



**ASSESSMENT OF THE IMMEDIATE SURROUNDINGS OF THE OLD BUILDING AT THE VOORSPOED
DIAMOND MINE AS WELL AS THE WIDER CULTURAL LANDSCAPE**

Version 2.0

14 February 2014

DETAILS OF REPORT


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EXECUTIVE SUMMARY

PGS Heritage was appointed by De Beers Consolidated Mines Limited to undertake archaeological mitigation on historic rubbish dumps associated with an old building at the mine. As part of the appointment, PGS Heritage was requested to assist with addressing a number of requirements raised by the South African Heritage Resources Agency.

On Wednesday, 3 April 2013 a letter was written by Ms. Mariagrazia Galimberti of the South African Heritage Resources Agency in response to an application by a party other than PGS Heritage to have the old building at the mine demolished and for the renewal of the permit which had been issued by the Free State Provincial Heritage Resources Authority. In the letter a list was made of the requirements of the SAHRA Archaeology, Palaeontology, Meteorites, Heritage Objects and Burial Grounds and Graves permit committee, which includes, as items 4 and 5, the following:

- *“...a historical archaeologist must survey the area around the building and a report from this assessment must be submitted to SAHRA for further comments.”*
- *“...the cultural landscape of the related to the history of the mine must be assessed properly.”*

This report addresses these two requirements of SAHRA. It is important to note that this document must be read in conjunction with the Phase 2 archaeological mitigation report in which a detailed overview of the history of the mine and old building is provided.

The immediate surroundings of the old building were assessed by the author as well as the archaeological project’s Principal Investigator Ms. Joanna Behrens during the archaeological fieldwork undertaken between 23 and 27 September 2013. The fieldwork established that with the exception of the old building, a rectangular cement structure to its immediate south, the avenue of eucalyptus trees as well as middens identified to the south, west, north-west and immediate north of the old building, none of the features identified in the Phase 2 heritage assessment undertaken by Dr. Robert de Jong (De Jong, 2005) have remained. This is due to the disturbance of the site which comprises road construction and mine development. However, as indicated in the Phase 2 Archaeological Mitigation Report, it is not known exactly when these disturbances took place. A site layout plan that was recorded during the archaeological mitigation work in September and October 2013 represents the findings of the intensive walkthroughs of the immediate surroundings of the study area.

The wider cultural landscape was assessed by the author on 19 December 2014. This assessment was underpinned by a detailed analysis of the history of the mine as well as previous heritage studies. An analysis of the available historic aerial photographs was also undertaken as part of this assessment. It must be noted that at

no stage were detailed heritage surveys of the entire mining property undertaken. This is due to the fact that the mining property had originally been assessed at the time of the Phase 1 Heritage Impact Assessment compiled by Pistorius (2004). The current work identified four heritage features, namely the old building forming the focus of the archaeological and heritage mitigation work, an old water reservoir, old school yard as well as the site where the original mine village is believed to be located.

The following recommendations are made with regard to the immediate surroundings of the old building as well as the wider cultural landscape:

- **Recommendations in terms of the Immediate Surroundings of the Old Building**

All heritage features that could be identified within the direct surroundings of the site were recorded on the archaeological site layout plan and were included in the archaeological mitigation of the site. As a result no further mitigation measures would be required.

- **Recommendations in terms of the Water Reservoir**

If no need exists for the structure to be demolished or impacted upon, the best option would be for it to be preserved in situ as a tangible remnant of the original mine infrastructure. Should any impacts be expected within the site boundaries as delineated in this report, archaeological mitigation and permitting would be required.

- **Recommendations in terms of the School Yard**

While no tangible remnants of the original school building appears to have been preserved, the eucalyptus trees surrounding the school yard defines a tangible link with the original school and school yard. The architectural study has showed that these eucalyptus trees are not associated with the original school. However, it is recommended that they be replaced on a tree-for-tree basis by indigenous trees and by doing this the delineation of the original school yard can be preserved.

- **Recommendations in terms of the Mine Village**

No tangible remains of the original mine village could be observed. However, it is still possible for subterranean middens and archaeological features to be present at the site. As a result, should any impacts be expected within the demarcated site boundaries, archaeological mitigation and permitting would be required.

- **General Recommendations**

Six cemeteries were identified during the 2004 heritage study across the mining property. However, these cemeteries are located away from the mine and its associated activities. A conservation management plan must be compiled with which the future conservation of these six cemeteries can be achieved.

The three identified sites from the wider cultural landscape must also be included in the conservation management plan.

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1. INTRODUCTION

PGS Heritage was appointed by De Beers Consolidated Mines Limited to undertake archaeological mitigation on historic rubbish dumps associated with an old building at the mine. As part of the appointment, PGS Heritage was requested to assist with addressing a number of requirements raised by SAHRA.

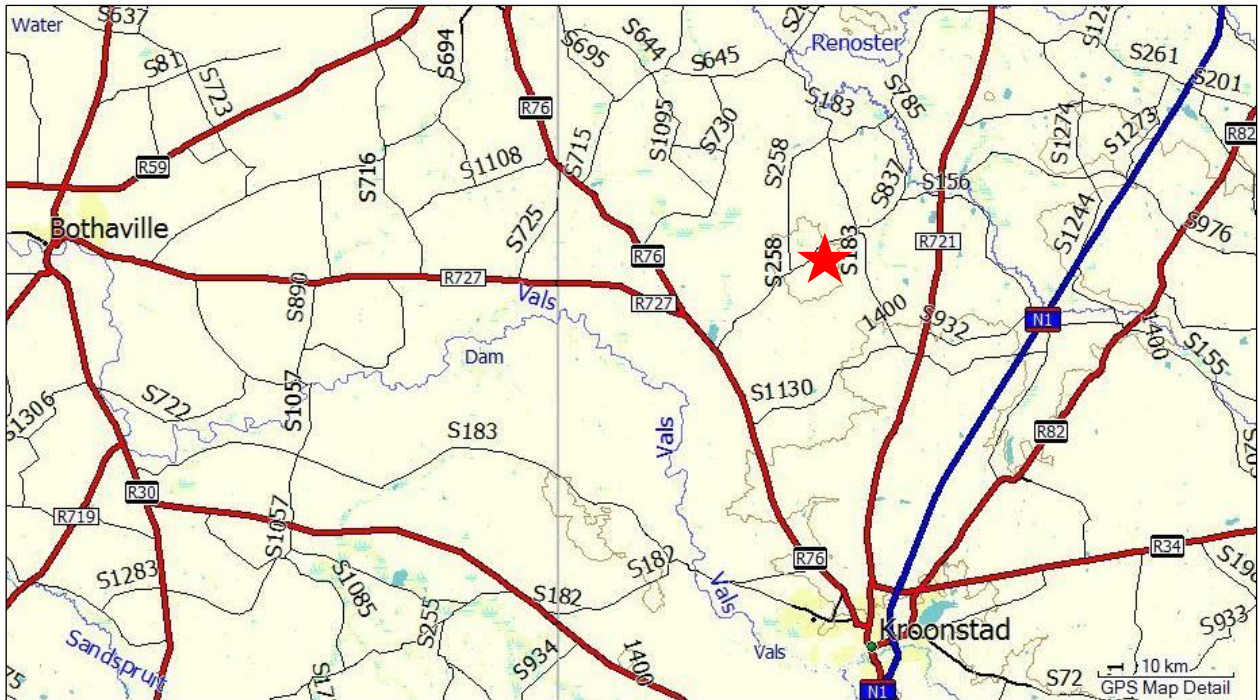


Figure 1 Map Source image depicting the site within its regional context.

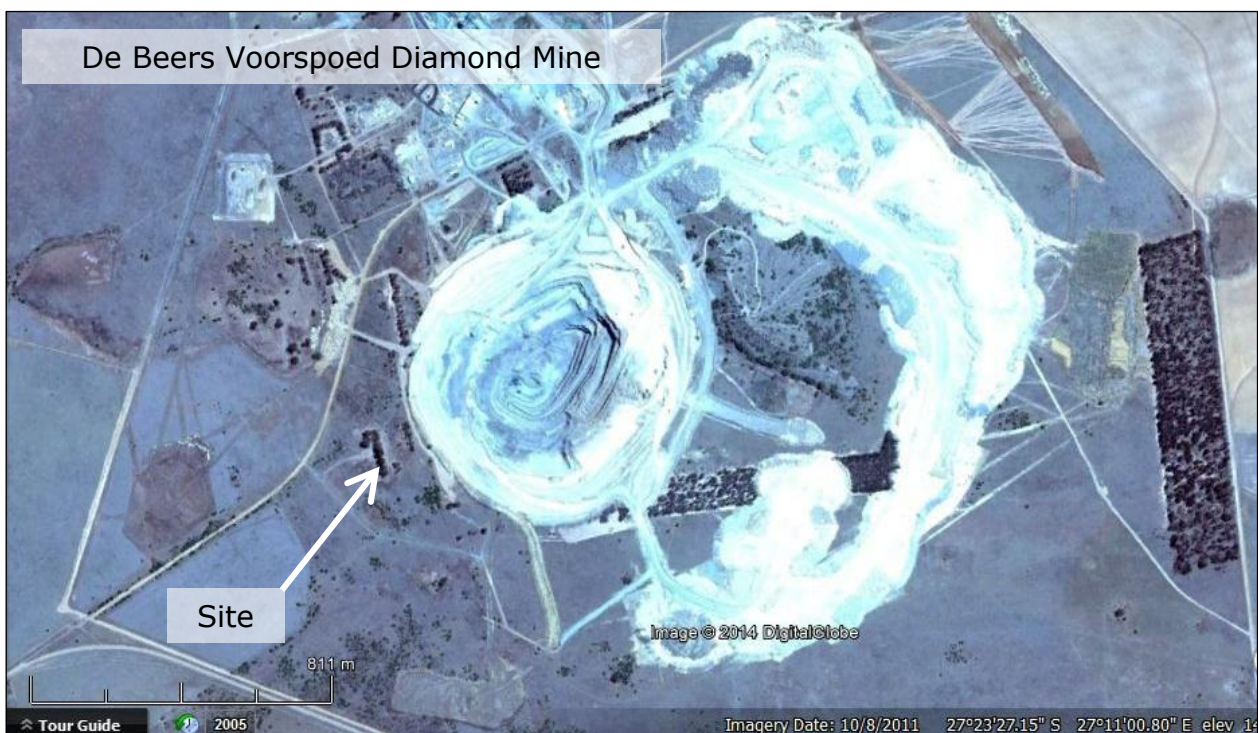


Figure 2 Google map showing the location of the archaeological site within its local context.

