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HERITAGE SCREENER

CTS Reference Number:	CTS19_156
HWC Ref:	120703TS04M
Client:	Savannah
Date:	October 2019
Title:	Proposed amendment to the authorised Zen Wind Energy Facility on Farms Bonne Esperance 83 Ptn 1 and 2, Farm 88 Ptn 4, Kleinbergrivier 1 Rem Ptn 4 and Moolenaarsdrift 85 Rem and Rem Ptn 1, Saron

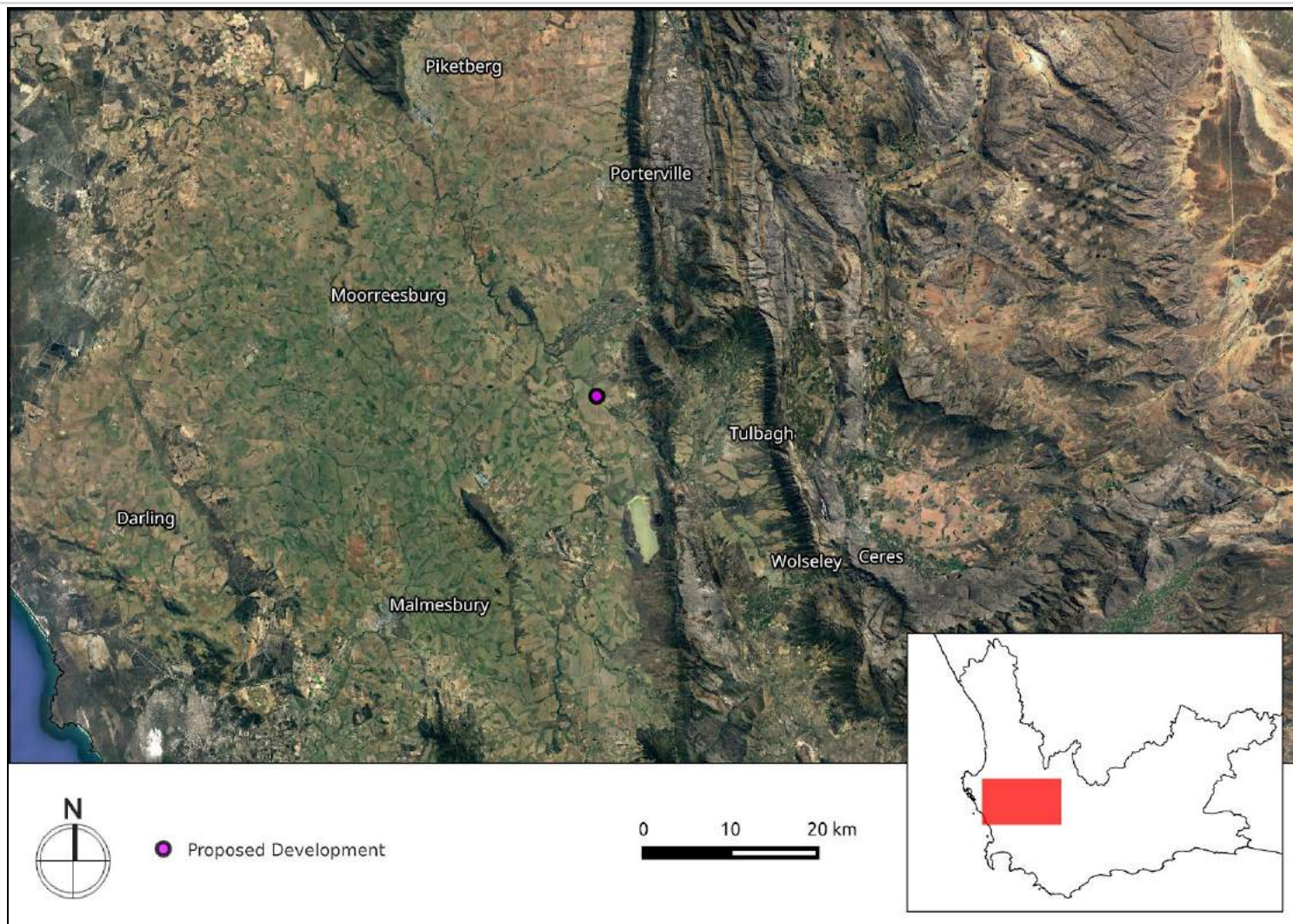


Figure 1a. Satellite map indicating the location of the proposed development in the Western Cape Province

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1. Proposed Development Summary

ZEN Wind Farm (Pty) Ltd which received EA on 03 November 2016 (as subsequently amended on 11 February 2019) is proposing the following amendments for the ZEN Wind Energy Facility:

- Reduction in the number of turbines from 46 to 27;
- Increase rated power of turbines from 3 MW to up to 6 MW per WTG
- Increase rotor diameter from 122 m to up to 165 m;
- Increase hub height from 110 m to up to 140 m;
- Increase in the overall capacity of the wind energy facility from 140 MW to up to 147 MW;
- Potential increase to dimensions of the crane pad and laydown area (storage area per turbine);
- Increase in the concrete foundation from 20m x 20m x 4m to 25m x 25m x 6m;
- Update of the layout; and
- Change the holder of the EA.

The amendment of turbine specifications and change to the layout constitutes as a Part 2 amendment application as contemplated in Regulation 31 of the 2014 EIA Regulations, as amended.

2. Application References

