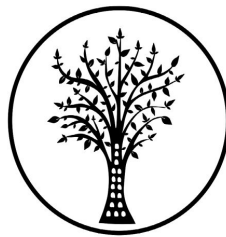


ARCHAEOLOGICAL SPECIALIST STUDY

In terms of Section 38(8) of the NHRA for a

Proposed development of the Vrede and Rondavel Solar Energy
Facilities near Kroonstad, Free State Province

Prepared by



CTS HERITAGE

And Dr Dominic Stratford

In Association with

Savannah Environmental

November 2020



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THE INDEPENDENT PERSON WHO COMPILED A SPECIALIST REPORT OR UNDERTOOK A SPECIALIST PROCESS

I Jenna Lavin, as the appointed independent specialists hereby declare that we:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at our disposal regarding the application, whether such information is favourable to the applicant or not; and
- are aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Jenna Lavin

Signature of the specialist

CTS Heritage

Name of company

September 2020

Date



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EXECUTIVE SUMMARY

Two new Solar Energy Facilities - Vrede and Rondavel - and their associated grid connection infrastructure are proposed for development just outside of Kroonstad in the Free State. The areas proposed for the development of the Vrede and Rondavel Solar Energy facilities and their associated grid infrastructure were thoroughly assessed in the field assessment described in this report. It was noted that both areas proposed for development have been thoroughly previously disturbed through agricultural activities and neither property can be considered a pristine landscape.

Two Later Stone Age scatters (RDW001 and RDW004) and one isolated flake (RDW003) were identified within the area proposed for the Rondavel SEF. Neither LSA scatter, nor the single flake, have much scientific significance and as such, no further mitigation measures are proposed for these resources. Also within the area proposed for the Rondavel SEF, a series of four stone piles were identified (RDW002), and additional examples may have been obscured by the vegetation. These stone piles may mark human burials and as such, are graded as having high local significance (Grade IIIA). It is recommended that a no-go area of 100m is implemented around site RDW002 so that these possible burials remain undisturbed. Furthermore, it is recommended that vegetation-clearing activities taking place in proximity to RDW002 be monitored by a professional archaeologist to ensure that no un-anticipated impact takes place.

Based on the outcomes of this assessment, it is not anticipated that the proposed development of the SEF at Vrede will negatively impact on any archaeological heritage resources. However, due to the nature of archaeological resources, it is possible that significant archaeological heritage may exist below the ground surface and as such, mitigation measures are recommended in this regard below.

Recommendations

There is no objection to the proposed development of either the proposed Vrede or Rondavel SEFs and their associated infrastructure on condition that:

- A 100m no development buffer is implemented around Site RDW002 as per Figure 7.2
- Monitoring of vegetation-clearing activities located in proximity to RDW002 by a professional archaeologist takes place. A monitoring report describing the outcome of the monitoring activities must be submitted to SAHRA.
- Should any previously unrecorded archaeological resources or possible burials be identified during the course of construction activities, work must cease in the immediate vicinity of the find, and SAHRA must be contacted regarding an appropriate way forward.



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1. INTRODUCTION

1.1 Background Information on Project

Two new Solar Energy Facilities - Vrede and Rondavel - and their associated grid connection infrastructure are proposed for development just outside of Kroonstad in the Free State. These are described in detail below:

Rondavel Solar Energy Facility

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the 75 MWac Rondavel Photovoltaic (PV) Solar Energy Facility (SEF) and Battery Energy Storage System (BESS), near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses two (2) farm parcels namely:

- Remaining Extent of the farm Rondavel Noord No. 1475 (main site); and
- Remaining Extent of the farm Rondavel No. 627 (main and grid site).

Rondavel SEF Grid connection

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the grid connection infrastructure for the proposed 75 MWac Rondavel Solar Energy Facility, Battery Energy Storage System (BESS) and associated infrastructure located near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses three (3) farm parcels namely:

- Remaining Extent of the farm Rondavel No. 627 (main and grid site);
- Remaining Extent of the farm Boschplaat No. 330 (grid site); and
- Remaining Extent of the farm Salie No. 1837 (grid site).

Vrede Solar Energy Facility

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the 75 MWac Vrede Photovoltaic (PV) Solar Energy Facility (SEF) and Battery Energy Storage System (BESS), near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses two (2) farm parcels namely:

- Farm Vrede, No. 1152, Remaining Extent;
- Farm Uitval, No 1104, portion 1;

Vrede SEF Grid connection

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the grid connection infrastructure for the proposed 75 MWac Vrede Solar Energy Facility, Battery Energy Storage System (BESS) and associated infrastructure located near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses three (3) farm parcels namely:

- Farm Vrede, No. 1152, Remaining Extent;
- Farm Gesukkel, No. 1153, Remaining Extent;
- Farm Geduld No. 1156, Remaining Extent.



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1.2 Description of Property and Affected Environment

Rondavel

The proposed North-East power line extended along the eastern boundary of the Rondavel property to the river. The river has eroded several deep (over 10m) channels into quaternary sand deposits in this location. This area is currently heavily used by foot traffic and local cattle. Several pre-existing power lines cross the river at this location. Immediately on the other side of the river is an industrial and informal residential area that spreads down to the river. Local landowners advised us to avoid accessing this land due to safety issues. The proposed Mid-East line extends east to west from the midline of the Rondavel property across a neighbour's farm and follows a field boundary gravel road. Overgrazing on this property has exposed soils and rock outcrop, resulting in good visibility but high levels of soil disturbance. The proposed south power line route extends along the southern border of the R34 main tar road. On both sides of the R34, extensive and significant construction processes have disturbed and displaced soils reducing the preservation or integrity of any cultural remains.

Vrede

Heavy grazing of cattle and small-scale ploughing of fields has impacted the whole property and in particular the northern and western areas, aiding in quick identification of surficial cultural features (stone walling, etc.) and soils. In the west of the property, four large square fields previously ploughed have been left fallow. The southernmost of these fields has been used for grazing and soil exposure was good, aiding the survey. Tall and dense grasses have grown in the northernmost fields, seriously limited soil exposure and hindering survey coverage. However, based on visible plough and irrigation lines from satellite imagery, it is clear that this section of the development area has been previously extensively disturbed through agricultural activities. In the eastern areas, dense pockets of acacia trees hindered access, but limited ground cover allowed clear assessment of potential surficial features that are often associated with localised tree growth. The multi-generation agricultural use of this property limits the potential preservation of culturally significant features.



