

6 FIELDWORK FINDINGS

6.1 Introduction

During the fieldwork, intensive field surveys of the study area were primarily undertaken on foot by an experienced fieldwork team comprising one archaeologist and heritage specialist (Polke Birkholtz) accompanied by a fieldwork assistant (Derrick James). The fieldwork was aimed at locating and documenting sites falling within the proposed development area. The fieldwork was undertaken over the course of the following six fieldwork trips:

- 5 March – 9 March 2018
- 27 March – 29 March 2018
- 18 April 2018
- 20 August – 22 August 2018
- 20 November - 22 November 2018
- 28 January – 30 January 2019

This intensive field assessment resulted in the identification of 57 archaeological and heritage sites. These identified sites will be individually discussed in this chapter and their respective locations are shown on the maps depicted on the subsequent few pages.

During the fieldwork, a hand-held GPS device was used to record track logs. These recorded track logs show the routes followed by the fieldwork team on site. The recorded track logs are also shown on maps depicted on the subsequent pages.

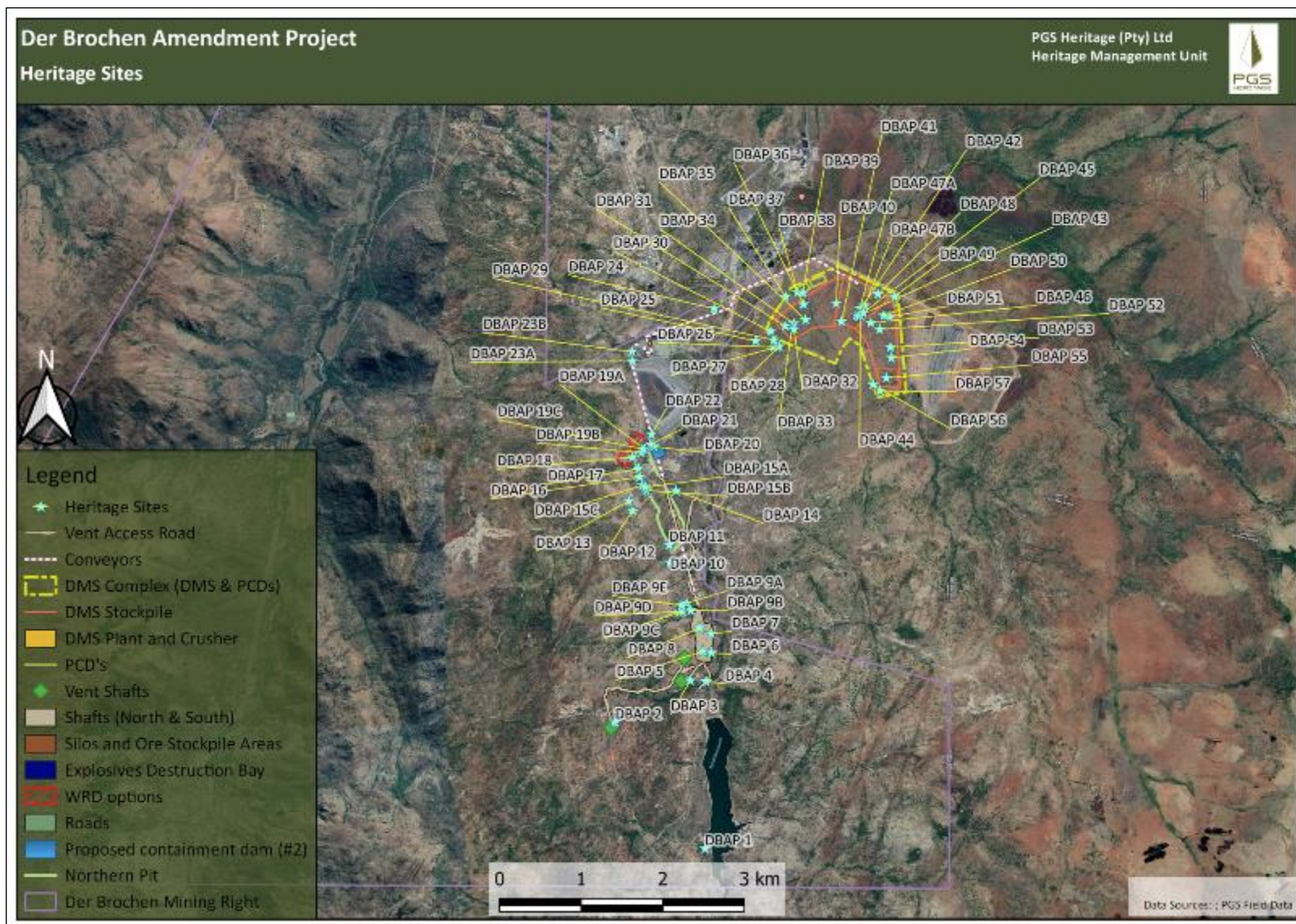


Figure 19 – This plan depicts the distribution of all 57 archaeological and heritage sites that were identified during the fieldwork.

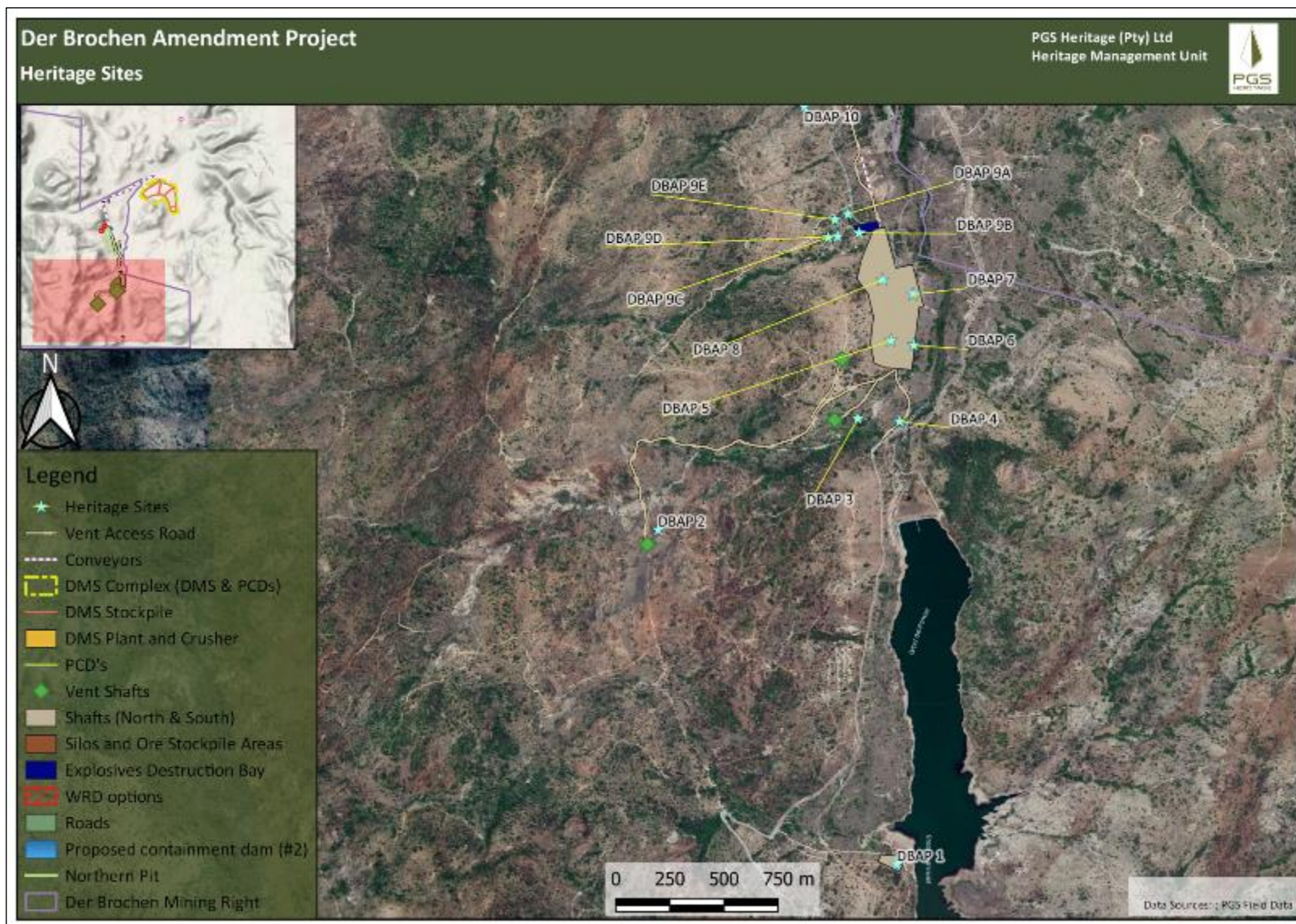


Figure 20 – This plan depicts the distribution of identified sites located within the southern component of the study area.

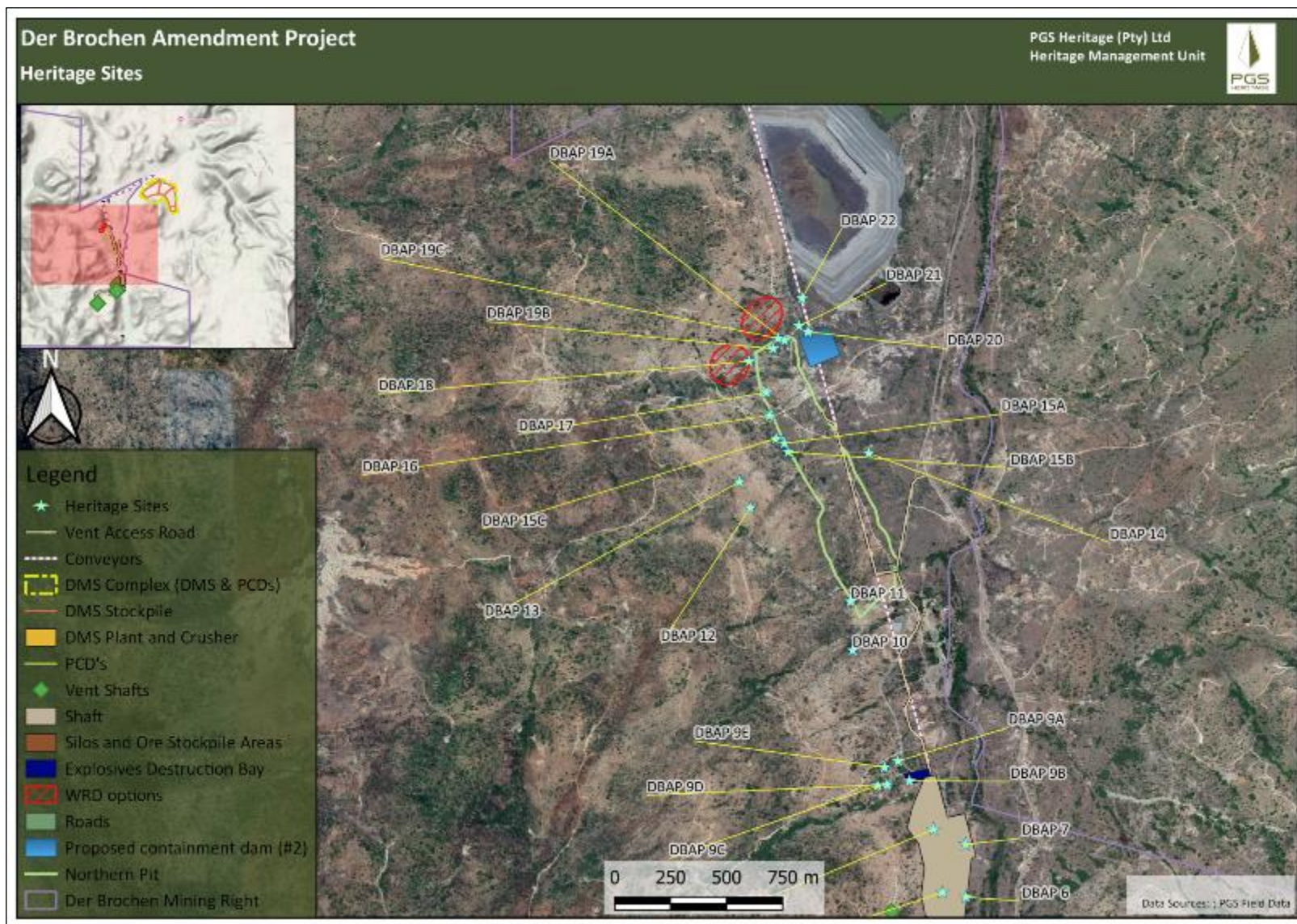


Figure 21 – This plan depicts the distribution of identified sites located within the central component of the study area.