Name of relevant heritage authority(s)	HWC
Name of decision making authority(s)	DEA

3. Property Information

Latitude / Longitude	33°13' 58.92"S, 18°59' 07.50"E
Erf number / Farm number	Farm 1/83, Farm 2/83, Farm 458, Farm 457, Farm 9/88, Farm RE/8/88
Local Municipality	Drakenstein
District Municipality	Cape Winelands
Province	Western Cape
Current Use	Agriculture
Current Zoning	Agriculture
Total Extent of Property	3561 Ha

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4. Nature of the Proposed Development

Total Surface Area of development	3561 Ha
Depth of excavation (m)	Approximately 2-3m
Height of development (m)	140m hub height

5. Category of Development

x	Triggers: Section 38(8) of the National Heritage Resources Act
	Triggers: Section 38(1) of the National Heritage Resources Act
	1. Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.
	2. Construction of a bridge or similar structure exceeding 50m in length.
	3. Any development or activity that will change the character of a site-
x	a) exceeding 5 000m ² in extent
	b) involving three or more existing erven or subdivisions thereof
	c) involving three or more erven or divisions thereof which have been consolidated within the past five years
	4. Rezoning of a site exceeding 10 000m ²
	5. Other (state):

6. Additional Infrastructure Required for this Development

The substations and powerline approved as per the previous EA are not to be amended.

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7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)