2. AIMS OF THE STUDY

On Wednesday, 3 April 2013 a letter was written by Ms. Mariagrazia Galimberti of the South African Heritage Resources Agency in response to an application by a party other than PGS Heritage to have the old building at the mine demolished and for the renewal of the permit which had been issued by the Free State Provincial Heritage Resources Authority. In the letter a list was made of the requirements of the SAHRA Archaeology, Palaeontology, Meteorites, Heritage Objects and Burial Grounds and Graves permit committee, which includes, as items 4 and 5, the following:

- *“...a historical archaeologist must survey the area around the building and a report from this assessment must be submitted to SAHRA for further comments.”*
- *“...the cultural landscape of the related to the history of the mine must be assessed properly.”*

The aim of this report is to address these two requirements of SAHRA. It is important to note that this document must be read in conjunction with the Phase 2 archaeological mitigation report in which a detailed overview of the history of the mine and old building is provided.

3. ASSESSMENT OF THE IMMEDIATE SURROUNDINGS OF THE SITE

3.1. Introduction

For the purposes of this report, the “immediate surroundings” of the site was defined as an area 120m from the building. In other words, the immediate surroundings of the study area can be defined as a circular area which has a radius of 120m with the old building at its centre.

3.2. Archival and Historical Information with regard to the Immediate Surroundings of the Site

A detailed archival and historical study was undertaken as part of the Phase 2 Archaeological Mitigation of the site and will not be repeated here. However, two archival and historical references included in the Phase 2 report provide such valuable insight into the immediate surroundings of the study area, that they are discussed here again.

The first of these is a historic photograph that was located in the Free State Archives (VAB, Photographs, 7932). A detailed view of a section of this photograph depicts the old building as well as its direct surroundings. This image is the only clear and known depiction of the site and its immediate surroundings during the early part of the 20th century. Although the photograph is undated, it appears to have been taken in c. 1909.

The historic photograph indicates that at the time the old building was located in a sparse landscape to the side of an active mine. The building was associated with two corrugated iron structures which appear to have been a mess and a kitchen. To the north-east, four married quarters were located. These buildings were likely constructed of brick and would have had corrugated iron roofs. Furthermore, each of these dwellings contained a number of outbuildings, including what would have been an outside toilet. Behind the row of married quarters three unidentified structures are depicted. Due to the flat perspective of the photograph it is currently impossible to state whether these unidentified structures were located directly adjacent to the old building, adjacent to the married quarters or in between the two. The low resolution of the photograph also makes the identification of these three structures very difficult.

What is known is that these unidentified structures are not depicted on the mine plan that was compiled in 1909. Similarly, neither the two corrugated iron structures associated with the old building nor any of the associated outbuildings in proximity to the married quarters are depicted on the 1909 map. The suggestion is that the three unidentified structures would have been of a similar temporary or sequential nature than what was the case with the regard to the outside structures associated with the old building and married quarters.

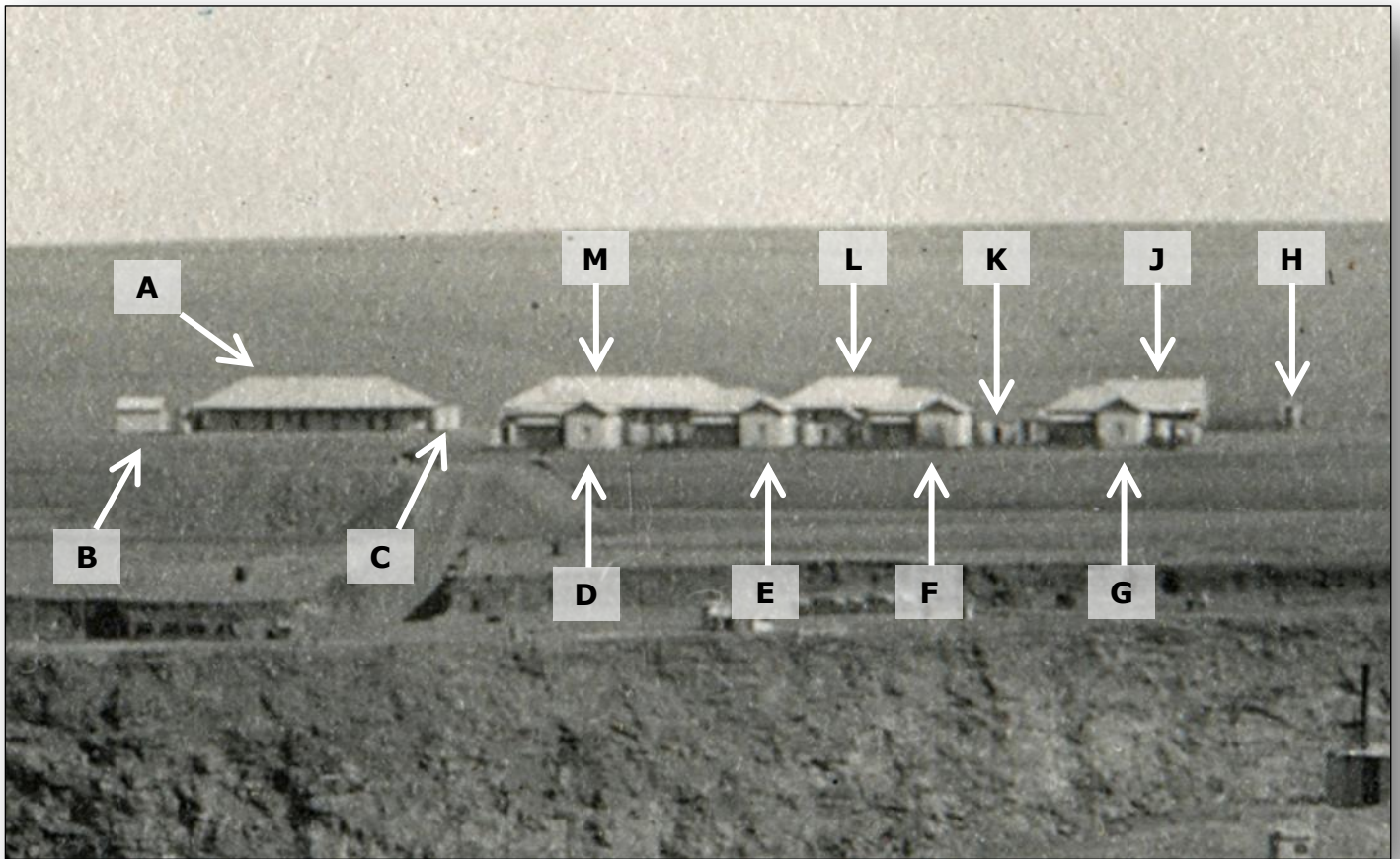


Figure 3 Detailed view of the historic photograph which depicts the old building and its immediate surroundings. The depicted letters can be described as follows (A) Old Building (B) Corrugated Structure which may have been the Mess (C) Corrugated Structure which may have been the Kitchen (D - G) Married Quarters (H) Outhouse associated with Unidentified Structure (J,L & M) Unidentified Structures which may have been associated with either the Old Building or the Married Quarters (K) Outbuilding associated with Married Quarters. It is important to note that due to the distance from which this photograph was taken, perspective has been flattened. As a result, although the married quarters appear to be located directly adjacent to the old building in reality these two features would have been at least 120m apart.

The second archival and historical reference of note for the discussion here is the map titled “Voorspoed Diamond Mining Company Limited: Plan of the Extended Mining Area” that was compiled in June 1909 by the Mines Department of the then Orange River Colony. The map was compiled for the purpose of proclaiming an extension to the existing proclaimed mining area of the Voorspoed Diamond Mining Company.

The map clearly shows that the building located at the archaeological site that is the focus of this report existed at the time and was used as bachelor’s accommodation. This means that the building was used to house single white mine workers. In terms of the direct surroundings of the study area, the map depicts only one other building located some distance to the north-east. This second building comprises staff quarters consisting of four blocks aligned in a single rectangle. Judging from the historic photograph above, these four blocks represented four individual dwellings used for accommodating married staff members and their families.

