

# NOTIFICATION OF MINING ACTIVITIES

## FINAL REHABILITATION, DECOMMISSIONING AND MINE CLOSURE PLAN INCLUDING ENVIRONMENTAL RISK ASSESSMENT, MINING RIGHT (GRANITE), CORE AREA 1: PORTION 1 FARM LOWER ZWART MODDER 79, REMAINDER AND PORTION 2 FARM UPPER ZWART MODDER 78, AND REMAINDER FARM OUP 80, NORTHERN CAPE PROVINCE.

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## CONTEXT OF THE MINING AND PROSPECTING OPERATIONS

### MINING PERMITS AND PROSPECTING RIGHTS

The Bushmanland Granite Core Mining Area 1 (Figure1) is situated on Portion 1 of the Farm Lower Zwart Modder 79, the Remainder and Portion 2 of the Farm Upper Zwart Modder 78 and the Remainder Farm Oup 80 (Figure 2).

The operation is carried out under two separate prospecting operations by means of Bulk Sampling. one mining operation is also taking place within this area. The details of the three operations are as follows:

- Mining permit MP 017/2014 File reference NC30/5/1/3/2/10358MP issued to **Sizisa Ukhanyo Trading 830 CC** over 5Ha portion of Portion 1 Lower Zwart Modder No 79
- Prospecting right MPTRO 29/2015 File reference NC30/5/1/3/2/10610PR issued to **Sizisa Ukhanyo Trading 830 CC** over the Remainder Farm Lower Zwart Modder 79, portion of Portion 1 of the Farm Nous West 76, Remainder Farm Upper Zwart Modder 78 and a portion of the Remainder Farm Oup No 80.
- Prospecting right MPTRO 68/2010 File reference NC30/5/1/3/2/10455PR issued to **Sizisa Ukhanyo Trading 830 CC** over Portion 1 of the Farm Lower Zwart Modder No 79 and Portion 2 of the Farm Upper Zwart Modder 78.

As the operations share most of the infrastructure and technical resources this final rehabilitation, decommissioning and mine closure plan that include the environmental risk assessment is applicable to all three operations.

The operations are situated in the Namakwa District Municipality and Khai-Ma local authority of the Kenhardt administrative district of the Northern Cape.

Portion 1 of the Farm Lower Zwart Modder 79 and Portion 2 of the Farm Upper Zwart Modder 78 was registered in the name of Erna Claassens by virtue of deed T4340/2016. The portion on which the mining operations are situated has now been subdivided as Farm 444.

The Remainder of the Farm Upper Zwart Modder No 78 is registered in the name of the JHP van der Westhuizen Family Trust by virtue of deed T62357/2001. The portion on which the mining operations are situated has now been subdivided and consolidated with Farm 444 as Farm Zwartmodder Mountain No 445 and is in the process of being registered in the name of Jianqiang Su (ID 69051459494180);

Remainder of the Farm Oup 80 is registered in the name of Henque 1001 cc by virtue of deed T46581/2001.

### CONSTRUCTION PHASE

The company has a lease agreement with the landowner of one of the nearby farms where all logistical facilities like workshops and secure storage as well as accommodation is provided and as part of this operation, only satellite logistics are provided.

The logistics available on the nearby farm of the company were developed as part of farm improvements and will not form part of decommissioning in terms of section 44(c) of the MPRDA. Maintenance and management however form part of an environmental authorization and all legal requirements with regard to mine health and safety as well as pollution control measures must be adhered to. The facilities at the company headquarters are listed below and waste management are covered by a separate final rehabilitation, decommissioning and closure plan.

- Living quarters and personnel amenities;
- Workshop with Eskom power supply;
- Service and wash bay with pollution control measures;
- Secure storage area and central supply stores;

- Bunded fuel supply with service apron and fuel spill control measures;
- Bio cell for bioremediation of any potential petrochemical pollution;
- Laydown area for equipment and machinery not in use together with spares and accessories;
- Salvage yard for redundant equipment and steel prior to sale to a scrap dealer;
- Temporary waste storage area for hazardous and other waste;
- Parking area (truck stop) for hauling trucks of transport service providers;
- Centralised dispatch yard.

The satellite infrastructure areas will consist mainly of mobile containers and temporary logistical facilities and no permanent infrastructure will be developed and only existing farm tracks will be used. Upgrading of the existing tracks will be done as part of the construction phase and maintenance as part of the operational phase.

## **OPERATIONAL PHASE**

Granite mining is dependent on market demand for specific colours that can change within relative short period of time. Different quarries each with a specific colour therefore needs to be available although not all of them will be active on the same time depending on the current market trend.

The mining method would be the same for all quarries and consists of:

- The establishment of a flat floor through the use of diamond wire saws;
- The flat floor is then fitted with parallel rails which serve the rotary saws which cut blocks from the ore body with less waste than other systems. The saws have a diameter of 3-4m and for purposes of planning are deemed to have a cutting depth of 1.7m;
- The bottom of the blocks is separated by small diameter plug and feather technique;
- The raw cut block is lifted out of the hole and placed for transport by block carrying front end loader to the dressing area;
- At the dressing area, the block is neaten up through removal of any protuberances and the 1st grade blocks are then transported to the dispatch yard and the 2nd grade blocks to a separate stockpile area;
- Waste blocks and offcuts are transport by block carrying front end loader to the waste rock dump. Excavators are used to keep the top of the waste dump level to promote traffic ability.

## **PROJECT LAYOUT AND DEVELOPMENT**

### **a) NC-S 30/5/1/1/2/10610 PR Bulk sampling Remainder Farm Oup 80**

The original prospecting area only consisted of the Remainder Farm Lower Zwart Modder 79 in extend 8675Ha and in September 2016 a 1311Ha portion of the Remainder Farm Oup 80 was added in terms of section 102 (Refer Diagram 3). From 2017 prospecting work on this property will start and the following activities that are in line with the prospecting work program will be implemented.

- Reconnaissance of the whole prospecting area on foot and identifying areas with a good surface expression.
- Collecting of “grab samples” on the areas with a good surface expression excluding the two historic quarries “Ivory” and “Desert Flame” where information is available from the historic workings.
- Mapping and demarcating sample areas.

When this initial prospecting is completed it is envisage that the largest section of this property will be relinquished by 2018 without any impact on the natural environment. At this stage it is envisage that the area retained for sampling will only include the Ivory and Desert Flame deposit but the following activities that are in line with the prospecting work program still needs to be implemented.

- Core drilling max .5m deep 38mm diameter
- Develop infrastructure and logistics
- Mine planning including waste dumps stockpiles and haul roads
- Cutting of bulk samples to determine quality and to test the market.