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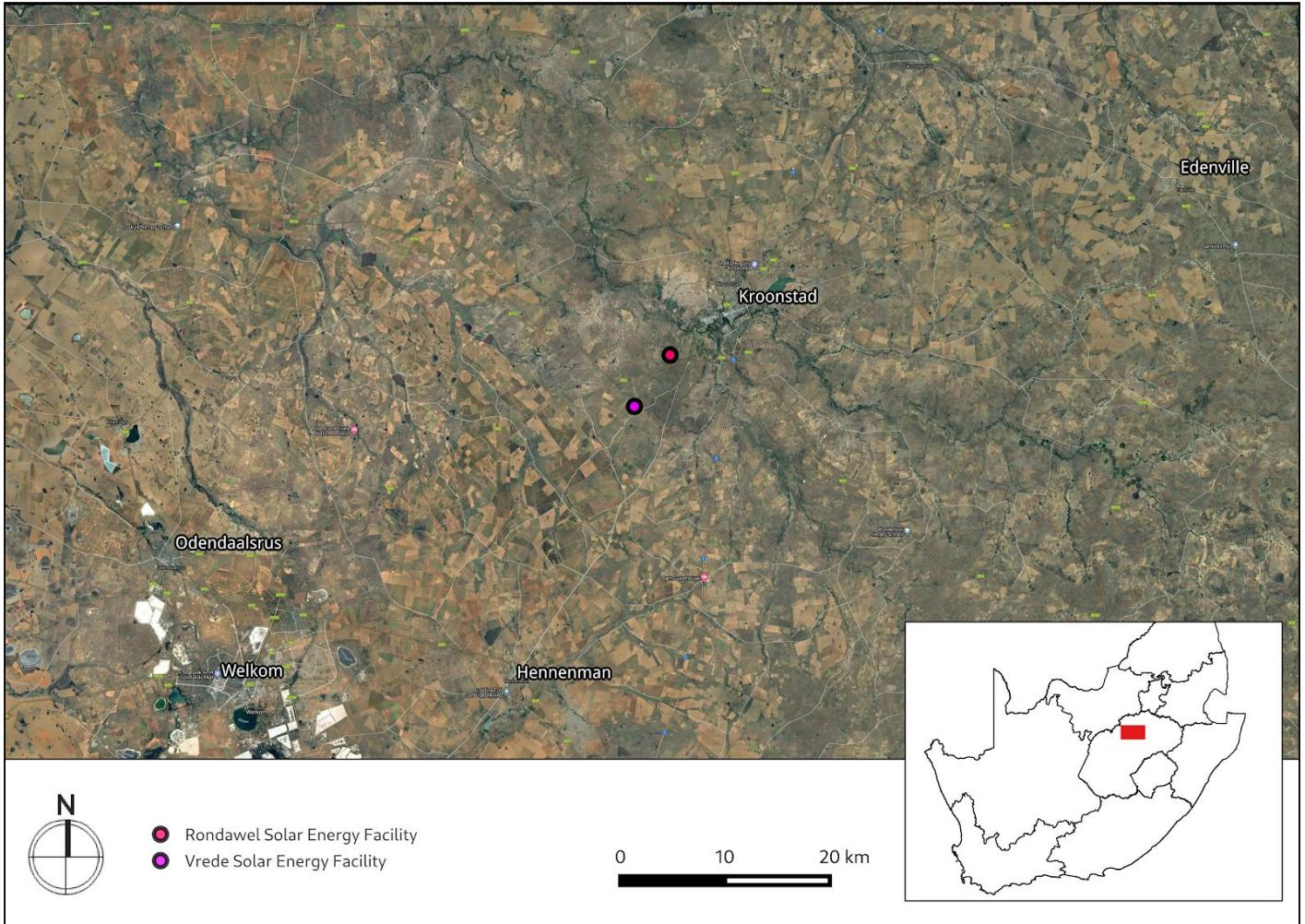


Figure 1.1: Close up satellite image indicating proposed location of development



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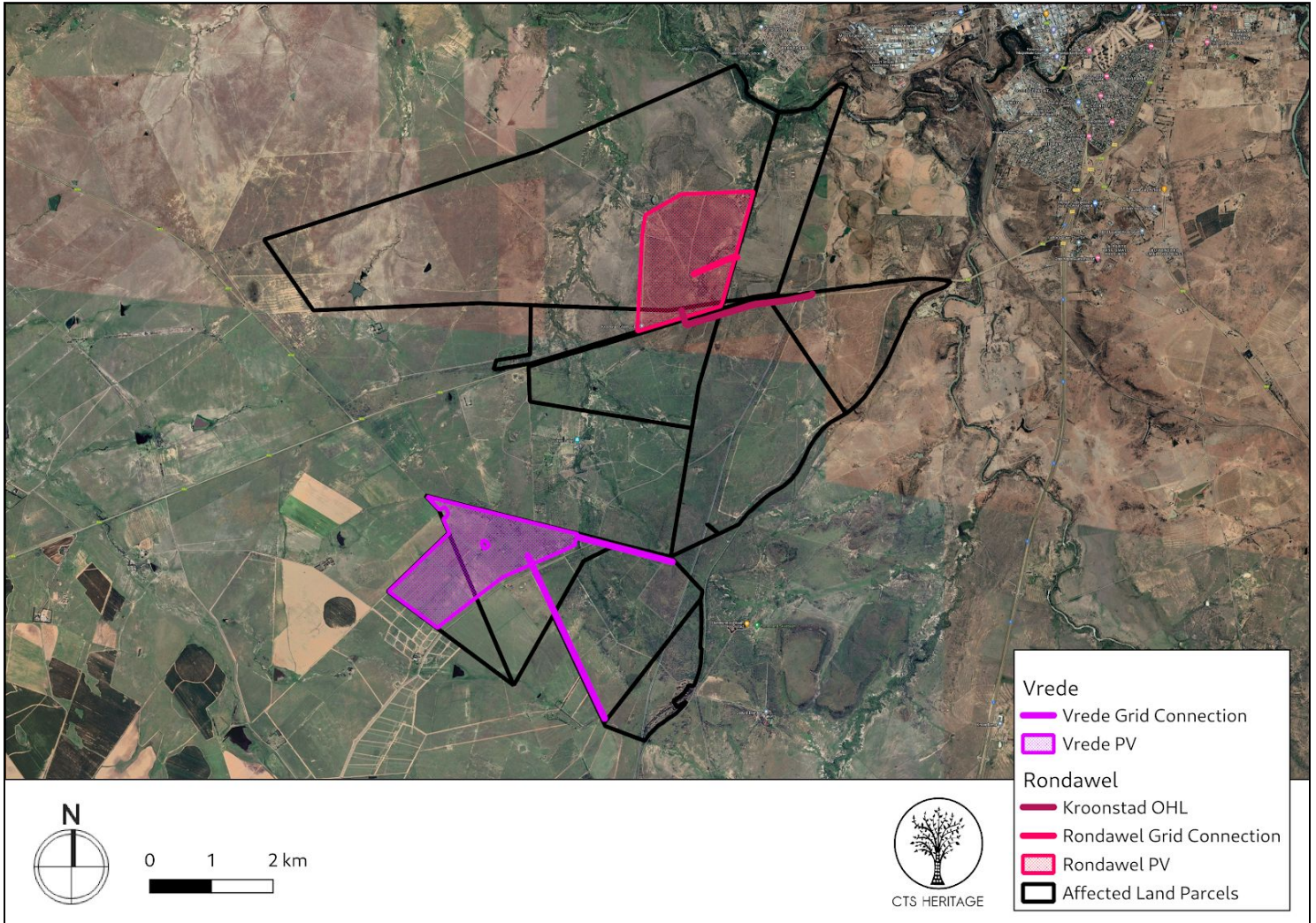


Figure 1.2: Area proposed for development including the proposed layout

2. METHODOLOGY

2.1 Purpose of Archaeological Study

The purpose of this archaeological study is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999) in terms of impacts to archaeological resources.

2.2 Summary of steps followed

- An archaeologist conducted a survey of the site and its environs on 18 and 19 October 2020 to determine what archaeological resources are likely to be impacted by the proposed development.
- The area proposed for development was assessed on foot in transects, photographs of the context and finds were taken, and tracks were recorded using a GPS.
- The identified resources were assessed to evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Alternatives and mitigation options were discussed with the Environmental Assessment Practitioner.