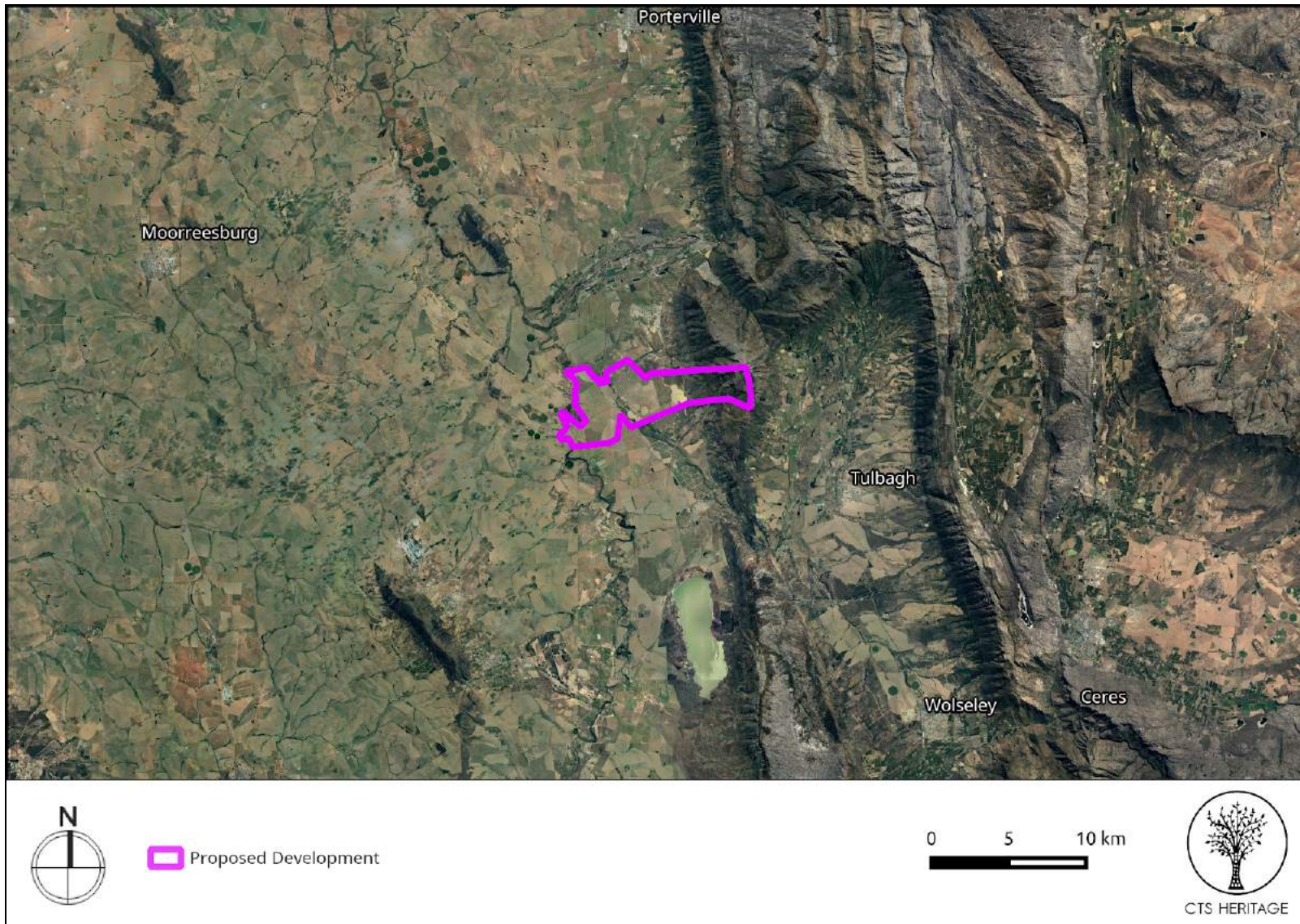


Figure 1b Overview Map. Satellite image (2019) indicating the proposed development area at closer range.