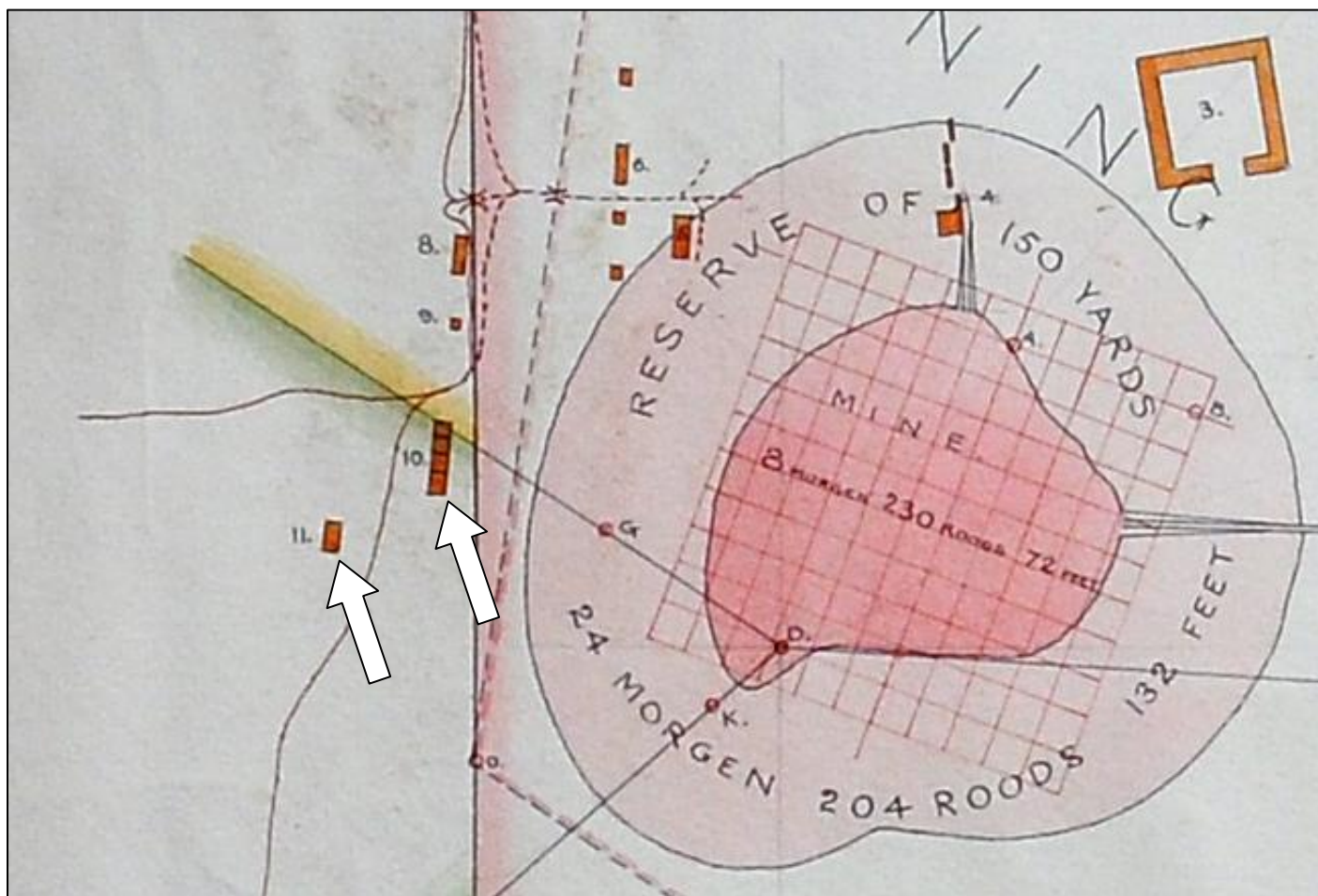


Figure 4 Section of a map titled "Voorspoed Diamond Mining Company Limited: Plan of Extended Mining Area" which is dated June 1909. The arrows indicate the position of the old building and nearby married quarters.

LIST OF BUILDINGS &c.	
1	STANDS FOR EMPLOYEES' HOUSES
2	STORAGE RESERVOIR CAPACITY 7,000,000 GALLONS
3	NATIVE COMPOUND
4	Nº 1 WASHING & HAULING GEAR
5	DETENTION & SEARCH HOUSE
6	QUARTERS & GENERAL OFFICES
7	MANAGER'S HOUSE
8	TRADING STORE
9	POST & TELEGRAPH OFFICE
10	STAFF QUARTERS
11	BATCHELOR'S QUARTERS
12	CRUSHER STATION & HAULING GEAR
13	Nº 2 WASHING GEAR
14	BOILER HOUSE
15	WORKSHOPS
16	EXPLOSIVES MAGAZINES

Figure 5 Section of the legend of the same map as depicted above. The legend provides a description of the buildings that are depicted and numbered on the map. The arrows mark the buildings in question.

3.3. Previous Heritage Studies and the Immediate Surroundings of the Site

The immediate surroundings of the study area have been the focus of heritage surveys and assessments since 2004.

- The old building was first identified during September 2004 by Dr. J.C.C. Pistorius as part of his heritage impact assessment for the proposed Voorspoed Mine of De Beers. The site was included in his report as site number HB01 and apart from the fact that he refers to the building as a 'historic building', Dr. Pistorius also states that spokespersons had indicated that the building may have been a police station. Furthermore, Dr. Pistorius identified several large middens to the north, south and west of the building and indicated that these middens may have been associated with the original function of the building or alternatively that they are associated with the more recent occupation of the building by farm labourers (Pistorius, 2004).
- On 7 December 2005 a Level 2 heritage impact assessment was undertaken by Dr. Robert de Jong of Cultmatrix (De Jong, 2005). Through archival research he established that the building in question was not the police station, but can plausibly be identified as mine offices for the old Voorspoed Mine. He also suggested a date of construction for the building of between 1906 and 1907. With regard to the immediate surroundings of the site as defined in the current report, the De Jong (2005) report indicates that five stone foundations were identified north of the old building and one directly to its south. These features were all located west of the avenue of eucalyptus trees. A further four rectangular stone foundations were identified north-east of the old building and east of this avenue of eucalyptus trees. At the same time middens were identified to the west, north-west, north and north-east of the old building.

3.4. Heritage Survey of the Immediate Surroundings of the Site

Since the start of the project, a number of site visits have been undertaken during which the immediate surroundings of the study area were walked to assess these surroundings for archaeological material. During the archaeological fieldwork undertaken between 23 and 27 September 2013 as well as during the recording of the site plan on 16 and 18 October 2013 intensive walkthroughs of the immediate surroundings of the study area were made. Ms. J. Behrens, the Principal Investigator for the archaeological project also undertook a field assessment.

The fieldwork established that with the exception of the old building, a rectangular cement structure to its immediate south, the avenue of eucalyptus trees as well as middens identified to the south, west, north-west and immediate north of the old building, none of the features identified in the De Jong (2005) report have remained. This is due to the disturbance of the site which comprises road construction and mine development. However, as indicated in the Phase 2 Archaeological Mitigation Report, it is not known exactly when these disturbances took place. The site layout plan that was recorded during the archaeological mitigation work in September and October 2013 represents the findings of the intensive walkthroughs of the immediate surroundings of the study area.

Archaeological Site Layout Plan of the Old Building at Voorspoed Mine

Field Survey: 16 & 18 October 2013

Compiled By: P.D. Birkholtz

Date: 1 February 2014

Legend

True North 

Map Scale  5m

Shovel Test Pits  ⑥

Eucalyptus Tree 

Pepper Tree 

Disturbance from Earthmoving Activities in this Area

Berm from Earthmoving Activities

Berm from Road Making Activities

Berm from Earthmoving Activities

② Mound

③ Low Mound

Car Body

Cement Slab

Detail of Grid Square E8

①
E8 / 12
E8 / 13

10

Berm Representing Edge of Mine Pit

3.5. Recommendations in terms of the Immediate Surroundings of the Site

All heritage features that could be identified within the direct surroundings of the site were recorded on the archaeological site layout plan and were included in the archaeological mitigation of the site. As a result no further mitigation measures would be required.



Figure 6 General view of the immediate surroundings of the old building as seen from the north-west.



Figure 7 Another general view of the old building as seen from the north.

4. ASSESSMENT OF THE CULTURAL LANDSCAPE SURROUNDING THE SITE

4.1. Introduction

For the purposes of this report, the cultural landscape surrounding the site will be the wider mining property, with emphasis placed on those areas closer to the general vicinity of the site. This said, the immediate surroundings of the site as defined in the previous section are not included here.

4.2. Archival and Historical Information with regard to the Wider Cultural Landscape of the Study Area

A detailed archival and historical study was undertaken as part of the Phase 2 Archaeological Mitigation of the site and will not be repeated here. However, a number of archival and historical references provide insight into the cultural landscape. These include a map of the mine that was compiled in 1909 as well as a number of historic photographs depicting various aspects of the mine over time. The map will be discussed in more details below, whereas the photographs will be used to highlight certain elements of the cultural landscape further down.

4.2.1 Voorspoed Mine Plan dating from 1909

The map in question is titled “*Voorspoed Diamond Mining Company Limited: Plan of the Extended Mining Area*” and was compiled in June 1909 by the Mines Department of the then Orange River Colony. It was compiled for the purpose of proclaiming an extension to the existing proclaimed mining area of the Voorspoed Diamond Mining Company. The map depicts the cultural landscape of the mine at the time, and apart from mining pits and mine excavations, sixteen individual features are depicted. The numbering used on the list below corresponds with the numbering used on the map. The sixteen depicted features are as follows:

- 1) Stands for Employee Houses
- 2) Storage Reservoir
- 3) Compound for Black Mineworkers
- 4) No. 1 Washing and Hauling Gear
- 5) Quarters and General Offices
- 6) Detention and Search House
- 7) Manager’s House
- 8) Trading Store
- 9) Post and Telegraph Offices
- 10) Staff Quarters
- 11) Bachelor’s Quarters
- 12) Crusher Station and Hauling Gear

- 13) No. 2 Washing Gear
- 14) Boiler House
- 15) Workshops
- 16) Explosives Magazines

From this list, the bachelor's quarters (Building Number 11) represent the old building that forms part of the site whereas the staff quarters (Building Number 10) represent the married quarters that used to be located a short distance north-east of the old building. These two buildings are dealt with in the previous section and will not be discussed again in this section.

In general terms, the list of buildings depicted on the map represent the type of buildings that one would expect to find on a mining operation from the turn of the century, including separated accommodation for single and married white staff as well as a separation between white staff members and black staff members. At the time black mineworkers were housed in separate compounds. One reasonably unique building listed above would be the Detention and Search House. Arguably, this building may have been typical of the early diamond mines.

The distribution of buildings across the landscape also indicate that the accommodation for white staff were built in the same general vicinity on the western end of the mine pit where the mine offices, shop and post and telegraph offices were located. The largest majority of the buildings associated with the operational activities of the mine such as the crusher station, hauling gear, No. 2 washing gear, boiler houses and workshops were all located on the eastern end of the mine pit. The compound for black staff as well as the original mine plant in the form of the No. 1 washing and hauling gear were located in proximity to each other on the northern end of the mine pit. Four explosives magazines were located on its own on the south-eastern end of the mine pit.

The mine manager's house appears to be one of the more isolated buildings from the site at the time and is depicted on its own near the north-western end of the mine.

On the northern end of the mining property a massive water reservoir is depicted. The capacity of this water reservoir is given as seven million gallons which equates to an impressive 26,497,882.49 litres or 26 mega litres.