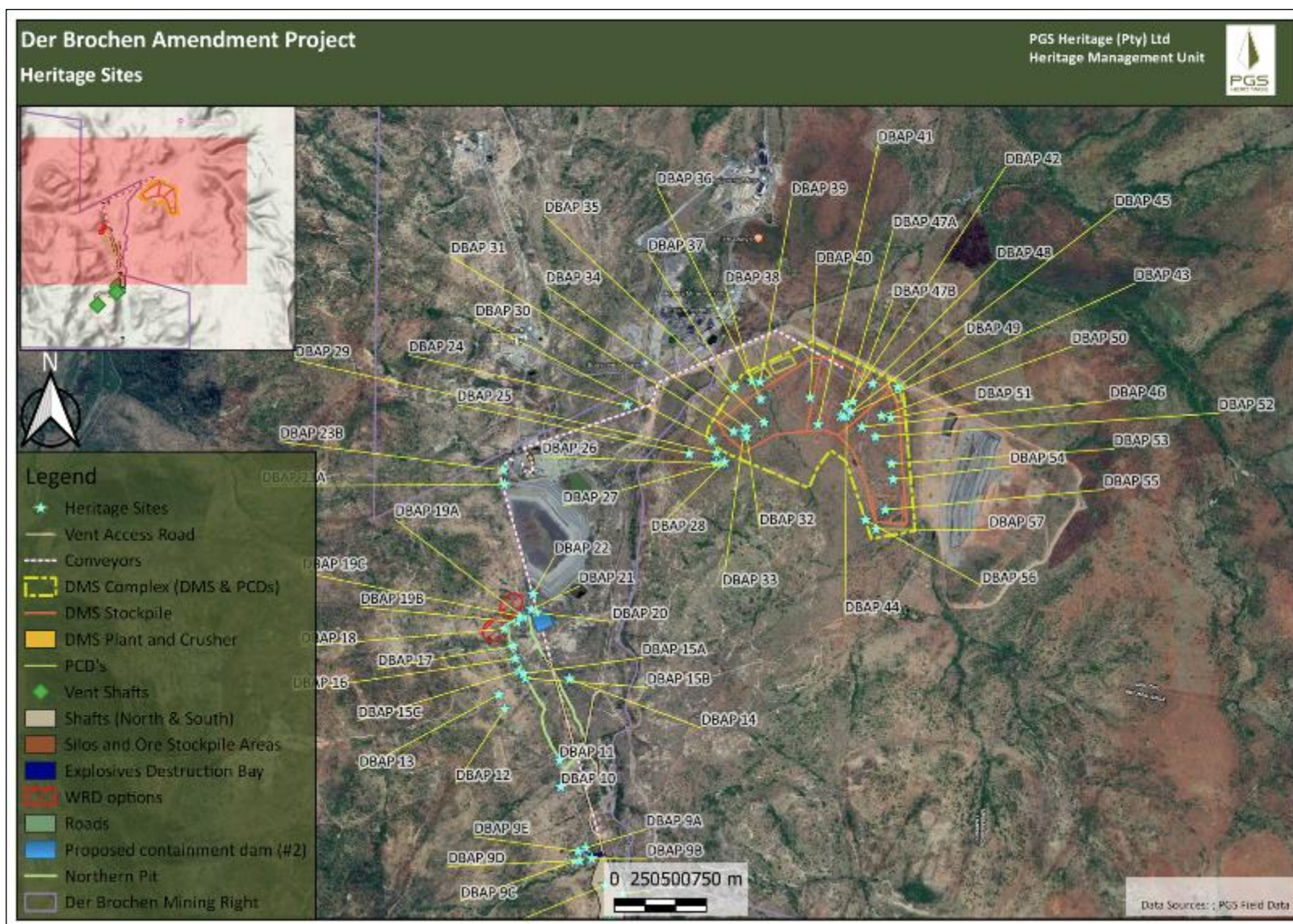


Figure 22 – This plan depicts the distribution of identified sites located within the northern component of the study area.

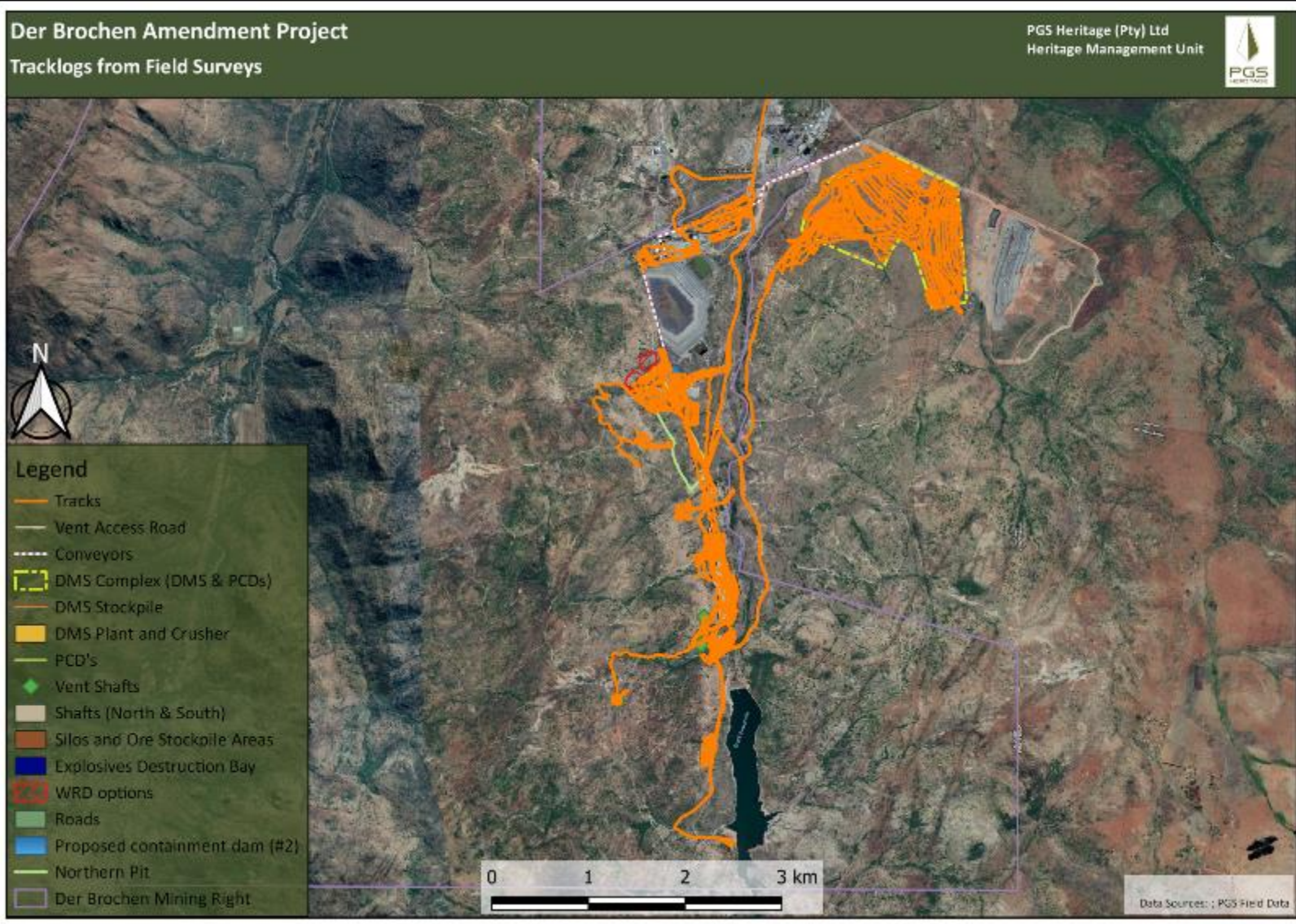


Figure 23 – This plan depicts all the track logs that were recorded during the fieldwork.

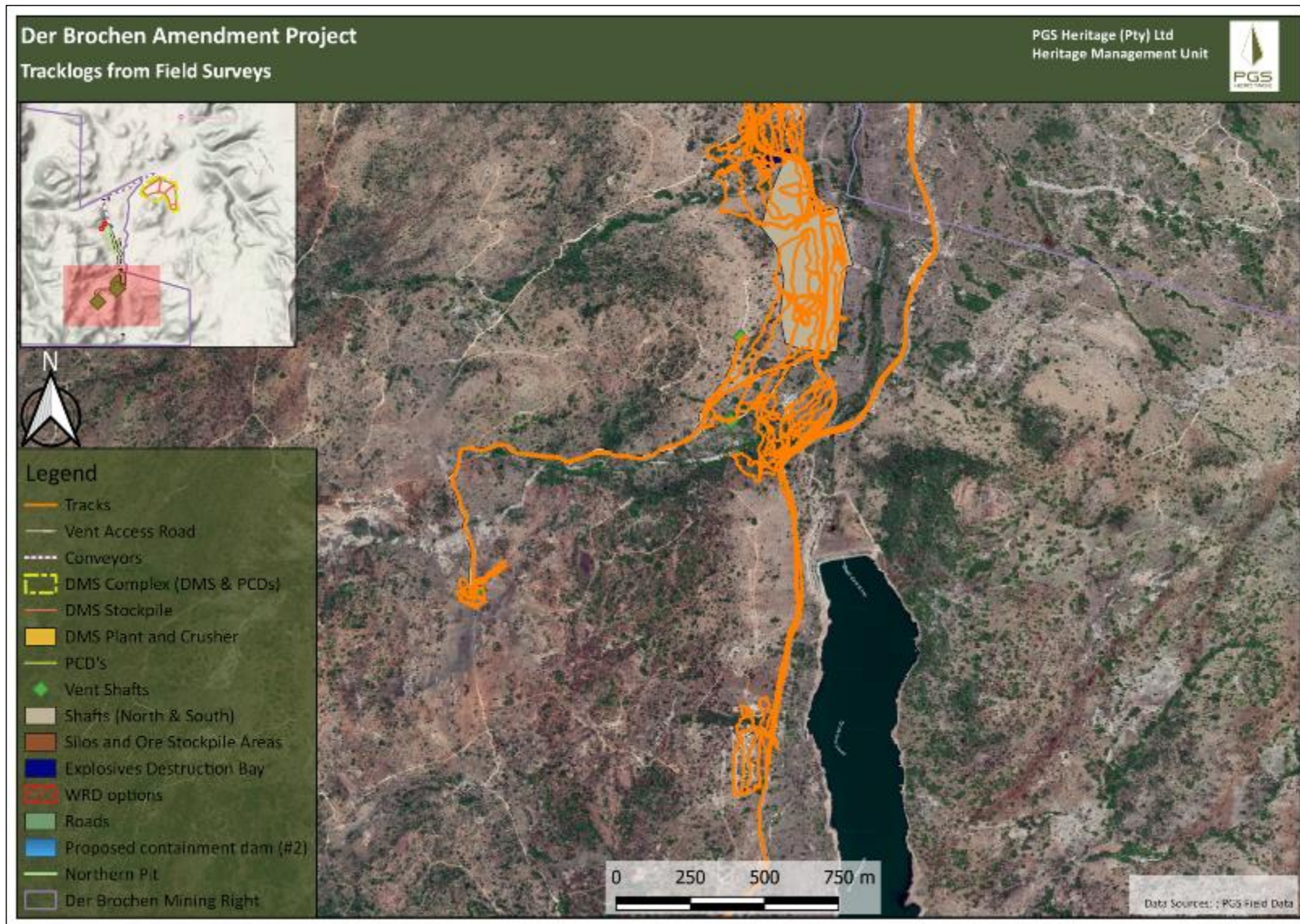


Figure 24 – This plan depicts the southern component of the study area and shows all the track logs that were recorded here during the fieldwork.

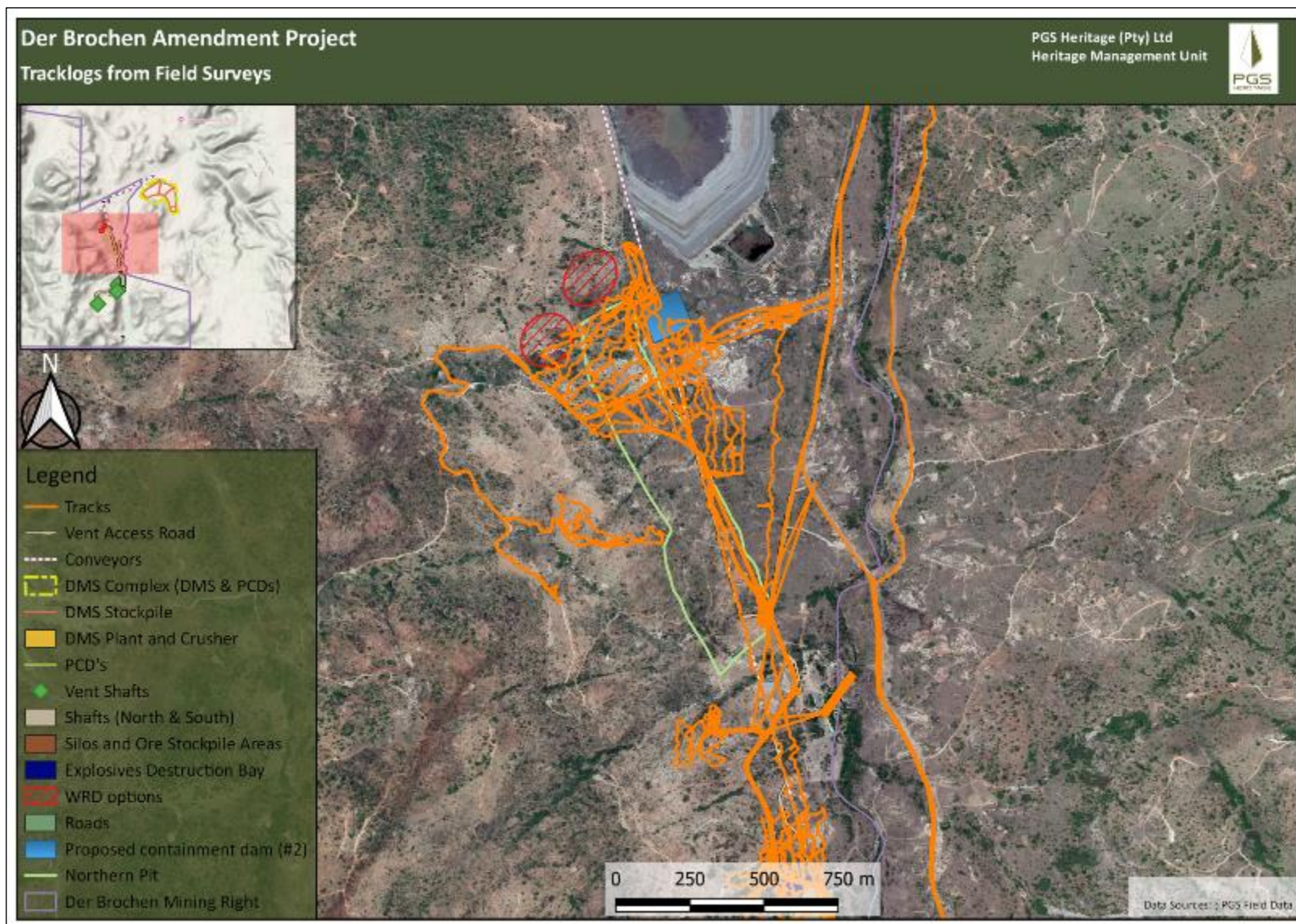


Figure 25 – This plan depicts the central component of the study area and shows all the track logs that were recorded here during the fieldwork.