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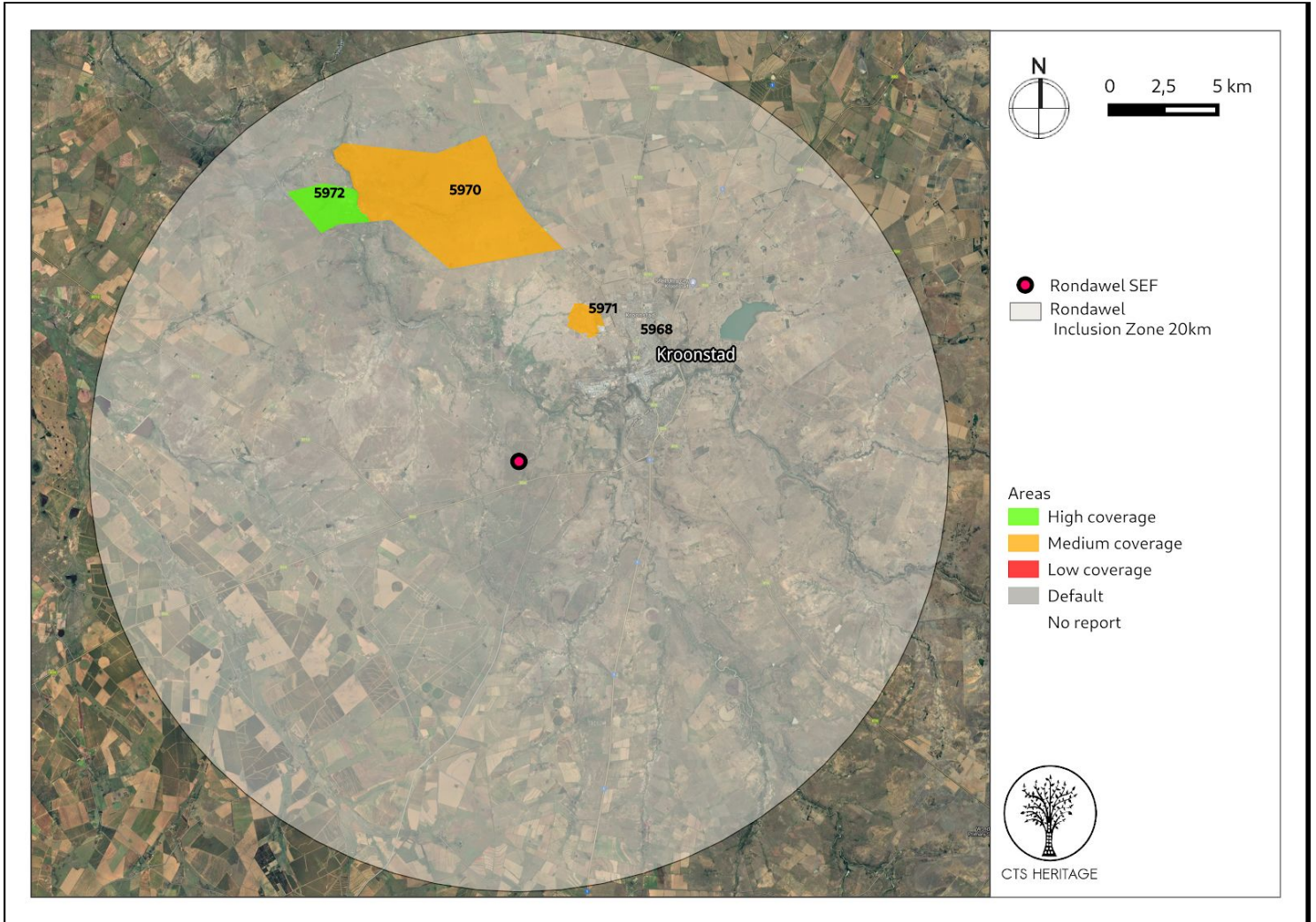


Figure 2a: Close up satellite image indicating proposed location of the Rondavel SEF in relation to heritage studies previously conducted



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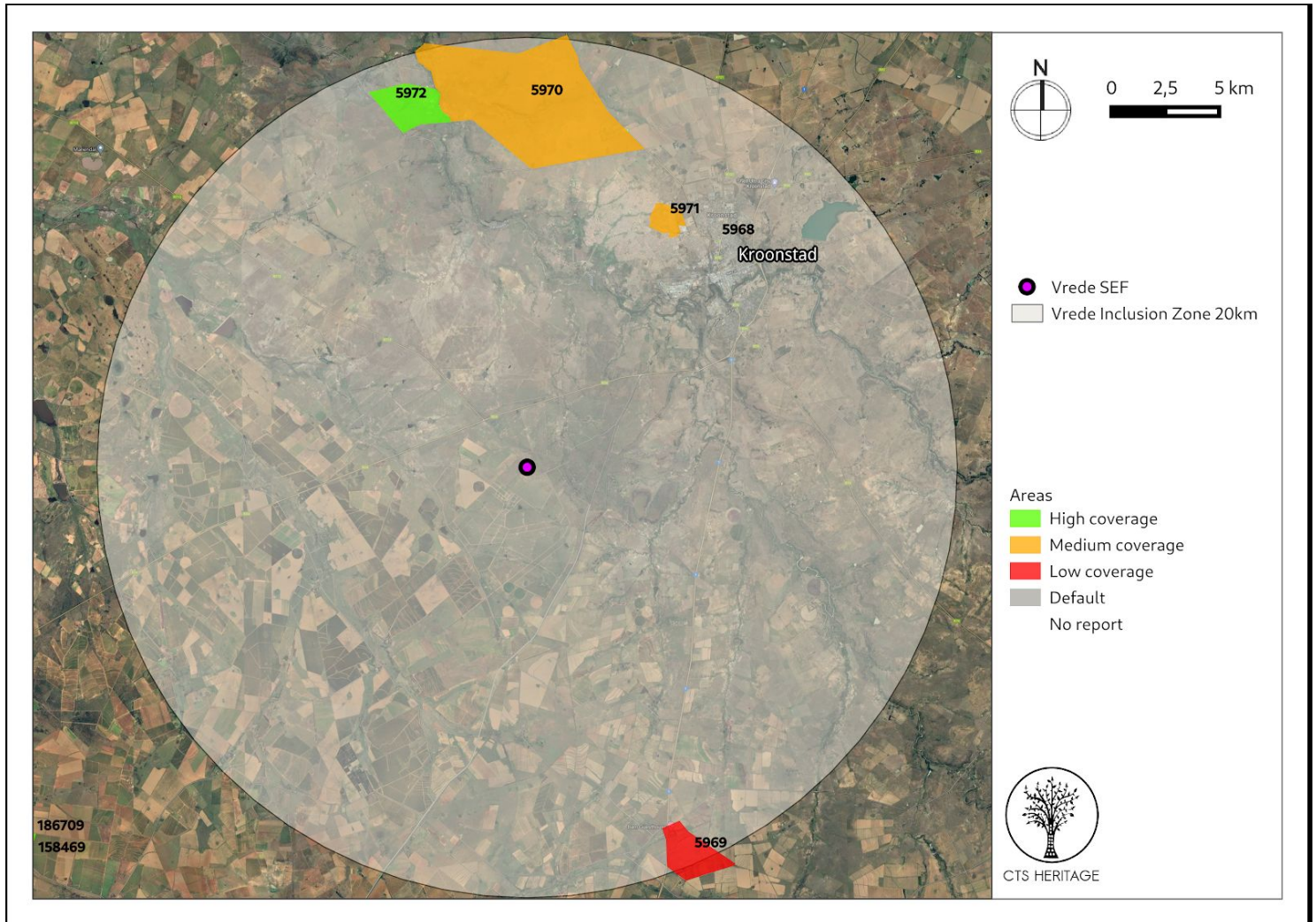


Figure 2b: Close up satellite image indicating proposed location of the Vrede SEF in relation to heritage studies previously conducted

2.3 Constraints & Limitations

Rondavel

Dense vegetation covered the majority of the landscape and seriously hindered systematic and comprehensive coverage of the ground. In this case, google earth was used to identify specific geomorphic features commonly associated with cultural remains (rivers and high ground). These areas and more open grassland were then targeted through field walking to build a representative perspective on the presence, distribution and abundance of any cultural remains. However, the dense vegetation in the interior of the property may have obscured small cultural features and isolated artefacts. Additional areas to survey were provided by CTS at short notice and were incorporated into the field walking. Local landowners advised us to avoid accessing various portions of the proposed powerline due to safety issues. The specialist is confident that this approach sampled adequately the variety of landscapes on this property and that the report presented is representative of the majority of preserved cultural remains.

