DOCUMENTATION REPORT

FOR LATE IRON AGE STONE WALLED SETTLEMENTS RDR 1, 2 & RDR 7 WITHIN THE PROPOSED DEVELOPMENT AREA (MORNING TIDE COMPLEX), ON THE REMAINDER OF PORTION 7 OF THE FARM ROOIDRAAI 34 JT, MASHISHING (LYDENBURG)

MPUMALANGA PROVINCE

REPORT COMPILED FOR

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EXECUTIVE SUMMARY

An archaeological scoping assessment was conducted in 2006 on the *remainder of portion 7 of the farm Rooidraai 34 JT*, on the outskirts of the town Lydenburg (Mashishing), Mpumalanga. Sections on the farm were earmarked for the Morning Tide Development Complex for commercial, light industrial and residential development. The current report concentrates only on the Late Iron Age features identified as RDR 1, 2, & 7 (see Fig. 1), which will be affected by the proposed developments of extension 54, 80 and 104 (see Appendix 1). In discussions it was indicated that RDR 6 will not be affected by the current proposed developments.¹ A documentation and management report was conducted for the rock engraving site, RDR 8 in August 2013.

A Phase 1 Heritage Impact Assessment (HIA) was conducted in April 2006 (Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential development by Archaeology Africa cc, P. Birkholtz), (SAHRA Arch. Ref. 9/2/236/0002). A review comment by SAHRA, was issued on 23 October 2007. It stated that sites RDR 1,2,& 7 be surveyed and drawn and that a layout plan be compiled to show the enclosure units, terracing, cattle tracks features and surface artefacts. Areas best suited for archaeological excavation must be identified and phase 2 excavations must be undertaken for which a permit must be obtained from SAHRA.

The Morning Tide Development Complex comprises of the *remainder of portion 7 of the farm Rooidraai 34JT.* It is approximately 150ha in extent and located to the south of Lydenburg. The area for the proposed development is situated on a watershed between the Doringbergspruit and Dorps River. It is currently vacant, and zoned as residential / commercial. A rock engraving site (RDR 8) is situated directly south of RDR 7 and a documentation report as well as management plan was done by the author (August 2013).² The study area is directly south of the Doringbergspruit, north and south of the Weltevreden dirt road, and east of the R36 (Lydenburg - Machadodorp road).

RDR 1 is extensive and is partially situated on a hill. Eleven units were identified in the initial report of 2006, and numbered from A - K. Traces of cattle tracks and terrace walls were identified, as well as ten engravings between units RDR I,J & K. Some of the walls as very well preserved in units RDR 1 I & J and is in the extent of 1m high and 1m wide. Most of the walls are in general, deteriorated. A few upper and lower grinders as well as a stone for the sharpening of implements, were identified. The section towards the south west (RDR1 K) is on the boundary of the farm, and has largely been destroyed by recent and past activities and excavations. Only a small section on top of the ridge is still intact.

² Rowe C., 2013. Specialist report and management plan for a LIA rock engraving site.

¹ Personal Communication: Danie van der Walt, August 2013.

RDR 2 consists of several units of which RDR 2 (A,B,C & D) are clearly defined. Some of these walls are still fairly well preserved, and are over 1m wide (RDR 2 B) and also approximately 1m in height, although RDR 2 (D) is almost level with the ground. Some upper grinders were identified during the surface investigation. Two possible graves were identified approximately 40m from RDR 2A, which were not indicated during the 2006 investigation.

RDR 7 consists of four units (1,2,3 & 4) as well as indistinct terrace walls, which are level with the ground surface. Some upper grinders and a few rough clay potsherds were identified in the disturbed sections. One potsherd with a single line decoration and graphite was observed. The rock engraving site RDR 8 is situated closest to RDR 7.

Birkholtz states that all the Iron Age sites from the study area are associated with one large settlement.³ As far as the survey could establish, RDR 1, 2, & 7 will directly be affected by the proposed development extensions 54, 80 and 104 (See Appendix 1 & Fig. 1: Layout plan of the proposed development).

All the sites were fully documented, and layout plans are included in this report. In general, a few surface artifacts, in the form of upper and lower grinders, potsherds and a stone for sharpening implements were identified. Specific sections in each site (RDR 1, 2, & 7), are recommended for phase 2 excavations, before an application for destruction will be made to SAHRA.

Two possible graves were identified near the LIA settlement unit RDR 2 A. These features were not identified during the 2006 excavations and mitigation measures are needed.

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³ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p. 22.

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A. BACKGROUND INFORMATION TO THE PROJECT

AFRIKA Enviro & Biology in association with the owners / developers of the Lydenburg Mall development requested Adansonia Heritage Consultants to document the areas which will be affected by the proposed development of the Morning Tide Complex (Extensions 54, 80, & 104), and to identify sections to be excavated before an application will be made to SAHRA for destruction on the remainder of *portion 7 of the farm Rooidraai 34 JT*.

A Phase 1 Heritage Impact Assessment (HIA) was conducted in May 2006 (*Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*) by *Archaeology Africa cc*, Mr. P. Birkholtz (SAHRA Arch. Ref. 9/2/236/0002), and a documentation and management report was subsequently done on the rock engraving site (C. Rowe, August 2013).