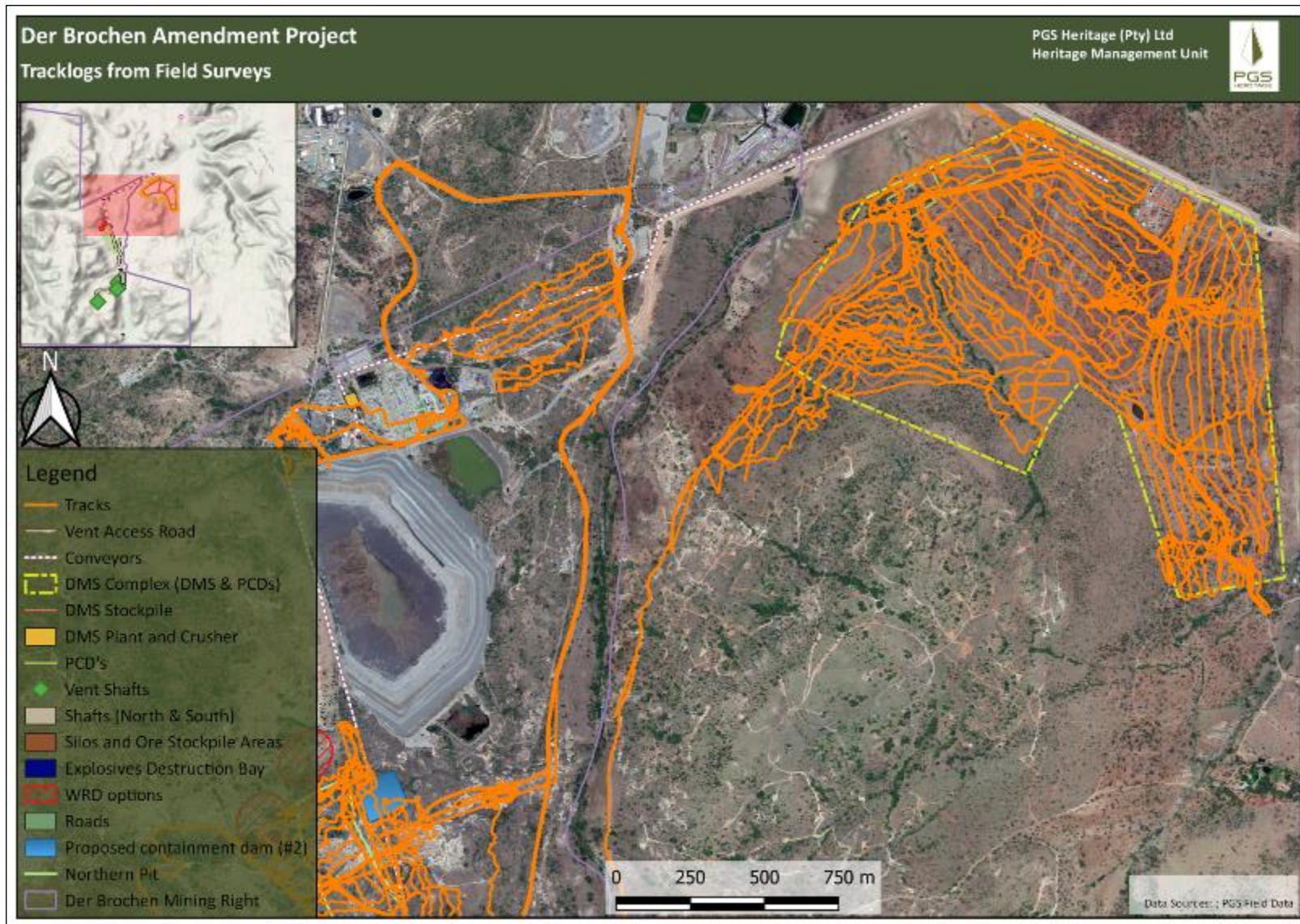


Figure 26 – This plan depicts the northern component of the study area and shows all the track logs that were recorded here during the fieldwork.

6.2 Fieldwork Findings

6.2.1 DBAP 1

Site Coordinates:

S 25.071334

E 30.118846

Site Description:

A historic black homestead was identified on the south-western bank of the Der Brochen Dam and is located at the base of a low ridge. The site comprises a number of low terrace walls consisting of single rows of curved and straight walls as well as what appears to be the remains of a poorly preserved rectangular structure. The cultural material observed on the surface of the site comprises eight undecorated potsherds and one upper grinder. Furthermore, two rocks with shallow grinding surfaces were also identified. Five of the eight potsherds identified on the surface of the site were observed in a single locality. These five ceramics were evidently from a single thick-walled pot, which evidently had a flat-base. Such flat-based pots are associated with modern pottery, and as a result, the presence of such a flat-based pot at the site suggests that the site is likely not very old.

The first edition of the 2530AA Topographical Sheet that was surveyed in 1969, depicts a hut a short distance from the position of this site. It is therefore clear that the site already existed in 1969. Furthermore, the second edition of the same map sheet that was surveyed in 1988 also depicts the site.

It is possible for graves to have been buried in association with the homestead at site DBAP 1. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not

be well marked and visible on the surface. However, Mönnig (1978:40) adds that “...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.” As this site was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 70m by 40m in extent.

Site Significance:

The structures themselves are poorly preserved and of low significance. However, until such time that the presence of graves here has been confirmed or disproved, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 27 – General view of a section of terrace walling from site DBAP 1. The Der Brochen dam is visible in the background. Scale in 10cm increments.



Figure 28 – The poorly preserved rectangular structure can be seen in this photograph. The scale is in 10cm increments.



Figure 29 – Sample of pottery observed on the surface of site DBAP 1. Scale in 1cm increments.



Figure 30 – One of five thick-walled potsherds identified in a single locality and which were evidently derived from the same pot. This potsherd clearly shows that the pot has a flat base, which is associated with more modern pottery. Scale is in 1cm increments.

6.2.2 DBAP 2

Site Coordinates:

S 25.055988

E 30.107909

Site Description:

The site is located on top of one of the mountain ranges characterizing this landscape and comprises irregularly shaped stonewalling extending over a reasonably small area. No cultural material could be observed on the surface of the site.

It is presently not certain whether the stonewalling found here are the remnants of a historic black homestead or the remnants of a Late Iron Age stonewalled site. While the relatively small extent of the walling suggests a historic homestead, no evidence for such a homestead could be found on the available historic topographic map sheets and aerial photographs. The site is not depicted on the first and second editions of the 2530AA Topographical Sheet that was surveyed in 1969 and 1988. The aerial photographs taken in 1956 and 1964 also do not depict any structures or buildings here. This said while the 1956 image does not depict any evidence for human activities here, the 1964 image does show an agricultural field immediately adjacent to where the site is located.

Possible engravings were identified on a large stone slab approximately 20m east by north-east of the stonewalling. Although not well executed, the possible engravings appear to show a cluster of three circles from which a line extends to what may have been another cluster of circles which is barely visible. One possible interpretation for these engravings is that they may engravings associated with the Iron Age, although this is not presently certain.

Site Extent:

The site is roughly 70m by 50m in extent.

Site Significance:

Until such time that the actual origin and age of the site have been confirmed, it will be assumed

that a historic black homestead was located here. As a result, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. Furthermore, although the origin and age of the possible engravings are also not certain, their possible interpretation as Iron Age engravings suggest that they are quite unique for this landscape. As a result, the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 31 – General view of a section of walling from site DBAP 2. The scale is in 10cm increments.



Figure 32 – Another view of a section of stonewalling from site DBAP 2. Scale in 10cm increments.



Figure 33 – Possible Iron Age rock engravings identified at site DBAP 2. Scale in 10cm increments.

6.2.3 DBAP 3

Site Coordinates:

S 25.050884

E 30.117062

Site Description:

A historic black homestead was identified roughly 40m north-west of a non-perennial stream and is located at the south-eastern foot of one of the many ridges characterising this landscape. The site comprises a larger rectangular mud-brick structure (6 x 4m) which is subdivided into two equal sized sections and a smaller rectangular mud-brick structure (3 x 3m) situated a short distance south of the larger structure. Both structures appear to have formed part of a single homestead. These mud structures may either be the remnants of the actual dwellings or alternatively the remnants of the mud walls (*moduthudu*) that enclosed the actual dwellings in Pedi homesteads.

A small number of potsherds were observed across the site, and in particular, in proximity to the two rectangular structures. Additionally, some potsherds were found within the mud-brick walls on the north-western corner of the smaller rectangular structure. The only decoration found on these potsherds comprise red (ochre) and black (graphite) burnish on a couple of sherds. This type of decoration is of course widespread, but also found on Marateng pottery (AD 1650 – AD 1840) and its associated Pedi pottery of historic to modern times.

Between the structures and the non-perennial stream, a low terrace stone wall is located. Additionally, a single grinding surface was identified on a rock less than 50m west of the homestead.

The site is not depicted on the first and second editions of the 2530AA Topographical Sheets surveyed in 1969 and 1988. However, it is depicted on an aerial photograph taken in 1956. As a result, the structure is certainly older than 60 years. The site is depicted on subsequent aerial photographs until the aerial photograph taken in 1975, when the site is clearly depicted as abandoned and in a dilapidated state.

It is possible for graves to have been buried in association with the homestead at site DBE 1. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a

Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *“...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”* As this site was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 100m by 80m in extent.

Site Significance:

The structures themselves are poorly preserved and of low significance. However, until such time that the presence of graves here has been confirmed or disproved, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 34 – General view of the smaller rectangular structure at site DBE 1. The photograph was taken in a southern direction with the non-perennial stream visible in the back. Scale in 10cm increments.



Figure 35 – This view of the smaller rectangular structure shows the height of the mud walls still remaining here. Scale is in 10cm increments.



Figure 36 – Sample of pottery observed on the surface of site DBE 1. Scale in 1cm increments.

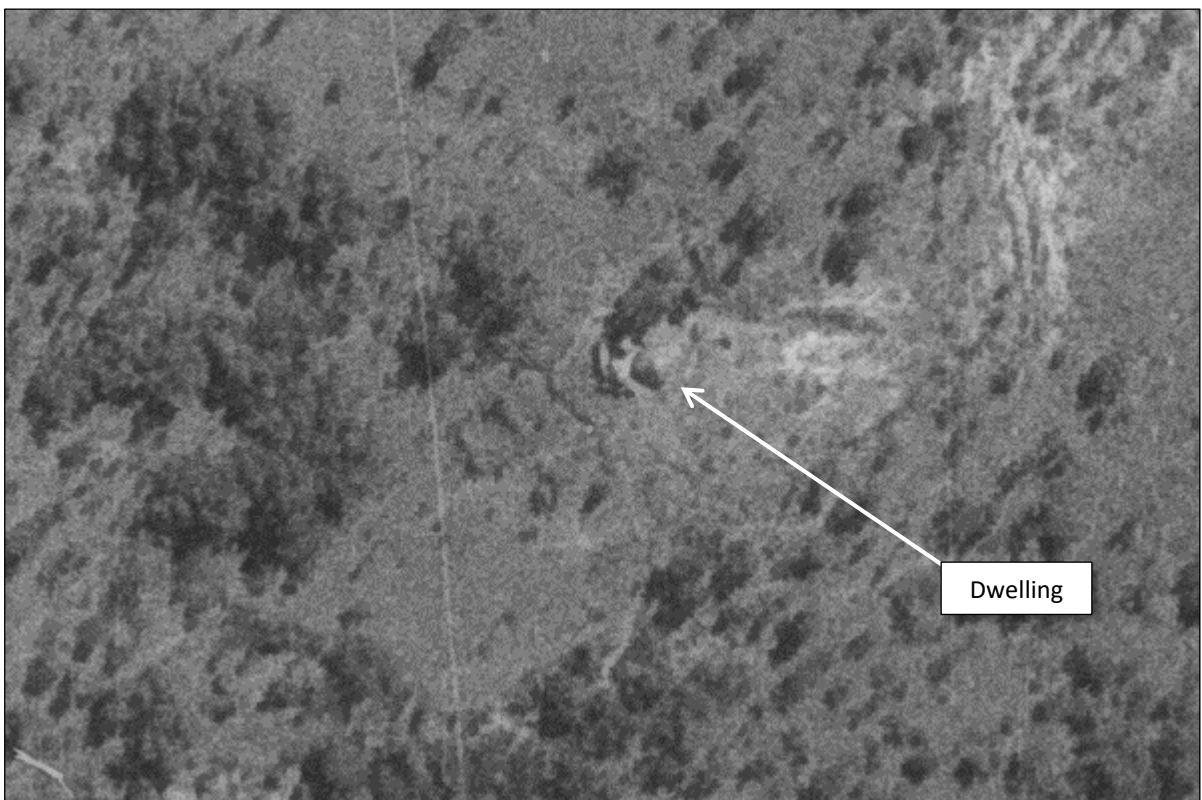


Figure 37 – Depiction of the site at DBE 1 on the 1956 aerial photograph (National Geo-spatial Information, Aerial Photograph, 367_1956_02_4328). The position of the dwelling is shown.

6.2.4 DBAP 4

Site Coordinates:

S 25.050884

E 30.117062

Site Description:

The site comprises a low rock outcrop that contains at least three relatively shallow grinding surfaces. Two of the grinding surfaces are located immediately adjacent to one another, with a third grinding surface located further away.

It is clear that a communal grinding stone was located here. With no homesteads known from the immediate surroundings of the site, it is possible that the stone was used by homesteads further away such as the one identified at DBE 1.

No cultural material could be identified on the surface of the site.

Site Extent:

The site is roughly 10m by 10m in extent.

Site Significance:

As the site consists of only a communal grinding stone without any cultural material or homesteads directly associated with the site, it has little significance. As such the site is of **Generally Protected C (GP. C)** or **Low Significance**. This indicates that the site may be destroyed without further mitigation.

Impact Assessment and Mitigation:

No mitigation is required for the site.



Figure 38 – General view of the communal grinding stone at site DBE 2. Scale in 10cm increments.



Figure 39 – Closer view of the two adjacent grinding surfaces. Scale is in 10cm increments.

6.2.5 DBAP 5

Site Coordinates:

S 25.04731

E 30.11857

Site Description:

A historic black homestead was identified near the eastern foot of one of the high ridges characterising this landscape. Although located near the foot of this ridge, the site is still very much located on sloped ground.

The main features of the site comprise an extensive rectangular wall built around two rectangular stone foundations. The enclosing rectangular stonewall was well-built and consists of a double row of large boulders. Sections of the wall were built quite high, and especially so on its western (up-slope) side, thereby functioning as a terrace wall to reduce the angle of the natural slope on which the site was built. An entrance in this enclosing wall is located on the eastern end of the site. This was the main entrance to the site and is marked in the traditional way by the use of upright stones on each end of the entrance.

Two rectangular stone foundation structures (8x4m & 6x4m) represent the remains of houses at the site. These foundation structures were well-built. On the surface of the smaller foundation structure, three hollow cement bricks were observed. It seems likely that these cement bricks were used in the walls of the structure.

An extensive rectangular mud-brick extension was added to the eastern side of the larger rectangular structure. This extension appears to have been a mud-wall lapa (*moduthudu*).

