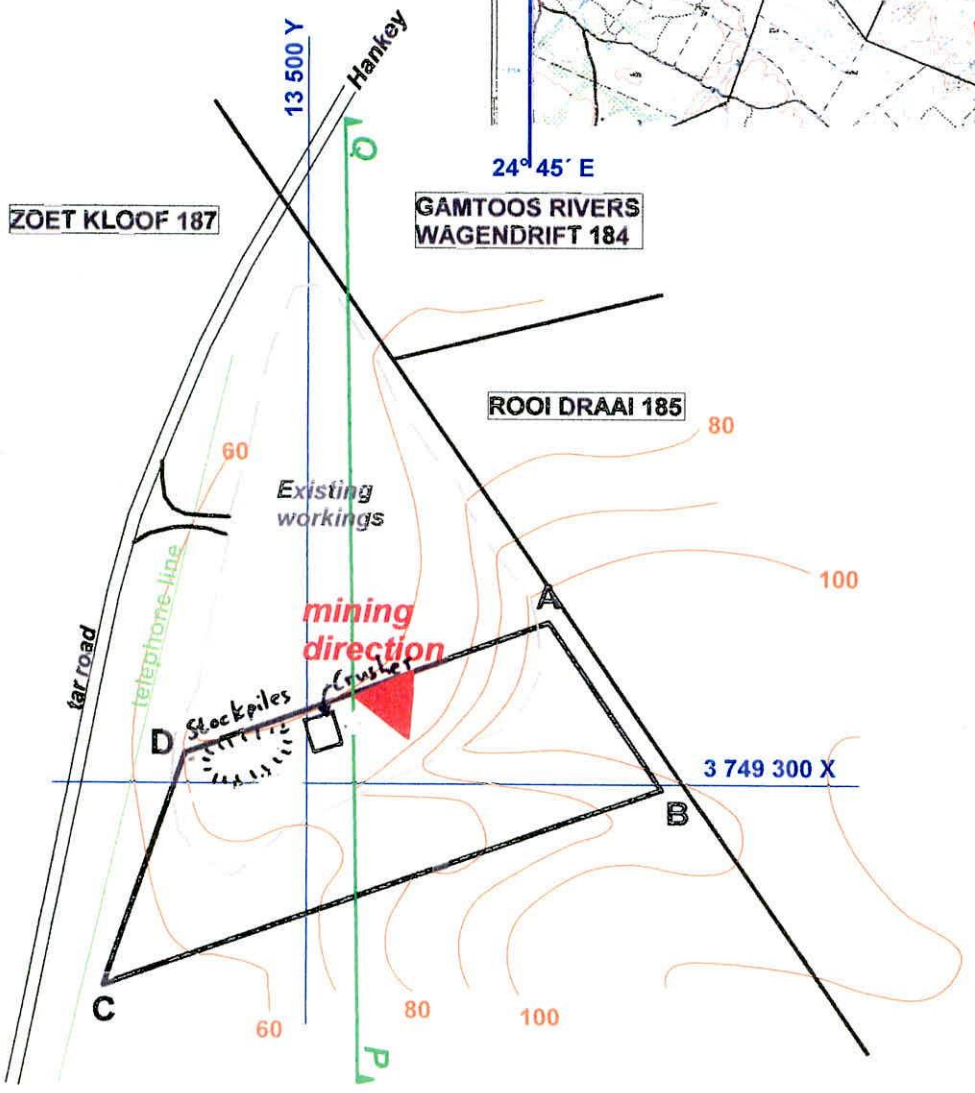
3324DD HANKEY

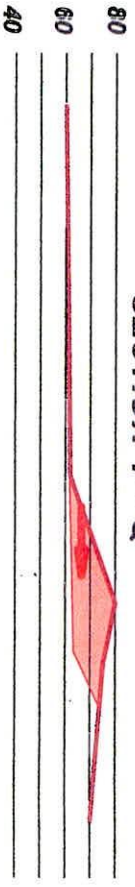


CO-ORDINATE SYSTEM WGS 84
EAST 25°

A	Y 13 404,3	X 3 749 236,5
B	Y 13 359,4	X 3 749 302,4
C	Y 13 580,2	X 3 749 381,6
D	Y 13 548,4	X 3 749 288,2

AREA 1,5 HA





N

SCALE 1:3 000

0 50 100 200

SURVEYOR _____

DATE 29.01.2010

APPLICANT _____

DATE 29/01/2010

OFFICE USE

_____
REGIONAL MANAGER
EASTERN CAPE

_____
DATE

The above figure lettered A,B,C,D represents an area of land, in extent 1,5 Ha, situated on the farm Zoet Kloof 187 district of Hankey, Eastern Cape Region, in respect of which a mining permit has been issued to