At the time of this review no invasive work has been completed and the development at any deposits identified for bulk sampling will be addressed as part of the next review of this final rehabilitation, decommissioning and closure plan. With regard to initial prospecting the following will be applicable:

i. Infrastructure and logistics

- Access and service roads
  - The Springbok, Upington Main Road (N14) provide excellent access to the mining operation. The turn-off from the N14 to the mine headquarters of Sizisa is 46 km east of Pofadder.
  - Access from the HQ to the mine workings is via a dual use public road system and existing farm tracks.
- Services and associated infrastructure
  - During the initial phases of prospecting no services and associated infrastructure will be required and the operation consisting mostly of field investigations will be run from the company HQ.
- Accommodation and Logistics
  - The logistics to be used during prospecting will be available at the company HQ
  - Due to the temporary nature and small scale of prospecting operations no satellite logistics will be supplied.
- Waste management facilities
  - Due to the temporary nature and small scale of prospecting operations no satellite logistics will be supplied.
- Oil/grease/diesel management systems:
  - Due to the temporary nature and small scale of prospecting operations no satellite logistics will be supplied.
  - No machinery will be used during initial prospecting
- Surface disturbance
  - During initial prospecting only non-invasive activities will be implemented with no surface disturbance.

ii. Quarry and Waste dumps

- Opencast workings (including final voids and ramps)
  - During initial prospecting only non-invasive activities will be implemented mainly reconnaissance of the whole prospecting area on foot and identifying areas with a good surface expression.
  - Collecting of “grab samples” on the areas with a good surface expression excluding the two historic quarries “Ivory” and “Desert Flame” where information is available from the historic workings.
  - Mapping and demarcating sample areas.
  - Only after the results from initial prospecting is available can a decision be made with regard to the deposit identified for invasive sampling.
  - The development at any deposits identified for bulk sampling will be addressed as part of the next review of this final rehabilitation, decommissioning and closure plan.

**b) NC-S 30/5/1/1/2/10610 PR Bulk sampling Remainder Farm Upper Zwartmodder 78**

The original prospecting area only consisted of the Remainder Farm Lower Zwart Modder 79 in extend 8675Ha and in September 2016 a 960Ha portion of the Remainder Upper Zwart Modder 78 was added in terms of section 102 (Refer Diagram 4).

On this area three deposits were identified for sampling the Red 2, Red 3 to be managed as one operation, and the Pink deposits. At this stage only preliminary planning of all three deposits has been

done and the following activities that are in line with the prospecting work program will be implemented:

- Develop infrastructure and logistics
- Mine planning including waste dumps stockpiles and haul roads
- Cutting of bulk samples to determine quality and to test the market.

With regard to the planned development on the quarries the following will be applicable:

i. Infrastructure and logistics

- Access and service roads

The Springbok, Upington Main Road (N14) provide excellent access to the mining operation. The turn-off from the N14 to the mine headquarters of Sizisa is 46 km east of Pofadder. Access from the HQ to the mine workings is via a dual use public road system and existing farm tracks. Existing tracks will be used as haul roads and will only be upgraded to facilitate haul trucks.

- Services and associated infrastructure

Process and potable water is obtained from boreholes on the property. All used process water will be collected in collection sumps for the recycling of process water to be used to cool the saws used for cutting of the granite blocks. Water is stored in plastic tanks. High voltage power lines are available for power supply to the Pink logistics area. Electrical supply required by the Red 2 & 3 logistics area and rock saws will be generated by mobile “gensets” to be supplied with generator bay and spill prevention measures.

- Accommodation and Logistics

Most of the logistics to be used during prospecting will be available at the company HQ and at the two bulk sampling operations satellite logistics will be supplied and infrastructure, buildings and waste management facilities will consist of pre-fabricated buildings and mobile containers. Development of infrastructure and waste management facilities are still in progress and when fully developed the logistics area with waste management facilities will consist of the following:

- Pre-fabricated buildings and mobile containers for site office and secure storage area.
- Pre-fabricated buildings for personnel accommodation and amenities for the 10 to 15 people staying on site.
- Waste management facilities
  - A demarcated laydown area for equipment prior to movement to the HQ.
  - A demarcated salvage yard for temporary storage of scrap prior to movement to the HQ.
  - Domestic waste will be collected in plastic containers and transported weekly to the HQ refuse site.
  - Petrochemical and hazardous waste including contaminated/used spares, filters and used oil will be collected and stored in special containers with spill containment measures and transported weekly to the HQ refuse site from where it will be disposed at a registered disposal site.
- Oil/grease/diesel management systems
  - A service and wash bay needs to be developed and all grey water will be collected in a sump from where it is recycled.
  - Bunded fuel supply and service apron needs to be developed with a sump for collection of spills and contaminated run off
  - The generators needs to be supplied with generator bays with a sump for collection of spills and contaminated run off
  - Contaminated soil and sludge from the collection sumps will be treated in a bio cell (soil farm) to be provided on site.
- Surface disturbance
  - The stockpile and dispatch area for first grade blocks to be demarcated and the footprint contained.

- The sorting and dressing area together with stockpile area for low grade blocks to be demarcated and the footprint contained.
- Regular sorting and dispatch of blocks to be done as part of housekeeping.
- Blocks used for demarcation purposes to be removed to the demarcated waste dump.

## ii. Quarry and waste dumps

- Opencast workings (including final voids and ramps)

Wire saws will be used to create a level surface to be fitted with parallel rails which serve the rotary saws which cut blocks from the ore body with less waste than other systems. The saws have a diameter of 3-4m and the average cutting depth of 1.7m.

The bottom of the blocks are separated by small diameter plug and feather technique. The raw cut block is lifted out of the hole and placed for transport by block carrying front end loader to the dressing area.

- Surface disturbance (compacted areas)

At the dressing area, the block is neatened up through removal of any protuberances and the 1st grade blocks is then transported to the dispatch yard and the 2nd grade blocks to a separate stockpile area. Except for dressing and sorting no processing is taking place but a relative large area still needs to be identified for the stockpile area.

- Residue deposits overburden and spoils

The existing historic valley fill waste dump will be used at the Pink quarry and new Valley fill waste dumps will be created at the Red 2 and Red 3 quarries. Waste blocks and offcuts will be transport by block carrying front end loader to the identified waste rock dump. Waste rock will also be used to create a work platform for the extended quarry floor.

## c) NC-S 30/5/1/1/2/10455PR Logistics & Access Portion 2 Upper Zwartmodder 78

The original prospecting area consisted of the complete Portion 2 of the Farm Upper Zwartmodder 78 in extent 4467.5715 Ha (Refer Diagram 5). From May 2008 to May 2010 prospecting was completed on this area. Only non-invasive field investigations were conducted making use of existing farm tracks and public roads therefore no rehabilitation was necessary and there were no impacts on the natural environment. From the initial work no deposits were identified for sampling and a large part of Portion 2 of the Farm Upper Zwartmodder 78 was relinquished (Refer Diagram 5). Only a small portion was retained for access and logistical purposes. No further prospecting and mining is planned on this section and will only be needed to supply access and services to the rest of the mining operations. All services including electricity and water supply as well as access roads were developed as part of farm improvement and will not be demolished at final decommissioning in terms of section 44 of the MPRDA.

## d) NC-S 30/5/1/1/2/10455 PR Bulk sampling Portion 1 Farm Lower Zwartmodder 79

The original prospecting area consisted of the complete Portion 1 of the Farm Lower Zwartmodder 79 in extent 8662 Ha (Refer Diagram 6). From May 2008 to May 2010 initial prospecting was completed on this area. Only non-invasive field investigations were conducted making use of existing farm tracks and public roads therefore no rehabilitation was necessary and there were no impacts on the natural environment and a large part of Portion 1 of the Farm Lower Zwartmodder 79 was relinquished (Refer Diagram 6). During 2011 to 2014 prospecting work on the remaining portion continued and the following activities that are in line with the prospecting work program were implemented.