In terms of cultural material, a relatively high number of potsherds were observed in the area at the back of the rectangular stone foundations. This area is located west of the stone foundation structures and east of the enclosing wall. It seems likely that these potsherds were all derived from the same pot. A number of large fragments from the same pot were also observed. Although this pot is of more recent extraction, the decoration motifs appearing on it are typical of the so-called

Marateng pottery which can be associated with the Pedi. These motifs include diagonal incisions along the rim and incised arcades along the upper shoulders of the pot separating sections of red (ochre) and black (graphite) burnish (see Huffman, 2007).

Examples of other cultural material observed on the surface of the site include an anvil stone and enamel bowl found on the surface of the enclosed lapa area. Furthermore, in an area located north of the rectangular foundation structures, but still inside the rectangular enclosing wall, what appears to have been a midden for the site was identified. Artefacts observed here include a number of glass liquor bottles, the remains of a paraffin lamp as well as pottery. Lastly, a very deep lower grinder was identified in the main entrance of the enclosing wall.

The site appears to have been partially disturbed by exploration activities.

The site is not depicted on the aerial photographs taken in 1956 (National Geo-spatial Information, Aerial Photograph, 367_1956_02_4328), 1964 (National Geo-spatial Information, Aerial Photograph, 481_1964_01_0031) and 1975 (National Geo-spatial Information, Aerial Photograph, 753_1975_01_4702). This means that the site cannot be older than 43 years. The cultural material as well as the general characteristics of the site support this relatively recent date for the site.

It is possible for graves to have been buried in association with the homestead at site DBEP 1. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *“...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”* As this site was abandoned some time ago, no direct information with

regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 70m by 60m in extent.

Site Significance:

The structures themselves are poorly preserved and of low significance. However, as indicated by Mönning (1978), the risk for unmarked stillborn (and other) graves does exist on Pedi homesteads such as the one under discussion. Until such time that the presence of graves here has been confirmed or disproved, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A) or High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 40 – General view of the two rectangular foundation structures from site DBAP 1. The larger structure is just visible on the right, with the smaller structure located in the top left-hand corner. Scale in 10cm increments.



Figure 41 – A section of the well-built rectangular stonewall that encloses the site. The main entrance to the site can just be seen on the left. Scale in 10cm increments.



Figure 42 – Side view of a section of the enclosing stonewall. Scale in 10cm increments.



Figure 43 – General view of the area where the highest concentration of pottery fragments was observed. Note the large fragment visible in the front. Scale in 10cm increments.



Figure 44 – Closer view of two pottery fragments from the surface of the site. Scale in 1cm increments.



Figure 45 – Enamel bowl and anvil stone observed within the mud-brick lapa area. Scale in 1cm increments.

6.2.6 DBAP 6

Site Coordinates:

S 25.047519

E 30.119623

Site Description:

The site is located approximately 116m west of the Groot Dwarsrivier and comprises a large rectangular stone structure (approx. 15m x 15m). The walling of the structure is roughly 40cm wide and not well preserved, with sections of the sides of the structure completely missing. No cultural material could be identified on the surface of the site. The site is not depicted on the 1969 and 1988 versions of the 2530AA Topographical Sheet and also not on the 1956, 1962 or 1975 aerial images. As a result, the exact age of the site is not known.

The site is located 108m east by south-east of the historic homestead at DBAP 5. This associated site is also not depicted on any of the topographic maps and aerial photographs and appears to date from the last 43 years. It seems very likely for the rectangular structure from site DBAP 6 to have been used as a livestock enclosure by the residents of DBAP 5. This said the risk still exists for graves to have been buried in association with the site. As it was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 30m by 30m in extent.

Site Significance:

The rectangular structure from this site appears to have been used as a livestock enclosure by the residents of site DBAP 5. However, the risk for unmarked and marked graves to be buried here remains. As such, the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 46 – *General view of site DBAP 6. The person in this photograph is standing next to the rectangular structure.*



Figure 47 – *Section of walling from the poorly preserved rectangular structure at site DBAP 6. The scale is in 10cm increments.*

6.2.7 DBAP 7

Site Coordinates:

S 25.045181

E 30.119594

Site Description

The site comprises a low-density surface occurrence of Middle Stone Age lithics that appear to have been exposed by erosion activities. Lithics were observed over an area roughly 40m by 30m in extent. The highest density observed at the site is one lithic per/ m². The artefacts observed on the surface of the site include a retouched point, flakes, debitage, and a few hammer stones. The presence of both debitage and hammer stones suggest that the manufacture of lithics also took place here.

Site Extent

Lithics were observed over an area roughly 40m x 30m in extent.

Site Significance

The site comprises a low-density surface scatter of lithics. This said, the site represents one of only two sites where Stone Age lithics were identified. The fact that manufacturing of lithics also took place, further support a relatively higher significance rating for the site. As a result, the site is deemed to be of **Medium Significance** and is rated as **Generally Protected B (GP.B)**.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 48 – General view of site DBAP 7. Scale is in 10cm increments.



Figure 49 – Sample of lithics observed on the surface of the site. Scale in 1cm increments.

6.2.8 DBAP 8

Site Coordinates:

S 25.044516

E 30.118185

Site Description:

A historic black homestead was identified roughly 84m west of a tar road that provides access to the Der Brochen offices at the eastern foot of a ridge. The site comprises a larger rectangular stone structure (approx. 20m x 20m) with a smaller rectangular stone structure (approx. 6m x 4m) located a short distance to the west. No cultural material could be identified on the surface of the site. The site is not depicted on the 1969 and 1988 versions of the 2530AA Topographical Sheet and also not on the 1956, 1962 or 1975 aerial images. As a result, the exact age of the site is not known.

The risk exists for graves to have been buried in association with the site. As it was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 40m by 30m in extent.

Site Significance:

The structures themselves are of low significance. However, until such time that the presence of graves here has been confirmed or disproved, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 50 – *General view of the smaller rectangular structure at site DBAP 8. The photograph was taken in an eastern direction. Scale in 10cm increments.*



Figure 51 – *General view of the larger rectangular structure.*

6.2.9 DBAP 9

Site Coordinates:

Feature DBAP 9A	Feature DBAP 9B	Feature DBAP 9C	Feature DBAP 9D	Feature DBAP9E
Stone Walling	Stone Enclosure	Circular Dwelling	Possible Grave	Comm. Grind. Stone
S 25.041492 E 30.116611	S 25.042370 E 30.117120	S 25.042582 E 30.115706	S 25.042526 E 30.116127	S 25.041760 E 30.116010

Site Description:

The site was first identified during an archaeological survey undertaken in 2002 (Huffman, 2002). Sites 19 and 19A from this 2002 archaeological survey are associated with this site.

A historic black homestead is located here in a position west of the tar road that provides access to the Der Brochen offices. It is located in a valley between two ridges and extends over some distance.

A number of features were identified over an area roughly 1.2 hectares in extent. These features all appear to have formed part of a single homestead (*kgoro*). Please note that the features shown in the table above do not represent all the tangible features that could be identified across the site. Rather, the five features shown above provide the reader with an idea of the extent of the site as well as the types of tangible remains still seen on the surface of the site.

At Feature DBAP 9A, low well-built stonewalling is located. The walling located here do not comprise circular enclosures, but rather appear to be the remnants of a historic stone-built cattle kraal. A section of the walling extends in a single line for a distance of approximately 40m in a south by south-eastern direction along a low ridge. This linear feature may have formed one side of the larger rectangular cattle enclosure. Near its south-eastern end, a small stone enclosure was identified with a lower grinder found in proximity to the enclosure. A short distance further to the south-east, a well preserved irregularly shaped stone enclosure (see Feature DBAP 9B) was identified. No cultural material could be observed in proximity to this stone enclosure.

Near the western boundary of the site, the circular mud-brick foundations of a dwelling (hut) were identified (see Feature DBAP 9C). Some potsherds (undecorated) were observed on the floor of the

dwelling, with more potsherds located nearby. A short distance east of the hut, three potsherds were identified, two of which contained some decoration. A large, intact and reasonably modern clay pot was identified immediately north of the circular dwelling remains. Although this pot is of more recent extraction, the decoration motifs appearing on it are typical of the so-called Marateng pottery which can be associated with the Pedi. These motifs include diagonal incisions along the rim and incised arcades along the upper shoulders of the pot (see Huffman, 2007).

What appears to be a cemetery was identified a few meters north of the circular dwelling remains. This cemetery is located in a component of the site that is very overgrown with dense vegetation. The undisturbed grave of a baby or small child is still located here. A number of headstones stacked against a tree were also observed a short distance from the child grave. It is not presently certain why these headstones are stacked against a tree. This stack of headstones was in fact already observed during the archaeological survey undertaken in 2002 by Professor Tom Huffman.

In terms of graves, on 21 January 2015 two PGS Heritage staff members with assistance provided by Anglo American Platinum, undertook a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. With the assistance provided by the Makua family, the following details were recorded for individuals who lie buried somewhere within site DBAP 9, and possibly near Feature DBAP 9C.

Grave	Name of Deceased	Age of Deceased
DB12/01	Matlaleng Makua	Approx. 5 months
DB12/02	Abel Makua	Approx. 10 months
DB12/03	Masibitsane Makua	Approx. 9 months
AA12/04	Michael Makua	Approx. 2 years
AA12/05	Kgaribjane Makua	Approx. 8 months
AA12/06	Tshaubone Mankge	Unknown
AA12/07	Sibutsi Makua (twins)	Approx. 8 months
AA12/08	Masibutsana Makua (twins)	Approx. 8 months

Approximately 45m east of the dwelling remains, a rectangular stone concentration was identified. Although this stone concentration is orientated along the north-south axis, the possibility exists for it

to have been a grave (see Feature DBAP 9D). Finally, a communal grinding stone was identified near the north-western end of the site (see Feature DBAP 9E).

Apart from the potsherds already mentioned, more potsherds were also observed on the surface of the site. Furthermore, low terrace walls were observed between DBE 9A and DBE 9E.

The site is depicted on the first and second editions of the 2530AA Topographical Sheets surveyed in 1969 and 1988. It is also depicted on the aerial photographs taken in 1956, 1962 and 1975. The two earlier images seem to depict an extensive homestead comprising a number of circular dwellings with conical thatch roofs. The 1975 depiction of the site indicates that the site underwent significant expansion in the period between 1962 and 1975. The depiction of the site on the 1956 aerial image, indicates that it is certainly older than 60 years.

Apart from the graves and possible graves already discussed, it is also possible for unmarked stillborn baby and adult graves to have been buried in association with the homestead at site DBAP 9. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *“...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”* As this site was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is approximately 200m by 200m in extent.

Site Significance:

Although risk exists for graves to have been buried at the site, the site's structures on their own have enough historic value to be deemed of **Generally Protected B (GP. B)** or **Medium Significance**.

At least one baby grave was identified within the site, with a number headstones stacked against a tree providing further suggestion that graves are located here. Additionally, the Makua family stated that their family has eight family members buried at the site. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 52 – General view of a section of stonewalling at feature DBAP 9A. Scale in 10cm increments.



Figure 53 – Another view of a section of stonewalling at feature DBAP 9A. Scale in 10cm increments.



Figure 54 – The irregularly shaped stone enclosure at Feature DBAP 9B. Scale in 10cm increments.



Figure 55 – Side view of a section of the enclosure wall at DBAP 9B. Scale in 10cm increments.



Figure 56 – General view of a section of the circular mud-brick foundations of a dwelling at Feature DBAP 9C. Scale in 10cm increments.



Figure 57 – Samples of potsherds observed near Feature DBAP 9C. Scale in 1cm increments.



Figure 58 – The image on the left depicts the clay pot that was observed immediately north of the circular dwelling remains at DBAP 9C. The photograph on the right shows the headstones that are stacked against a tree. As discussed in the text, these headstones were observed a short distance north of the circular dwelling remains at DBAP 9C.



Figure 59 – General view of the in situ grave dressing identified a short distance north of the circular dwelling remains at DBAP 9C.



Figure 60 – General view of the possible grave at Feature DBAP 9D. Scale in 10cm increments.

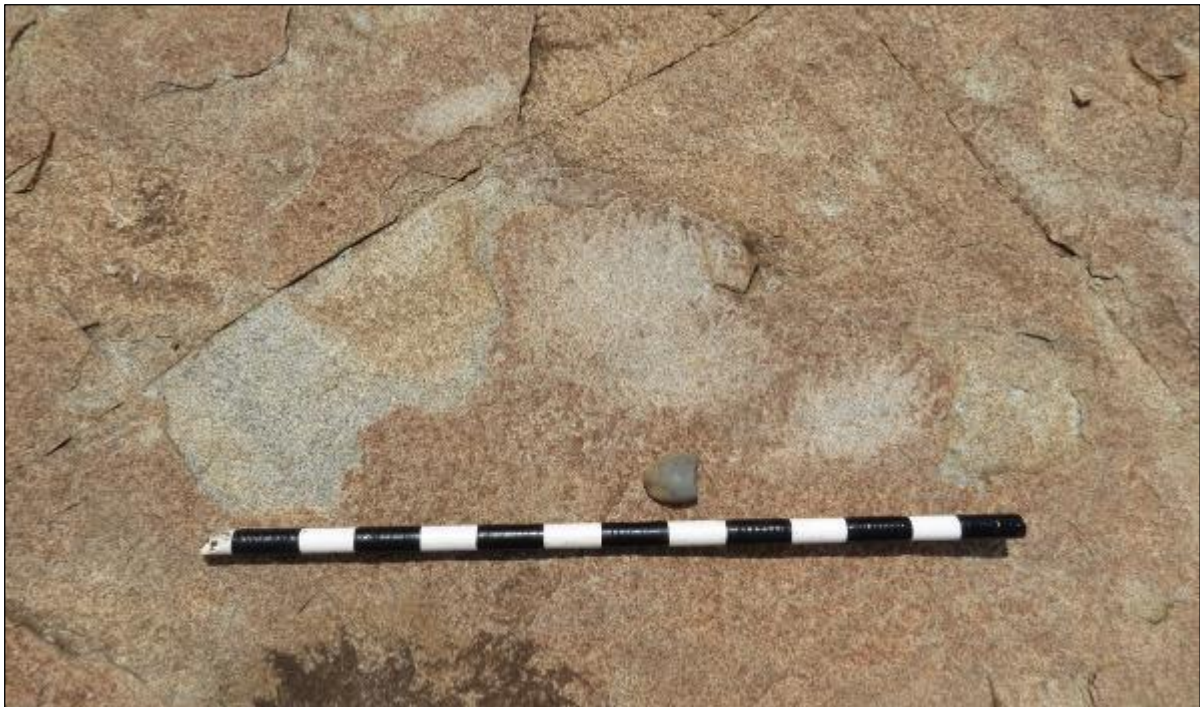


Figure 61 – Grinding surfaces and upper grinder at DBAP 9E. Scale in 10cm increments.