In proximity to the water reservoir a total of 39 residential stands that are grouped in four blocks are depicted. These residential stands would have been the start of the mine village where white married staff and their families would have been able to reside.

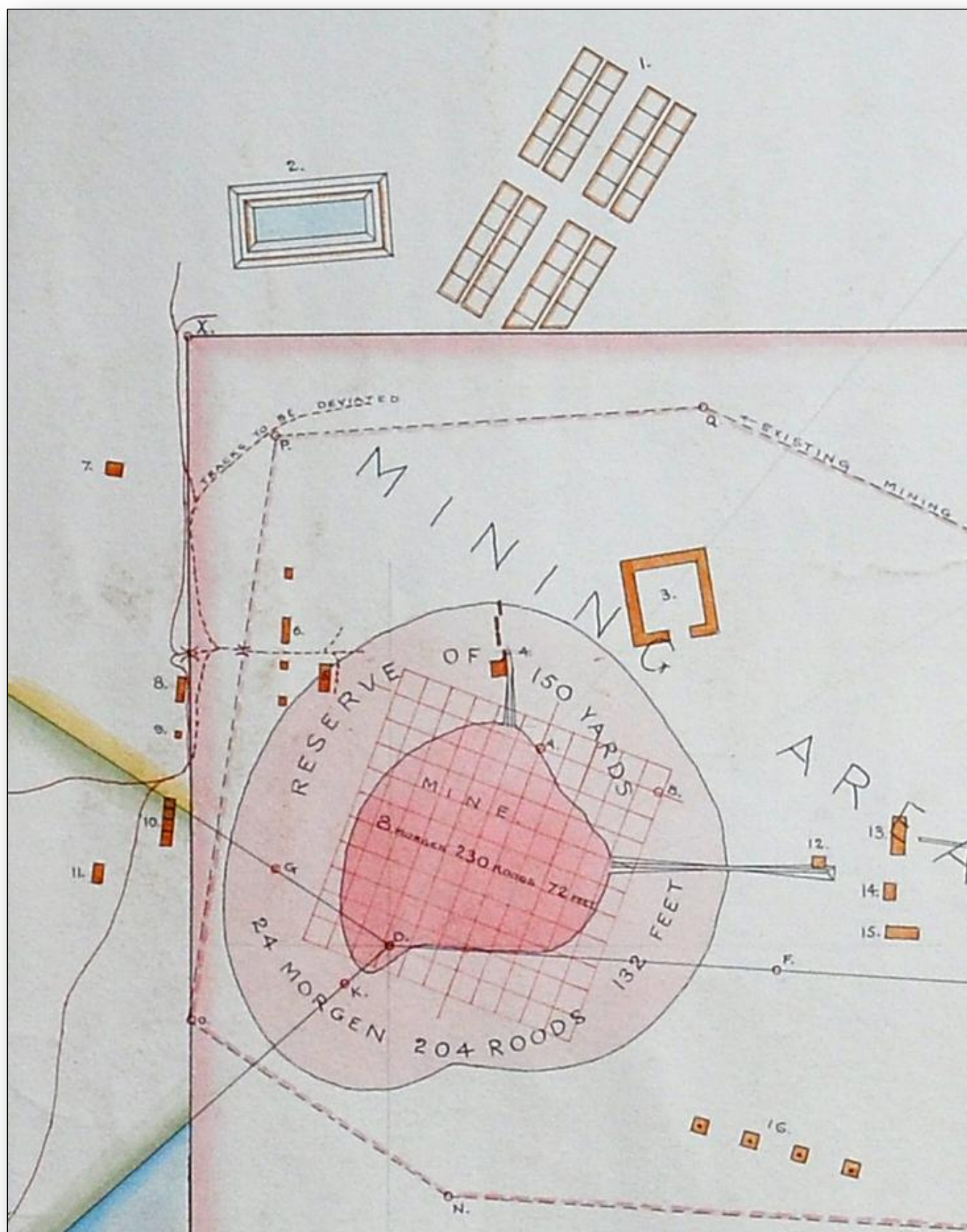


Figure 8 Section of a map titled "Voorspoed Diamond Mining Company Limited: Plan of Extended Mining Area" which is dated June 1909.

4.2.2 Aerial Photograph dating from 1951

The second archival and historical reference of note here is an aerial photograph that was taken in 1951 (NGI, Aerial Photographs, 206_1951_11_321). Although the photograph is not clear, the following features could be identified:

- (A) Avenues of trees appear to be the only remaining evidence for what was once the Voorspoed mine village.
- (B) The school and school ground are still shown.
- (C) The water reservoir can clearly be seen.
- (D) An unidentified structure is depicted here. This structure did not appear on the 1909 map.
- (E) A cluster of three buildings is depicted here. A comparison with the 1909 map suggests that at least one of these buildings was the old mine manager's residence.
- (F) A cluster of at least two buildings are depicted for the first time.
- (G) The old building forming part of the site is depicted.
- (H) An unidentified building is depicted here for the first time. The original four buildings used for married quarters are not depicted on this image.
- (I) Four explosives magazines are depicted here.
- (J) The remains of the old compound can be identified here. It is evident that the building was not in use at the time and appears to have been demolished by the time that this aerial photograph was taken.

A general observation which can be made is that the landscape has changed significantly in the 42 years since the original mine map was compiled. From the features depicted on the original 1909 map, only the water reservoir, mine manager's house, old building and explosives magazines are still visible on the 1951 aerial photograph.

Furthermore, a number of buildings had evidently been added to the landscape during this time including the unidentified structure at Building D, the cluster of three buildings at Building E as well as a cluster of two buildings at Building F.

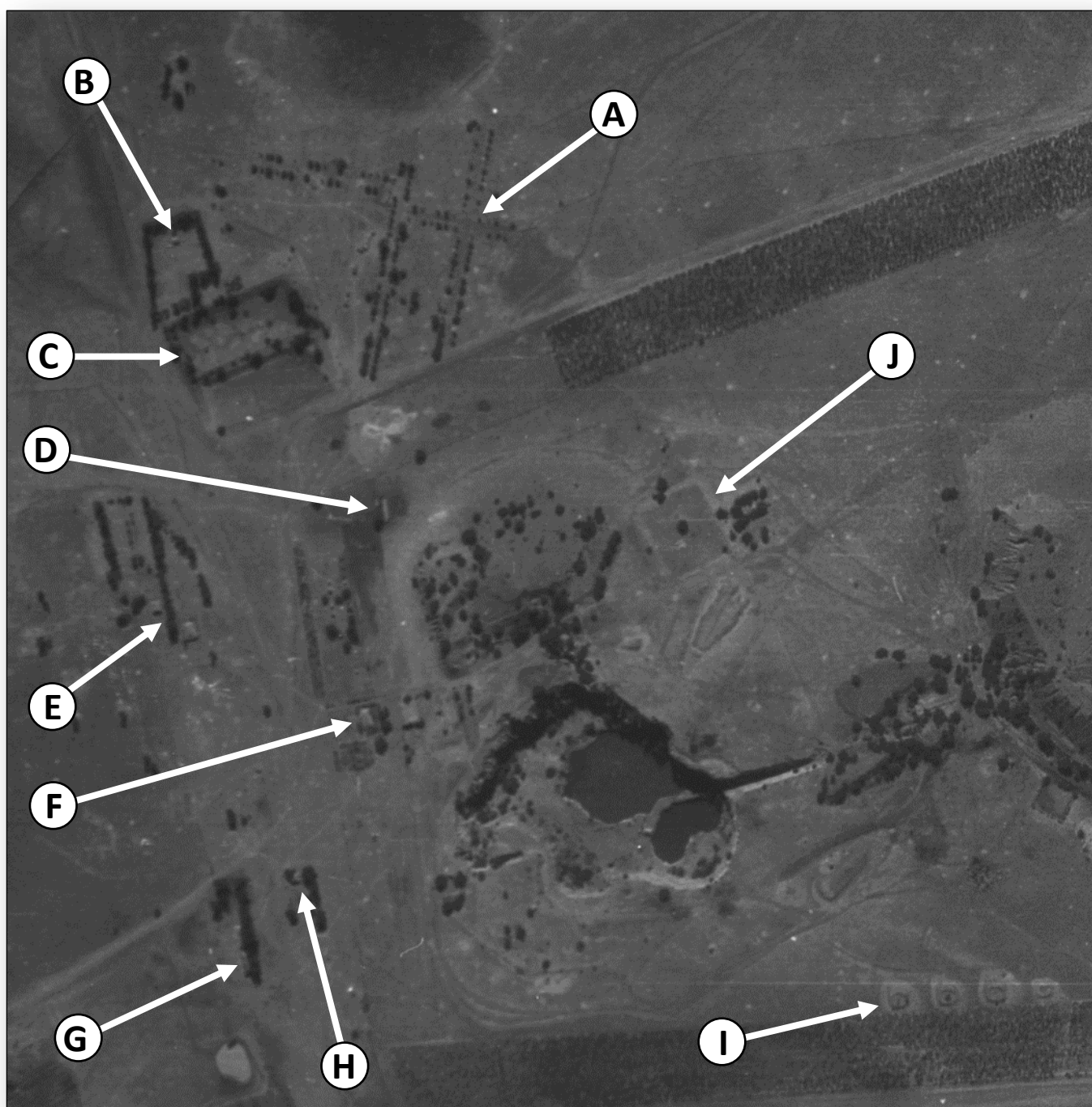


Figure 9 Portion of the 1951 aerial photograph (NGI, Aerial Photographs, 206_1951_11_321).