_____

ID No _____

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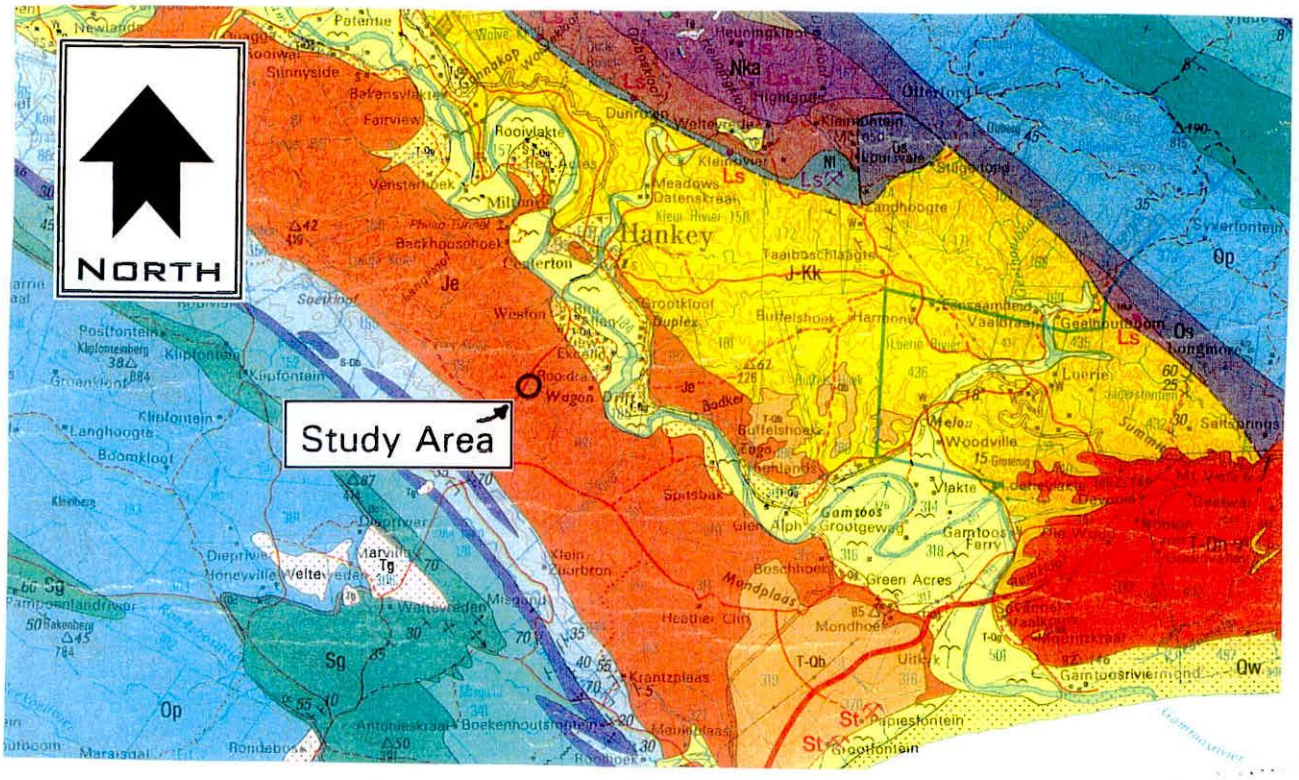

FIGURE 3: PROPOSED ZOET KLOOF 187 MINING PERMIT: Geological Map.

SCALE: 1:250 000
SOURCE: 3324 PORT ELIZABETH

0 5 000 10 000 15 000 20 000 m

LEGEND:	Lithology	Formation	Group	Sub-Group
~	Alluvium	Undifferentiated		
T-Qg	Fluvial terrace gravel	Undifferentiated		
J-Kk	Mudstone and subordinate sandstone	Kirkwood	Uitenhage	
Je	Conglomerate	Enon	Uitenhage	
Dc	Shale and sandstone	–	–	Ceres
○	Approximate Locality of the Mining Permit Area			