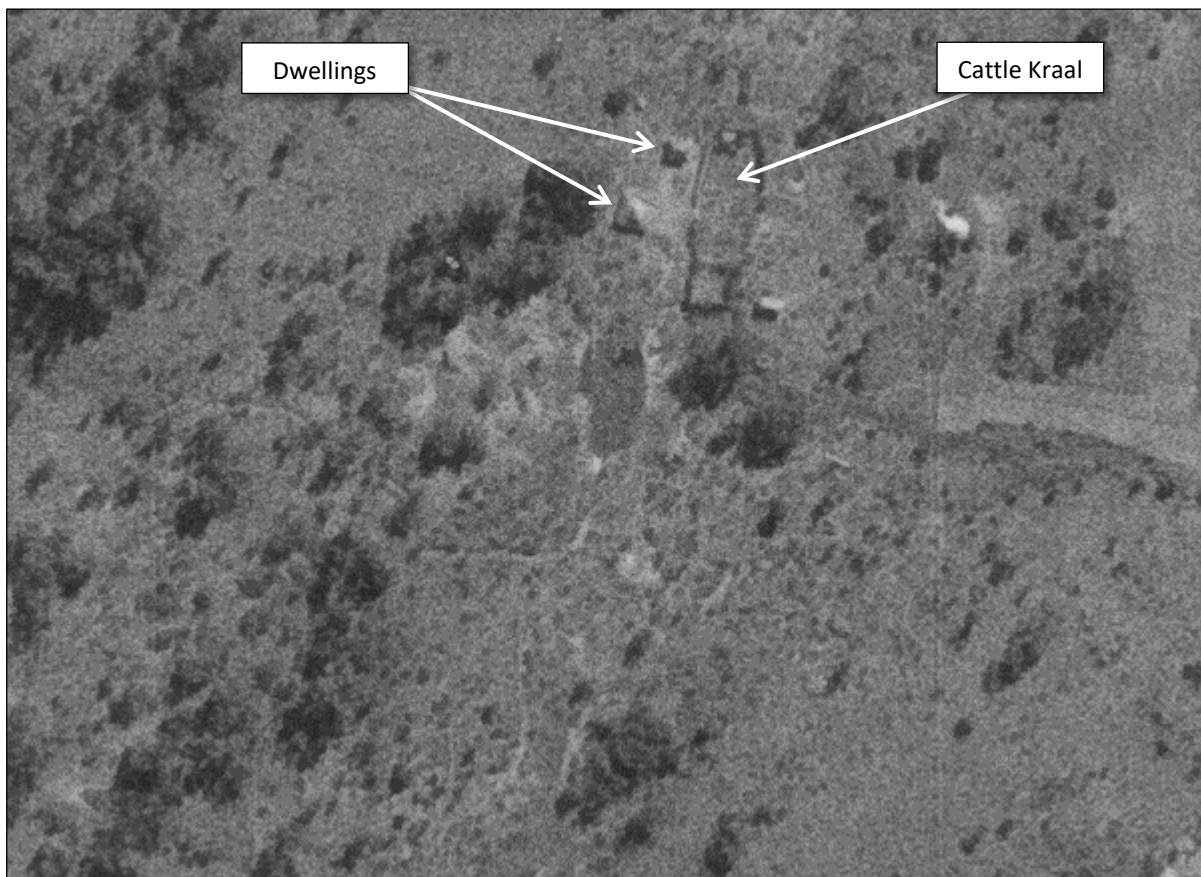


Figure 62 – Depiction of the site at DBAP 9 on the 1956 aerial photograph (National Geo-spatial Information, Aerial Photograph, 367_1956_02_4328).

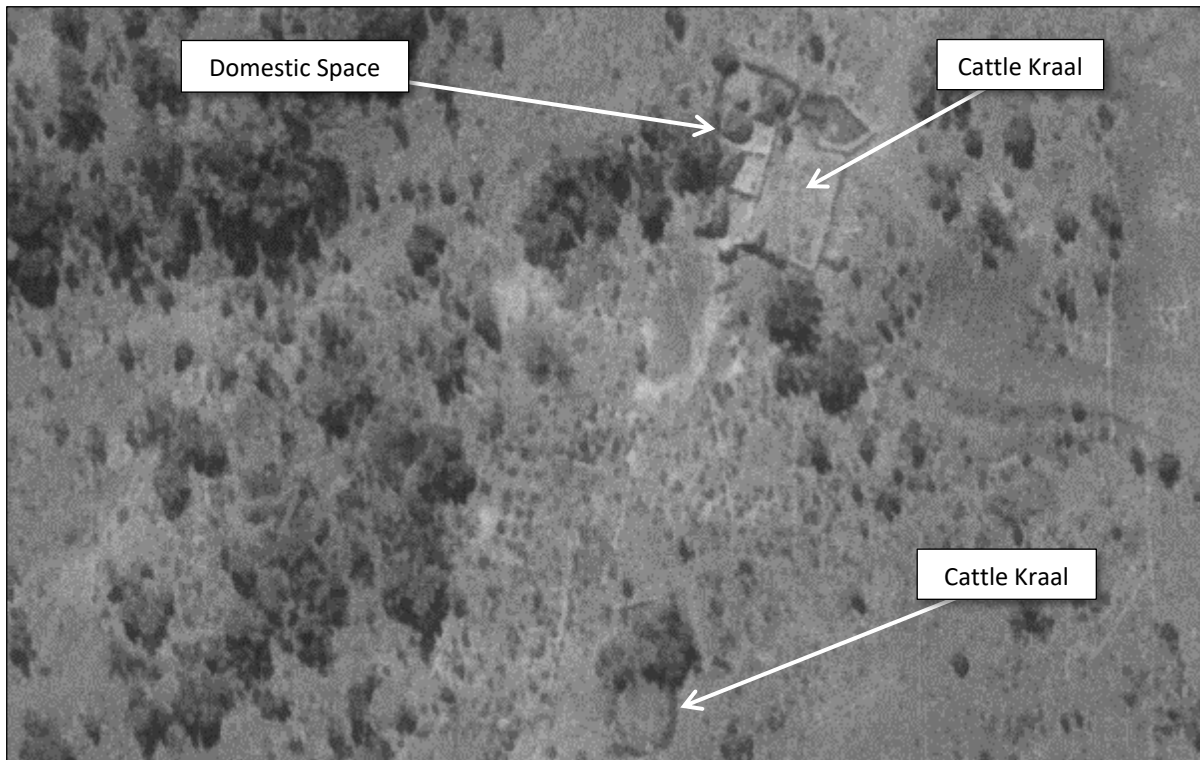


Figure 63 – Depiction of the site at DBAP 9 on the 1962 aerial photograph (NGI, Aerial Photograph, 267_1962_01_4853). A cattle enclosure is shown for the first time near the southern end of the site.

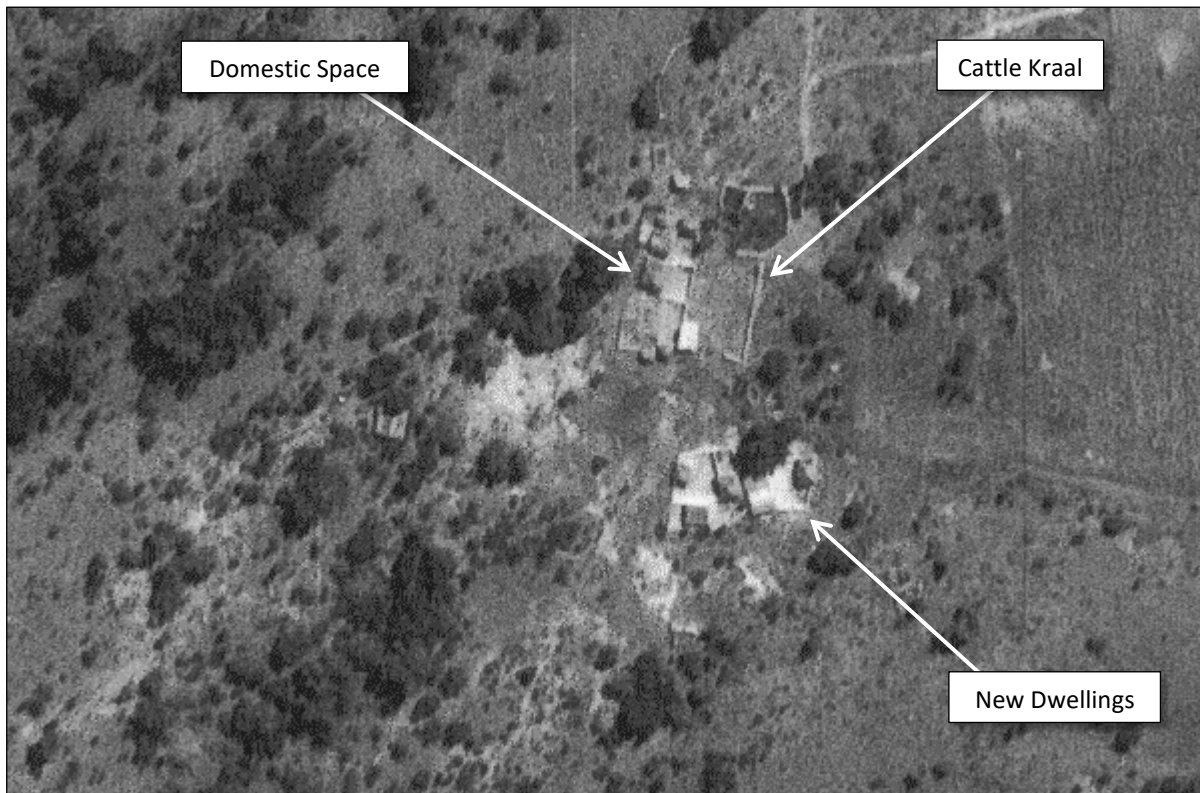


Figure 64 – Depiction of the site at DBAP 9 on the 1975 aerial photograph (NGI, Aerial Photograph, 753_1975_01_4702). A new domestic area is shown for the first time.

6.2.10 DBAP 10

Site Coordinates:

S 25.036574

E 30.114602

Site Description:

The site was first identified during an archaeological survey undertaken in 2002 (Huffman, 2002). A historic black homestead is located here in a position approximately 200m south-west of the current drill core storage area.

At the time of the fieldwork, the site was covered in reasonably dense grass and vegetation. Low terrace waling was however identified. It is clear that a homestead was located here. It is important to note that the tangible remains of the site are expected to extend from a point north-west of the site coordinates for a distance of approximately 80m in a south-eastern direction. The south-eastern end of the site was destroyed by the construction of a soil berm.

The site is not depicted on the first and second editions of the 2530AA Topographical Sheets surveyed in 1969 and 1988. It is also not depicted on the aerial photographs taken in 1956 and 1962. However, the site is depicted on the 1975 aerial photograph. This means that it was built between 1962 and 1975, and as a result, is between 44 and 57 years old.

It is possible for graves to have been buried in association with the homestead at site DBAP 1. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *“...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with*

water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.” As this site was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is roughly 80m by 50m in extent.

Site Significance:

The structures themselves are poorly preserved and of low significance. However, until such time that the presence of graves here has been confirmed or disproved, the site must be viewed as containing graves. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 65 – General view across the extent of site DBAP 10.



Figure 66 – A section of terrace walling can be seen. The scale is in 10cm increments.

6.2.11 DBAP 11

Site Coordinates:

S 25.034417

E 30.114500

Site Description:

The site comprises a small cemetery consisting of five graves. The cemetery is located 207m north-west of the current drill core storage area.

On 16 October 2014, the author of this report assisted Anglo American Platinum with a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. This represented the second site visit undertaken for this purpose of identifying known graves. With the assistance provided by the Leshaba, Machipa and Mankge families, the following information was recorded for this cemetery.

Grave	Name of Deceased	Dates	Description of Graves
AA124/01	Mokaidi Rangwato Leshaba	* Unknown † 1975/10/10	Rectangular cement lined and covered dressing with an inscribed cement headstone.
AA124/02	Legane Maria Tshehla	* 1840/02/04 † 1963/01/02	Rectangular granite lined dressing covered with white gravel and which has an inscribed granite headstone on its western end.
AA124/03	Tshwabidi Mankge	* 1967 † 1968	No grave dressing with just a shallow excavation made by a burrowing animal visible.
AA124/04	Rueben Thupa	* 1969 † 1970	No grave dressing.
AA124/05	Mashiane Charles Mankge	* 1960/01/15 † 1963/01/24	Rectangular granite lined dressing covered with white gravel and which has an inscribed granite headstone on its western end.

From this information, it is clear that the two oldest graves at this cemetery were buried here during 1963 whereas the youngest grave was buried here in 1975. It seems evident therefore that the

cemetery is younger than 60 years.

Site Extent:

The site is approximately 20m by 10m in extent.

Site Significance:

Graves and burial grounds have high levels of emotional, religious and historical significance. As a result, the site has a **Generally Protected A (GP. A)** or **High/Medium Significance**.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



*Figure 67 – General view of the cemetery at site DBAP 11. Photograph was taken on 16 October 2014.
The cemetery number recorded at the time for the site is AA124.*



Figure 68 – The grave of Legane Maria Tshehla. Her grave is one of the two oldest graves at the cemetery. Scale in 10cm increments. Photograph was taken on 16 October 2014.



Figure 69 – The grave of Mokaidi Rangwato Leshaba. This is the youngest grave at the cemetery. Photograph was taken on 16 October 2014.

6.2.12 DBAP 12

Site Coordinates:

S 25.030258

E 30.110059

Site Description:

A historic mining site is located here. It comprises three main features, namely an adit that was excavated into the side of a ridge, a vertical shaft located roughly 30m south-west of the adit entrance and the remains of an old road with associated stone buttressing and support. According to a staff member of Anglo American who explored these shafts and adits, the vertical shaft goes down to a depth of roughly 20 meters and connects with the adit. It is not presently certain whether this vertical shaft was used for ventilation of the adit or alternatively as a direct way of removing material from the adit.