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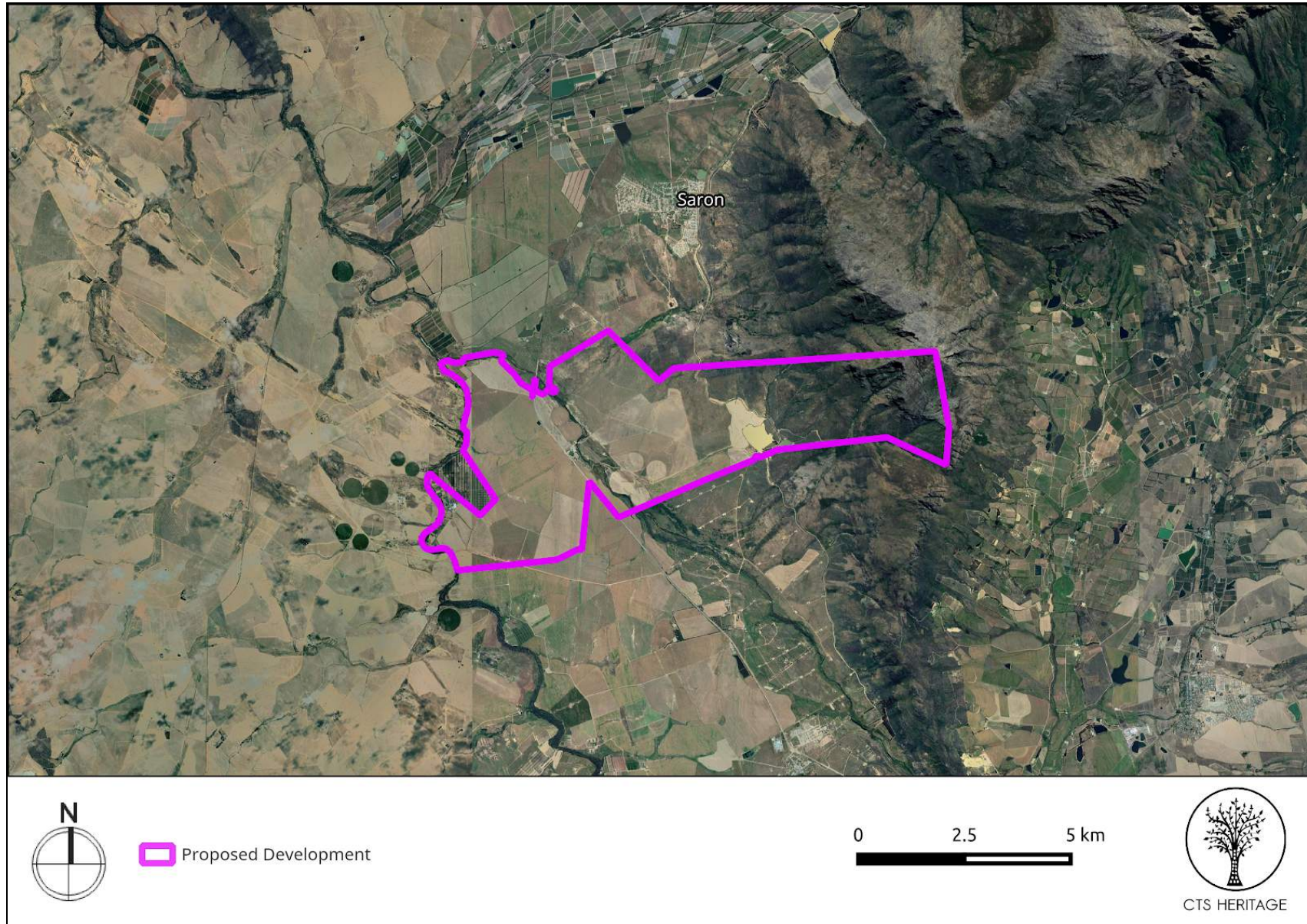
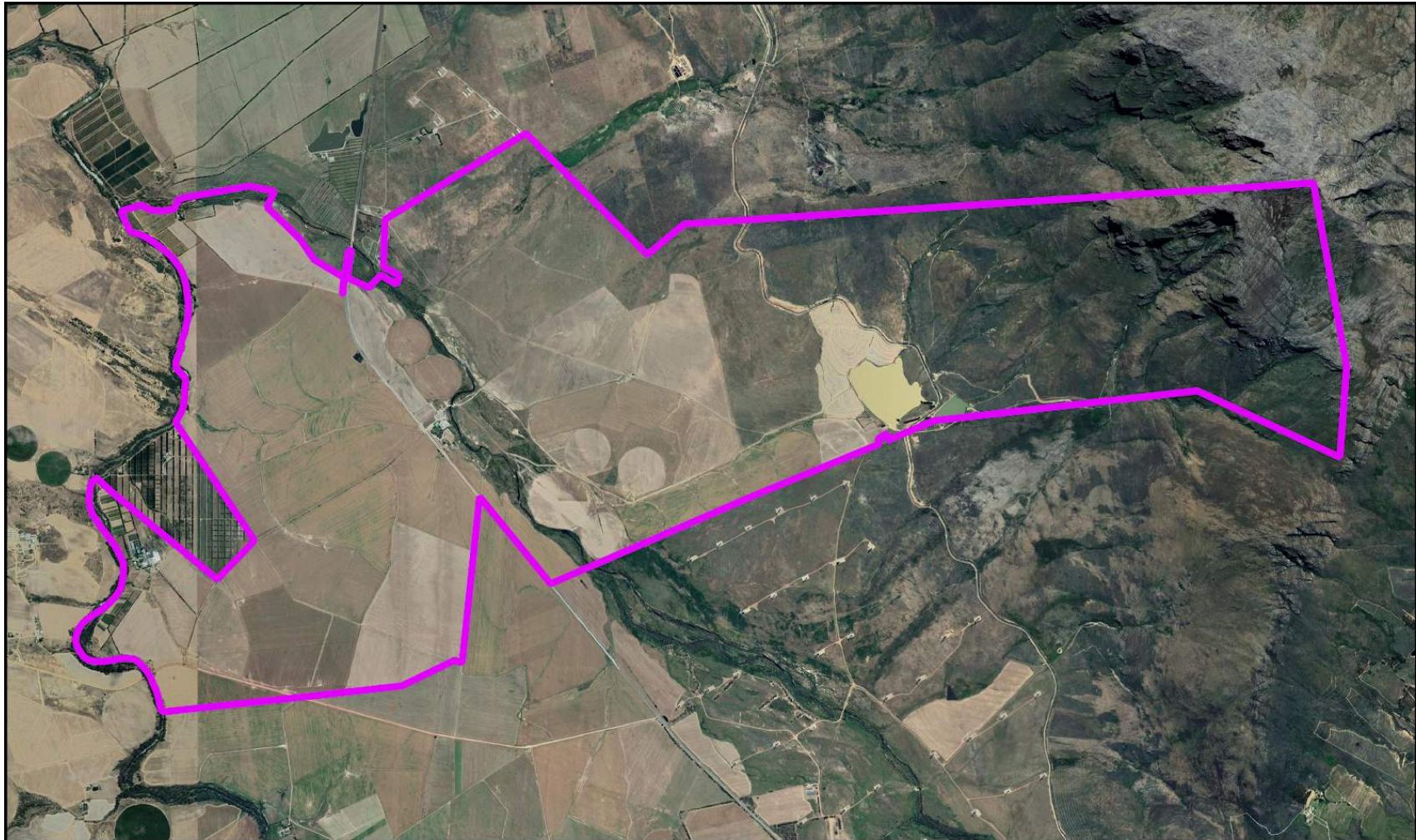