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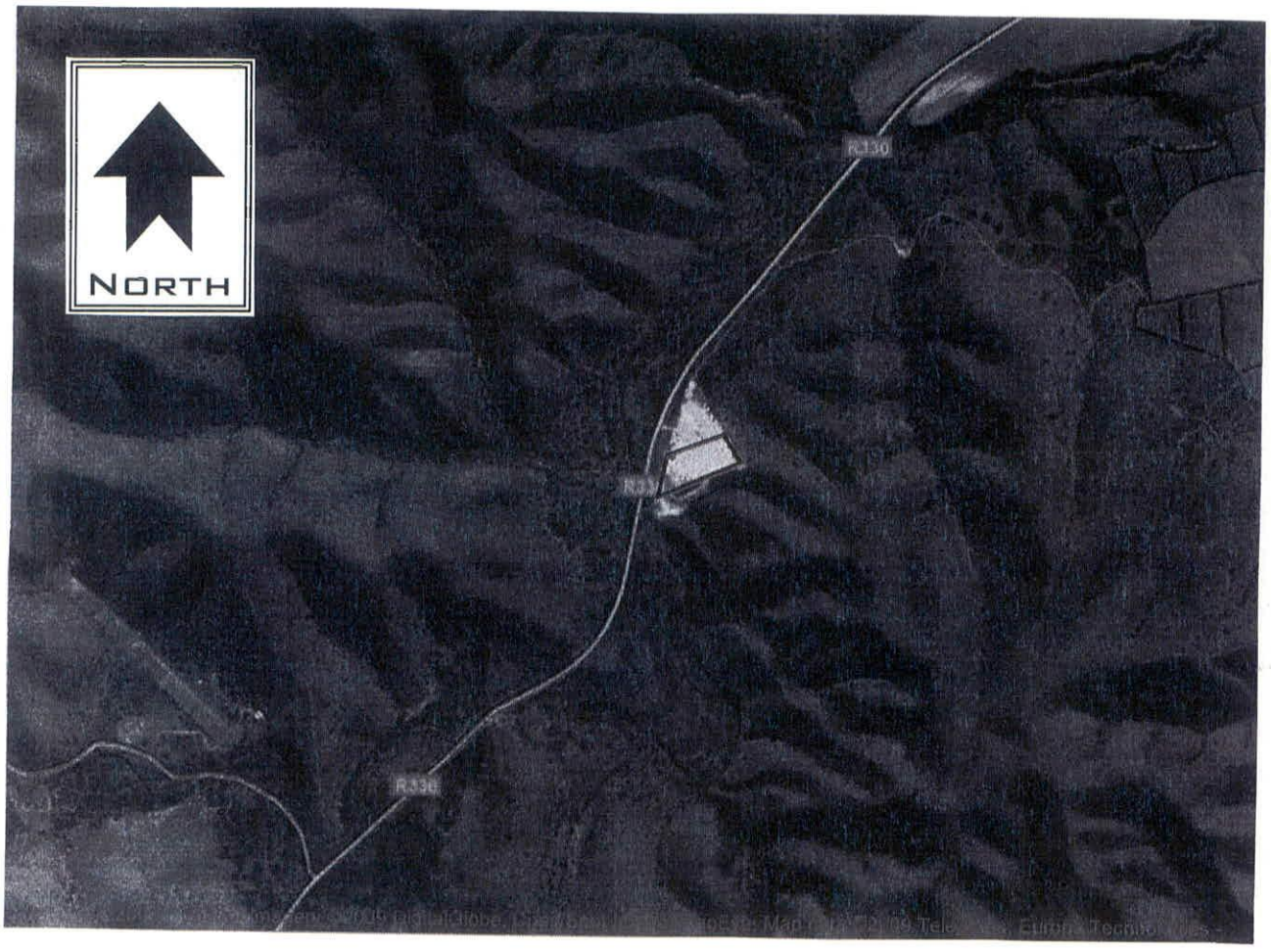

FIGURE 4: PROPOSED ZOET KLOOF 187 MINING PERMIT: Aerial Photograph.

Scale Unknown.
Aerial Photograph obtained from Google Earth.