These shafts and adits on the farm Helena are sometimes associated with the famous geologist Hans Merensky. However, the historical overview of mining activities on the farm Helena outlined in Chapter 5 clearly shows that although Hans Merensky identified the first platinum reef in South Africa in 1924 and subsequently brought it to the attention of the world, the discovery of platinum on the farm Helena was made by a Lydenburg lawyer named Cornelius Jansen Weilbach. Weilbach subsequently ceded his discoverer's rights to the farm Helena to the company Platinum Proprietary Company (of Lydenburg) Limited, and in turn became a director of this company (National Archives, MNW, 775, MM1037/25). It was the Platinum Proprietary Company (of Lydenburg) Limited that was responsible for the exploration and mining work on the farm Helena. By c. 1929 this company had undertaken a *"...considerable amount of work...on the Merensky Horizon...on Helena"* (Wagner, 1973: 303).

It is not known for how long the Platinum Proprietary Company conducted mining activities on Helena, but by the early 1940s, the company was still active on the farm. At the time the company directors were D.C. Greig, Herman Ohlthaver and Ludwig Wipplinger (South African Mining Yearbook, 1941/42). While Wipplinger had been the assistant to Hans Merensky, Ohlthaver was a friend of Merensky and with his business partner Gustav Becker often supported Merensky's prospecting expeditions financially (Machens, 2009). However, although these three individuals have worked

with Hans Merensky in the past, the famous geologist himself does not appear to have been directly involved with the exploration and mining activities on the farm Helena.

The company name still appears in archival records dating to 1957 (National Archives, WLD, 936/1957), but not after this date. It would appear therefore that the Platinum Proprietary Company ceased to exist during the late 1950s.

The dating of the site to the first half of the twentieth century is supported by the old aerial photographs, in that the workings associated with the site are clearly depicted on the 1956 aerial photograph.

No cultural material could be observed in association with the site.

Site Extent:

The site is roughly 60m by 50m in extent.

Site Significance:

The site represents well-preserved workings relating to the early mining of platinum on the farm Helena. Coupled with the history outlined above, it is clear that the site has some historical significance. Furthermore, the site also comprises structures older than 60 years. This said a reasonably high number of these historic mining sites are located on the farm Helena. As a result, this site can not be seen as unique. As a result, the site is of **Generally Protected B (GP. B)** or **Medium Significance**. This indicates that the site may be destroyed without further mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 70 – The entrance of the adit at site DBAP 12. Scale in 10cm increments.



Figure 71 – The fenced-off opening of the vertical shaft from site DBAP 12. Scale in 10cm increments.

6.2.13 DBAP 13

Site Coordinates:

S 25.029109

E 30.109591

Site Description:

A historic mining site is located here. It comprises two main features, namely an adit that was excavated into the side of a ridge and an extensive waste rock dump. The massive size of the waste rock dump suggests that the adit is quite long and must have been worked over a long period of time.

These shafts and adits on the farm Helena are sometimes associated with the famous geologist Hans Merensky. However, the historical overview of mining activities on the farm Helena outlined in Chapter 5 clearly shows that although Hans Merensky identified the first platinum reef in South Africa in 1924 and subsequently brought it to the attention of the world, the discovery of platinum on the farm Helena was made by a Lydenburg lawyer named Cornelius Jansen Weilbach. Weilbach subsequently ceded his discoverer's rights to the farm Helena to the company Platinum Proprietary Company (of Lydenburg) Limited, and in turn became a director of this company (National Archives, MNW, 775, MM1037/25). It was the Platinum Proprietary Company (of Lydenburg) Limited that was responsible for the exploration and mining work on the farm Helena. By c. 1929 this company had undertaken a *"...considerable amount of work...on the Merensky Horizon...on Helena"* (Wagner, 1973: 303).

It is not known for how long the Platinum Proprietary Company conducted mining activities on Helena, but by the early 1940s, the company was still active on the farm. At the time the company directors were D.C. Greig, Herman Ohlthaver and Ludwig Wipplinger (South African Mining Yearbook, 1941/42). While Wipplinger had been the assistant to Hans Merensky, Ohlthaver was a friend of Merensky and with his business partner Gustav Becker often supported Merensky's prospecting expeditions financially (Machens, 2009). However, although these three individuals have worked with Hans Merensky in the past, the famous geologist himself does not appear to have been directly involved with the exploration and mining activities on the farm Helena.

The company name still appears in archival records dating to 1957 (National Archives, WLD, 936/1957), but not after this date. It would appear therefore that the Platinum Proprietary Company ceased to exist during the late 1950s.

The dating of the site to the first half of the twentieth century is supported by the old aerial photographs, in that the workings associated with the site are clearly depicted on the 1956 aerial photograph.

No cultural material could be observed in association with the site.

Site Extent:

The site is roughly 50m by 50m in extent.

Site Significance:

The site represents well-preserved workings relating to the early mining of platinum on the farm Helena. Coupled with the history outlined above, it is clear that the site has some historical significance. Furthermore, the site also comprises structures older than 60 years. This said a reasonably high number of these historic mining sites are located on the farm Helena. As a result, this site can not be seen as unique. As a result, the site is of **Generally Protected B (GP. B)** or **Medium Significance**. This indicates that the site may be destroyed without further mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 72 – General view of the entrance of the adit at site DBAP 13. Scale in 10cm increments.

6.2.14 DBAP 14

Site Coordinates:

S 25.027833

E 30.115307

Site Description:

A historic rectangular stone structure is located 226m west of the tar road that provides access to the Der Brochen offices. The structure is approximately 9m by 7m in extent and was built from dressed stone. The site is not depicted on any of the available topographical sheets or aerial photographs. As a result, the age of the structure is not presently known. This said the use of dressed stone suggests a historic association for the structure. Furthermore, the site is located 350m east of a historic farmstead that was built by the Du Preez family presumably during the 1930s (Birkholtz, 2014). Even though this farmstead is located outside of the present development footprint area, the possible association of the structure at DBE 5 with this historic farmstead suggests that DBE 5 may also date to the 1930s. No cultural material could be identified on the surface of the site. As a result, it is impossible to identify the structure's original function. This said it is doubtful that the structure was a dwelling.

Site Extent:

The site is roughly 10m by 10m in extent.

Site Significance:

The site consists of one rectangular structure that is poorly preserved without any associated cultural material present. As a result, the site is of **Generally Protected C (GP. C)** or **Low Significance**. This indicates that the site may be destroyed without further mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 73 – General view of DBAP 14. The scale is placed at the north-eastern corner of the structure at DBAP 14. Scale in 10cm increments.



Figure 74 – Another view of a section of the structure at DBAP 14. The scale is placed along the southern wall of the structure. Scale in 10cm increments.

6.2.9 DBAP 15

Site Coordinates:

Feature DBAP 15A	Feature DBAP 15B	Feature DBAP 15C
Historic Farmhouse	Structure & Grave	Structure & Grave
S 25.027399 E 30.111576	S 25.027780 E 30.111743	S 25.027185 E 30.111206

Site Description:

A historic farmstead is located here at the eastern foot of a ridge. A number of features were identified over an area roughly two hectares in extent. While some of these features formed part of a historic farmstead that was associated with the Du Preez family, other components of the site are associated with a more recent residence of the site by black families.

Please note that the features shown in the table above do not represent all the tangible features that could be identified across the site. Rather, the three features shown above provide the reader with an idea of the extent of the site as well as the types of tangible remains still seen on the surface of the site. One clear omission from the three features shown in the table above is a large stonewalled cattle kraal (25m x 20m) located 57m north of the feature at DBAP 15C.

Based on building materials and technique, the oldest building from the entire farmstead is the structure located in the center of the settlement, known for the purposes of this report as Feature DBAP 15A. The core sections of the stonemasonry walling were done with clay mortar and the technique used for the construction of stonemasonry along the western entrance reflects a methodology typical of the early 20th century and earlier. The way the stone was laid, reflects old-fashioned craftsmanship that does not occur in any of the other buildings. The small scale of the building and the floor plan reflects the character of an older building tradition than any of the other buildings. Both the floor plans and spatial layout of this structure reflect the character of a build that is older than any of the other structures from the farmstead.

It is evident that this is the oldest of the three buildings and could have been a small dwelling and farmhouse at an unknown time in the past. The structure consists of a core building with later

extensions and additions – quite typical of old farm dwellings. The original building was tiny as it had two or three rooms. When the site was re-used during the more recent time, the interior walls were demolished and the floor plan was altered to reflect similarities with the other buildings on the site.

Based on available information, the farmhouse was built by Petrus Hendrik du Preez (July 1878 – 6 March 1963). The farm ownership record for the farm Helena indicates that Petrus Hendrik du Preez obtained a portion of the farm on 14 July 1931. The suggestion therefore, is that the farmhouse would have been built shortly after this date. With this as background, it is therefore of no surprise that this farmhouse is depicted on the 1956 aerial photograph. The farmhouse is therefore between 63 and 88 years old.

The structure located at Feature DBAP 15B is located roughly 20m south-east of the historic farmhouse. The structure at Feature DBAP 15B comprises a cluster of units that reflect the same architectural character as the building at DBAP 15C. However, the keen observer would identify some differences in size, scale, building materials, and techniques. The craftsmanship inherent in the design and structure is of recent date but executed with refinement and a strong sense for neatness and aesthetic to be found in urban neighborhoods and in the dwellings of urbanites. Plastering was refined by smooth, square and plumb surfaces and was not done by hand and left irregular and uneven as used to be the case for black vernacular buildings.

The building at Feature DBAP 15B is not depicted on the 1956 and 1962 aerial photographs and is shown for the first time on the 1975 aerial photograph. It would appear therefore that the building was erected between 1962 and 1975, and as a result is between 44 and 57 years old. As a result, this building is currently younger than 60 years.

On 16 October 2014, the author of this report assisted Anglo American Platinum with a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. This represented the second site visit undertaken for this purpose of identifying known graves. With the assistance provided by the Mankge family, it was found that a single unmarked stillborn grave lies buried against the walling of the structure at Feature DBAP 15B. In fact, the coordinates provided for this feature in the table above, represent the exact locality for this grave as recorded in the presence of the family representative. The following information was recorded for this grave.

Grave	Name of Deceased	Dates	Description of Graves
HNN1/01	Rose Mankge	* 1970s † 1970s ± 4 days	No grave dressing. The grave is located in the corner of a former dwelling.

The building at DBAP 15C is the larger of the two more recent buildings (the other being Feature DBAP 15B) and was erected to follow the contours of the site and the outcrops of norite along the lower part of the ridge. The direction and height of the outcrops dictated the floor plan and floor levels of the structure – both the interior and exterior spaces.

The building at DBAP 15C contains several building traditions resulting in a mixture of aesthetic traditions more typical of more recent vernacular architecture. The use of the landscape as dictating feature to build on various levels linking one level with the other with low steps is both a black vernacular and white vernacular tradition and adds to the presence of the building. However, the occurrence of several separated single room units as a 'dwelling' is not a white phenomenon or tradition. It remains a black vernacular tradition. The principle aesthetic character of the building is contained within the use of koppieklip set in well-prepared cement mortar mixture with no coursework. This is also repeated in the interiors of some of the units as the walls were not decorated or plastered. The cluster also includes sundried brick walls that occur concurrently with the stonemasonry units.

Thatched rondavels and at least one rectangular hut-like structure are already depicted at Feature DBAP 15C on the 1956 aerial photograph. These are again shown on the 1962 aerial photograph. However, the building as it appears at present is shown for the first time on the 1975 aerial photograph. This means that the building defined for the purposes of this report as Feature DBAP 15C was erected between 1962 and 1975. As a result this building is between 44 and 57 years old.

On 16 October 2014, the author of this report assisted Anglo American Platinum with a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. This represented the second site visit undertaken for this purpose of identifying known graves. With the assistance provided by the Mankge family, it was found that a single unmarked stillborn grave lies buried against the walling of the structure at Feature DBAP 15C. In fact, the coordinates provided for this feature in the table above, represent the exact locality for this grave as recorded in the presence

of the family representative. The following information was recorded for this grave.

Grave	Name of Deceased	Dates	Description of Graves
HNN2/01	Mmagopheteng Mankge	* 1979 † 1979 Less than one year	No grave dressing. The grave is located in the corner of a former dwelling.

While no middens have been identified in proximity to this site, such middens are expected to be present.

Site Extent:

The site is approximately 200m by 100m in extent.

Site Significance:

Components of the historic farmstead are older than 60 years. The site also possesses reasonably high levels of historic significance. However, its preservation is not all that good. The historic farmstead, without the presence of graves, is deemed to be **Generally Protected B (GP. B)** or **Medium Significance**.

Two unmarked stillborn baby graves were identified in association with two buildings from the site. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 75 – General view of historic farm dwelling at feature DBAP 15A. Photograph was taken in 2015 by Mauritz Naudé.



Figure 76 – Interior view of a section of the historic farm dwelling at feature DBAP 15A. Photograph was taken in 2015 by Mauritz Naudé.



Figure 77 – General view of a section of the building at feature DBAP 15B. Photograph was taken in 2015 by Mauritz Naudé.



Figure 78 – General view of the unmarked grave of Rose Mankge. This grave is associated with the building at feature DBAP 15B. Scale in 10cm increments.



Figure 79 – General view of the building at feature DBAP 15C. Photograph was taken in 2015 by Mauritz Naudé.



Figure 80 – General view of the unmarked grave of Mmagopheteng Mankge. This grave is associated with the building at feature DBAP 15C. Scale in 10cm increments.