The area for the proposed development is currently vacant, and zoned as residential / commercial. The area consists of open landscapes with very few trees. Some indistinct Late Iron Age (LIA) stone and agricultural terrace walls are scattered throughout the wider area. The owners / developers burnt the area and visibility during the investigation was excellent.

The aims for this report are to document the archaeological resources and to source all relevant information on the sites as well as to identify areas which are viable to excavate in the Phase 2 study. The study area is indicated in Fig. 1, 2, 3 & 4. Layout plans and photographic evidence is included in the text (Fig. 5 & 6).

- Type of development: Business development for commercial, light industrial and residential purposes.
- The area is zoned as residential / commercial.
- Location of Province, Magisterial district / Local Authority and Property (farms): The area falls
 within the Mpumalanga Province under the jurisdiction of the Thaba Chweu Local
 municipality and the Ehlanzeni District municipality.
- Land owners / developers: Ralindo Pty (Ltd).
 - **Terms of reference:** As specified by section 38 (3) of the NHRA, the following information is provided in this report.
 - a) The identification, documentation and mapping of LIA stone walls complexes (RDR 1, 2 & 7) and associated surface artefacts.

Legal requirements:

The legal context of the report is grounded in the National Heritage Resources Act no. 25, 1999, as well as the National Environmental Management Act (1998) (NEMA).

National Heritage Resources Act

The National Heritage Resources Act no. 25, 1999 (NHRA) aims to promote good management of the national estate, and to enable and encourage communities to conserve their legacy so that it may be bequeathed to future generations. Heritage is unique and it cannot be renewed, and contributes to redressing past inequities.⁴ It promotes previously neglected research areas.

All archaeological and other cultural heritage resources are evaluated according to the NHRA, section 3(3). A place or object is considered to be part of the national estate if it has cultural significance or other special value in terms of:

- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.⁵

Graves

SAHRA Policy on burial grounds

The policy is that graves and cemeteries should be left undisturbed, no matter how inaccessible and difficult they are to maintain. It is our obligation to empower civil society to nurture and conserve our heritage. It is only when essential developments threaten a place of burial, that human remains should be disinterred to another cemetery or burial ground.

From a historical point of view and for research purposes, it is vital that burial sites are not disturbed. The

⁴National Heritage Resources Act, no. 25 of 1999. p. 2.

⁵National Heritage Resources Act, no. 25 of 1999. pp. 12-14

location and marking of an individual's grave tells a life story, where he / she died possibly defending (or attacking) a particular place or situation and makes it easier to understand the circumstances of his / her death.⁶

Section 38 of the NHRA

Please take note that a phase 1 Heritage impact assessment was conducted in May 2006 (SAHRA Arch. Ref. 9/2/236/0002). The proposed development is a listed activity in terms of Section 38 (1) of the NHRA. Section 38 (2) of the NHRA requires the submission of a HIA report for authorisation purposes to the responsible heritage resources agency, (SAHRA).

A review comment by SAHRA was issued on 23 October 2007 states as follows:

- RDR 1: is of high significance. It extends over a very large area and comprises of reasonably well preserved stone wall enclosures, terrace walling and cattle tracks with at least eleven individual enclosure units (A-K). Please note that the 10 engraving sites which were identified on 2 November 2013 (and not indicated in the 2006 report) are also of high significance as SAHRA indicated for the other engraving sites RDR 3 & 8.
- RDR 2: consists of four enclosure units (A-D) and is of moderate to high significance. Please
 note the two possible graves at RDR 2 were not included during the 2006 report. SAHRA regard
 all grave sites as of high significance and therefore mitigation measures are recommended.
- RDR 7: consists of Late Iron Age stone walling and are of moderate to low significance.

SAHRA recommended that all three sections must be surveyed and drawn and a layout plan must be compiled showing enclosure units, terracing, cattle tracks as well as surface artifacts. Areas best suited for archaeological test excavations must be identified and phase 2 excavations must be undertaken for which a permit must be obtained from SAHRA. A permit from SAHRA must be obtained before the sites may be destroyed.

The **rock engraving sites** must be preserved in situ and a surrounding buffer zone must be demarcated as a green open space in which no activities and direct impacts from the development may be allowed. A management plan which includes monitoring during construction and operation phases and sustainable conservation must be compiled.

In terms of the NHRA (no 25 of 1999) **graves** older than 60 years (not in a municipal graveyard) are protected. Anyone who wishes to develop an area where there are graves older than 60 years is required to follow the process described in the legislation (section 36 and associated regulations). SAHRA must be notified and the specialist will require a permit from SAHRA.

⁶SAHRA, Burial sites, <u>Http://www.sahra.org.za/burial.htm</u>, Access, 2008-10-16.

An accredited archaeologist must be consulted to determine the age of the graves and to
undertake burial relocations. Alternatively the graves must be preserved in situ and not be
impacted upon by the development. They must be fenced off. (See specification of the process
in Appendix 2).

Section 35 of the NHRA

Section 35 (4) of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object. This section may apply to any significant archaeological sites that may be discovered. In the case of such chance finds, the heritage practitioner will assist in investigating the extent and significance of the finds and consult with an archaeologist about further action. This may entail removal of material after documenting the find or mapping of larger sections before destruction. Surface artifacts were scarce but some potsherds were identified in the disturbed areas of RDR 7. Other surface artifacts at RDR 1, 2 & 7 were mostly in the form of upper and lower grinders which were visible after the velt was burnt.