4.2.3 Aerial Photograph dating from 1964

The third archival and historical reference of note here is an aerial photograph that was taken in 1964 (NGI, Aerial Photographs, 519_1964_08_3399). The following observations can be made:

- (A) Apart from the same avenues of trees representing the old street layout of the Voorspoed mine village, a number of houses are also depicted.
- (B) The school and school ground are still shown. The school is shown to consist of two buildings.
- (C) The water reservoir can clearly be seen.
- (D) An unidentified structure is depicted here. This structure did not appear on the 1909 map, but is depicted on the 1951 image.
- (E) The 1951 aerial photograph depicts a cluster of three buildings here. On this 1964 image at least two buildings are shown, although these buildings are in a different position than what was depicted on the 1951 image.
- (F) A cluster of at least two buildings was depicted on the 1951 image. The 1964 aerial photograph indicates that a number of buildings were added in the 13 years since the previous image was taken.
- (G) The old building forming part of the site is depicted again.
- (H) The same unidentified building that was depicted here on the 1951 image is shown again.
- (I) Four explosives magazines are still depicted here.
- (J) The remains of the old compound can still be identified here.

In general terms, although some changes have taken place in the landscape in the 13 years since the previous photograph had been taken, the most significant change appears to be the re-use of the old mine village and the construction of a number of houses here. These buildings may either have been constructed for use by the mine during the exploration activities which commenced during the 1960s or alternatively the buildings were erected as accommodation for farm workers.

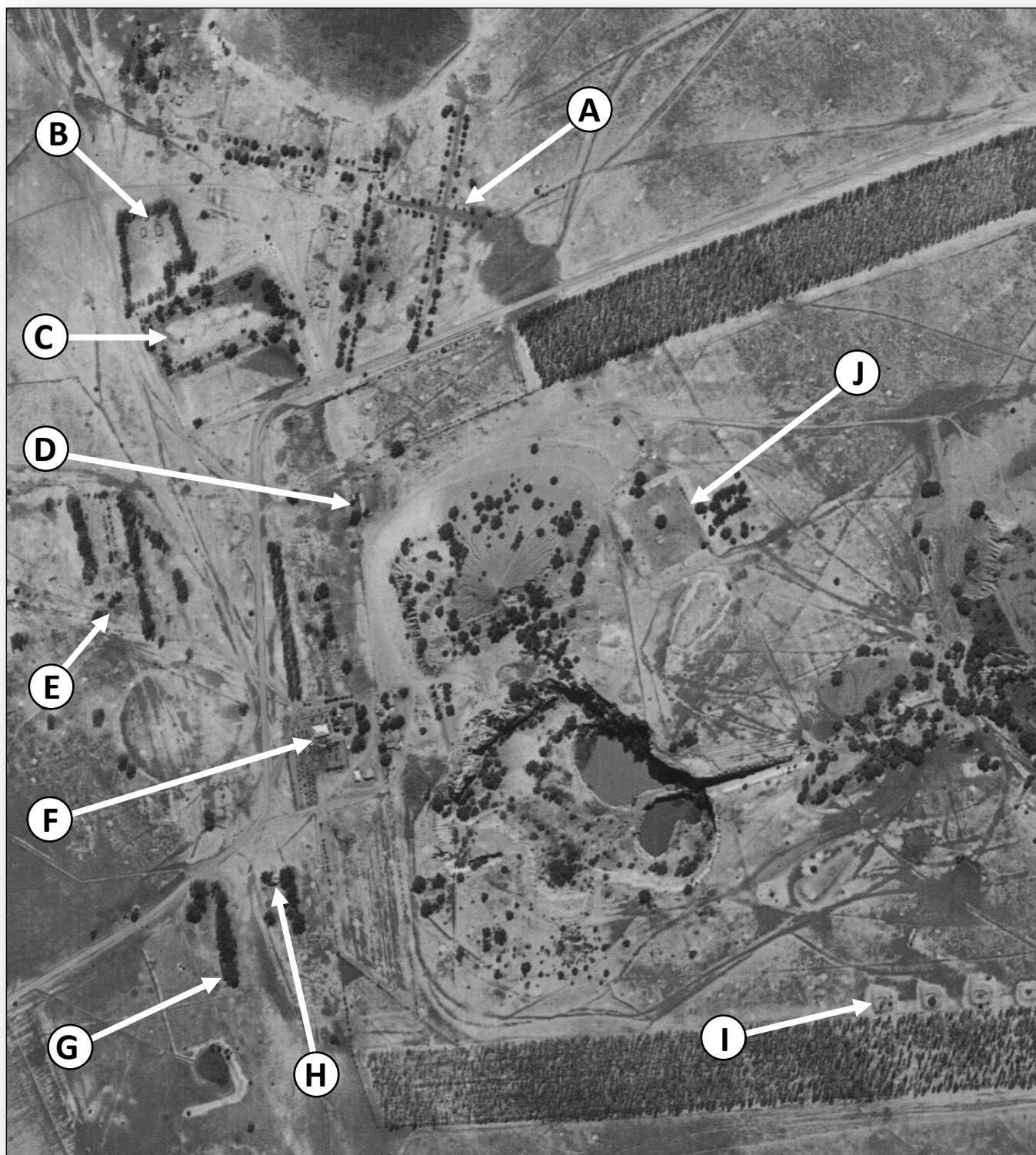


Figure 10 Portion of the 1964 aerial photograph (NGI, Aerial Photographs, 519_1964_08_3399).

4.2.4 Aerial Photograph dating from 1975

The fourth archival and historical reference of note here is an aerial photograph that was taken in 1975 (NGI, Aerial Photographs, 755_1975_09_5359). The following observations can be made:

- (A) Apart from the same avenues of trees representing the old street layout of the Voorspoed mine village, a number of houses are still depicted.
- (B) The school and school ground are still shown. The school is shown to consist of two buildings.
- (C) The water reservoir can clearly be seen.
- (D) The unidentified structure that was depicted on the 1964 image is not shown on this image.
- (E) The 1951 aerial photograph depicts a cluster of three buildings here. On the 1964 image at least two buildings are shown, although these buildings are in a different position than what was depicted on the 1951 image. On the 1975 image the only structure still to be seen here appears to be a livestock enclosure.
- (F) A cluster of at least two buildings was depicted on the 1951 image. The 1964 aerial photograph indicates that a number of buildings were added in the 13 years since the previous image was taken. While the 1975 image does not depict additional buildings, it does show that this site was actively occupied and used.
- (G) The old building forming part of the site is depicted again.
- (H) The same unidentified building that was depicted here on the 1951 image is shown again.
- (I) Four explosives magazines are still depicted here.
- (J) The remains of the old compound can still be identified here. For the first time houses are shown at the site. It is possible that these houses were erected as accommodation for the black staff of the mine during exploration activities undertaken at the time.

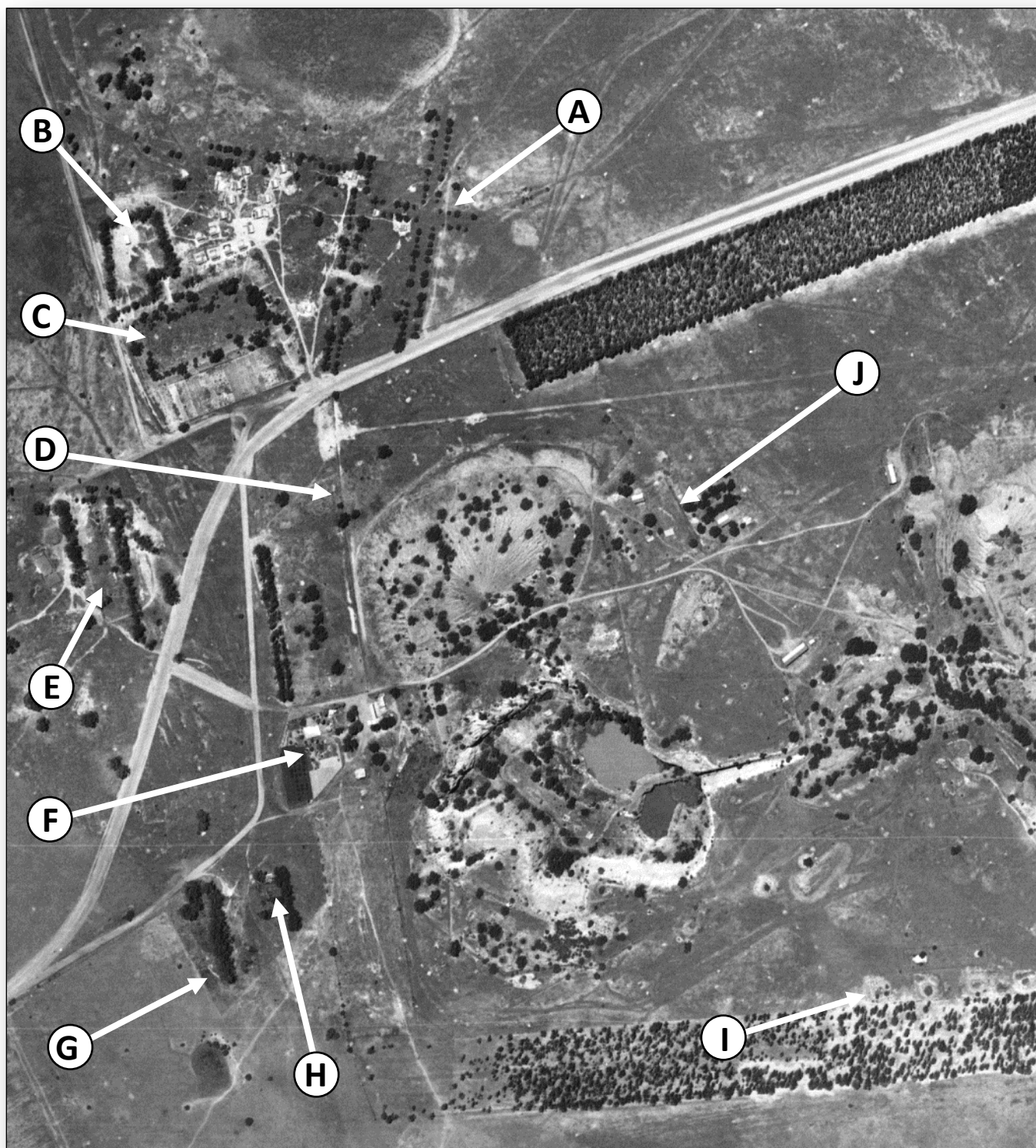


Figure 11 Portion of the 1975 aerial photograph (NGI, Aerial Photographs, 755_1975_09_5359).