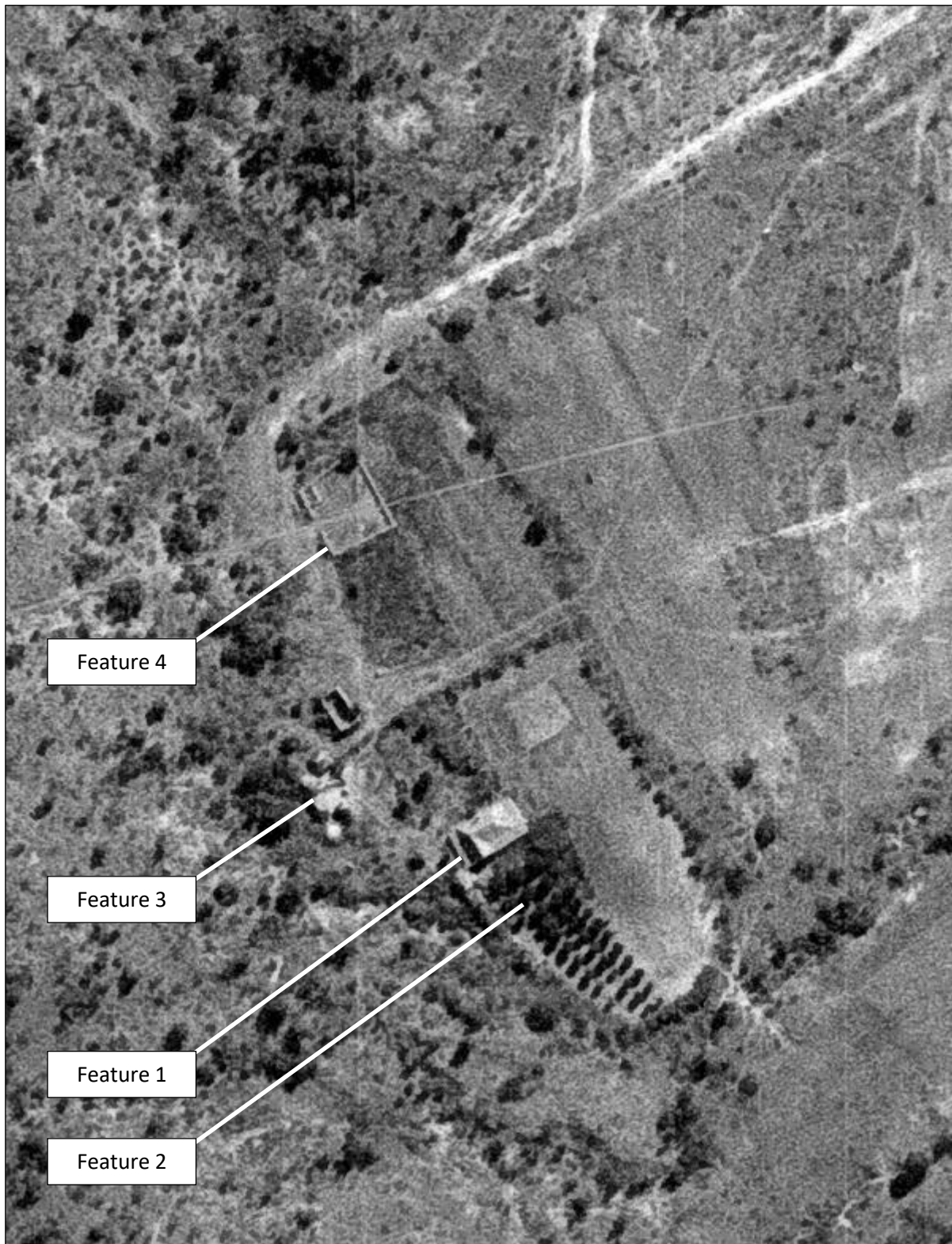


Figure 81 – Depiction of site DBAP 15 on the 1956 aerial photograph (National Geo-spatial Information, Aerial Photograph, 367_1956_02_4328). Feature 1 indicates the position of the historic farm dwelling at feature DBAP 15A. Feature 2 indicates the position where the building at feature DBAP 15B is currently located. As can be seen, no building existed at the time with only a fruit orchard shown here on this 1956 aerial photograph. Feature 3 indicates the position where building DBAP 15C is currently located. At the time that this aerial photograph was taken, a cluster of smaller structures such as rondavels appears to have been located here. Feature 4 indicates the position of the cattle kraal.

6.2.16 DBAP 16

Site Coordinates:

S 25.026167

E 30.110917

Site Description:

The site comprises a small cemetery consisting of three graves. The cemetery is located 36m north by north-west of the cattle kraal from site DBAP 15.

PGS Heritage was appointed a few years ago to relocate the cemetery. This was successfully undertaken and the deceased were reburied in the Heatherdale Municipal Cemetery in Pretoria.

Before relocation, the cemetery comprised three graves. The details of the deceased are provided in the table below.

Grave	Name of Deceased	Dates	Description of Graves
AA44b/01	Fredrika Isabella du Preez	* 1917/04/12 † 1937/05/14	Rectangular stone slab with an ornate and inscribed headstone.
AA44b/02	Unknown Du Preez Child	* Unknown † Unknown	Small brick and cement lined dressing.
AA44b/03	Unknown Du Preez Child	* Unknown † Unknown	Single stone

From this information, it is clear that the oldest grave with an inscribed headstone at this cemetery was buried here in 1937. The date of deaths for the other two Du Preez family graves from this cemetery is not known.

The graves from this cemetery are directly associated with the Du Preez family who established the farmstead at DBAP 15. In fact, it is known that one of the deceased from this cemetery, namely Fredrika Isabella du Preez (1917/04/12 – 1937/05/14) was the daughter of the first person with the surname Du Preez to own a portion of the farm Helena, namely Petrus Hendrik du Preez (July 1878 –

6 March 1963). The farm ownership record for the farm Helena indicates that Petrus Hendrik du Preez obtained a portion of the farm on 14 July 1931.

Site Extent:

The site is approximately 20m by 10m in extent.

Site Significance:

As the graves had already been relocated, the site does not have any heritage significance.

Impact Assessment and Mitigation:

The cemetery was successfully relocated on 21 April 2017. This was done with permits provided by various permitting authorities, as well as with the written permission provided by the Du Preez family. The graves were reburied at the Heatherdale Municipal Cemetery in Pretoria.



Figure 82 – The grave of Fredrika Isabella Du Preez. Scale in 10cm increments. Photograph taken on 16 October 2014. As indicated in the text, all the graves from this cemetery were successfully exhumed and relocated on 21 April 2017.

6.2.17 DBAP 17

Site Coordinates:

S 25.025149

E 30.110766

Site Description

The site comprises a low-density surface occurrence of Middle Stone Age lithics and potsherds that appear to have been exposed by the construction of an exploration track. The site is located near the south-eastern boundary of the Helena Waste Rock Dump Alternative. Lithics were observed over an area roughly 10m by 10m in extent, with only three lithics identified within this relatively wide area. It is not surprising therefore that the highest density observed at the site is one lithic per/ m². All the lithics from the site are flakes. No hammerstones were observed at the site.

Only two potsherds were observed on the surface of the site, and both were found to be extensively weathered. It is possible that one of these potsherds is decorated, however, the weathering makes it impossible to identify the decoration.

Site Extent

Lithics were observed over an area roughly 10m x 10m in extent.

Site Significance

The site comprises a low-density surface scatter of lithics, with a total number of only three lithics identified across the entire site. Two potsherds were also observed here, both of which are quite weathered. As a result, the site is of **Low Significance** and is rated as **Generally Protected C (GP.C)**. No heritage mitigation measures or permits are therefore required before the site is destroyed.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 83 – General view of site DBAP 17.



Figure 84 – Sample of lithics (left) and potsherds (right) observed on the surface of the site. Scale in 1cm increments.

6.2.18 DBAP 18

Site Coordinates:

S 25.023767

E 30.110019

Site Description

The site comprises a high concentration of potsherds identified a few meters north of a non-perennial stream. The concentration of potsherds is furthermore located at the base of a large outcrop. A number of the potsherds contain decoration, with applique arcades and herringbone incisions on the shoulder and diagonal incisions and fingernail impressions along the rim dominant.

While the shoulder arcades and rim decoration can most likely be associated with the Marateng pottery facies (AD 1650 – AD 1850), the execution of the shoulder arcades in applique, points to some level of Nguni influence (Zulu or Swazi) in the pottery as well (Biemond, pers. comm.).

The site can be associated with either the Late Iron Age or Historic Period. With no associated features or cultural material identified, it is not presently clear why such a high concentration of ceramics is located here.

Site Extent

Potsherds were observed over an area roughly 10m x 10m in extent.

Site Significance

A high concentration of potsherds was identified near a non-perennial stream. The exact reason for the presence of this potsherd concentration is not presently certain. The site is also relatively unique, with no other such sites found during the present fieldwork. The site has **Medium Significance** and is rated as **Generally Protected C (GP.B)**. Mitigation measures would be required.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 85 – General view of site DBAP 18 showing the area at the base of a large rock outcrop where the concentration of potsherds is located. Scale in 10cm increments.



Figure 86 – Sample of decorated potsherds observed on the surface of site DBAP 18. Scale in 1cm increments.

6.2.19 DBE 19

Site Coordinates:

Feature DBAP 19A	Feature DBAP 19B	Feature DBAP 19C
Mud-Brick Dwelling	Stone Walling	Graves
S 25.022839 E 30.111587	S 25.023205 E 30.111070	S 25.022747 E 30.111292

Site Description:

A historic black homestead was identified near the eastern foot of a prominent ridge. The site is located a short distance west of a farm track. Three main components to the site were identified over an area roughly half a hectare in extent. These three features appear to have formed part of a single homestead (*kgoro*). Please note that the features shown in the table above do not represent all the tangible features that could be identified across the site. Rather, these features shown above provide the reader with an idea of the extent of the site as well as the types of tangible remains still seen on the surface of the site.

At feature DBAP 19A, the poorly preserved remains of mud-brick foundations of a structure were identified. The shape of the structure could not clearly be discerned, although it did appear rectangular in shape. Cultural material in the form of potsherds, metal pieces, and imported ceramic sherds was observed on the surface of the foundations as well as in its proximity. All three these cultural material types suggest a more recent date for the site. For example, the decoration found on one of the potsherds from here point to a pot made in the relatively recent past.

A low wall of packed stone stretching over only a short distance was identified at Feature DBAP 19B. The feature appears to have been disturbed by exploration drilling activities. While one section of the wall was packed, another section comprised large flat stone slabs that were placed upright to create a wall.

The site is not depicted on the first and second editions of the 2530AA Topographical Sheets surveyed in 1969 and 1988. It is also not depicted on the aerial photograph taken in 1956. However, the site is depicted on the aerial photograph taken in 1962. This areal image depicts a walled

domestic zone containing four rectangular structures (at least two of which appear to have been dwellings) with a relatively large cattle kraal directly east of the domestic area. Interestingly, no evidence for this cattle kraal could be found during the fieldwork. The depicted layout of this homestead as well as the presence of low walls enclosing the domestic zone and separating the different dwellings into separate courtyards suggest that the site was a Pedi homestead or *kgoro*. It is possible that the low mud-brick walls identified at feature DBAP 19A may be the remnants of the mud walls (*moduthudu*) that enclosed the actual dwellings in Pedi homesteads. The walling at feature DBAP 19B cannot be identified on this aerial photograph, and may have been built at a later time. The depiction of the site on the 1962 aerial image, indicates that it may be older than 60 years. The 1975 depiction of the site indicates that the site was abandoned between 1962 and 1975, with only the walls of the domestic area still barely visible on the aerial photograph.

On 21 January 2015, two PGS Heritage staff members with assistance provided by Anglo American Platinum undertook a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. With the assistance provided by the Mashigoane family, the following details were recorded for individuals who lie buried at Feature DBAP 19C.

Grave	Name of Deceased	Dates	Description of Graves
H1/01	Markus Mashigoane	* 1948 † Unknown Adult	No formal grave dressing. The only surface makers that could be observed on the grave were a lower and upper grinder.
H1/02	Masakaneng Mashigoane	* 1950 † Unknown ± 5 years	No formal grave dressing or surface marking.
H1/03	Bhuti Mashigoane	* Unknown † Unknown ± 18 months	No formal grave dressing or surface marking.

Apart from the graves already mentioned above, it is possible for graves to have been buried in association with the homestead at site DBAP 19. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that “*Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the*

eaves of the hut.” Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: “The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.” It is therefore clear that any graves associated with a particular kgoro may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that “...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”

Site Extent:

The site is approximately 100m by 80m in extent.

Site Significance:

All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 87 – General view of some of the area where mud-brick foundations were identified.



Figure 88 – Sample of cultural material observed near feature DBAP 19A. Scale in 1cm increments.



Figure 89 – General view of feature DBAP 19B. Scale in 10cm increments.



Figure 90 – Side view of a section of the stone packed wall at feature DBAP 19B. Scale in 10cm increments.

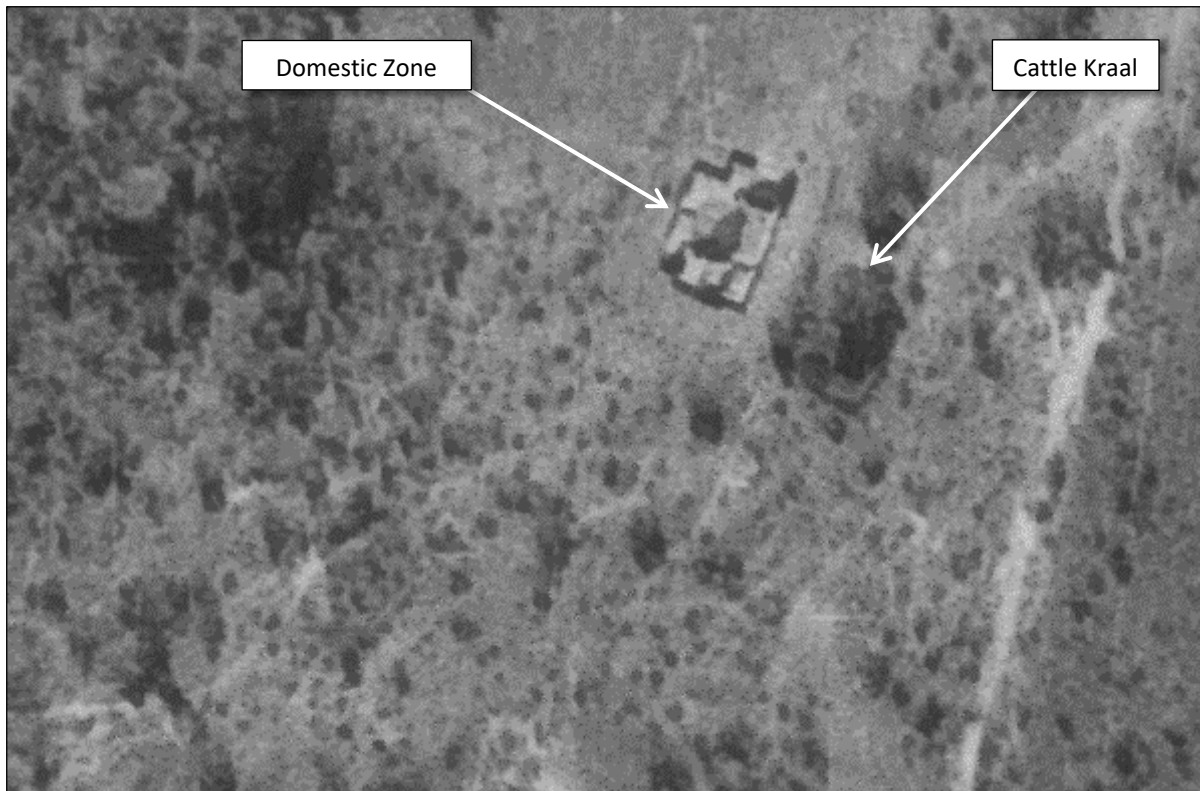


Figure 91 – Depiction of the site at DBE 8 on the 1962 aerial photograph (National Geo-spatial Information, Aerial Photograph, 267_1962_01_4853). This depiction also shows the area where feature DBE 8B was identified. However, this feature cannot be seen in this image.