Vrede

No constraints or limitations were experienced in the assessment of the Vrede site.



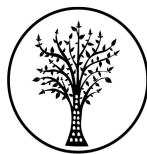
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3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

Kroonstad was established as a town in 1855. During the Second Boer War, from 13 March to 11 May 1900, the city became the capital of the Orange Free State, and subsequently the site of a British concentration camp to contain Boer women and children. Kroonstad still boasts much of the inherent rugged beauty which led the Voortrekkers to establish the town where they did and it is situated in an area characterised by open spaces and an abundant variety of vegetation that makes it particularly beautiful. According to Van Schalkwyk (2013), “Most farmsteads were burned down during the Anglo-Boer War, with the result that very little of the built environment dates to the 19th century.” According to Matenga (2019), the Black and Coloured townships are significant as landscapes of segregation occupying the north-western fringe of the CBD, while the exclusive white suburbs were located northeast of the town and south of the Valsch River.

According to Van Schalkwyk (2013), “The cultural landscape qualities of the region essentially consist of a rural setup. In this the human occupation is made up of a pre-colonial element consisting of limited Stone Age and Iron Age occupation, as well as a much later colonial (farmer) component. This was soon followed by the development of a number of urban centres or towns. Originally these mostly served the surrounding farming communities, but with the discovery of the Free State Gold Fields, they expanded rapidly in order to serve this industry as well.” The proposed Solar Energy Facilities and their associated grid connections are located some distance from the historic core of Kroonstad town. Furthermore, the areas proposed for development are located more than 5km away from the site of the Boer War concentration camps and associated burial grounds.

Prior to colonial settlement in 1855, the area proposed for development formed part of a landscape that was occupied by indigenous Khoe herders and San hunter-gatherers. These indigenous communities were displaced by Bantu-speaking people who began to occupy the area in the Iron Age. According to Van Schalkwyk (2013), “Sites dating to the Late Iron Age are known to occur in the region, especially... in the vicinity of the Sandrivier, whereas some are known to occur to the northwest of Ventersburg, These are typical stone walled sites that are linked with Sothospeakers and date to the period after 1600.” As such, it is possible that Early, Middle or Later Stone Age artefacts may be located within the proposed development footprint. Furthermore, it is possible that evidence of Iron Age settlement may also be located within the proposed development areas.



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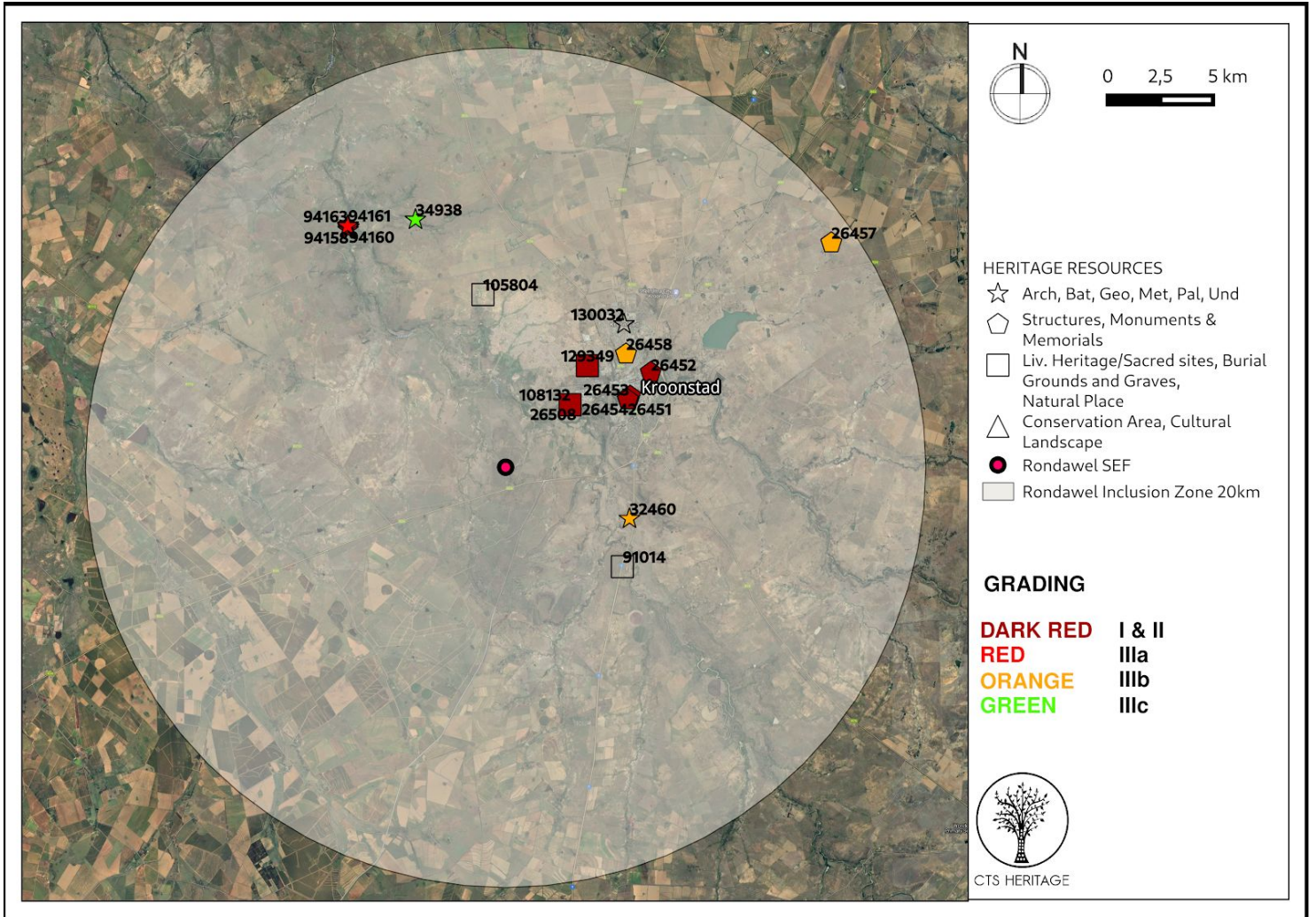
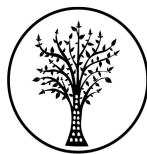


Figure 3a. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Heritage Screening Assessment for insets)