- Reconnaissance of the whole prospecting area on foot and identifying areas with a good surface expression.
- Collecting of "grab samples" on the areas with a good surface expression.
- Mapping and demarcating sample areas.
- Core drilling max .5m deep 38mm diameter

On this property six deposits were identified as follow (Refer Diagram 6):

- Rainbow, a Historic quarry - planning still needs to be done as this is not a priority for the next 3 years
- Cape Autumn, a Historic quarry earmarked for Bulk Sampling as a priority
- Ocean Blue 1 a new quarry earmarked for Bulk Sampling as a priority
- Ocean Blue 2 a Historic quarry where no further sampling is planned - This area needs to be rehabilitated as part of the annual rehabilitation plan
- Black a Historic quarry earmarked for Bulk Sampling as a priority
- Red 1 a Mining operation under NC 10358 MP – Refer 1.3.4 (e)

At this stage only preliminary planning of all deposits has been done and the following activities that are in line with the prospecting work program will be implemented:

- Develop infrastructure and logistics
- Mine planning including waste dumps stockpiles and haul roads
- Cutting of bulk samples to determine quality and to test the market.

With regard to the planned development on the quarries the following will be applicable:

i. Infrastructure and logistics

- Access and service roads

The Springbok, Upington Main Road (N14) provide excellent access to the mining operation. The turn-off from the N14 to the mine headquarters of Sizisa is 46 km east of Pofadder. Access from the HQ to the mine workings is via a dual use public road system and existing farm tracks. Existing tracks will be used as haul roads and will only be upgraded to facilitate haul trucks.

- Services and associated infrastructure

Process and potable water is obtained from boreholes on the property. All used process water will be collected in collection sumps for the recycling of process water to be used to cool the saws used for cutting of the granite blocks. Water is stored in plastic tanks. Electrical supply required by the logistics area and rock saws will be generated by mobile “gensets” to be supplied with generator bay and spill prevention measures.

- Accommodation and Logistics

Most of the logistics to be used during prospecting will be available at the company HQ and at the bulk sampling operations satellite logistics will be supplied and infrastructure, buildings and waste management facilities will consist of pre-fabricated buildings and mobile containers. No development are planned at this stage at the Rainbow Quarry and the Cape Autumn and Ocean Blue 1 Quarry will share logistics due to their close proximity to each other. Development of infrastructure and waste management facilities still needs to be implemented as part of the construction phase and when fully developed the logistics area with waste management facilities will consist of the following:

- Pre-fabricated buildings and mobile containers for site office and secure storage area.
- Pre-fabricated buildings for personnel accommodation and amenities for the 10 to 15 people staying on site.

No development are planned at the Black Quarry due to its close proximity to the company HQ. Accommodation and Logistics at the HQ were developed as part of farm improvements and will not form part of decommissioning in terms of section 44(c) of the MPRDA. The facilities at the company headquarters are listed below and waste management are covered by this final rehabilitation, decommissioning and closure plan.

- Living quarters and personnel amenities
  - Workshop with Eskom power supply
  - Service and wash bay with pollution control measures
  - Secure storage area and central supply stores
  - Bunded fuel supply with service apron and fuel spill control measures
  - Bio cell for bioremediation of any potential petrochemical pollution
  - Laydown area for equipment and machinery not in use together with spares and accessories
  - Salvage yard for redundant equipment and steel prior to sale to a scrap dealer
  - Temporary waste storage area for hazardous and other waste
  - Parking area (truck stop) for hauling trucks of transport service providers
  - Centralised dispatch yard
- Waste management facilities
    - A demarcated laydown area for equipment prior to movement to the HQ laydown area.
    - A demarcated salvage yard for temporary storage of scrap prior to movement to the HQ salvage yard.
    - Domestic waste will be collected in plastic containers and transported weekly to the HQ refuse site.
    - Petrochemical and hazardous waste including contaminated/used spares, filters and used oil will be collected and stored in special containers with spill containment measures and transported weekly to the HQ refuse site from where it will be disposed at a registered disposal site.
  - Oil/grease/diesel management systems
    - A main service and wash bay needs to be developed at the company HQ and all grey water will be collected in a sump from where it will be recycled.
    - Bunded fuel supply and service apron needs to be developed with a sump for collection of spills and contaminated run off
    - The generators need to be supplied with generator bays with a sump for collection of spills and contaminated run off
    - Contaminated soil and sludge from the collection sumps will be treated in a bio cell (soil farm) to be provided on site.
  - Surface disturbance
    - The stockpile and dispatch area for first grade blocks at the company HQ will be used for this operations and must be demarcated and the footprint contained.
    - The sorting and dressing area together with stockpile area for low grade blocks to be demarcated for each quarry and the footprint contained.
    - Regular sorting and dispatch of blocks to be done as part of housekeeping.
    - Blocks used for demarcation purposes to be removed to the demarcated waste dump.

## ii. Quarry and waste dumps

- Opencast workings (including final voids and ramps)

Wire saws will be used to create a level surface to be fitted with parallel rails which serve the rotary saws which cut blocks from the ore body with less waste than other systems. The saws have a diameter of 3-4m and the average cutting depth of 1.7m. The bottom of the blocks are separated by small diameter plug and feather technique. The raw cut block is lifted out of the hole and placed for transport by block carrying front end loader to the dressing area.

- Surface disturbance (compacted areas)

At the dressing area, the block is neaten up through removal of any protuberances and the 1st grade blocks are then transported to the dispatch yard and the 2nd grade blocks to a separate stockpile



area. Except for dressing and sorting no processing is taking place but a relative large area still needs to be identified for the stockpile area.

- Residue deposits overburden and spoils

The existing historic side hill fill waste dump will be used at the Rainbow quarry and the heap filled waste dump at the Cape Autumn Quarry. New Valley fill waste dumps will be created at the Ocean Blue 1 and Black quarries. Waste blocks and offcuts will be transport by block carrying front end loader to the identified waste rock dump. Waste rock will also be used to create a work platform for the extended quarry floor.

#### **e) NC-S 10358MP Mining Operations Portion 1 Farm Lower Zwart Modder 79**

This mining operation covering an area of 5Ha is situated adjacent to the bulk sampling operation under NC-S 10455PR and this operations share most of the infrastructure and technical resources (Diagram 7).

##### **i. Infrastructure and logistics**

- Access and Haul Roads

The Springbok, Upington Main Road (N14) provide excellent access to the mining operation. The turn-off from the N14 to the mine headquarters of Sizisa is 46 km east of Pofadder. Access from the HQ to the mine workings is via a dual use public road system and existing farm tracks. Existing tracks will be used as haul roads and will only be upgraded to facilitate haul trucks by applying dust suppression and/or hardening compound such as Macadamite.

- Services and associated infrastructure

Process and potable water is obtained from boreholes on the property with collection sumps for the recycling of process water used to cool the saws used for cutting of the granite blocks. Electrical supply for the logistics are supplied via an Eskom line but power supply to the rock saws are generated by mobile gensets supplied with generator bay and spill prevention measures.