Section 36 of the NHRA

Section 36 of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority. It is possible that chance burials might be discovered during construction work. Two possible graves were identified near RDR 2(A).

Section 34 of the NHRA

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. It is possible that other historical or LIA structures which are not indicated in the Phase 1 study (2006) might be discovered during construction work.

B. BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA

The extensive Late Iron Age (LIA) settlements in the Lydenburg (Mashishing) area are associated with rock engravings which are abundant in the open grasslands surrounding the town. The located sites were given individual numbers (in the initial 2006 HIA report), based on the farm Rooidraai (Morning Tide Development complex). The units were numbered as RDR 1, RDR 2, & RDR 7. Fig. 1 indicates the layout of the proposed development (54 - pink, 80 – orange and 104 - green) with the clusters of archaeological units superimposed in red. See also Appendix 1.

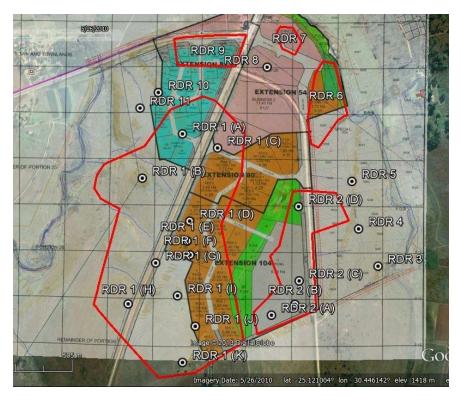


Fig. 1: Plan of archaeological remains within the layout of proposed developments: extensions 54, 80 and 104.

A rock engraving site (RDR 8) was identified just south of RDR 7. This site, which will be affected by the proposed development (extension 54), was documented and a management plan was done in August 2013. Ten rock engraving sites were identified during an extensive survey of RDR 1 I,J & K. These sites were not identified previously and will have to be handled under the specifications for the identified rock engraving sites in the study area. (Another rock engraving site which was identified in 2006 towards the east of the Weltevreden road, RDR 3, is possibly associated with site RDR 4 as it is situated closest to that site. RDR 3, 4 & 5 are not handled in this report). Some of the best examples of the Bantu agriculturist rock engravings can be found on the farm Boomplaas, north-west of Lydenburg. Many of these rock art features depict stone walled settlement layout plans (engravings of ground plans representing the shape of settlements people built and lived in), as is illustrated by Maggs (1995). Research undertaken by scholars such as Evers (1975) and Marker & Evers (1976) in the Lydenburg area, and Collett (1979; 1982) in the Badfontein Valley have revealed the existence of extensive settlements comprised of terracing, cattle tracks and areas with concentrated enclosures or homesteads. The stone walled enclosures and cattle tracks found at many of these sites indicate the significance of

⁷ Rowe, C., 2013. Specialist report and management plan for a LIA rock engraving site.

⁸ Maggs, T.,1995. Neglected Rock art: The rock engravings of agriculturist communities in South Africa, pp. 135-136.

⁹ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p.15.

herding activities. Agricultural activities in turn are indicated by the location of numerous grinding stones as well as terracing used for leveling sloped areas for use as agricultural fields. Ceramic evidence has revealed that the stone walled sites from the Lydenburg district belonged to the *Marateng* phase, which has a strong association with the Pedi.¹⁰

Recent research has linked the LIA stone walled settlements in the Mpumalanga escarpment (Lydenburg area) more specifically to the Bokoni. During the 16th and 17th centuries the Bakoni built a vast complex of stonewalled settlements in this area. These cities were carefully planned around terraced farms and roads that were built to lead cattle to pasture while keeping the cows out of the gardens. In the late 1700's the sites had populations of between 30 000 to 50 000 people.¹¹

The historical Bokoni region in Mpumalanga stretched between Ohrigstad and Carolina and was occupied by pre-colonial farming societies that built stonewalled homesteads, roads and terraces. Delius and Schoeman argued that it was a key location in the pre-colonial trade system which formed a strategic area between the coast and interior.¹² This gave the Bokoni substantial power but it also attracted other expanding groups such as the Swazi and Pedi. The resulting conflicts eventually lead to the destruction of Bokoni in the 19th century. Bokoni eventually fell under the control of the Pedi. Many people fled the area during the periods of violence, and those who remained were incorporated into the Pedi state. The terraces and stonewalled sites fell into disuse, but the initial footpaths of the Bokoni were used by other groups to trade with the coast.¹³

Research by Maggs, Van Hoepen and others show that there exists a close link between the practice of building stone walls and the engraving of homestead pattern images. In the late pre-colonial period, many of the agricultural communities which built in stone also made engravings near their homes. Both similarities and differences between engraved and built settlement patterns may provide us with a deeper understanding of the patterns. Some engravings may even show aspects of a pattern that are otherwise of low archaeological visibility and therefore liable to be overlooked. Research on the LIA stone walls therefore needs to proceed in association with work on related engravings. They can however, also have a deeper, symbolic meaning and in order to understand the agriculturist engravings, the religious and symbolic systems of these communities should be studied as well.

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¹⁰ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p. 14.

¹¹ Rossouw, C. A new experience in local tourism, in Lowvelder (9 June 2009), p. 7.

¹² Coetzee T., & Schoeman, A., Mapping Trace in Bokoni, Archaeological Bullitin 2011, p. 7.