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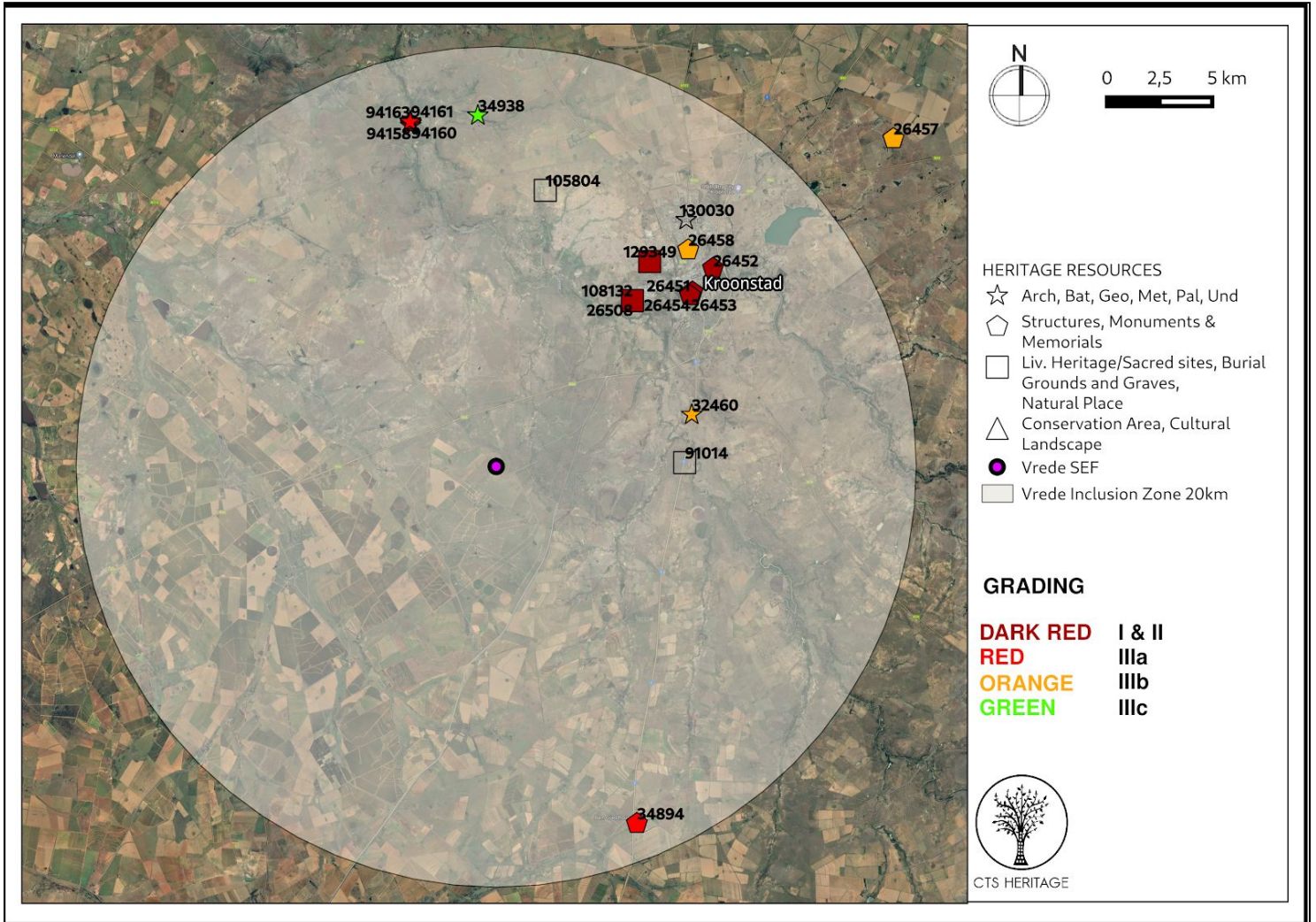


Figure 3b. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Heritage Screening Assessment for insets)



4. IDENTIFICATION OF HERITAGE RESOURCES

4.1 Field Assessment

Rondavel

Due to dense vegetation present within this development area, the field assessment focussed on investigating outcrops visible on GoogleEarth Satellite imagery.

- Outcrop 2

Outcrop 2 was considered important because of its relatively open surfaces and exposed regolith and soil, which are often useful deflation areas that can accumulate cultural remains. The survey extended the length of the outcrop both above and below the primary exposures of sandstones. Below the outcrop, cattle have trampled large areas, but have also exposed soils. Here, on a deflated compact surface, a small accumulation of Later Stone Age informal artefacts was found comprising quartz flakes and small chert cores (RDW001). These isolated artefacts are no longer in situ and have been extensively disturbed through water, animals and plant growth. However, they do suggest that similar, isolated and *ex situ* scatters of artefacts may exist elsewhere on the property. As such, the recommended grading for this scatter is Grade IIIC. The outcrop also serves as a demonstration of the relatively shallow nature of the soils here, and therefore limited opportunity for major cultural sequences to remain buried on the property.

- Outcrop 3

The soils above Outcrop 3 were thicker than the soils seen in the northern areas of the property as demonstrated by several large porcupine dens that had dug up to one meter deep. Large animal dens often provide a good opportunity to find buried cultural remains in the animal spoil heaps and so each large den and its excavated sediments was inspected for artefacts. None were identified. On the northwestern edge of Outcrop 3, a series of discrete but deliberately constructed stone piles were found against the outcropping sandstone (RDW002). These stone piles varied in size, but not shape, being elongated and in most cases measuring approximately 2m long by 1m wide and up to 30cm high. The piles occurred in a series of features laid next to each other with another two more isolated piles located a few meters to the east. It is possible that more were present but were obscured by tall grass. In all cases, grass has grown over the piles, obscuring them slightly. The piles are slightly degraded, but are reminiscent of Iron Age graves. They could also be piles created from field-clearing agricultural activities however these features should be treated with great sensitivity. Due to the chance that these features may mark graves, these features are graded IIIA.

- Dam Outcrop

A large, now empty, dam is located in the southeastern corner of the property. Recent cuttings exposed various deposits. At the base of once such cutting, a single lithic flake was found (RDW003). This artefact is not technologically diagnostic or identifiable to a major industry and was not *in situ*, being located close to rubble accumulated through the dam-building process. This artefact is considered to be not conservation-worthy (NCW).

- Later Stone Age Observation

Immediately adjacent to a small ephemeral stream lined by dense vegetation, in a cattle-trampled exposure of soil, several small informal Later Stone Age lithic artefacts were identified scattered on the surface (RDW004).



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The artefact scatter comprises quartz and chert flakes, and small cores that have been brought together in a small depression through surface run-off. These artefacts are not in situ and have limited scientific value. As such, this observation is graded as Grade III C.

Vrede

The Vrede property has been utilised for numerous farming activities over several generations and so the landscape has been heavily modified by this activity. A combination of ploughing and heavy grazing has important detrimental implications on the preservation of in situ surficial cultural features such as stone walling, stone tools, shallow graves and associated cultural remains. It is important to note that despite an extensive foot survey, no cultural heritage remains were identified on the property. However, there remains the possibility that cultural material may be present beneath the ground surface.



Figure 4.1: Thick bush along North West to South East diagonal track at Rondavel



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Figure 4.2: Thick bush along North West to South East diagonal track at Rondavel.



Figure 4.3: Looking East from the end of the proposed Mid-East power line. Note the overgrazing-exposed soils in the foreground and irrigated agricultural land in the background.



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Figure 4.4: Looking North from the middle of the proposed Mid-East power line. Note the grazed open grassland and compacted soils by cattle along the fence track



Figure 4.5: Along the Mid-East power line. Note the overgrazing on the farm track verge and grazed open grass in the field on the left. Also note the major power lines extending along the track.



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Figure 4.6: Looking South from the middle of the proposed Mid-East power line.