4.2.5 Aerial Photograph dating from 1984

The fifth archival and historical reference of note here is an aerial photograph that was taken in 1984 (NGI, Aerial Photographs, 498_203_1984_15_5542). The following observations can be made:

- (A) Apart from the same avenues of trees representing the old street layout of the Voorspoed mine village, a large number of houses are depicted in the area where the old mine village used to stand.
- (B) The school and school ground are still shown.
- (C) The water reservoir can clearly be seen.
- (D) The unidentified structure that was first depicted on the 1964 image is again not shown on this image.
- (E) The 1951 aerial photograph depicts a cluster of three buildings here. On the 1964 image at least two buildings are shown, although these buildings are in a different position than what was depicted on the 1951 image. On the 1975 image the only structure still to be seen here appears to be a livestock enclosure. The same can be said for this 1984 image.
- (F) While the 1975 image does not depict additional buildings, it does show that the site was actively occupied and used. However, the 1984 image appears to show less activity at the site, almost to the extent that it has been abandoned.
- (G) The old building forming part of the site is depicted again.
- (H) The unidentified building that was still depicted on the 1975 image is not shown anymore.
- (I) Four explosives magazines are still depicted here. Two new buildings are depicted north of the old explosives magazines.
- (J) Very little of the old compound can still be identified on this image. Furthermore, the houses that were depicted for the first time on the 1975 image are not shown anymore. A short distance to the east of where the compound was located a large new building is depicted. This building appears to have been a shed.

The additional houses at the old mine village, additional two buildings at the explosives magazines as well as the new large shed-like building can all be related to the exploration activities which had been undertaken in the years leading up to 1984. It is also known that during the mid 1980s the recommendation was made for mining to recommence at the mine. The abandoned appearance of Buildings F and G and the disappearance of Buildings D and H may have been related to the decision for mining to restart.

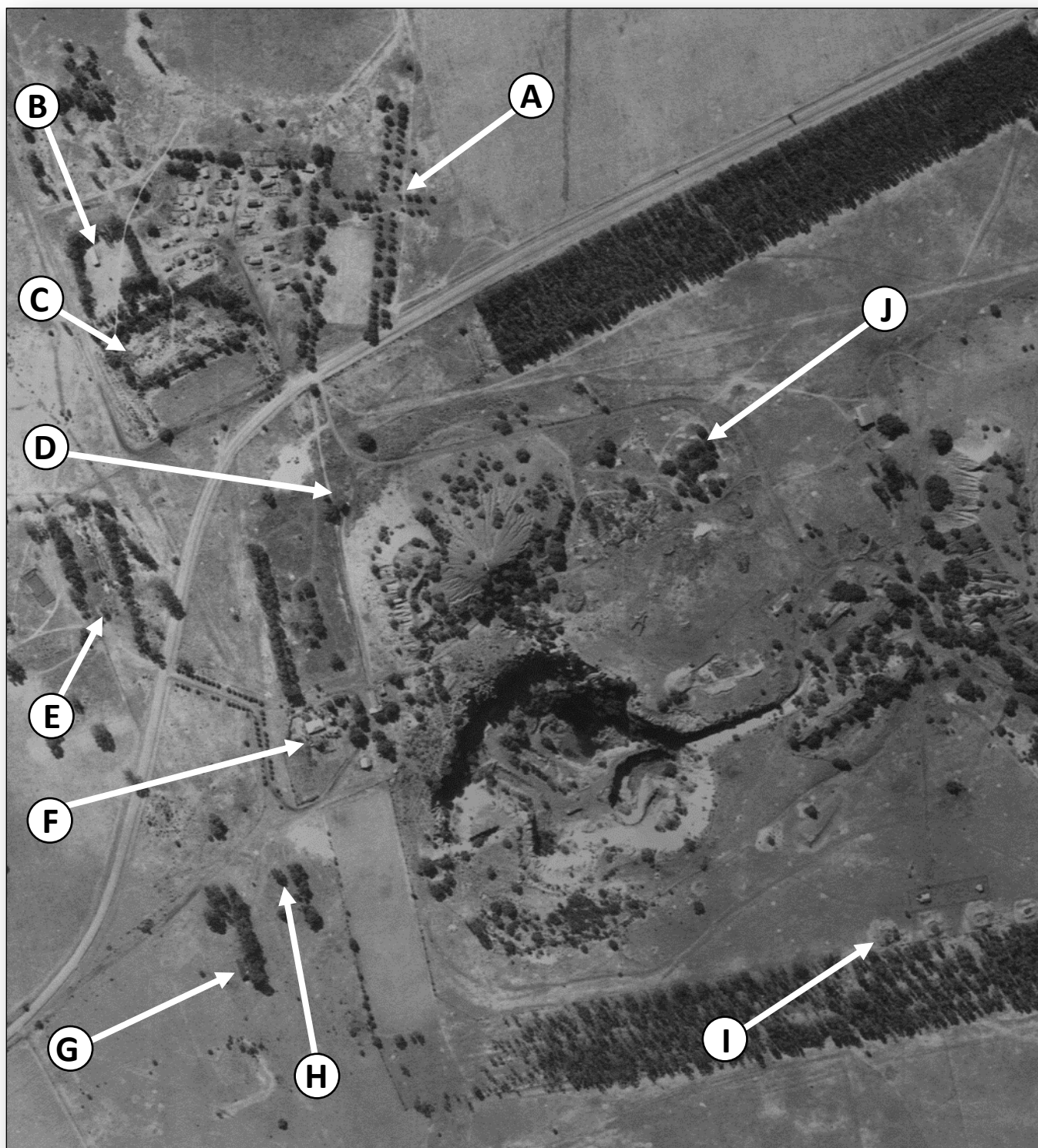


Figure 12 *Portion of the 1975 aerial photograph (NGI, Aerial Photographs, 498_203_1984_15_5542).*

4.3. Previous Heritage Studies and the Immediate Surroundings of the Study Area

The wider landscape surrounding the site has been the focus of heritage surveys and assessments since 2004.

4.3.1 Phase 1 Heritage Impact Assessment

During September 2004 a heritage impact assessment was undertaken by Dr. J.C.C. Pistorius for the proposed reopening of the Voorspoed Diamond Mine. The study area of his assessment comprised portions of the farms Voorspoed 401, Voorspoed 2480, Morgenster 772 and Geldenhuys 1477 (Pistorius, 2004).

Dr. Pistorius identified a number of sites within the 'critical area' of the property. These will be discussed individually below:

- Historical Building (HB01)

This is the old building that represents the focus of the archaeological and heritage mitigation projects undertaken at the moment.

- Remains of Early Diamond Mining Activities

The pit and waste rock dumps of the old Voorspoed Diamond Mine formed part of this site. As stated in the report, these features would have been impacted upon by the proposed reopening of the mine.

- Face-brick residence with outbuildings (RRP01)

The face-brick residence with outbuildings is the building cluster discussed as Building F on the aerial photographs above. The site was indicated to be of no outstanding architectural or historical significance in the Pistorius report. This building cluster does not exist anymore.

- Compound (RRP02)

The compound comprised a large number of cement brick houses with pitched corrugated iron roofs. It is important to note that the compound referred to here is not the compound remains associated with the original Voorspoed Diamond Mine but rather represents accommodation for black staff members from the more recent past.

It would appear that the site identified by Dr. Pistorius represents the relatively recent reuse of the original mine village. This reuse includes the construction and occupation of relatively recent houses with pitched corrugated iron roofs.

The report states that the site is of no historical significance. As a result it is unlikely for the site to still exist.

- Explosives magazine (RRP03)

The explosives magazine was located south-east of the pit area and comprised two face-brick buildings. These two buildings seem to be the ones that appeared on the 1984 aerial photograph and that were constructed a short distance north of the original explosives magazine structures. These buildings were designated to be of no historical significance in the Pistorius report. It is unlikely that this site still exists.

- Historical Graveyard (GY01)

A cemetery containing roughly 50 graves is located here. The cemetery is located near Renosterkop and is situated approximately 1.3km south-west of the old building.

- Historical Graveyard (GY02)

A cemetery containing six graves is located here. The cemetery is roughly 1.7km north-west of the old building.

- Stone Age Occurrences

This is described in the report as “...a few loosely scattered stone tools collected from disturbed spots in the project area” (Pistorius, 2004).

Apart from these sites, Dr. Pistorius also identified four cemeteries (GY03, GY04, GY05 and GY06) in the peripheral area. These cemeteries are all further away from the mine, with GY03 located 2.4km to the east of the old building, GY04 roughly 3.6km south-east of the old building, GY05 roughly 4.4km north-west of the old building and GY06 roughly 4.3km north-west of the old building.

4.3.2 Phase 2 Heritage Impact Assessment

On 7 December 2005 a Level 2 heritage impact assessment was undertaken by Dr. Robert de Jong of Cultmatrix (De Jong, 2005). Through archival research he established that the building in question was not a police station, but can plausibly be identified as mine offices for the old Voorspoed Mine. They also suggested a date of construction for the building of between 1906 and 1907. The report discusses three sites namely:

- Mine Office Building

This site comprises the old building that is the focus of the archaeological and heritage mitigation projects undertaken at the moment.

- Mine Office Site

The Mine Office site comprises the building foundations and middens that were identified in the direct vicinity of the old building. As discussed elsewhere, very little of this site remains at present.

- Voorspoed Mine Village Site

The mine village site is located north-west of the pit and represents the site where the original mine village of the Voorspoed Diamond Mining Company was located. The report found that apart from trees that were planted at the time of the original mine village, no tangible remains of the original village has remained preserved. The report also indicated that a number of modern worker's cottages had been built on the original site.

The report found that the site was of low to medium significance, and recommended that archaeological sampling takes place at the mine village.

4.4. Heritage Survey of the Wider Cultural Landscape of the Study Area

The author of this report undertook a field visit to the mine on 19 December 2013 to assess the remaining cultural heritage and landscape in the wider vicinity of the old building. To assist with this fieldwork an overlay of the 1909 mine map was made using Google Earth. The positions of the original buildings from the Voorspoed Diamond Mining Company was established as a result and coordinates recorded. By using these coordinates in the field it was possible to assess what has remained of the original cultural landscape.