Coetzee & Schoeman, Mapping Trace in Bokoni, Archaeological Bullitin 2011p. 9.
 Maggs, T., 1995, Neglected Rock art: The rock engravings of agriculturist communities in SA p. 141.

¹⁵ Maggs, T., 1995, Neglected Rock art: The rock engravings of agriculturist communities in SA pp.133-134.

C. DESCRIPTION OF AREAS TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

Description of methodology:

Google images of the site (Fig. 2), indicate the study area, and Fig. 1 and Appendix 1, show the layout of the proposed development. The following methods were used during the documentation of the LIA site:

- The Phase 1 HIA by Archaeology Africa cc, Mr. P. Birkholtz, May 2006, was studied (SAHRA Arch. Ref. 9/2/236/0002).
- The fieldwork and survey was conducted extensively on foot, with three people;
- The terrain consists of open grassland which was burnt to make visibility easier;
- The relevant data was located with a GPS instrument (Garmin Etrex) datum WGS 84, and plotted. Co-ordinates were within 4-6 meters of identified sites;
- Personal communication with relevant stakeholders on the specific study area, were held, Mr. A
 de la Hunt and Mr. D. van der Walt.

• GPS: Co-ordinates of the perimeters of the study area:

Co-ordinates				
	Latitude	Longitude		
RDR 1	S 25° 07' 29.89"	E 30° 26' 35.53"		
RDR 1: Engraving site	S 25° 07' 36.42"	E 30° 26' 37.70"		
RDR 2	S 25° 07' 29.18"	E 30° 26' 55.20"		
RDR 2: Graves	S 25° 07' 30.1"	E 30° 26' 53.3"		
RDR 7	S 25° 06' 53.56"	E 30° 26' 55.88"		

The area which will be affected by the proposed development is indicated in Fig. 1, 2, 3 & 4 and Appendix 1. (See also the layout plans of the stone walls in Fig. 5 & 6 & Appendix 3 for photographic evidence). This will in turn affect the archaeological Late Iron Age sites RDR 1,2, & 7, as initially identified by Birkholtz in 2006.

The initial development map (Fig. 1) deviates from the later layout of the proposed development map as indicated in Appendix 1. Therefore it is recommended that all the archaeological features be mitigated as if they will be impacted upon by the proposed development.

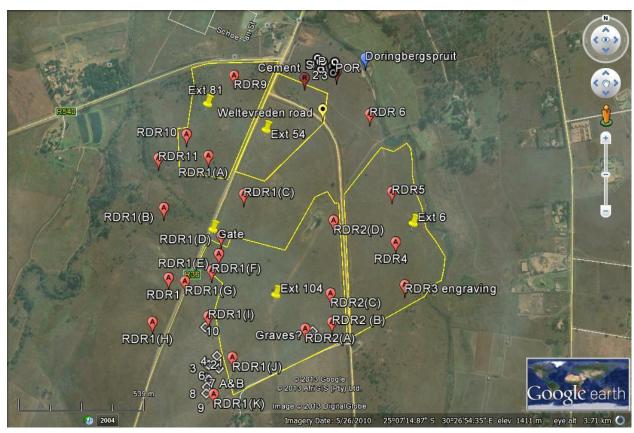


Fig. 2: Distribution of archaeological sites in study area. The proposed development impacts are indicated with the yellow lines.

D. LOCALITY & DESCRIPTION OF SITES

All comments should be studied in conjunction with the figures and appendices, which indicate the areas, and which corresponds with the summary below.

The Morning Tide Development Complex comprises of the *remainder of portion 7 of the farm Rooidraai* 34JT. It is approximately 150ha in extent and located to the south of Lydenburg. The area for the proposed development is situated on a watershed between the Doringbergspruit and Dorps River. Disturbances to the physical landscape include tarred and gravel roads, as well as a number of farm roads. Sections of the property show evidence of quarrying and prospecting activities. It is currently vacant, and zoned as residential / commercial. The area consists of open landscapes with very few trees. The study area is south of the Doringbergspruit, and directly north and south of the Weltevreden gravel road, and east of the R36 (Lydenburg - Machadodorp road). Birkholtz states that all the Iron Age

sites from the study area are associated with one large settlement.¹⁶ This study concentrates on the areas which will be affected by the proposed development, RDR 1, 2, & 7. A rock engraving site (RDR 8) is situated directly south of RDR 7 and a documentation report as well as management plan was done by the author (August 2013).¹⁷ Ten more rock engraving sites were identified in an extensive survey of RDR 1 between units I, J and K. These sites were not identified in the initial 2006 report. Two possible graves were identified just north-east of RDR 1 A. The possible graves were also not identified during the 2006 report.

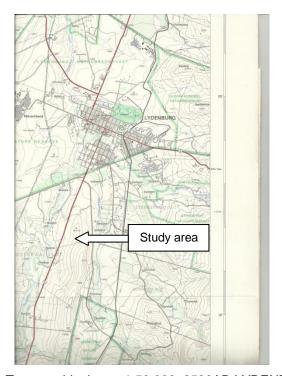


Fig. 3: Topographical map 1:50 000, 2530AB LYDENBURG.