Figure 1c. Overview Map. Satellite image (2019) indicating the proposed development area at closer range.



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 Proposed Development

0 1 2 km




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Figure 1d. Overview Map. Satellite image (2019) indicating the proposed development area at closer range

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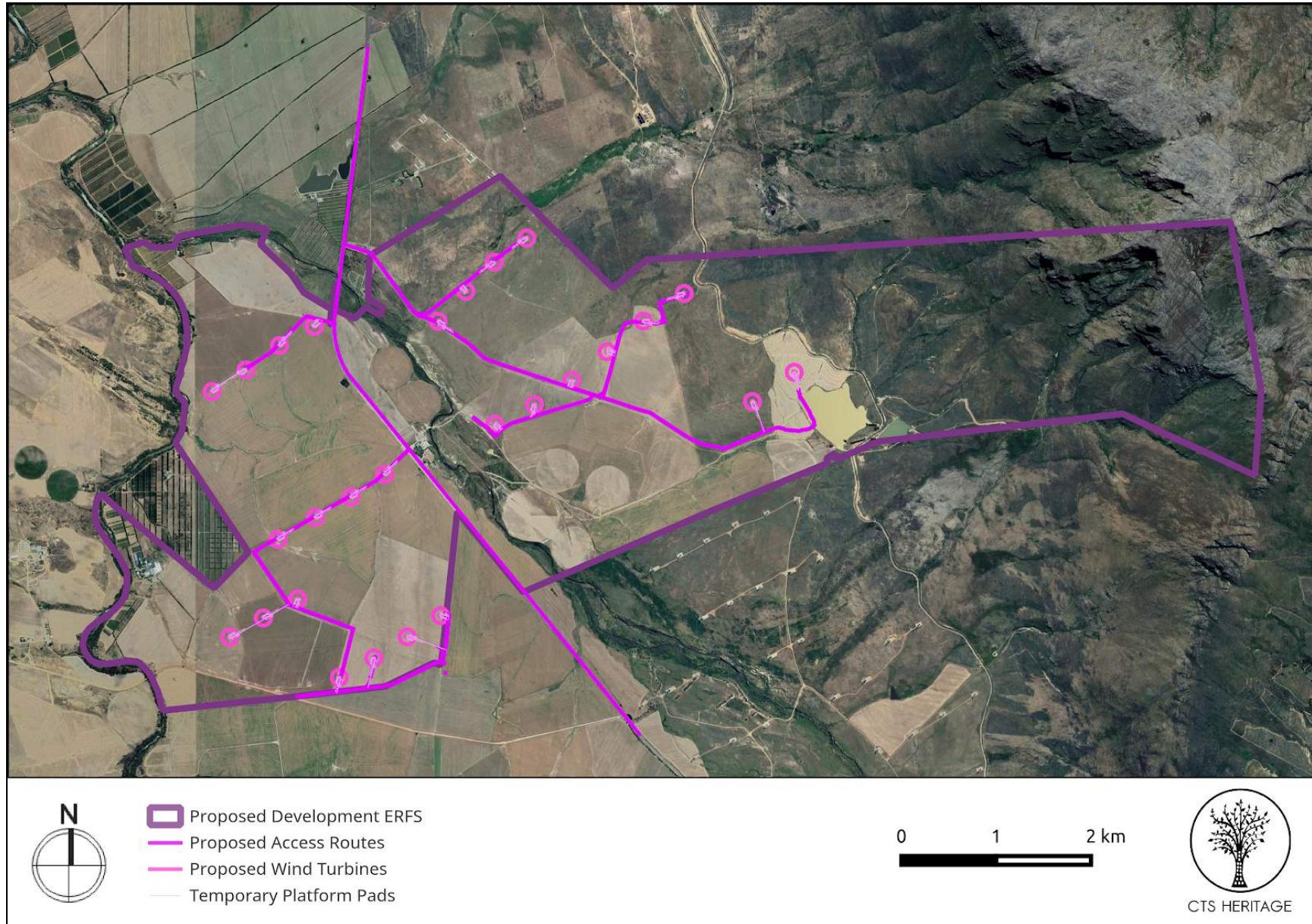
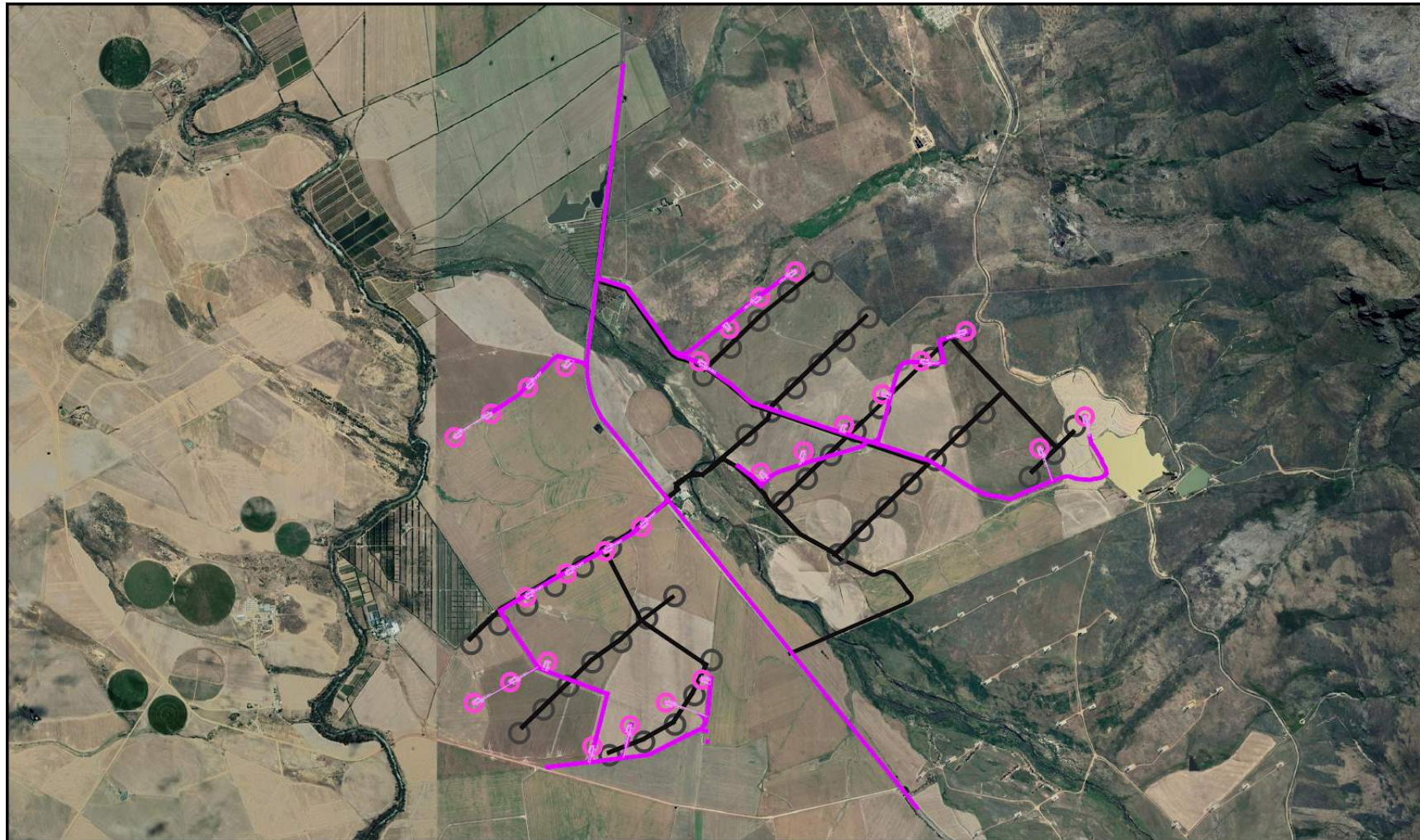