- Accomodation and Logistics

Most of the logistics are available at the company HQ and at the quarry only satellite logistics are supplied and infrastructure, buildings and waste management facilities consist of pre-fabricated buildings mobile containers and/or structures created from waste blocks and upgrading of infrastructure and waste management facilities are still in progress. When fully developed the logistics area with waste management facilities will consist of the following:

- Mobile units for site office and secure storage area.
- Pre-fabricated buildings serves as personnel accommodation and amenities for the 15 people staying on site.
- Waste management facilities
  - A small demarcated laydown area for equipment prior to movement to the company HQ.
  - A small salvage yard for temporary storage of scrap steel prior to movement to the company HQ.
  - Domestic waste are collected in plastic containers and transported weekly to the company HQ refuse site.
  - Petrochemical and hazardous waste including contaminated/used spares, filters and used oil are collected and stored in special containers with spill containment measures for disposal at a registered disposal site.
- Oil/grease/diesel management systems
  - The service and wash bay at the company HQ are used.
  - The fuel supply tank is provided with a bund wall and service apron.

- Surface disturbance
  - The stockpile and dispatch area for first grade blocks at the company HQ are used.
  - Blocks used for demarcation purposes to be removed to the demarcated waste dump at final closure.

## ii. Quarry and waste dumps

- Opencast workings (including final voids and ramps)

Only one floor were created at this quarry that is fitted with parallel rails which serve the rotary saws which cut blocks from the ore body with less waste than other systems. The saws have a diameter of 3-4m and the average cutting depth of 1.7m. The bottom of the blocks are separated by small diameter plug and feather technique. The raw cut block is lifted out of the hole and placed for transport by block carrying front end loader to the dressing area. A high wall were created as part of the development of this operation that needs to be addressed as part of decommissioning.

- Surface disturbance (compacted areas)

The surface of one of the valley filled waste dumps is used as dressing area were the blocks are neatened up through removal of any protuberances and the 1st grade blocks is then transported to the dispatch yard and the 2nd grade blocks to a separate stockpile area. Regular sorting and movement of blocks to the designated areas needs to be done as housekeeping. Except for dressing and sorting no processing is taking place but a relative large area is taken up by stockpile areas as indicated on the diagrams below.

- Residue deposits overburden and spoils

Waste blocks and offcuts are transport by block carrying front end loader to the waste rock dump. When operations started three valley filled waste dumps were present but only one of the historic waste dumps will be used by this operation and all other waste dumps needs to be rehabilitated as part of the annual rehabilitation plan.

**Table 1: Summary of activities**

Quarry Name	Condition	~Size (Ha)
Ivory (2)	existing quarry and new	~0.74
Rainbow	existing quarry and new	~1.53
Desert Flame	existing quarry and new	~7.33
Cape Autumn	existing quarry and new	~4.16
Ocean Blue 1	new	~7.42
Ocean Blue 2	existing quarry	?
Black	existing quarry and new	~4.91
Red 1	existing quarry and new	~22.6
Red 2	new	~9.26
Red 3	new	~7.31
Pink	existing quarry and new	~21