LEGEND:

Proposed Mining Permit Area (1,5 Ha)

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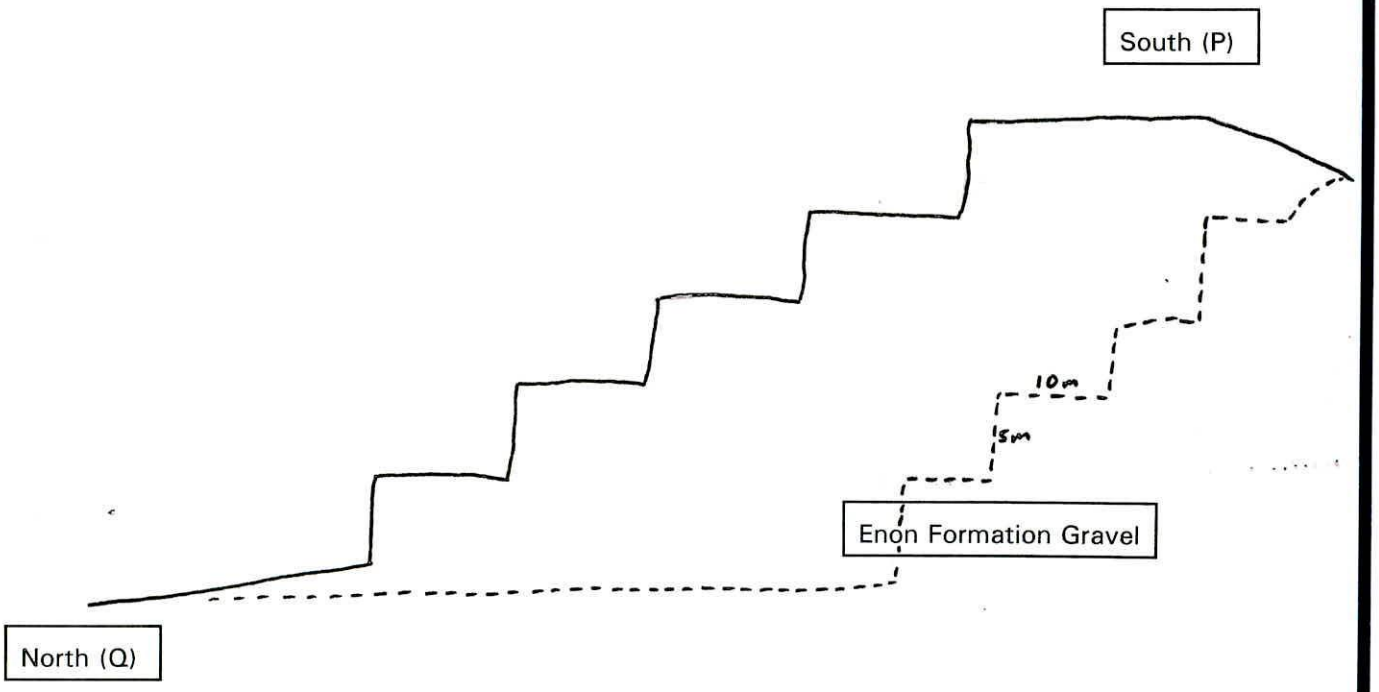
Schematic Cross-section from North to South
(Line QP across the mining area on Figure 2)



Existing surface
- - - -Post-mining surface

FIGURE 5: **PROPOSED ZOET KLOOF 187 MINING PERMIT: Schematic Cross-Section**

Not to Scale

APPENDIX 2:

MINING PERMIT - FARM ZOET KLOOF 187:

Photographs.

Photograph 1: **A panoramic view of the existing quarry on a portion of the Farm Zoetkloof 187. The view is from the north.**

Photograph 2: An easterly view along one of the central quarry benches.

APPENDIX 3:

MINING PERMIT - FARM ZOET KLOOF 187:

Public Participation Process.

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PUBLIC PARTICIPATION PROCESS FOR THE GRAVEL QUARRY ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

Prepared for Island House Trading 114 (Pty) Ltd.

March 2010 **Report No. G10196**

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CK 97/39490/23

Department of Minerals and Energy
Eastern Cape Province
Private Bag X6076
PORT ELIZABETH
6000

Our Ref: zoetkloofpermitppp.rep
Your Ref: (EC)30/5/1/3/2/0413 MP

5 March 2010

ATTENTION: Mr S. van den Berg

Dear Sir,

PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED GRAVEL QUARRY ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

Your correspondence (dated 3 February 2010) regarding the abovementioned project, refers.

As stipulated, herewith the results of the Public Participation Process for the Mining Permit application on a Portion of the Farm Zoet Kloof 187, located to the south-west of Hankey, in the Eastern Cape Province. The application area coincides with an existing quarry which has been standing idle over the past few years.

SITE NOTICE.