The Late Iron Age (LIA) settlements in the area vary from well to poorly preserved stone walling. Google images show a layout comprised of concentric circles. RDR 7 represents the closest Iron Age stone walled site to the rock engraving site (RDR 8).¹⁸ The newly discovered engraving sites are associated with RDR 1 I, J & K (Fig. 4). The engravings are, unlike RDR 8, situated on the hill at a general elevation of 1450m. They also differ substantially from RDR 8 in technique and style. It is almost positive that more sites might be identified on the hill.

¹⁶ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p. 22.

¹⁷ Rowe C., 2013. Specialist report and management plan for a LIA rock engraving site.

¹⁸ Birkholtz, P. 2006 Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential Development, pp. 44-45.



Fig. 4: Distribution of ten engraving sites which was not indicated in the 2006 report.

LATE IRON AGE SITES:

RDR 1 (Fig. 5), is extensive and is partially situated on a hill. Eleven units were identified in the initial report of 2006, and numbered from A - K. RDR 1 is situated on both sides (west and east) of the R36 (Fig. 3), and the road has cut through unit RDR 1 G &H. Some of the units and walls of RDR 1 are still intact and vary in height from over 1m to level with the ground surface. Traces of cattle tracks and terrace walls were identified. The provincial road development has impacted negatively on the site and extensive disturbances are visible. Gravel roads and excavations in the study area have further impacted on the LIA stone walled settlement. A few upper and lower grinders were identified. The overall preservation of the settlement is very good although the section towards the south west (RDR1 K) has largely been destroyed by recent and past activities and excavations (Photos 87 & 88). The best preserved walling observed in the settlement are found at enclosure units RDR1 E,F,G & I. At enclosure unit I, many of the walls are in excess of 1.5m in height (Photos 62, 64, 65, 66, 67 & 73).

SAHRA review comment of 23 October 2007:

Site	Significance	Comment	Recommendation
RDR 1	High significance	Extends over a large area and	Must be surveyed and drawn;
		comprise of reasonably well	Layout plan must show features;
		preserved stone wall enclosures,	Identify area for excavations;
		terrace walling and cattle tracks with	Phase 2 excavations.
		at least 11 enclosure units	

During an extensive survey, ten rock engravings sites were identified in the area between RDR 1 I, J & K, and are all located on top of the hill. The units RDR1 I and J are situated on the slopes of the hill. The entire hill shows traces of stone walled layout patterns although it is not distinct. The stones used in the layout are generally quite big. Some of the engravings are incorporated in the walls of the units (Photo 89). The engravings are quite different from site RDR 8 which represents a pecked possible layout pattern of a LIA settlement. The engravings were all done on distinct orange coloured dolerite with a smooth hard core of a light gray colour. Most of the stones have natural hollows in them. The engravers used mainly two techniques to remove the patina: this include pecking the patina with another stone and cutting through or incising it with a sharp object. The freshly engraved surface weathers, forming a patina of its own which after many years approaches that of the original surface, thus making some engravings difficult to see ¹⁹ – especially when the light is not favourable. The incised engravings consist of triangular lines (Photo 90, 93), arrows (Photo 92), very fine hair-lines without a distinct pattern (Photo 96, 101), distinct lines projecting from circles (Photo 97, 99), and incisions similar to sharpening of metal tools. The pecked engravings consist of circular forms, dots, and lines which sometimes highlight a natural aspect in the rock such as a hollow or stain (Photo 98). Some of the rocks are lying randomly in the velt and some are incorporated in the built walls of the LIA settlement. It is strongly suspected that the images or motifs may have had a deeper symbolic rather than a functional meaning.²⁰

Please note that the 10 engraving sites which were identified on 2 November 2013 are also of high significance as SAHRA indicated for the other engraving sites RDR 3 & 8. (They were not indicated in the 2006 report). SAHRA will subsequently be notified of the sites.

The following surface artifacts were identified during the survey of RDR 1:

Site number	Surface artifacts	Description	GPS co-ordinate
RDR 1 C & D	Upper grinder	2 x Upper grinders found between units C	S 25° 07' 12.6"
		& D. Photo 46.	E 30° 26′ 43.4″
	Upper grinder		S 25° 07' 13.0"
			E 30° 26' 43.3"
RDR 1 F	Few upper grinders & a	Upper grinders were observed as well as a	S 25° 07' 22.0"
	lower grinder	small shallow lower grinder of black slate.	E 30° 26′ 38.0″
RDR 1 G	Upright stone	Entrance to unit (Photo 61)	S 25° 07' 25.78"
			E 30° 26′ 35.3″
RDR 1 I	Uprights stones	Many upright stones were observed as the	S 25° 07' 29.5"
		stone walls are still in fairly good condition;	E 30° 26' 37.6"
	Lower grinder	Lower grinder inside a unit. Photo 70.	

¹⁹ Dowson, T. The rock engravings of southern Africa, p.1.

²⁰ Maggs, T., 1995, Neglected Rock art: The rock engravings of agriculturist communities in SA pp.133-134.