Apart from the old building representing the focus of the heritage and archaeological mitigation projects, the only other features from the original mine still remaining on the site are the water reservoir, the patterned layout of the trees where the original mine village was located as well as trees around the original school yard.

4.4.1 Water Reservoir

Site Coordinates:

S 27° 23' 42.6"

E 27° 11' 33.0"

Refer Delineation Map for boundaries of site.

Site Description:

The old water reservoir is located some distance north-west of the old building under discussion. It is located in proximity to existing mine buildings associated with the current mining activities. The site comprises an extensive rectangular structure which would in all likelihood have had a clay core with stones packed along the sides to strengthen the structure. The condition of the structure is still good and its centre is currently used as a scrap metal dumping area.

The water reservoir was depicted on the 1909 map and as a result is 104 years old. The structure can therefore be considered an archaeological site. All archaeological sites require permits before they are modified or destroyed.

Originally, a pumping station was located on the farm Belmont from where a pipeline carried water to this reservoir. According to the 1909 map this water reservoir had a carrying capacity of seven million gallons (roughly 26.5 megalitres) and would have been built to address the water requirements of both the diamond mine and its staff working there and living in the general vicinity.

Site Significance:

The site is reasonably unique in that it represents an early engineering work which can be associated with early mining activities. The reservoir also represented a key component in the early establishment of the mine in that the mine would never have been established was it not for the supply of water provided for by this structure. As a result the structure is of Medium to Low Significance.



Figure 13 Historic photograph depicting the mine village with the water reservoir visible on the left (Free State Archives, VAB, Photograph, 7932).



Figure 14 The north-western corner of the water reservoir can be seen behind the avenue of trees.

4.4.2 School and School Yard

Site Coordinates:

S 27° 23' 39.5"

E 27° 11' 29.8"

Refer Delineation Map for boundaries of site.

Site Description:

A short distance north of the water reservoir the tree-lined site of the old school yards was identified. While no complete buildings could be seen within this area, a close inspection revealed at least one section of a rectangular stone foundation. From archival evidence it is possible to indicate that this foundation structure represents a later use of the school. As highlighted in the discussion on the aerial photographs, various changes have taken place to this site during the period covered by the aerial photographs, namely from 1951 to 1983. In some instances buildings were added and then removed again over time.

A comparison between the available Google Earth imagery dated 8 October 2011 and the original school yard as depicted on the 1911 plan of the original mine village was made. This shows that the layout of the trees surrounding the school yard site correlates perfectly with the original boundaries of the school yard as depicted on the 1911 plan.

The original school was built in 1911 (SAB, PWD, 1881, 6711). Although the Voorspoed Mine closed down one year after the erection of the school, it is apparent that the facility still functioned for some time after the closure of the mine. According to the available archival evidence the school only closed down in 1927. The exact reasons for its long existence after the cessation of mining activities in 1912 are not presently clear. However, the possibility exists for the school to have continued due to the need for educational facilities in the local rural landscape. As a result the school may have functioned as a farm school where the children of local farmers would have been educated.

Site Significance:

The site is in a poor condition and due to the re-use of the site over the years very little of the original school appears to have remained. Furthermore, the original school building depicted on the 1911 plan appears to be currently located underneath a road which passes through the school yard site. However, the boundaries of the original school yard are preserved to this day in the layout of the trees surrounding the site. Although the school site itself is of Low Significance, the trees surrounding the site can be considered to be of a Medium to Low Significance.



Figure 15 A section of the trees defining the old school yard can be seen. This view is along the inside of the eastern boundary of the site.



Figure 16 A section of the trees surrounding the old school yard as seen from the north-east.



Figure 17 A Google Earth Image depicting the area where the school yard is located can be seen on the left. On the right a section of a mine plan depicting the village of the Voorspoed Diamond Mine is depicted. The plan was compiled on 29 August 1911 (National Archives, SAB, PWD, 1881, 6711). If a comparison is drawn between the boundaries of the school yard as defined by the avenues of trees on the Google Earth image and the boundaries of the school yard as depicted on the 1911 plan, it is evident that the two are the same.

4.4.3 Mine Village

Site Coordinates:

S 27° 23' 34.78"

E 27° 11' 33.44"

Refer Delineation Map for boundaries of site.

Site Description:

To the east of the school yard and north-east of the water reservoir the remnants of the old mine village is located. Very little of the original mine village has remained preserved, with the only tangible evidence for the old village that could be observed was in the form of some trees as well as historic and archival data. The area was briefly walked through on foot and no historic middens or structures could be observed.

While the development of the mine village would have been associated with the development of the mine, it appears that the mine village may have been established a few years after the establishment of the mine. This is said as the 1909 plan of the mine depicts 39 residential stands but no buildings. A plan that was compiled on 29 August 1911 depicts a number of buildings in the village as well as established streets (National Archives, SAB, PWD, 1881, 6711). Apart from residential buildings, the mine village would also have comprised a school as well as a police station.

It is likely that the low visibility of the original mine village may be attributed to the fact that it was re-used during the 1960s to 1980s when prospecting activities were undertaken at the mine. This re-use would have comprised the construction of new structures and buildings on the site that originally would have been the mine village.

Site Significance:

The site is in a poor condition and due to its re-use from the 1960s to 1980s very little of the original village has remained. The only tangible feature identified on the site comprises the presence of some trees. Without the presence of archaeological middens the site would be of low significance. However, the potential does exist for such middens and features to be located here. As a result, the site is deemed to be of Medium Significance.



Figure 18 *Historic photograph depicting the mine village with the water reservoir visible on the left (Free State Archives, VAB, Photograph, 7932). It is evident from this early photograph that the trees were planted at a later stage.*



Figure 19 *This photograph depicts a section of the site where the original mine village was located.*



Figure 20 Portion of the plan depicting the village at the Voorspoed Diamond Mine. The plan was compiled on 29 August 1911 (National Archives, SAB, PWD, 1881, 6711).

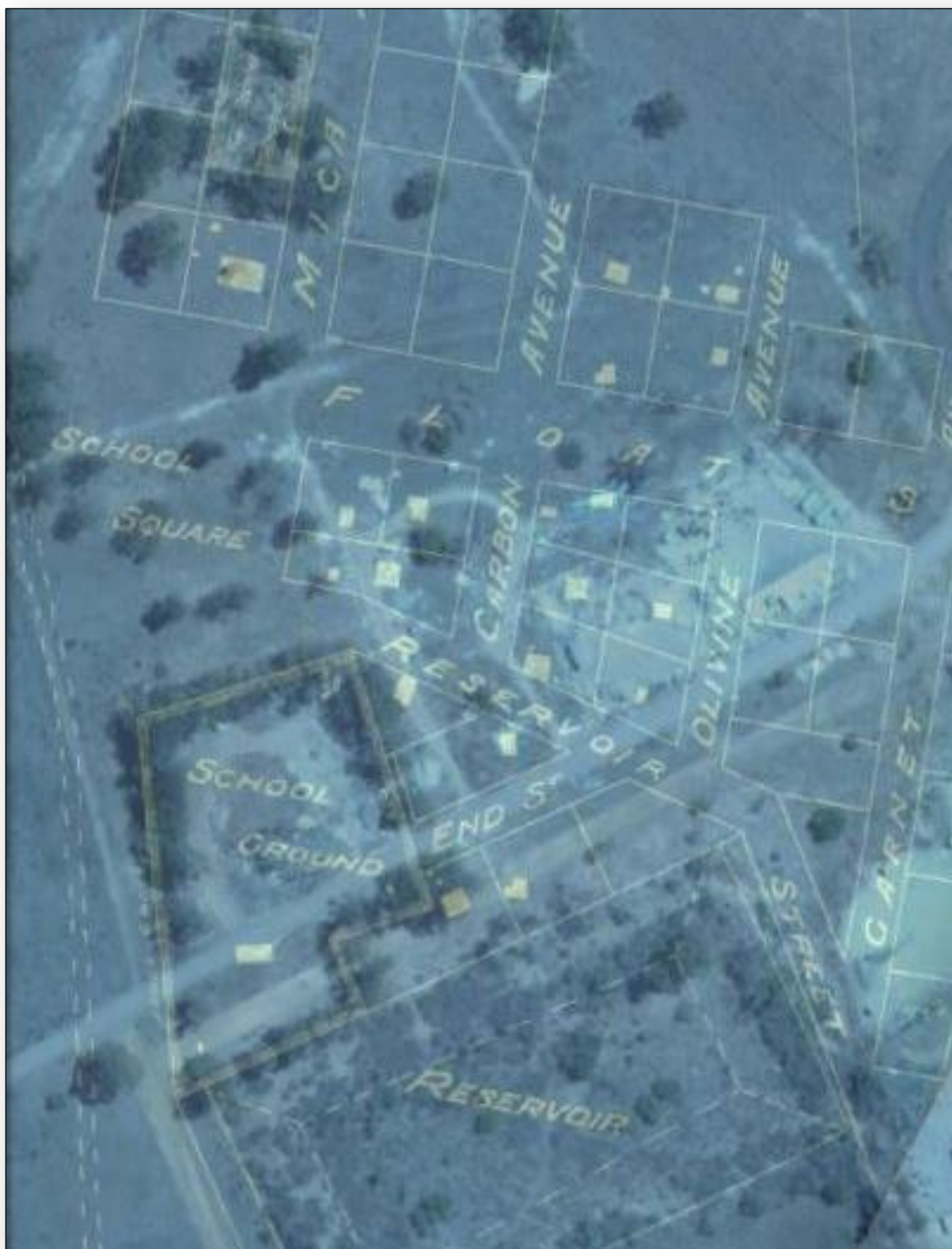


Figure 21 *Overlay of the 1911 plan depicting the original mine village on the latest available Google Earth satellite image taken in October 2011. It is evident from this image that although sections of the original mine village have been completely impacted upon by more recent activities, the possibility exists for archaeological features and middens to still be located here. The positions of the school yard and reservoir are also shown.*

4.5. Recommendations in terms of the Wider Cultural Landscape of the Study Area

4.5.1 Recommendations in terms of the Water Reservoir

If no need exists for the structure to be demolished or impacted upon, the best option would be for it to be preserved in situ as a tangible remnant of the original mine infrastructure. Should any impacts be expected within the site boundaries as delineated in this report, archaeological mitigation and permitting would be required.