A laminated A3 size notice was attached to the gate at the entrance to the existing gravel quarry (see Photograph 1 in Appendix 1). The quarry entrance is situated along the main road linking Hankey and Humansdorp (R330). This notice provided broad information regarding the Mining Permit application, and called for prospective interested and affected parties to register with the consultant (see copy of notice in Appendix 2). The notice was placed on Thursday 25 February 2010. During a subsequent site visit, it was observed that the notice had been removed. A second notice was then re-attached to the gate on Wednesday 3 March 2010. To date, no responses have been forthcoming as a result of this notice.

LANDOWNER.

The registered owner of the Farm Zoet Kloof 187 is the Kouga Municipality, who lease the portion of land to Stoneman CC, who were the previous operators of the quarry a few years ago. By leasing the land for quarrying purposes, the Kouga Municipality are obviously not opposed to this activity.

Correspondence providing details of the Mining Permit application by Island House Trading 114 (Pty) Ltd was faxed to the Kouga Municipality on Friday 26 February 2010, followed up by Registered mail on Wednesday 3 March 2010. To date, no response has been forthcoming.

Note: During the Prospecting Right application by Island House Trading 114 (Pty) Ltd in 2007, the Kouga Municipality were also contacted during the Public Participation Process. As far as can be ascertained, the Kouga Municipality never replied, despite a number of written and telephonic approaches at the time.

LAND OCCUPIER.

The existing quarry was previously operated by Stoneman CC, who still have a valid lease for the land in question. Stoneman CC have, however, not formally quarried at this site for a number of years.

Correspondence providing details of the Mining Permit application by Island House Trading 114 (Pty) Ltd was faxed to Stoneman CC on Friday 26 February 2010, followed up by Registered mail on Wednesday 3 March 2010.

Mr Miles Cuffe of Stoneman CC has subsequently made telephonic contact with the undersigned. Mr Cuffe has promised to provide written feedback regarding the application by Island House Trading 114 (Pty) Ltd. In the interim, herewith a few key issues raised during the telephonic contact.

- Stoneman CC have no intention of further quarrying at this site.
- Their lease is still valid for a few years.
- They plan to oppose the application until some form of agreement is reached regarding compensation for the existing lease.
- Stoneman CC would ideally prefer being bought out by Island House Trading 114 (Pty) Ltd.

During a visit to the quarry site on Wednesday 3 March 2010, personnel from Stoneman CC were dismantling the old crusher on site and removing any metal which could be re-cycled. It was also noted that gravel had been freshly removed from one of the upper quarry faces.

OTHER INTERESTED AND AFFECTED PARTIES.

Even though the land is owned by the Kouga Municipality, the Department of Land Affairs were identified as a potential interested party. Details of the application were faxed to them on 3 March 2010, followed up on the same day by a registered letter (see proof of registration in Appendix 2).

During the Public Participation Process for the Prospecting Right in 2007, a Mr Mnikelo Stuurman registered as an interested party on behalf of a group of local residents. Mr Stuurman's address is unknown, but his fax number has been traced. Details of the application have subsequently been faxed to him.

ENVIRONMENTAL MANAGEMENT PLAN.

The Environmental Management Plan (EMP) for this project is due for completion by 4 April 2010. Once completed, the EMP will be made available for perusal by all of the registered interested and affected parties.

FEEDBACK.

Any further feedback from the interested and affected parties will be passed on to the Department of Minerals and Energy as soon as it is received.

CONCLUSION.

The site in question has been subjected to gravel mining for many years without any significant opposition nor incident. As a result, very little additional feedback is expected, other than that from Stoneman CC.

The applicant will embark upon a process of dialogue with the Kouga Municipality and Stoneman CC to amicably resolve the issue of a lease for this portion of land. The Department of Minerals and Energy will be kept informed.

If any further information is required regarding the public participation process, please contact the undersigned.