RDR 1 I	2 x Stones with	Heavy stone used for grinding and	S 25° 07' 29.5"
	sharpening marks;	sharpening. The hollows are elongated	E 30° 26' 37.2"
		instead of round; Photo 71.	
		Stone with incised marks is in same	
		location and forms part of the stone wall.	
		Photo 100.	
RDR 1 J	Upright stones	Many upright stones were observed as the	S 25° 07' 33.8"
		stone walls are still in fairly good condition;	E 30° 26' 39.1"
		Photo 75.	
	Upper grinders	Many upper grinders were observed.	
		Photo 80.	
RDR 1	Stone with incised	Some of the engraving stones have apart	S 25° 07' 35.0"
	marks	from other motifs also marks similar to that	E 30° 26' 39.4"
		of sharpening metal objects.	
		Photo 92, 95, 100.	
RDR 1	Stone with incised	Engraving stone with fine hair-lines as well	S 25° 07' 34.5"
	marks	as an incision similar to that of sharpening	E 30° 26' 37.9"
		a metal object.	
		Photo 100.	

RDR 2 (Fig. 5), consists of several units of which RDR 2 (A,B,C & D) are clearly defined. Although no continuous stonewalling, terracing or cattle tracks were observed which directly link this site with RDR 1, it is very likely that both sites formed part of the same settlement. The site is located on a level area along both sides of the Weltevreden road. After the velt was burnt, some very indistinct units were observed between RDR 2 A,B,C and RDR 2 D, indicating that the settlement was extensive (See Fig, 5). Some of these walls are still fairly well preserved, and are over 1m wide (RDR 2 B) and also approximately 1m in height, although only the foundations of the wall of RDR 2 C & D are visible. The other units of RDR 2 which were identified after a controlled burn, are all level with the ground. Some upper grinders were identified during the surface investigation. Two possible graves were identified approximately 40m from RDR 2 A, which were not indicated during the 2006 investigation.

SAHRA review comment of 23 October 2007:

Site	Significance	Comment	Recommendation
RDR 2	Moderate to High	Four enclosure units (A-D).	Must be surveyed and drawn;
	significance	Fig. 5.	Layout plan must show features;
			Identify area for excavations;
			Phase 2 excavations.

Please note the two possible graves at RDR 2 were not included during the 2006 report. SAHRA regard all grave sites as of high significance and therefore SAHRA will be notified and mitigation measures are neccessary.

The following surface artifacts were identified during the survey of RDR 2 A-D:

Site number	Surface artifacts	Description	GPS co-ordinate
RDR 2 A	Possible graves	The two possible graves are situated 38m	S 25° 07' 30.1"
		from RDR2 A and 45m from RDR 2 B	E 30° 26' 53.3"
		towards the north. One grave seems to be	
		intact while the huge slate stones on the	
		second grave are broken and disturbed.	
		Photo 28.	
RDR 2 A	Upper grinder	The upper grinder was located inside the	S 25° 07' 31.7"
		unit.	E 30° 26' 52.3"
RDR 2B(1)	Upper grinder	Photo 32.	S 25° 07' 30.2"
			E 30° 26' 55.4"
RDR 2B(2)	2x Upper grinders	2 x upper grinders located in outer wall.	S 25° 07' 27.7"
		Photo 40.	E 30° 26' 56.5"
RDR 2 C	Upper grinders	2 x upper grinders found at this unit & 4 x	S 25° 07' 24.7"
	4 x Upper grinders	upper grinders.	E 30° 26' 54.1"
		Photo 37, 38 & 39.	
RDR 2 D	2 x Upper grinders	The grinders were found inside unit D	S 25° 07' 17.4"
		Photo 44.	E 30° 26′ 56.7″