Figure 4.7: Looking West from the middle of the proposed Mid-East power line. Note the overgrazed field to the left and multiple farm and cattle tracks. Also note the heavily trampled and disturbed context of the road. The Rondavel property can be seen in the background.



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Figure 4.8 Looking East from the middle of the proposed Mid-East power line. Note the overgrazed field on the left.



Figure 4.9 Looking North from the middle of the proposed Mid-East power line.



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Figure 4.10 Looking North from the northern boundary of the Rondavel property at the point where the proposed power line would cross the river.



Figure 4.11 Looking East from the northern boundary of the Rondavel property at the point where the proposed power line would cross the river. Note the heavily compacted grass of the wide Rondavel farm fence-line track in the foreground and the major power line on the neighbouring farm to the east.



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Figure 4.12 Looking South from the northern boundary of the Rondavel property at the point where the proposed power line would cross the river. Note the heavily compacted grass and exposed soils of the wide Rondavel farm fence-line track extending south.



Figure 4.10 Looking West from the northern boundary of the Rondavel property at the point where the proposed power line would cross the river. Note the heavily compacted grass and exposed soils of the wide Rondavel farm fence-line track



Figure 4.13 Outcrop 2 with scalebar = 10cm



Figure 4.14 Overview of the landscape at Vrede from the main gate (1/3rd along South East border) looking South West. Note the heavy grazing and trampling by cattle and rutting from farming vehicles extending over a wide area near the fence on the left and under the power lines. Also note the short grass cover extending to the right across the field providing good visibility of features on the landscape



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Figure 4.15 Overview of the landscape from the Vrede main gate looking North West. Note the heavy grazing and trampling by cattle and rutting from farming vehicles extending over a wide area near the fence on the right. Also note the short grass cover extending to the left across the field providing good visibility of features on the landscape.



Figure 4.16 Overview of the landscape from main gate at Vrede looking North East. Note the heavy grazing and trampling by cattle and rutting from farming vehicles extending over a wide area neat the fence on the right.



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Figure 4.17 From the main gate, looking South West along the road running along the South East border of the Vrede property.



Figure 4.18 From the South corner of the property, looking South West into neighbouring property.



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Figure 4.19 From the South corner of the property, looking North West along western border of the Vrede property. Note the wide fence track.



Figure 4.20 From the middle of southern portion of the Vrede property, looking South West. Note the short, grazed grass and good feature visibility.



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Figure 4.21 From the middle of northern portion of the Vrede property, looking South West. Note the short, grazed grass and good feature visibility.



Figure 4.22 From the middle of northern portion of the Vrede property, looking North West. Note the short, overgrazed grass and good feature visibility.



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Figure 4.23 From the middle of northern portion of the Vrede property, looking NE. Here, note the small cattle watering station and heavily trampled, exposed soils.



Figure 4.24 From the western corner of the Vrede property, looking South East. Note on the left, the tall, dense grasses that hindered survey (also see methods section for description of this area).



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Figure 4.24 From the western corner of the Vrede property, looking East towards middle of property. Note the tall, dense grasses that hindered survey (also see methods section for description of this area).



Figure 4.25 From the middle of western boundary of the Vrede property, looking South West. Note the tall, dense grasses that hindered survey (also see methods section for description of this area)



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Figure 4.26 From the South East corner of the Vrede property, looking North. Note the denser but still open acacia-bearing grassland with good ground visibility.



Figure 4.27 From South East corner of the Vrede property, looking South. Note the denser acacia-bearing grassland with more limited ground visibility.



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Figure 4.28 From South East corner of the Vrede property, looking East. Note the denser acacia-bearing grassland with more limited ground visibility. Also note the power line cables.



Figure 4.29 From the North corner of the Vrede property, looking South East. Note the grazed and cleared fence tracks and the short, grazed grass.



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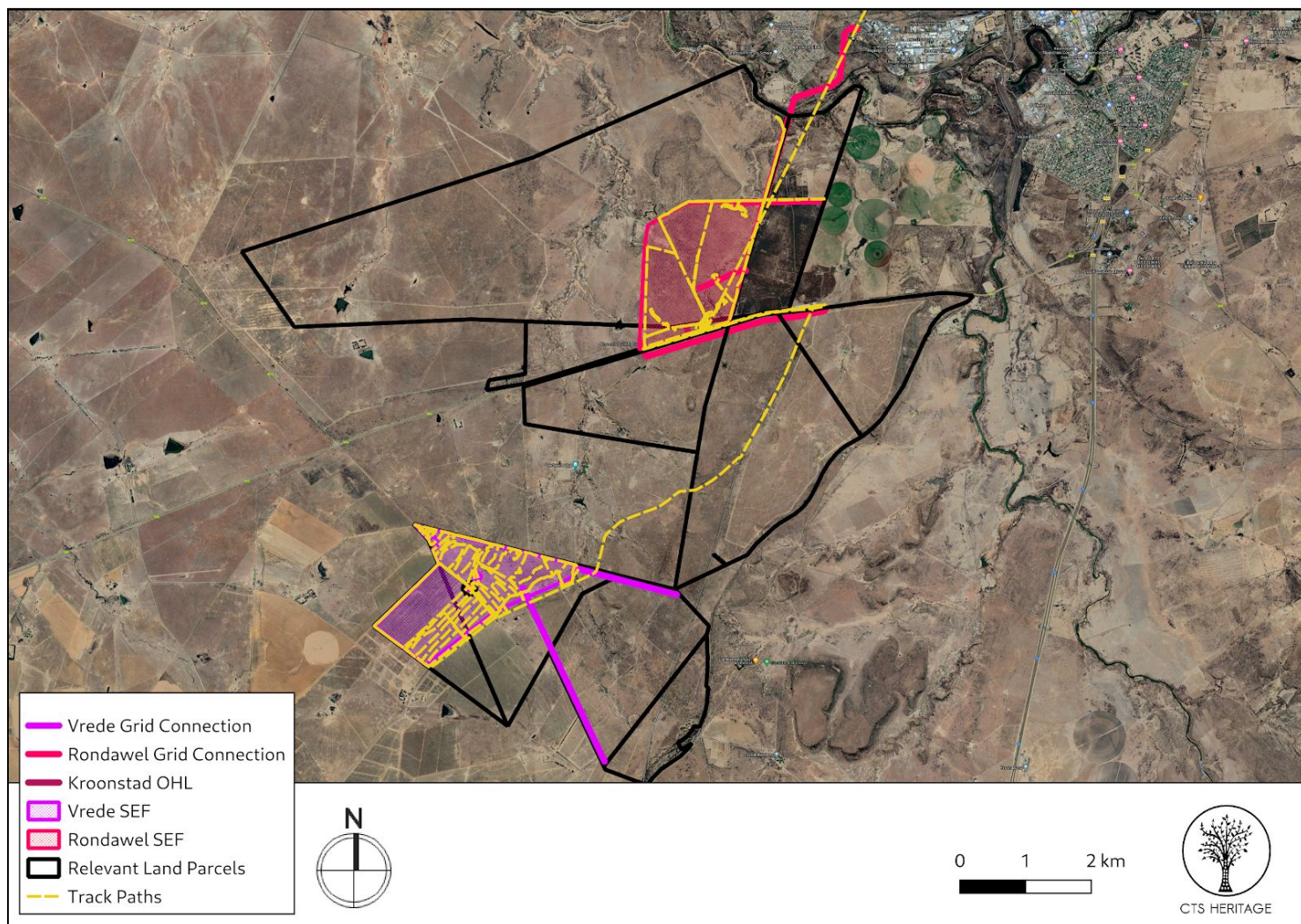