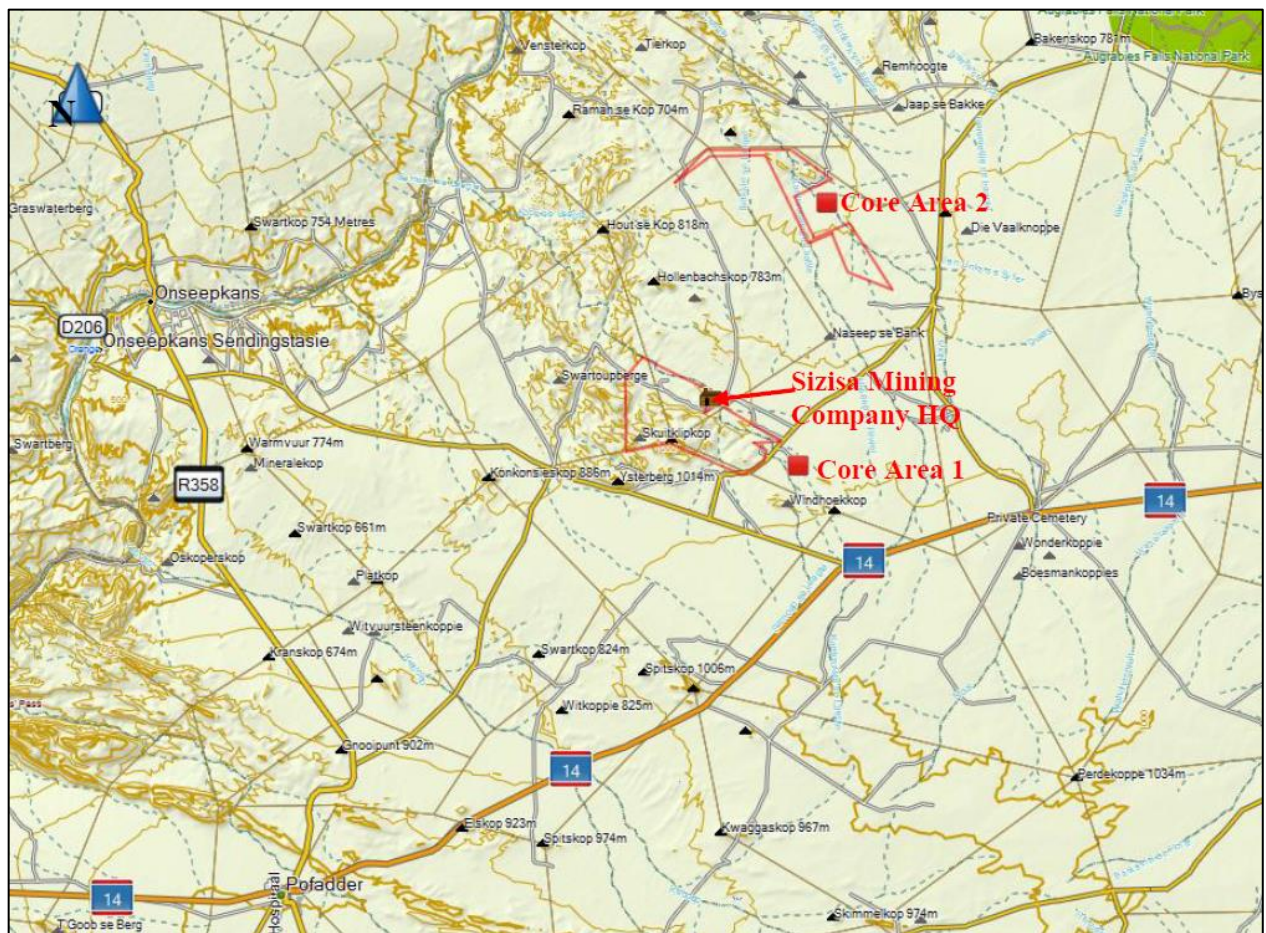


Figure 1: Core areas 1 and 2 in regional context