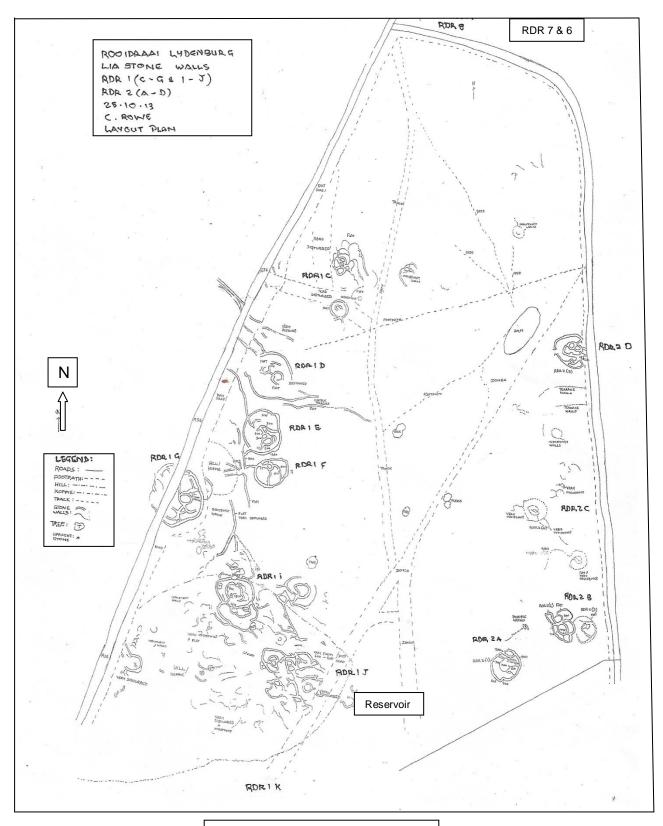


Fig. 5: Layout plan of RDR 1 & RDR 2

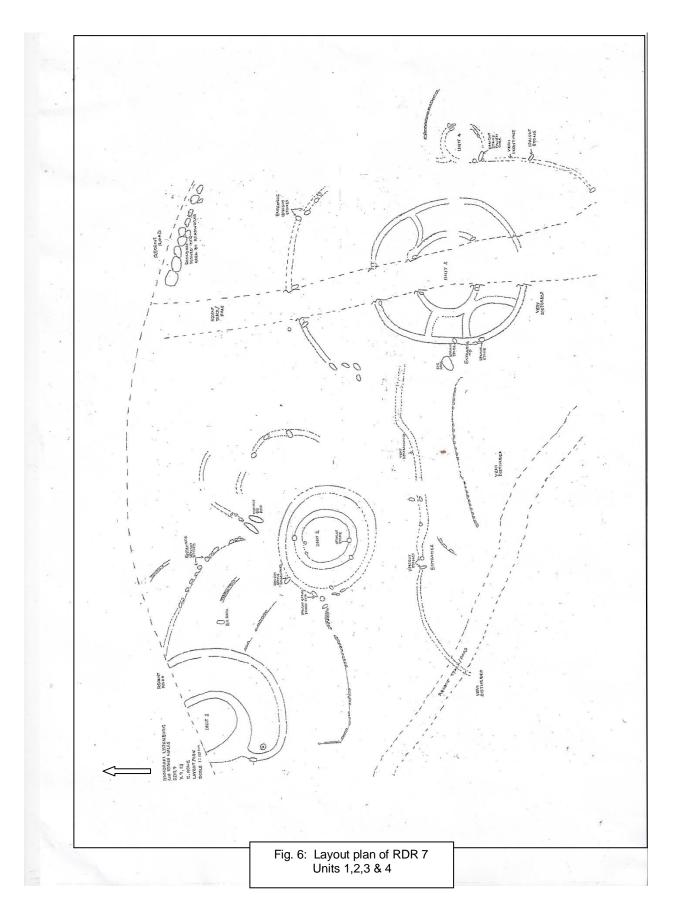
RDR 7 (Fig. 6), is located near the northern boundary of the development area and is located directly south of the Doringbergspruit. It consists of the remains of poorly preserved Late Iron Age stonewalling. After a controlled burn, four concentric units (1,2,3 & 4), and indistinct terrace walls which are level with the ground surface, were identified. Some upper grinders and a few rough clay potsherds were identified in the disturbed sections. One potsherd with a single line decoration and graphite remains was observed. RDR 7 represents the closest Iron Age stone walled site to the rock engraving at RDR 8.

SAHRA review comment of 23 October 2007:

Site	Significance	Comment	Recommendation
RDR 7	Moderate to Low	Late Iron Age stone walling.	Must be surveyed and drawn; Layout
	significance		plan must show features; Identify area for
			excavations; Phase 2 excavations.

The following surface artifacts were identified during the survey of RDR 7:

Site number	Surface artifacts	Description	GPS co-ordinate
RDR 7 (1)	Potsherds	Two fragments of potsherds were observed in	S 25° 06' 52.3"
	Photo 7	the disturbed section at the road. One fragment	E 30° 26′ 54.6″
		has a single line decoration and graphite.	
RDR 7 (2)	Upright stones	Two upright stones facing north	S 25° 06' 52.5"
	Photo 8 & 11		E 30° 26′ 55.2″
RDR 7 (2)	2 x Huge stones as part	The huge stones form part of outer wall.	S 25° 06' 52.8"
	of outer wall	Photo 8, 9 & 12	E 30° 26′ 55.0″
RDR 7 (2)	Prominent stones	Prominent stones in wall towards the south end	S 25° 06' 53.1"
		of the unit.	E 30° 26′ 54.7″
RDR 7 (2)	Entrance	Entrance south of unit 2 in southern outer wall	S 25° 06' 53.4"
			E 30° 26′ 54.6″
RDR 7 (2)	2 x Upper grinder	One upper grinder was found in the wall section	S 25° 06' 52.8"
	Photo 13, 14.	of the unit and the other just outside	E 30° 26′ 54.6″
RDR 7 (3)	Upright stones	Two upright stones facing north	S 25° 06' 53.9"
		Photo 16.	E 30° 26′ 54.7″
RDR 7 (3)	Upper grinders &	All the surface material (1 x broken upper	
	potsherds	grinder, 2 x upper grinders and 2 fragments of	
	Photo 18.	potsherds) were found in the disturbed road	
		section.	
RDR 7 (4)	Upright stones	Many upright stones were observed at units	S 25° 06' 54.3"
	Photo 20 & 21	although the wall is deteriorated.	E 30° 26′ 56.6″
RDR 7 (4)	Upright stone	This stone has fallen over	S 25° 06' 54.2"
			E 30° 26′ 56.8″
RDR 7 (4)	Upright stone	This stone is situated further south in the wall	S 25° 06' 54.3"
	Photo 21.		E 30° 26′ 56.6″



E. RECOMMENDATIONS

The Late Iron Age stone walled complex on the *remainder of portion 7 of the farm Rooidraai 34 JT*, to the south of the town Lydenburg, is quite extensive. This forms part of the wider Badfontein stone walled complex of which remains are still visible between Lydenburg, Machadodorp and Carolona. The stone walls have been impacted upon over the years by extensive road networks and developments. This report concentrates on the documentation of the LIA stone walled remains, engravings and surface artifacts which will be impacted upon by the proposed development as indicated in Appendix 1.