Figure 5: Overall track paths of foot survey

4.2 Archaeological Resources identified

Table 1: Observations noted during the field assessment

Site No.	Site Name	Description	Co-ordinates		Grading	Mitigation
RDW001	Rondavel 001	LSA Scatter	S 27.69110	E 027.18327°	IIIC	None Required
RDW002	Rondavel 002	Series of possible graves demarcated by piles of stones	S 27.70531°	E 027.16925°	IIIA	A no-go buffer of 100m must be implemented around the identified stone piles
RDW003	Rondavel 003	Single isolated flake, <i>ex situ</i>	S 27.70413°	E 027.17879°	NCW	None Required
RDW004	Rondavel 004	LSA Scatter	S 27.70099°	E 027.17900°	IIIC	None Required



4.3 Selected photographic record

(a full photographic record is available upon request)



Figure 6.1: Outcrop 2 and RDW001 LSA Scatter (Grade IIIC)



Figure 6.2: Outcrop 3 and porcupine den indicating soil depth



Figure 6.3: Stone piles 1 and 2 at RDW002



Figure 6.4: Stone piles 3 and 4 at RDW002



Figure 6.5 Dam outcrop and flake RDW003



Figure 6.6 LSA Scatter (RDW004) and its context



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5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

5.1 Assessment of impact to Archaeological Resources

Rondavel

In summary, the area proposed for the development of the Rondavel SEF and associated infrastructure has yielded some cultural remains but with varied value and preservation. The isolated and scattered lithic artefacts (RDW001, RDW003 and RDW004) are typical of a deflated landscape and have very limited cultural value given that they have been accumulated and modified by various natural processes to their current *ex situ* state. The stone piles found in the south west of the property (RDW002) are more noteworthy (Grade IIIA) and require sensitive treatment. The dense vegetation did limit comprehensive coverage of the landscape during the survey and so caution should be practiced when clearing the vegetation during construction. As such, it is recommended that a no development buffer of 100m is implemented around RDW002 in order to mitigate the risk of disturbing the possible human remains identified here.

However, the generally shallow nature of the soils and heavy disturbance of the landscape for previous use (in dam and road construction) limit the potential for long, *in situ* sequences of archaeological significance. No archaeological resources were identified in any of the proposed powerline routes associated with the Rondavel development. There is an existing access track along the route proposed for the Kroonstad OHL. The track and its verges are used as a major through-route for farms vehicles and cattle resulting in a heavily disturbed landscape surface along this route. A major power line extended north-south along the neighbouring farm's western fence.

Vrede

Based on the assessment completed, the area proposed for the Vrede SEF and associated infrastructure has low archaeological sensitivity. The majority of this property has been exploited by various farming practices over several generations that have fundamentally modified the landscape and removed or destroyed any previous archaeological remains. Having conducted a comprehensive survey of the property I am confident that there is a very limited potential for the preservation of in situ surficial cultural remains. There may be small and isolated lithic artefacts or ceramic fragments, but there is a low potential for these to be *in situ* and escaping the heavy grazing and trampling previously and currently occurring on the landscape. The previous ploughing of most of the western side of the property has essentially removed any archaeology on the surface or buried to a depth of 30 cm.

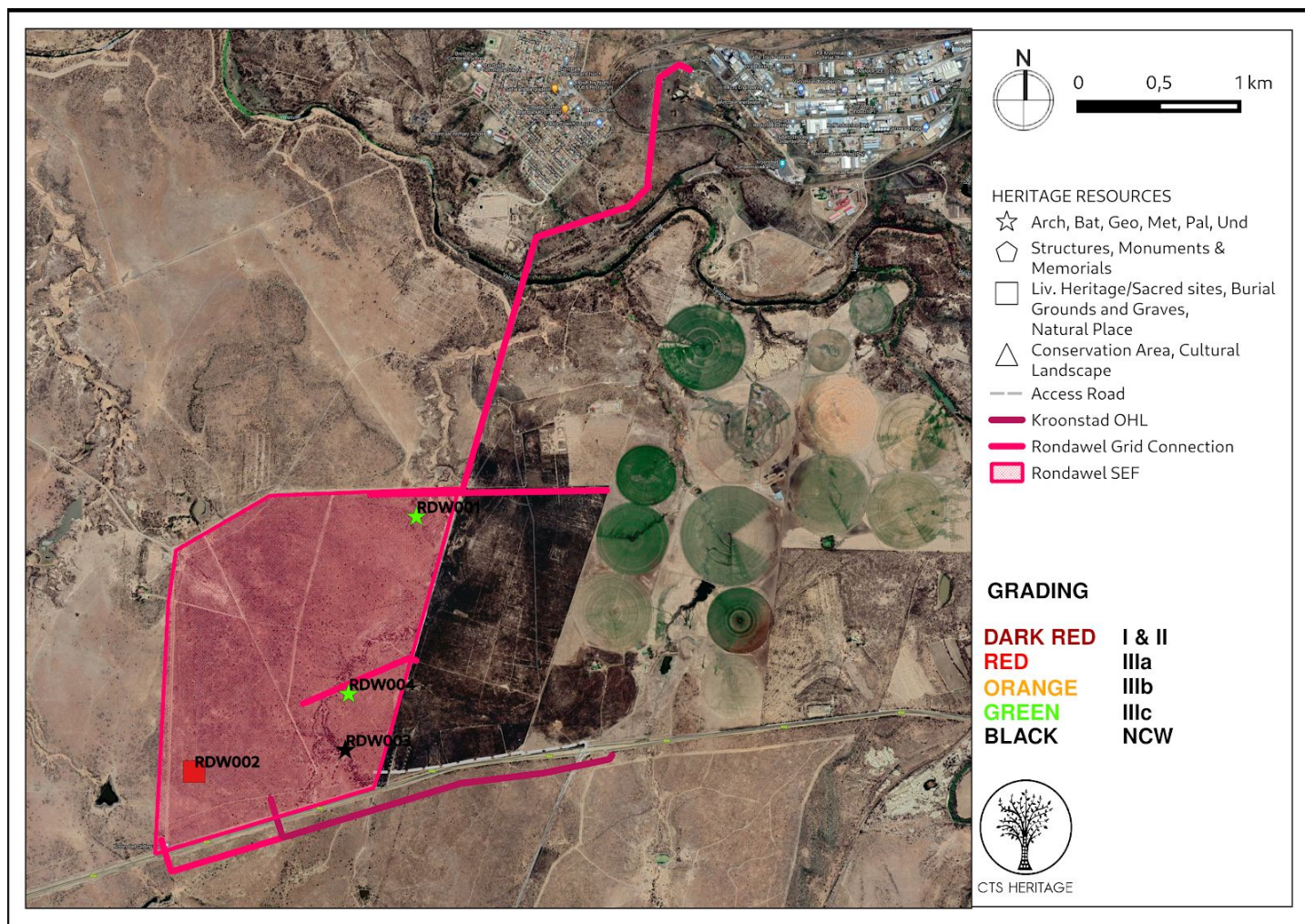


Figure 7.1: Map of heritage resources identified during the field assessment, relative to the proposed development footprint

6. CONCLUSION AND RECOMMENDATIONS

The areas proposed for the development of the Vrede and Rondavel Solar Energy facilities and their associated grid infrastructure were thoroughly assessed in the field assessment described in this report. It was noted that both areas proposed for development have been thoroughly (Vrede) and somewhat (Rondavel) previously disturbed through agricultural activities.