4.5.2 Recommendations in terms of the School Yard

While no tangible remnants of the original school building appears to have been preserved, the eucalyptus trees surrounding the school yard defines a tangible link with the original school and school yard. The architectural study has showed that these eucalyptus trees are not associated with the original school. However, it is recommended that they be replaced on a tree-for-tree basis by indigenous trees and by doing this the delineation of the original school yard can be preserved.

4.5.3 Recommendations in terms of the Mine Village

No tangible remains of the original mine village could be observed. However, it is still possible for subterranean middens and archaeological features to be present at the site. As a result, should any impacts be expected within the demarcated site boundaries, archaeological mitigation and permitting would be required.

5. GENERAL RECOMMENDATIONS

Six cemeteries were identified during the 2004 heritage study across the mining property. However, these cemeteries are located away from the mine and its associated activities. A conservation management plan must be compiled with which the future conservation of these six cemeteries can be achieved.

The three identified sites from the wider cultural landscape must also be included in the conservation management plan.

6. SITE DISTRIBUTION AND DELINEATION MAPS

A site distribution map was compiled to depict the heritage features still identified on site. Furthermore, site delineation maps for the water reservoir, old school yard and site of the original mine village were also compiled.

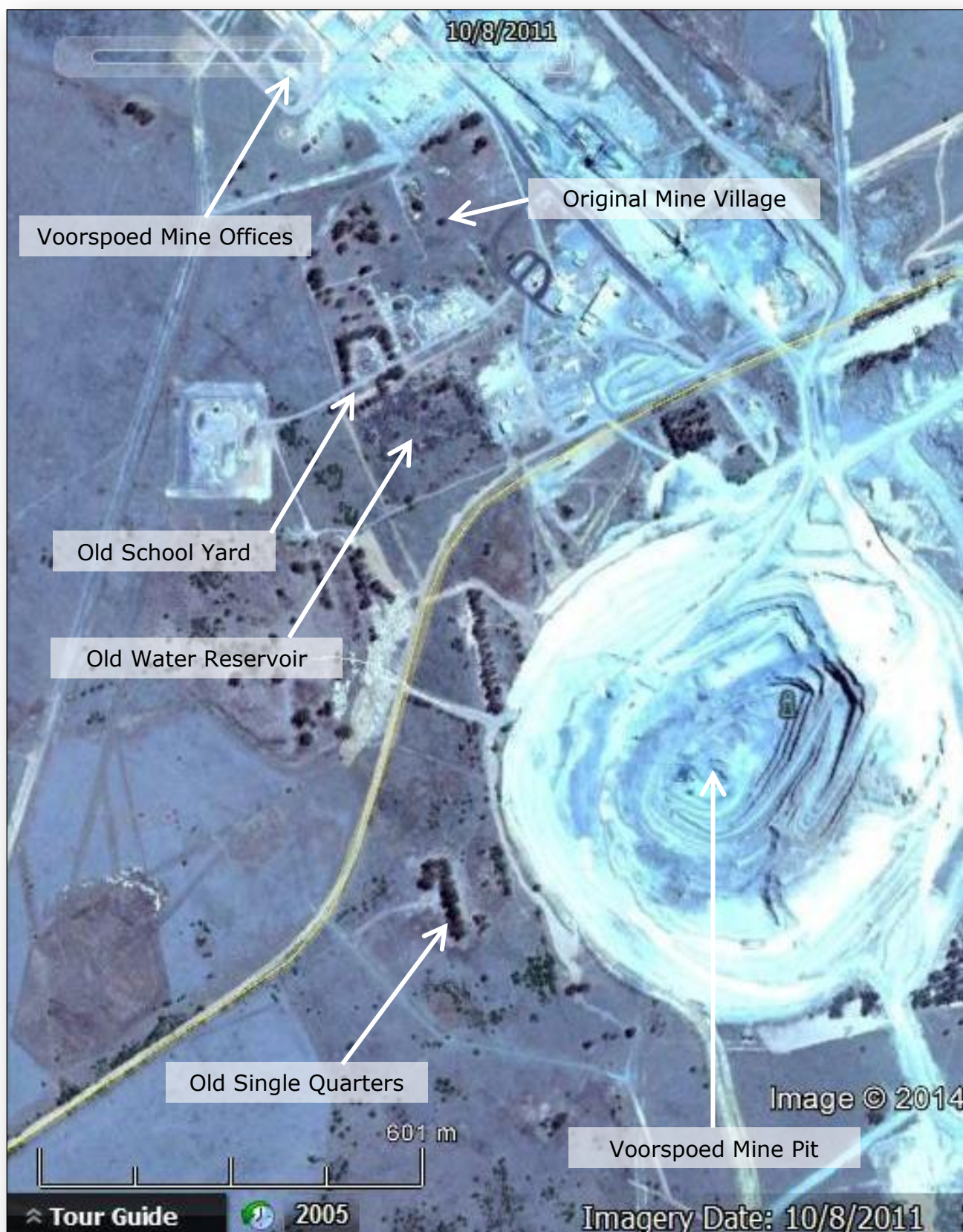


Figure 22

Google Earth image depicting the cultural landscape of the area surrounding the old building. The four remaining sites which could be identified comprise the old building (single quarters), water reservoir, school yard and site of old mine village. This satellite image is dated 8 October 2011, and as a result the mining development would have expanded from what is depicted here.



Figure 23 Google Earth image depicting the school yard and water reservoir. The boundaries for both these sites are shown.

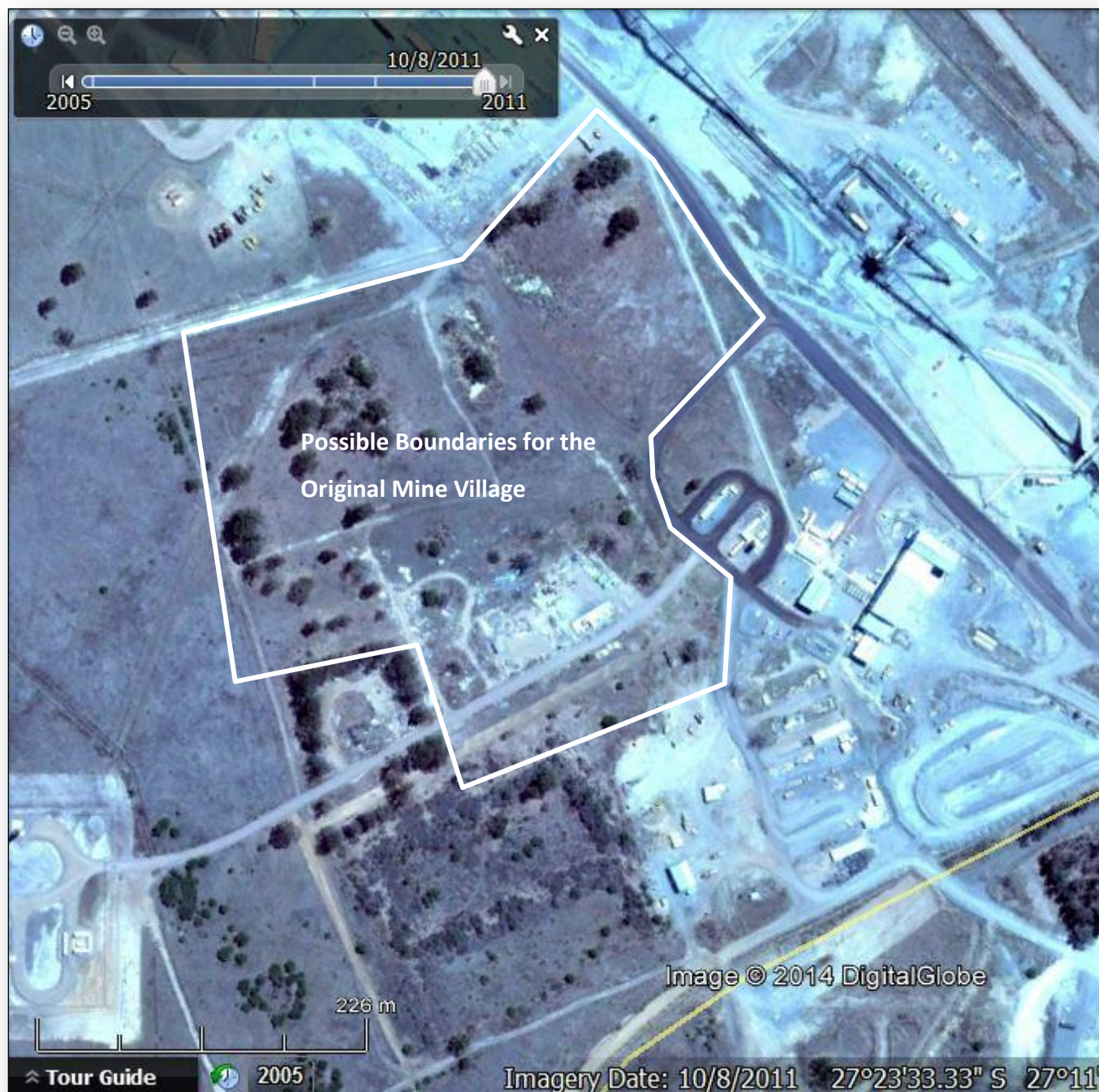


Figure 24 Google Earth image depicting the area where the original mine village was located. The possible boundary for this area is indicated.

7. REFERENCES

Unpublished References

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Galimberti, M. 2013. An unpublished letter by SAHRA entitled *Application for demolition of a building older than 100 years in disuse and request for exemption from undertaking the excavation of the midden in the Voorspoed Mine near Kroonstad, Free State*. On file at SAHRA.

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Google Earth

All satellite depictions and overlays used in this report are from Google Earth.