Figure 92 – General view of the area identified by the Mashigoane family as the place where three of the family's graves lie buried. Neither one of these graves has formal grave dressings.

6.2.20 DBE 20

Site Coordinates:

S 25.022450

E 30.112623

Site Description

The site comprises a moderate density surface scatter of potsherds identified south of a non-perennial stream. After a potsherd was identified on the surface of the site, an intensive walkthrough of the area was undertaken and approximately 30 potsherds were observed over an area roughly 30m by 30m in extent. Almost all of these potsherds were found to be undecorated, with only one decorated sherd observed at the time. The decoration found on this sherd comprises a band of diagonal incision. In general terms, the potsherds appear to be reasonably weathered.

The low frequency of decorated sherds suggests that the pottery can be associated with either the Late Iron Age or Historic Period. With no associated features or cultural material identified, it is not presently clear why such a high concentration of ceramics is located here. It is worth noting that according to the well-known ethnologist H.O. Mönnig, the surface of Pedi graves may contain broken potsherds with very little other surface marking used. It is especially the following section from Mönnig (1978:40) that is important: *"...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered."*

Site Extent

Potsherds were observed over an area roughly 30m x 30m in extent.

Site Significance

A moderate density scatter of largely undecorated potsherds were identified here, the exact reason for the presence of this potsherd concentration is not presently certain. For the moment, the site is deemed to be of **Medium Significance** and is rated as **Generally Protected C (GP.B)**. Mitigation measures would therefore, be required.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 93 – General view of site DBAP 20 with the associated non-perennial stream visible in the back.



Figure 94 – Sample of potsherds observed on the surface of site DBAP 20. The one decorated potsherd observed at the site can be seen in the top row on the right. Scale in 1cm increments.

6.2.21 DBAP 21

Site Coordinates:

S 25.022194

E 30.112222

Site Description:

The site was first identified during an archaeological survey undertaken in 2002 (Huffman, 2002). Sites 6 from this 2002 archaeological survey is associated with this site (DBAP 22). The site comprises a small cemetery consisting of five graves. On 16 October 2014, the author of this report assisted Anglo American Platinum with a site visit during which families with graves on the mining property were invited to show these known graves to the mine staff and PGS Heritage in an attempt to identify and record these cemeteries. With the assistance provided by the Mashegwane and Mankge families, the following information was recorded for this cemetery.

Grave	Name of Deceased	Dates	Description of Graves
AA20/01	Sepeke Kobo Mashegwane	* Before 1924 † 1960s	Rectangular cement dressing with cement headstone.
AA20/02	Petrus Mohlogane Mankge	* 1913/08/14 † 1974/06/25	Rectangular granite-lined dressing covered with white gravel with an inscribed granite headstone
AA20/03	Paulina Moshiane Mankge	* 1974/12/25 † 1975/01/22	Rectangular granite lined dressing covered with white gravel and which has an inscribed granite headstone on its western end.
AA20/04	Rose Tlou	* c. 1989 † c. 1990	Oval stone lined dressing with upright stone used as a headstone.
AA20/05	Dorcas Matshipa	* 1980/04/05 † 1980/09/25	Rectangular granite-lined dressing covered with white gravel with inscribed granite headstone

Site Extent:

The site is approximately 20m by 10m in extent.

Site Significance:

Graves and burial grounds have high levels of emotional, religious and historical significance. As a result, the site has a **Generally Protected A (GP. A)** or **High/Medium Significance**.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 95 – The grave of Sepeke Kobo Mashegwane. This is the oldest grave at the cemetery. Scale in 10cm increments. Photograph was taken on 16 October 2014.



Figure 96 – The grave of Rose Tlou can be seen in the foreground. Her grave is the youngest grave at the cemetery. Scale in 10cm increments. Photograph was taken on 16 October 2014.

6.2.22 DBAP 22

Site Coordinates:

S 25.020970

E 30.112360

Site Description:

The site was first identified during an archaeological survey undertaken in 2002 (Huffman, 2002). Sites 6 from this 2002 archaeological survey is associated with this site (DBAP 22). According to the 2002 report, a historic black homestead was identified here.

During the fieldwork undertaken for the present project, an attempt was made to visit the homestead identified by Huffman (2002). Due to a security fence that was erected around the Mototolo Concentrator, the fieldwork team from PGS Heritage could not access the GPS point recorded by Huffman (2002), with the closest distance that could be achieved approximately 4m from the homestead. From this relatively close distance, no tangible evidence for the homestead could be identified. It is not presently certain whether any tangible evidence for the site still remains or if it has been completely destroyed.

Depending on the actual condition of the site, it is possible for graves to have been buried in association with the homestead at site DBAP 22. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *"Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut."* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *"The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices."* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *"...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the*

burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”

Site Extent:

Unknown

Site Significance:

As the present condition of the homestead is not known, it will be assumed that the homestead still exists and that possible graves may be associated with the homestead. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 97 – General view of the area where a black homestead was identified during the 2002 archaeological survey. The fence seen in this image made access to the site coordinates impossible.

6.2.23 DBAP 23

Site Coordinates:

Feature DBAP 23A	Feature DBAP 23B
Stone Walling	Low Terrace Wall
S 25.012076 E 30.110037	S 25.010930 E 30.109967

Site Description:

A historic black homestead is located here in a position immediately west of the plant area of the Mototolo Concentrator. During an archaeological survey undertaken in 2002 (Huffman, 2002), a homestead (Site 12 from this 2002 report) was identified roughly 262m east of the present site.

A number of features were identified over an area roughly 2.5 hectares in extent. These features all appear to have formed part of a single homestead (*kgoro*). Please note that the features shown in the table above do not represent all the tangible features that could be identified across the site. Rather, these features shown above provide the reader with an idea of the extent of the site.

Extensive stonewalling was identified against the discard dump of the Mototolo Concentrator at Feature DBAP 23A. This stonewalling represents the southern end of the site and appears to comprise connected rectangular enclosures. The walling was not built in the traditional Iron Age tradition of a double row of larger stones filled with smaller stones. Rather, the walling found at this site was built by simply stacking medium-sized boulders on each other to create walls.

At Feature DBAP 23B, a low crescent-shaped terrace wall was identified. Some undecorated potsherds could be observed in the surroundings of this terrace wall. However, no middens or concentrations of cultural material could be observed.

The section of the site located between these two features is partially covered in dense vegetation. This said two rectangular stone concentrations were identified, with a possible lower grinder located on one of these concentrations. While these concentrations maybe graves, it is also possible for these concentrations to represent the remains of a dwelling foundation. More stonewalling is also

found in the area between the two above-mentioned features. Some undecorated potsherds were also observed in this area, but again no evidence for middens could be seen.

The site is not depicted on the first and second editions of the 2530AA Topographical Sheets surveyed in 1969 and 1988. However, it is depicted on the aerial photographs taken in 1956. Only the southern component of the site is clearly visible on this aerial image, with houses and attached rectangular livestock enclosures clearly seen on this photograph. The attached rectangular livestock enclosures shown on this 1956 aerial photograph is clearly the same stonewalling that was identified at Feature 23A. The aerial photograph taken in 1964 appears to show fewer dwellings and less extensive livestock enclosures. From this, it would appear that the homestead was abandoned during the preceding years. This is proven by the 1975 aerial photograph which only shows some stonewalling in the area where stonewalling was identified at Feature 23A.

Apart from the possible graves already discussed, it is also possible for unmarked stillborn baby and adult graves to have been buried in association with the homestead at site DBAP 9. According to well-known ethnologist H.O. Mönnig, graves were buried in different localities across a Pedi settlement or *kgoro*. Mönnig (1978:139) states that *“Chiefs and heads of lineages and their wives, and the heads of households are buried in the cattle kraal. Young men and women of lesser importance are buried in the private courtyard (mafuri) behind the hut. Babies are buried inside the hut, and young children are buried under the eaves of the hut.”* Furthermore, Mönnig (1978: 140) provides the following description in terms of the marking of such graves: *“The grave is then filled up by the close male relatives, and a small stone placed in the center of the grave to indicate its position for future sacrifices.”* It is therefore clear that any graves associated with a particular *kgoro* may not be well marked and visible on the surface. However, Mönnig (1978:40) adds that *“...as soon as the grave is filled, the female relative who officiated previously approaches with a clay pot filled with water and purifying medicines. In the case of a polygamist, all his wives have to come, each with a pot. All the persons who took part in the burial, and who were thus contaminated with ditshila, then cleanse themselves by washing their hands in the water. Each woman then drops her pot on the grave, where it is shattered.”* As this site was abandoned some time ago, no direct information with regards to the presence (or not) of graves is currently available.

Site Extent:

The site is approximately 180m by 140m in extent.

Site Significance:

Although risk exists for graves to have been buried at the site, the site's structures on their own have enough historic value to be deemed of **Generally Protected B (GP. B)** or **Medium Significance**. The risk of unmarked baby and adult graves to be present as well requires a higher significance for the site. All graves have high levels of emotional, religious and in some cases historical significance. As such the site is of **Generally Protected A (GP. A)** or **High/Medium Significance**. This indicates that the site may not be impacted upon without prior mitigation.

Impact Assessment and Mitigation:

See Chapter 7 for impact assessment calculations and Chapter 8 for required mitigation measures.



Figure 98 – General view of a section of stonewalling at feature DBAP 23A. Scale in 10cm increments. Note the use of equal sized boulders in the construction of the wall.



Figure 99 – Another view of a section of stonewalling at feature DBAP 23A. Scale in 10cm increments.



Figure 100 – A small enclosure forming part of the stonewalled section at Feature DBAP 23A. The scale is in 10cm increments.



Figure 101 – One of two rectangular stone concentrations identified between features DBAP 23A and DBAP 23B which may either be graves or the poorly preserved remains of a rectangular dwelling.

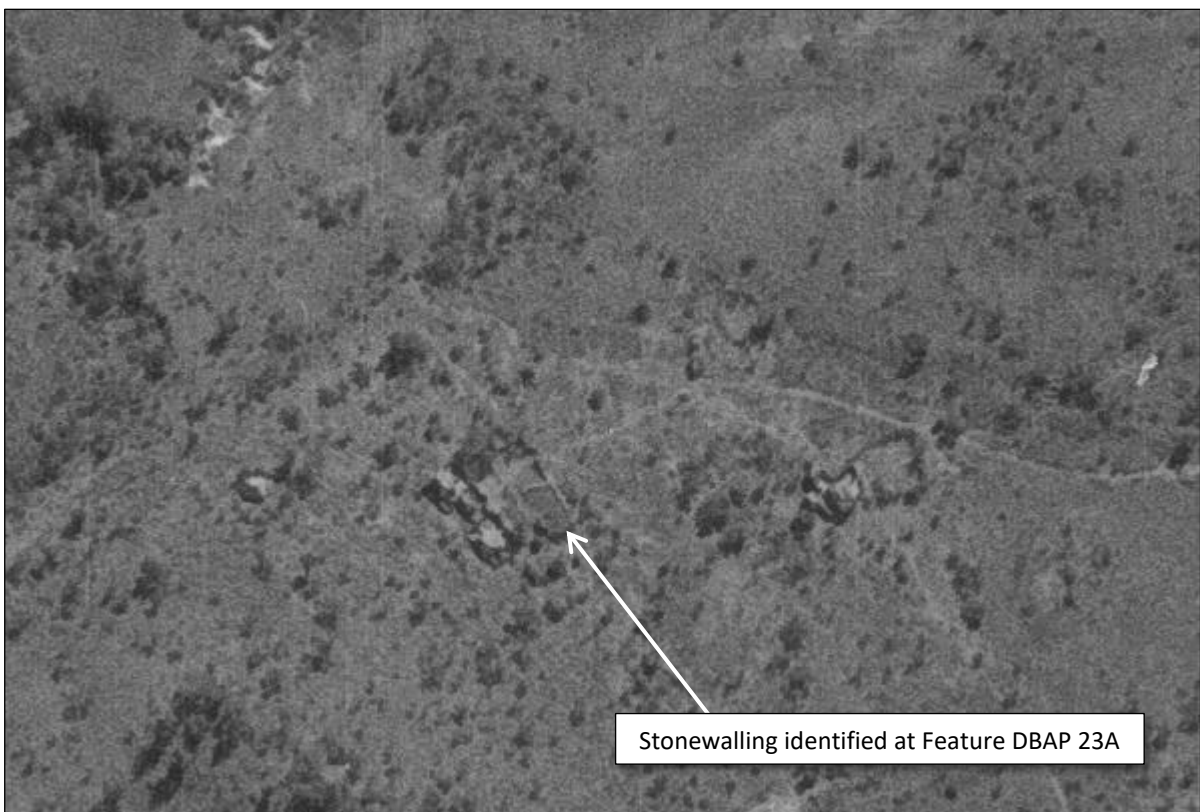


Figure 102 – Depiction of the site at DBAP 23 on the 1956 aerial photograph (National Geo-spatial Information, Aerial Photograph, 367_1956_02_4328).

6.2.24 DBAP 24

Site Coordinates:

S 25.005692

E 30.119966

Site Description:

The site comprises a low rock outcrop that contains at least two relatively shallow grinding surfaces. Cultural material in the form of two upper grinders and three undecorated potsherds were identified.

It is clear that a communal grinding stone was located here. With no homesteads known from the immediate surroundings of the site, it is possible that the stone was used by homesteads further away. In this regard, it is worth noting that neither the 1956 nor the 1962 aerial photographs depict any homesteads in the general surroundings of the site.

Site Extent:

The site is roughly 20m by 20m in extent.

Site Significance:

As the site consists of only a communal grinding stone with some cultural material but with no associated settlement features such as stonewalling present, the site has little significance. As such the site is of **Generally Protected C (GP. C)** or **Low Significance**. This indicates that the site may be destroyed without further mitigation.

Impact Assessment and Mitigation:

No mitigation is required for the site.



Figure 103 – General view of the communal grinding stone at site DBAP 24. Scale in 10cm increments.



Figure 104 – Sample of potsherds found near the communal grinding stone. Scale in 1cm increments.