Two Later Stone Age scatters (RDW001 and RDW004) and one isolated flake (RDW003) were identified within the area proposed for the Rondavel SEF. Neither LSA scatter, nor the single flake, have much scientific significance and as such, no further mitigation measures are proposed for these resources. Also within the area proposed for the Rondavel SEF, a series of four stone piles were identified (RDW002), and additional examples may have been obscured by the vegetation. These stone piles may mark human burials and as such, are graded as having high local significance (Grade IIIA). It is recommended that a no-go area of 100m is implemented around site RDW002 so that these possible burials remain undisturbed. Furthermore, it is recommended that vegetation-clearing activities taking place in proximity to RDW002 be monitored by a professional archaeologist to ensure that no un-anticipated impact takes place.



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Based on the outcomes of this assessment, it is not anticipated that the proposed development of the SEF at Vrede will negatively impact on any archaeological heritage resources. However, due to the nature of archaeological resources, it is possible that significant archaeological heritage may exist below the ground surface and as such, mitigation measures are recommended in this regard below.

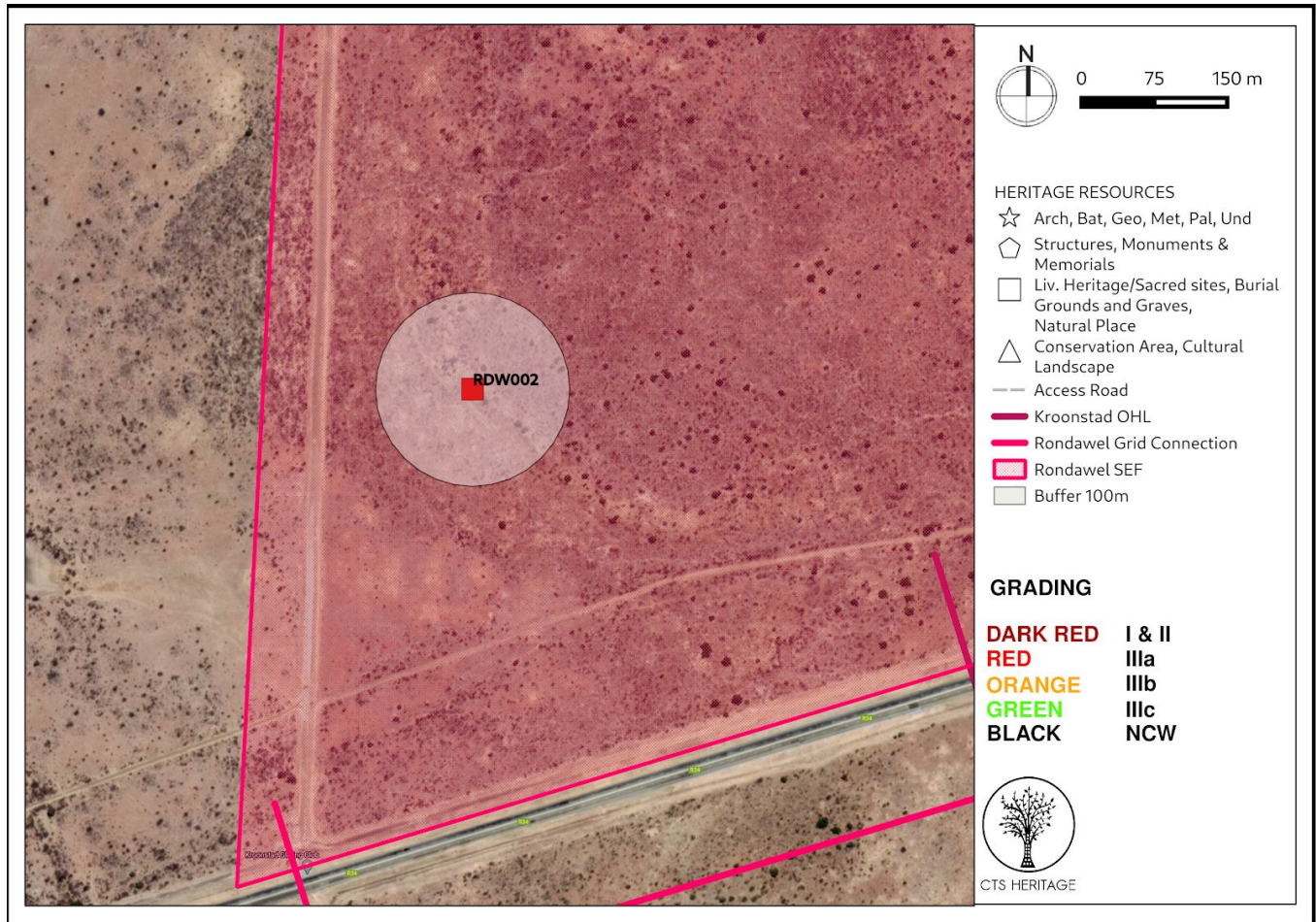


Figure 7.2: Map of heritage resources identified during the field assessment, relative to the proposed development footprint including the recommended 100m buffer around RDW002

Recommendations

There is no objection to the proposed development of either the proposed Vrede or Rondavel SEFs and their associated infrastructure on condition that:

- A 100m no development buffer is implemented around Site RDW002 as per Figure 7.2
- Monitoring of vegetation-clearing activities located in proximity to RDW002 by a professional archaeologist takes place. A monitoring report describing the outcome of the monitoring activities must be submitted to SAHRA.
- Should any previously unrecorded archaeological resources or possible burials be identified during the course of construction activities, work must cease in the immediate vicinity of the find, and SAHRA must be contacted regarding an appropriate way forward.



7. REFERENCES

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
5968	AIA Phase 1	Cobus Dreyer	20/06/2005	Archaeological and Historical Investigation of the Proposed New Filling Station at Kroonstad, Free State
5969	AIA Phase 1	Cobus Dreyer	25/08/2005	Historical Investigation of the Existing Outbuildings at the Farm Smaldeel 202, Kroonstad, Free State
5970	AIA Phase 1	Cobus Dreyer	29/05/2006	First Phase Archaeological and Cultural Heritage Assessment of the Proposed Residential Developments at the Farm Middenspruit 151, Kroonstad, Free State
5971	AIA Phase 1	Cobus Dreyer	12/07/2006	Archaeological and Historical Investigation of the Proposed Township Developments at Maokeng, Kroonstad, Free State
5972	AIA Phase 1	Cobus Dreyer	26/10/2006	First Phase Archaeological and Cultural Heritage Assessment of the Proposed Residential Developments at the Farm Boschpunt 2218 Kroonstad, Free State
129819	AIA Phase 1	Jaco van der Walt	30/08/2013	Archaeological Impact Assessment Report for the Proposed Steynsrus (19.5MW) Photovoltaic Plant, Free State Province
533640	HIA Phase 1	Edward Matenga	25/11/2019	PHASE I HERITAGE IMPACT ASSESSMENT (INCLUDING PALAEOLOGICAL DESKTOP ASSESSMENT) IN TERMS OF SECTION 38 OF THE NATIONAL HERITAGE RESOURCES ACT NO 25/1999 FOR THE PROPOSED PHASE II MAOKENG HOUSING DEVELOPMENT(5390 ERVEN MOAKENG) (KROONSTAD), FREE STATE PROVINCE
165622	HIA Phase 1	Johnny van Schalkwyk	04/06/2014	Cultural heritage impact assessment for the UPGRADE OF A SECTION OF NATIONAL ROUTE 1, BETWEEN KROONSTAD AND VENTERSBURG, FREE STATE PROVINCE