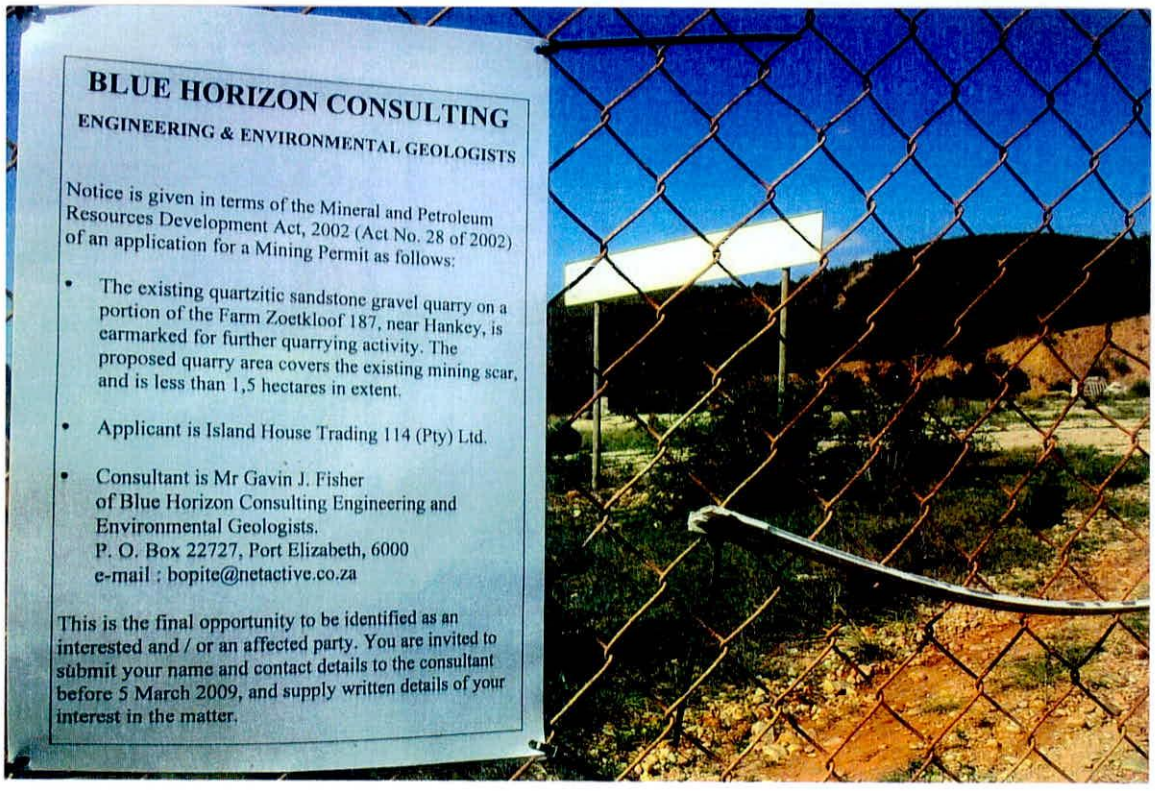
Yours Faithfully

Gavin J. Fisher *BSc (Hons) Engineering Geology*

APPENDIX 1:

PUBLIC PARTICIPATION PROCESS - FARM ZOET KLOOF 187:

Photograph.



<u>Photograph 1:</u> A notice advising that a Mining Permit has been applied for, was attached to the main gate at the existing quarry on 25 February 2010. On the notice, readers are afforded the opportunity of registering as an Interested and Affected Party (I&AP). During a subsequent site visit, it was observed that the notice had been removed. A second notice was then re-attached to the gate on 3 March 2010.

APPENDIX 2:

PUBLIC PARTICIPATION PROCESS - FARM ZOET KLOOF 187:

Notice and Registered Mail.

BLUE HORIZON CONSULTING

ENGINEERING & ENVIRONMENTAL GEOLOGISTS

Notice is given in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) of an application for a Mining Permit as follows:

- The existing quartzitic sandstone gravel quarry on a portion of the Farm Zoetkloof 187, near Hankey, is earmarked for further quarrying activity. The proposed quarry area covers the existing mining scar, and is less than 1,5 hectares in extent.

- Applicant is Island House Trading 114 (Pty) Ltd.

- Consultant is Mr Gavin J. Fisher
  of Blue Horizon Consulting Engineering and Environmental Geologists.
  P. O. Box 22727, Port Elizabeth, 6000
  e-mail : bopite@netactive.co.za

This is the final opportunity to be identified as an interested and / or an affected party. You are invited to submit your name and contact details to the consultant before 5 March 2009, and supply written details of your interest in the matter.

Blue Horizon Consulting
Gavin Fisher.

Department of Land Affairs
Fairview Office Park
Ring Road
Greenacres
6057

REGISTERED LETTER
(with a domestic insurance option)
ShareCall 0860 111 502 www.sapo.co.za
RD 416 435 173 ZA
CUSTOMER COPY 301028R

The Municipal Manager
Kouga Municipality
P.O. Box 21
Jeffreys Bay
6330

REGISTERED LETTER
(with a domestic insurance option)
ShareCall 0860 111 502 www.sapo.co.za
RD 416 435 638 ZA
CUSTOMER COPY 301028R

Stoneman CC
Box 997
Jeffreys Bay
6330
Att Mr Miles Caffe.