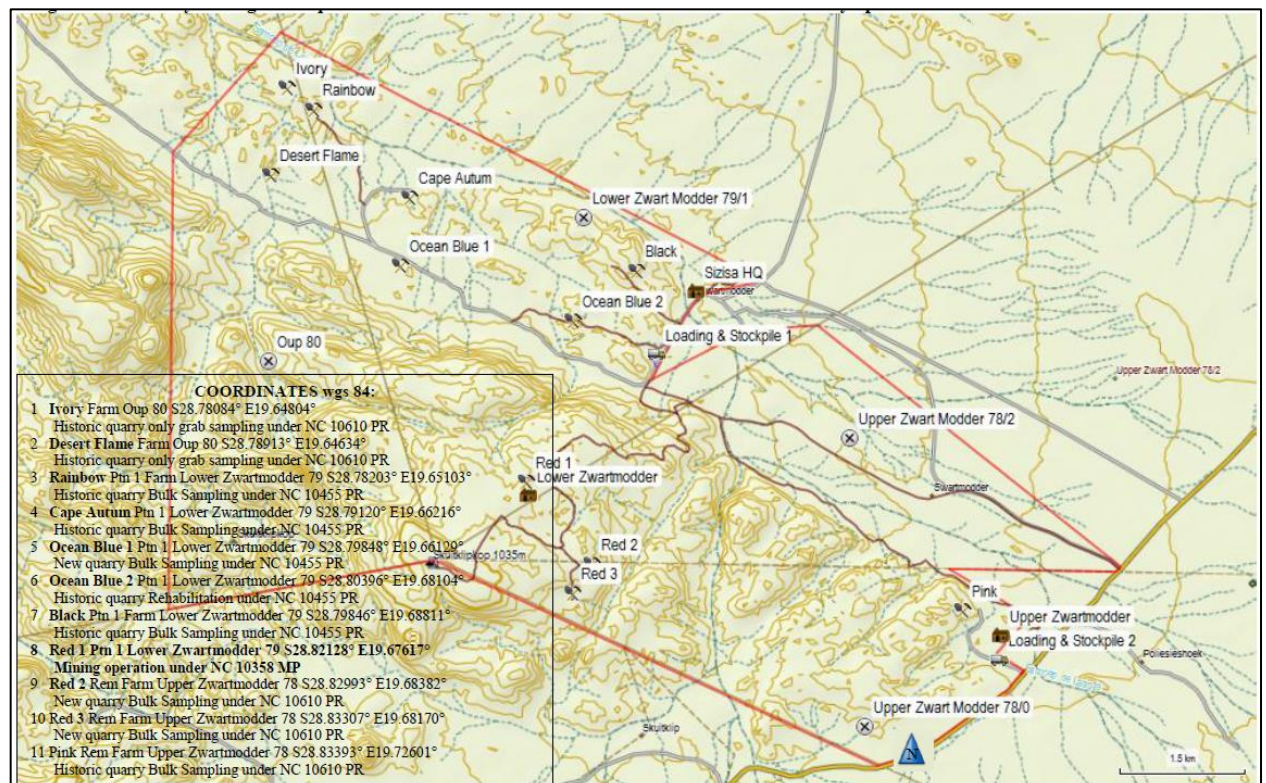
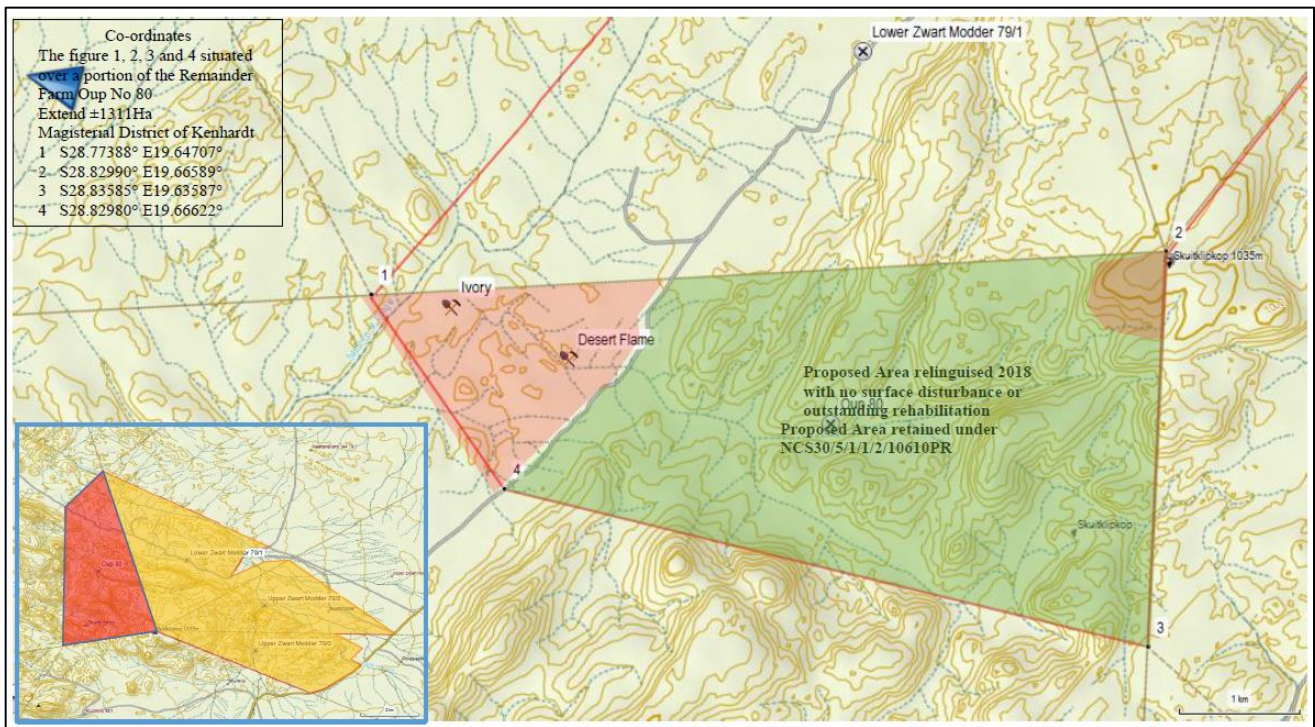
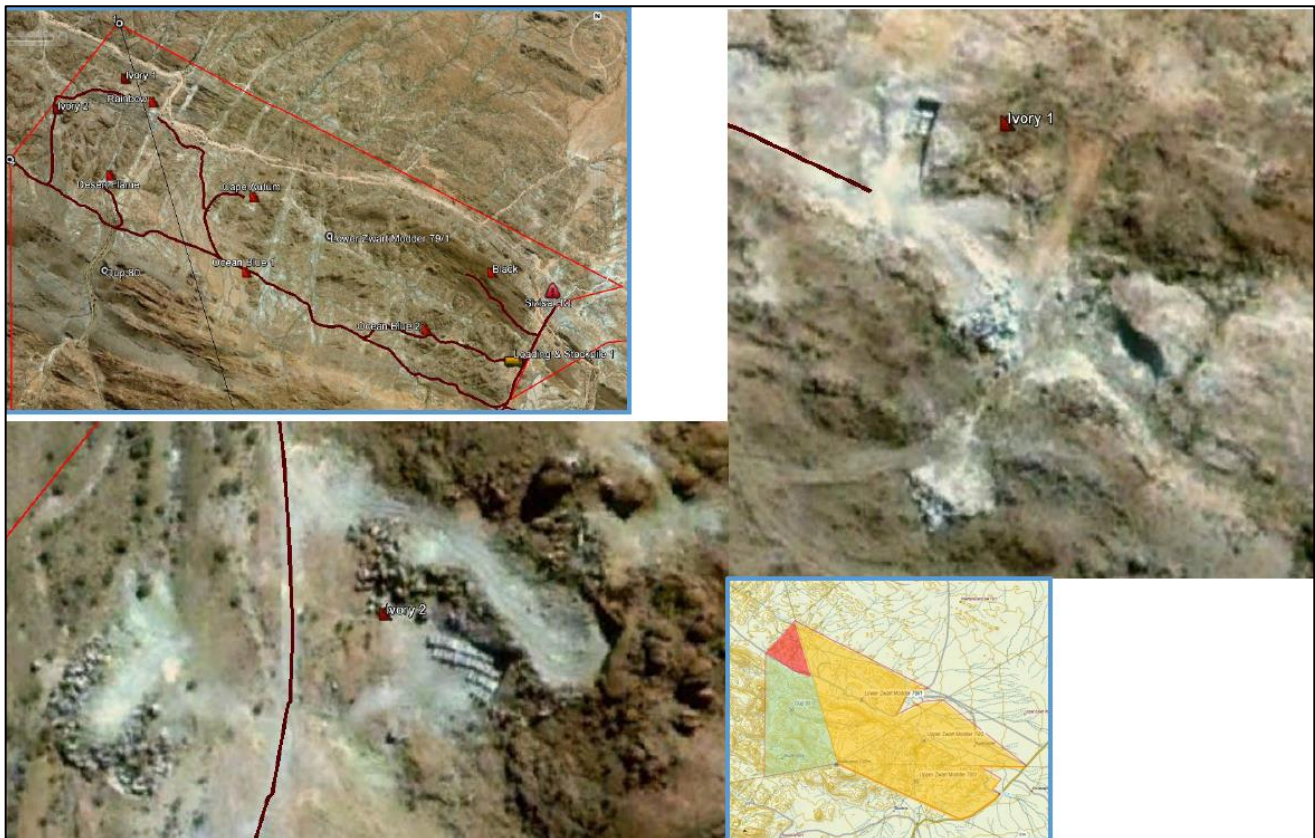