An initial HIA study was done in 2006. A review comment by SAHRA which was issued on 23 October 2007, stated the following:

- RDR 1: is of high significance. It extends over a very large area and comprises of reasonably well preserved stone walled enclosures, terrace walling and cattle tracks with at least eleven individual enclosure units (A-K). It stretches to the west and east of the R36. Please note that the 10 engraving sites which were identified on 2 November 2013 (and not indicated in the 2006 report) are also of high significance as SAHRA indicated for the other engraving sites in the area, RDR 3 & 8:
- RDR 2: consists of four enclosure units (A-D) and is of moderate to high significance. Please
 note that the two possible graves which were identified at RDR 2, were not included in the 2006
 report. SAHRA regard all grave sites as of high significance and therefore mitigation measures
 are necessary;
- RDR 7: consists of Late Iron Age stone walling and are of moderate to low significance, but it is
 also the closest to the rock engraving site, RDR 8.

SAHRA recommended that all three sections must be surveyed and drawn and a layout plan must be compiled showing enclosure units, terracing, cattle tracks (see Fig. 5 & 6), as well as surface artifacts (see section D for a summary of the surface artifacts, and photographs). Surface artifacts consisted of a few upper and lower grinders, some rough clay potsherds (only one piece has a decoration on) and a stone for sharpening of implements. The clay potsherds were all below the surface in disturbed areas. A large number of stones from all the sites have been removed over the years.

The areas that are best suited for archaeological test excavations were identified according to the location of surface artifacts in the various sections and it is recommended in a letter dated 27 August 2013, that the phase 2 excavations be done at the following points:

The sampling strategy that is recommended for the archaeological features at Rooidraai is the examination of smaller areas, which are representative of the wider area. Test excavations must be conducted at the following sites to get a representative sample of the entire area.

1. RDR 1F & K (east of the R36 as well as the middle section);

- 2. RDR 2 C (middle of section);
- 3. RDR 2 The graves should be investigated and addressed as per the specifications in section 36 of the NHRA (see Appendix 2).
- 4. RDR 7, as it is the closest stone walled unit to the rock engraving site;²¹

It is recommended that the author initially accompany the appointed archaeologist to familiarize him with the area. The appointed archaeologist must obtain the necessary permits for excavations and destruction of features from SAHRA.

It seems as if the proposed development will not directly be affecting the new rock engraving site at RDR 1 I,J & K. However, the sites will eventually be impacted upon by the adjacent development and it is therefore recommended that a full documentation of the site be executed. The rock engraving site must be preserved in situ and a surrounding buffer zone must be demarcated as a green open space in which no activities and direct impacts from the development may be allowed. A management plan which includes monitoring during construction and operation phases and sustainable conservation must be compiled.

In terms of the NHRA (no 25 of 1999), graves older than 60 years (which are not in a municipal graveyard) are protected. Anyone who wishes to develop an area where there are graves older than 60 years is required to follow the process described in the legislation (section 36 and associated regulations). SAHRA must be notified and the specialist will require a permit from SAHRA (see Appendix 2). Alternatively, the graves must be fence off, and any visitors must be allowed access.

F. CONCLUSION

Archaeological material or graves are not always visible during field surveys and therefore some significant material may only be revealed during construction activities of the proposed development. It is therefore recommended that the owners be made aware of this possibility and when human remains, clay or ceramic pottery etc. are further observed, a qualified archaeologist must be notified and an assessment be done. Further research might then be necessary in this regard for which the developer will be responsible.

Adansonia Heritage Consultants cannot be held responsible for any archaeological material or graves which were not located during the survey.

²¹ Communication: Letter to Danie van der Walt, *Morning Tide Development Complex, remainder of portion 7 of the farm Rooidraai 34 JT*, 27 August 2013.

G. REFERENCES

NATIONAL LEGISLATION

• Republic of South Africa, National Heritage Resources Act, (Act No. 25 of 1999).

LITERARY SOURCES

- BERGH J.S., Swart gemeenskappe voor die koms van die blankes, in J.S. Bergh (red). Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies. J.L. van Schaik, 1999.
- COETZEE, T., & SCHOEMAN, A., 2011. Mapping Trace in Bokoni, in SA Archaeological Bullitin.
- DOWSON, T., The rock engravings of southern Africa, 1992.
- MAGGS, T., 1995, Neglected Rock Art, The rock engravings of agricultural communities, in SA Archaeological Bullitin, 162.
- WEBB, H. S., The Native Inhabitants of the Southern Lowveld, in Lowveld Regional
 Development Association, The South-Eastern Transvaal Lowveld. Cape Times Limited.
 1954.

ELECTRONIC INFORMATION SOURCES

• SAHRA, Burial sites, Http://www.sahra.org.za/burial.htm, Access, 2008-10-16.

OTHER SOURCES

- BIRKHOLTZ, P. 2006, Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential Development, 2007.
- SAHRA Review comment, Arc. Ref. 9/2/236/0002, 23-10-2007.
- ROSSOUW, C. A new experience in local tourism, in Lowvelder (9 June 2009).
- ROWE, C. Specialist report and Management Plan for a LIA rock engraving site within the proposed development of the Lydenburg Mall, on the remainder of portion 7 of the farm Rooidraai 34 JT, August 2013.

PERSONAL INFORMATION

- Mr. A. de la Hunt, 09-08-2013.
- Mr. D. van der Walt, 09-08-2013.