REGISTERED LETTER
(with a domestic insurance option)
ShareCall 0860 111 502 www.sapo.co.za
RD 416 435 757 ZA
CUSTOMER COPY 301028R

REGISTERED LETTER
GEREGISTREERDE BRIEF
Post Office
(with an insurance option/met 'n versekeringsopsie)

Full tracking and tracing/Volledige volg en spoor

Addressed to/Geadresseer aan
Blue Horizon Consulting
3 Three on 1st
Postcode
Poskode

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The tracking and tracing details for the registered correspondence sent to the landowner (Kouga Municipality), the lease holder (Stoneman CC), and the Department of Land Affairs.

APPENDIX 3:

PUBLIC PARTICIPATION PROCESS - FARM ZOET KLOOF 187:

Outgoing Correspondence.

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

TEL: (041) 776 1171 FAX: (041) 776 1171 CELL: 082 5729159
P. O. BOX 22727, PORT ELIZABETH, 6000
2 GOUSBLOM STREET, BLUE HORIZON BAY

CK 97/39490/23

Stoneman CC
P. O. Box 997
JEFFREYS BAY
6330

Our Ref: zoetkloofpermitppp.le1
Your Ref: –

26 February 2010

Attention: Mr Miles Cuffe

Dear Sir,

AN APPLICATION FOR A MINING PERMIT ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

During 2007, Island House Trading 114 (Pty) Ltd successfully applied for a Prospecting Right on a Portion of the Farm Zoet Kloof 187, to the south-west of Hankey. The selected portion of land is a disused gravel quarry, which was apparently previously operated by yourselves. Stoneman CC also apparently have an existing lease agreement for this land with the Kouga Municipality. As such, you have been identified as an Interested and Affected Party.

The prospecting process revealed sufficient quality gravel reserves at this site to warrant continued mining. The process also uncovered a number of future expansion options for the quarry. As a result, the directors of Island House Trading 114 (Pty) Ltd decided to apply for a Mining Permit.

Ownership of Island House Trading 114 (Pty) Ltd has changed since the Prospecting Right was granted. The new directors are Port Elizabeth based businessmen, Messrs Loyiso Nkantsu and Mtobeli Mlahleki.

This mining permit application has been made in terms of Section 27 (2) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

Your input with regard to this application will be valued within 14 days of receipt of this letter.

Yours Faithfully

Gavin J. Fisher *BSc (Hons) Engineering Geology*

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

TEL: (041) 776 1171 FAX: (041) 776 1171 CELL: 082 5729159
P. O. BOX 22727, PORT ELIZABETH, 6000
2 GOUSBLOM STREET, BLUE HORIZON BAY

CK 97/39490/23

Kouga Municipality
P. O. Box 21
JEFFREYS BAY
6330

Our Ref: zoetkloofpermitppp.le2
Your Ref: –

26 February 2010

Attention: The Municipal Manager

Dear Sir / Madam,

AN APPLICATION FOR A MINING PERMIT ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

During 2007, Island House Trading 114 (Pty) Ltd successfully applied for a Prospecting Right on a Portion of the Farm Zoet Kloof 187, to the south-west of Hankey. The selected portion of land is a disused gravel quarry, which was apparently previously operated by Stoneman CC, who also apparently have an existing lease agreement for this land with the Kouga Municipality. As the landowner, the Kouga Municipality have been identified as an Interested and Affected Party.

The prospecting process revealed sufficient quality gravel reserves at this site to warrant continued mining. The process also uncovered a number of future expansion options for the quarry. As a result, the directors of Island House Trading 114 (Pty) Ltd decided to apply for a Mining Permit.

Ownership of Island House Trading 114 (Pty) Ltd has changed since the Prospecting Right was granted. The new directors are Port Elizabeth based businessmen, Messrs Loyiso Nkantsu and Mtobeli Mlahleki.

This mining permit application has been made in terms of Section 27 (2) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

Your input with regard to this application will be valued within 14 days of receipt of this letter.

Yours Faithfully

Gavin J. Fisher *BSc (Hons) Engineering Geology*

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

TEL: (041) 776 1171 FAX: (041) 776 1171 CELL: 082 5729159
P. O. BOX 22727, PORT ELIZABETH, 6000
2 GOUSBLOM STREET, BLUE HORIZON BAY

CK 97/39490/23

Department of Land Affairs
Fairview Office Park
Ring Road
GREENACRES
6057

Our Ref: zoetkloofpermitppp.le3
Your Ref: –

26 February 2010

Attention: The Office Manager, Mr Henk Prinsloo

Dear Sir,

AN APPLICATION FOR A MINING PERMIT ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

During 2007, Island House Trading 114 (Pty) Ltd successfully applied for a Prospecting Right on a Portion of the Farm Zoet Kloof 187, to the south-west of Hankey. The selected portion of land is a disused gravel quarry. The landowner is the Kouga Municipality.