Figure 2: Locality of all granite quarries within core area 1 with infrastructure areas shared by operations



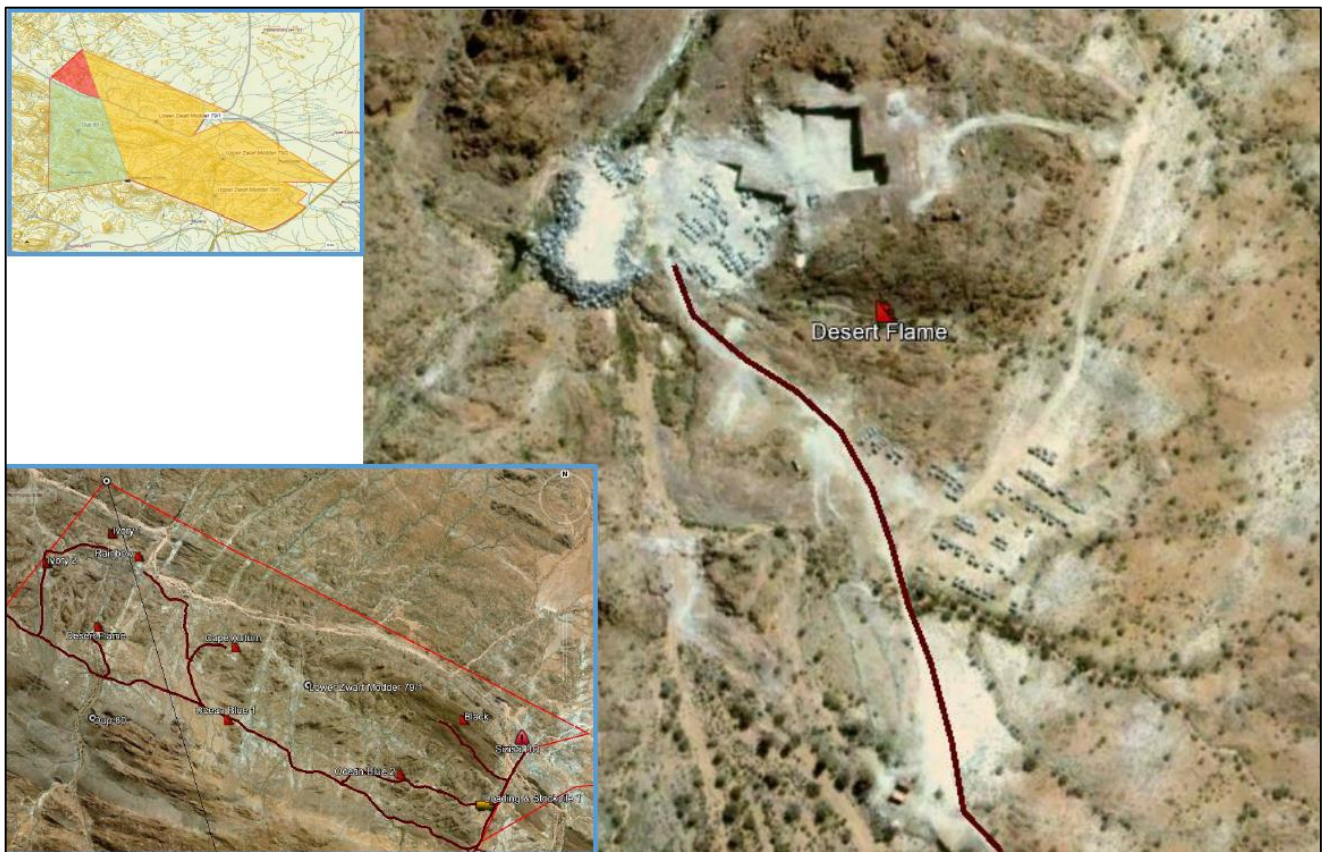


**Figure 3:** Locality of activities on the Farm Oup 80 NC-S 30/5/1/1/2/10610 PR

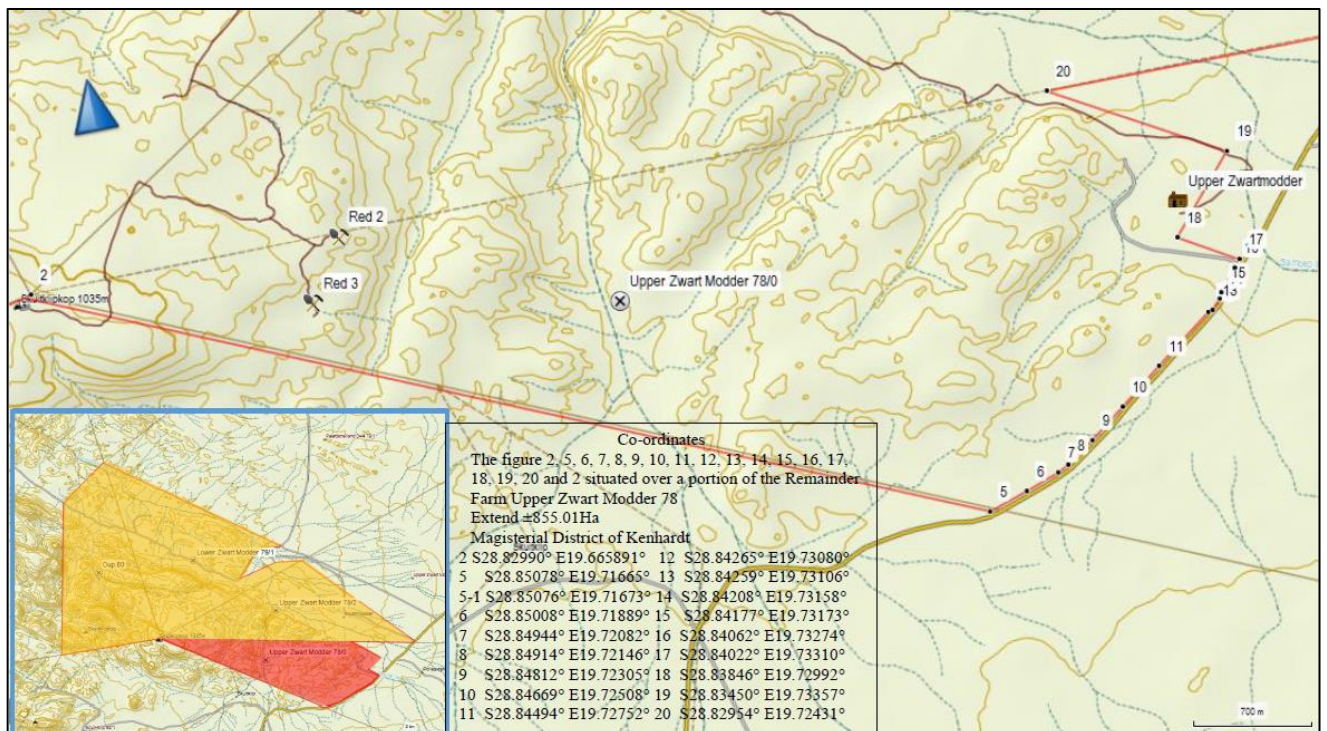


**Figure 3a:** Plan showing historic workings at Ivory Quarry as well as access from company HQ



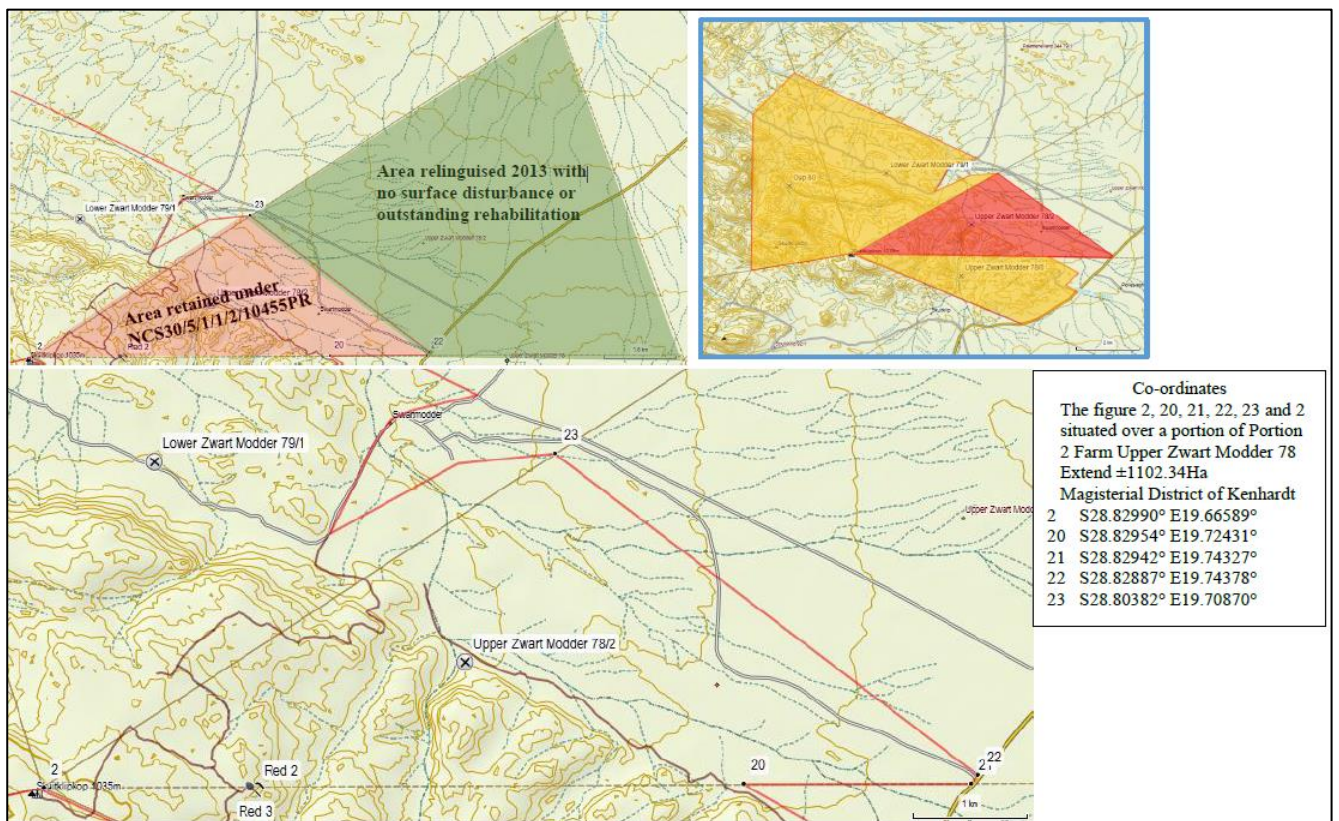


**Figure 3b:** Plan showing historic workings at Desert Flame Quarry on Farm Oup 80 NC-S 30/5/1/1/2/10610 PR as well as access from company HQ

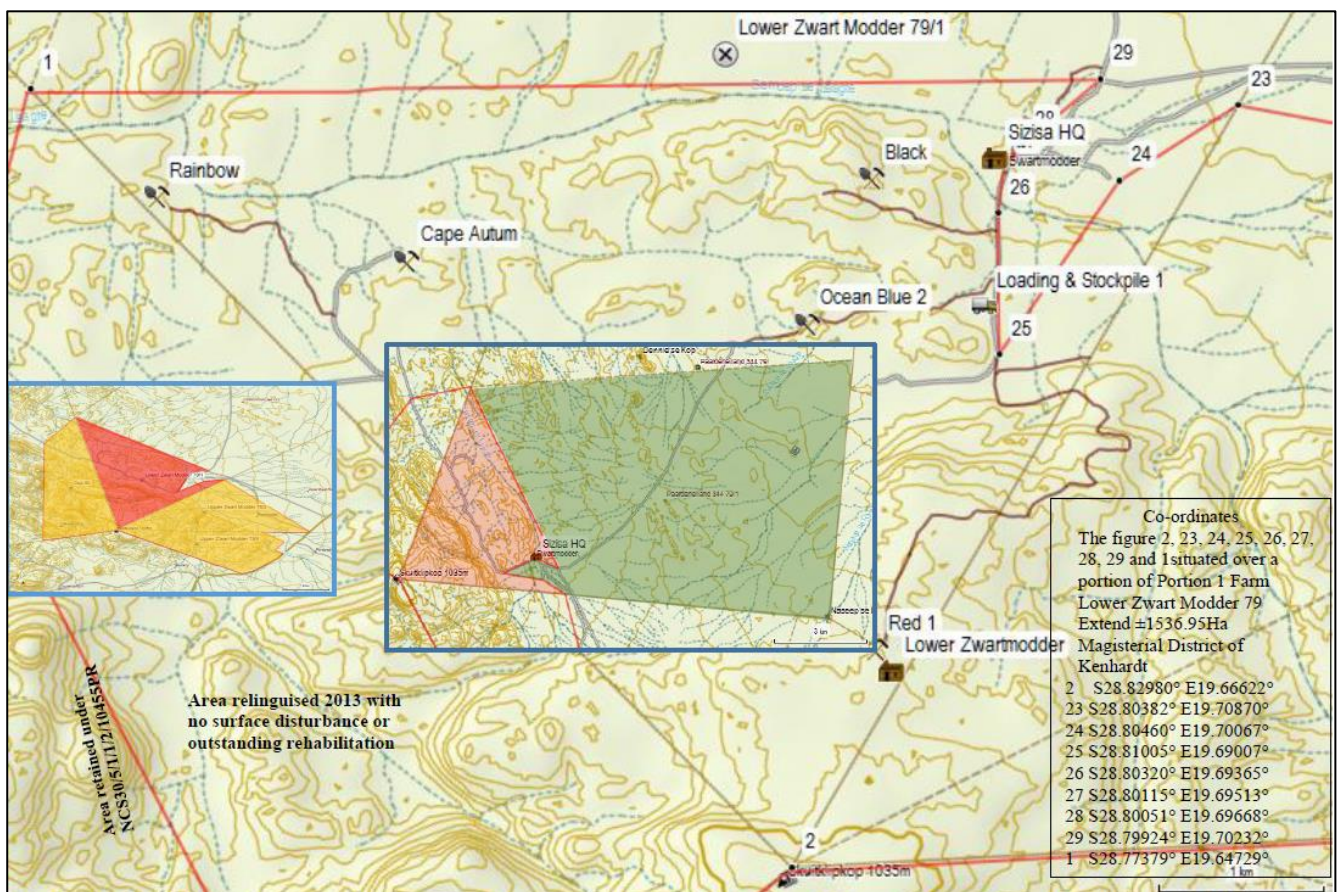


**Figure 4:** Locality of activities on the Remainder Farm Upper Zwart Modder 78 NC-S 30/5/1/1/2/10610PR



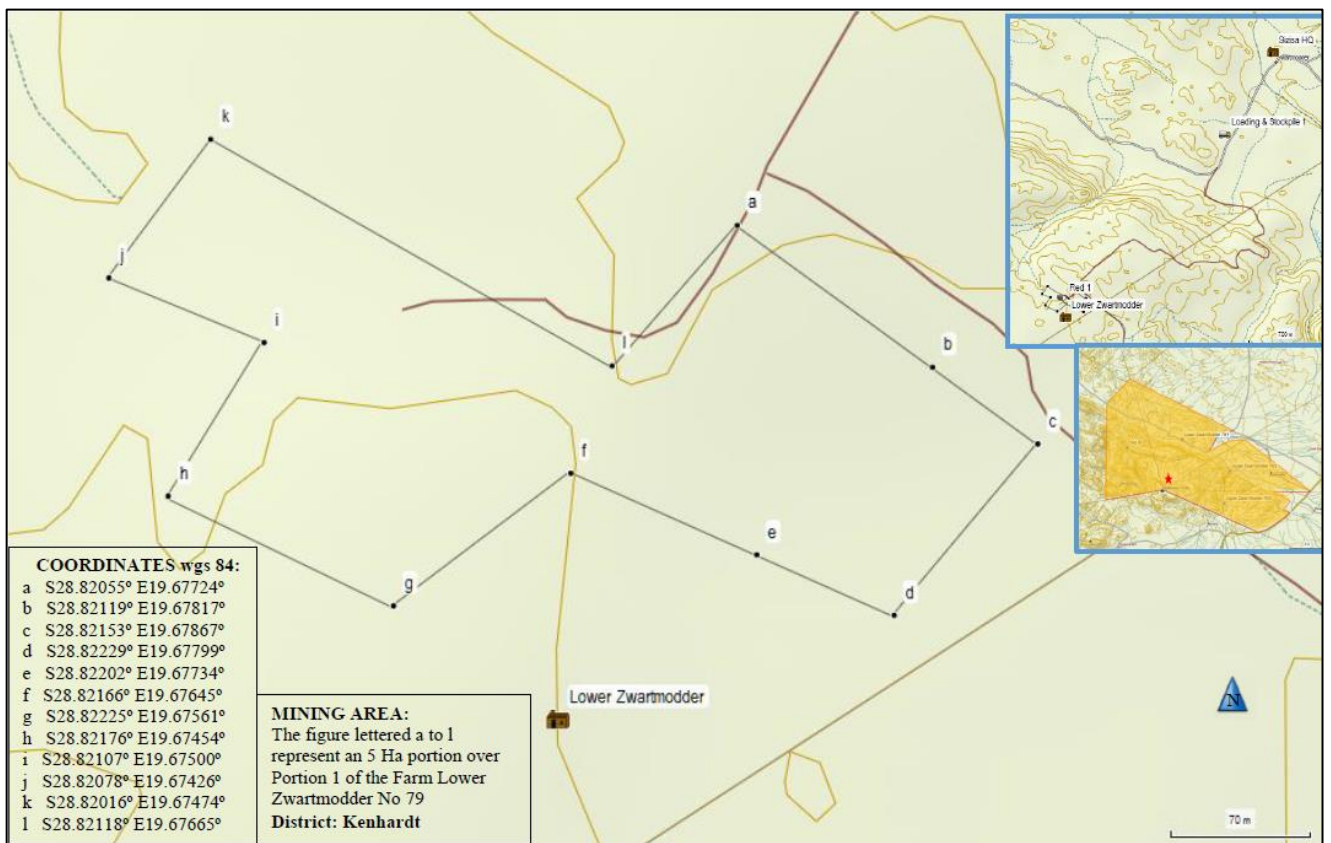


**Figure 5:** Locality of activities on Portion 2 Farm Upper Zwart Modder 78 NC-S 30/5/1/1/2/10455PR



**Figure 6:** Locality of activities on Portion 1 Farm Lower Zwart Modder 79 NC-S 30/5/1/1/2/10455PR





**Figure 7:** Mine layout NC 10358 MP - Red 1 - Ptn 1 Lower Zwartmodder 79