The prospecting process revealed sufficient quality gravel reserves at this site to warrant continued mining. The process also uncovered a number of future expansion options for the quarry. As a result, the directors of Island House Trading 114 (Pty) Ltd decided to apply for a Mining Permit. The Department of Land Affairs have been identified as a potential Interested and Affected Party.

This mining permit application has been made in terms of Section 27 (2) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

Your input with regard to this application, if any, will be valued within 14 days of receipt of this correspondence.

Yours Faithfully

Gavin J. Fisher *BSc (Hons) Engineering Geology*

BLUE HORIZON CONSULTING ENGINEERS CC TRADING AS

BLUE HORIZON CONSULTING

ENGINEERING AND ENVIRONMENTAL GEOLOGISTS

TEL: (041) 776 1171 FAX: (041) 776 1171 CELL: 082 5729159
P. O. BOX 22727, PORT ELIZABETH, 6000
2 GOUSBLOM STREET, BLUE HORIZON BAY

CK 97/39490/23

Mr / Ms Mnikelo Stuurman

Our Ref: zoetkloofpermitppp.le4
Your Ref: –

Letter by facsimile: 086 512 5161

26 February 2010

Dear Sir / Madam,

AN APPLICATION FOR A MINING PERMIT ON A PORTION OF THE FARM ZOET KLOOF 187, TO THE SOUTH-WEST OF HANKEY, IN THE EASTERN CAPE PROVINCE.

During 2007, Island House Trading 114 (Pty) Ltd successfully applied for a Prospecting Right on a Portion of the Farm Zoet Kloof 187, to the south-west of Hankey. It is noted that you registered as an Interested and Affected Party at the time.

The prospecting process revealed sufficient quality gravel reserves at this site to warrant continued mining. The process also uncovered a number of future expansion options for the quarry. As a result, the directors of Island House Trading 114 (Pty) Ltd decided to apply for a Mining Permit.

This mining permit application has been made in terms of Section 27 (2) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

Ownership of Island House Trading 114 (Pty) Ltd has changed since the Prospecting Right was granted. The new directors are Port Elizabeth based businessmen, Messrs Loyiso Nkantsu and Mtobeli Mlahleki.

As a previously registered Interested and Affected Party, you are once again invited to provide input with regard to this application. Your input, if any, will be valued within 14 days of receipt of this correspondence.

Yours Faithfully

Gavin J. Fisher *BSc (Hons) Engineering Geology*

APPENDIX 4:

PUBLIC PARTICIPATION PROCESS - FARM ZOET KLOOF 187:

Incoming Correspondence.

Munisipaliteit - Kouga - Municipality

Phone 042 2931111
Fax 042 2931114
E-Mail registry@ec108.org.za

Posbus 21
P O Box 21
Jeffreys Bay
33 Da Gama Road
6330

Acknowledge Document Received

10/03/2010

BLUE HORIZON CONSULTING
GAVIN J. FISHER
PO BOX 22727
PORT ELIZABETH
6000

Sir/Madam/Me
Mnr/Mev/Me

Enquiries: ARCHIVES

*** Our Reference:** 74219-R/187 **Your Reference:**

APPLICATION FOR MINING PERMIT ON PORTION OF FARM ZOET KLOOF 187

I hereby acknowledge receipt of your letter of the 26 February 2010 which will receive attention.

Yours faithfully

DR E M RANKWANA
MUNICIPAL MANAGER

* In order to prevent delays kindly use this reference number. * Ten einde vertraging te voorkom gebruik asb. hierdie verwysingsnommer.

APPENDIX 4:

MINING PERMIT - FARM ZOET KLOOF 187:

Signed Undertaking.

UNDERTAKING

I, Mthobeli Mahleki

the undersigned on behalf of Island House Trading 114 (Pty) Ltd., hereby undertake to give effect to every undertaking contained in the Environmental Management Plan for the proposed mining activity on a portion of the Farm Zoet Kloof 187, to the south-west of Hankey, and accept full responsibility thereof.

SIGNED at Port Elizabeth this Sixth day of April 2010

....

Witness

Gavin J. Fisher