Figure 1e. Overview Map. Satellite image (2019) indicating the proposed amended development area at closer range



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- Proposed Access Routes
- Old Access Routes
- Proposed Wind Turbines
- Old Wind Turbines
- Temporary Platform Pads



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Figure 1f. Overview Map. Satellite image (2019) indicating the proposed development amendments in relation to the old plan

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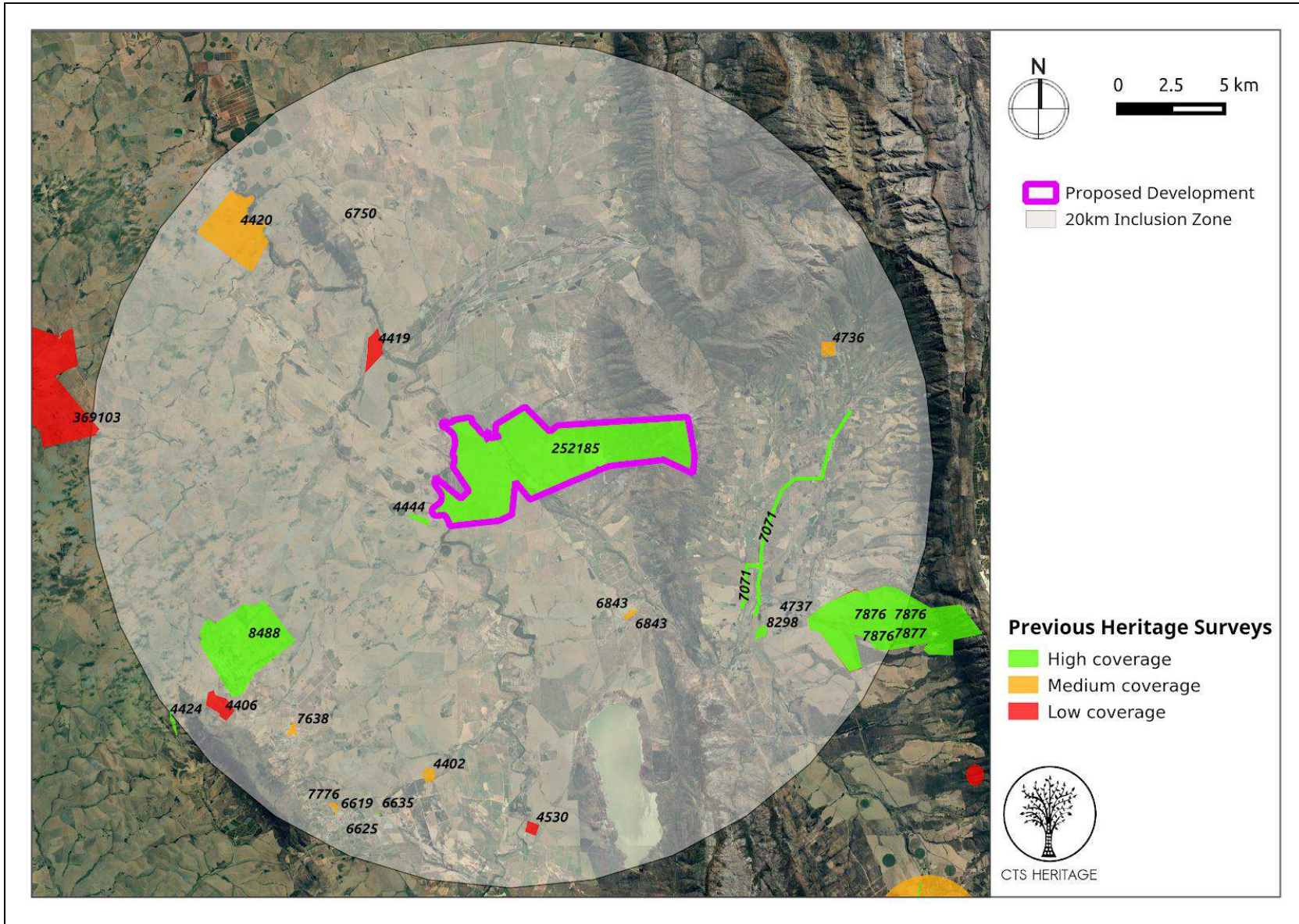


Figure 2. Previous HIAs Map. Previous Heritage Impact Assessments surrounding the proposed development area within 20km, with SAHRIS NIDS indicated. Please see Appendix 2 for full reference list.



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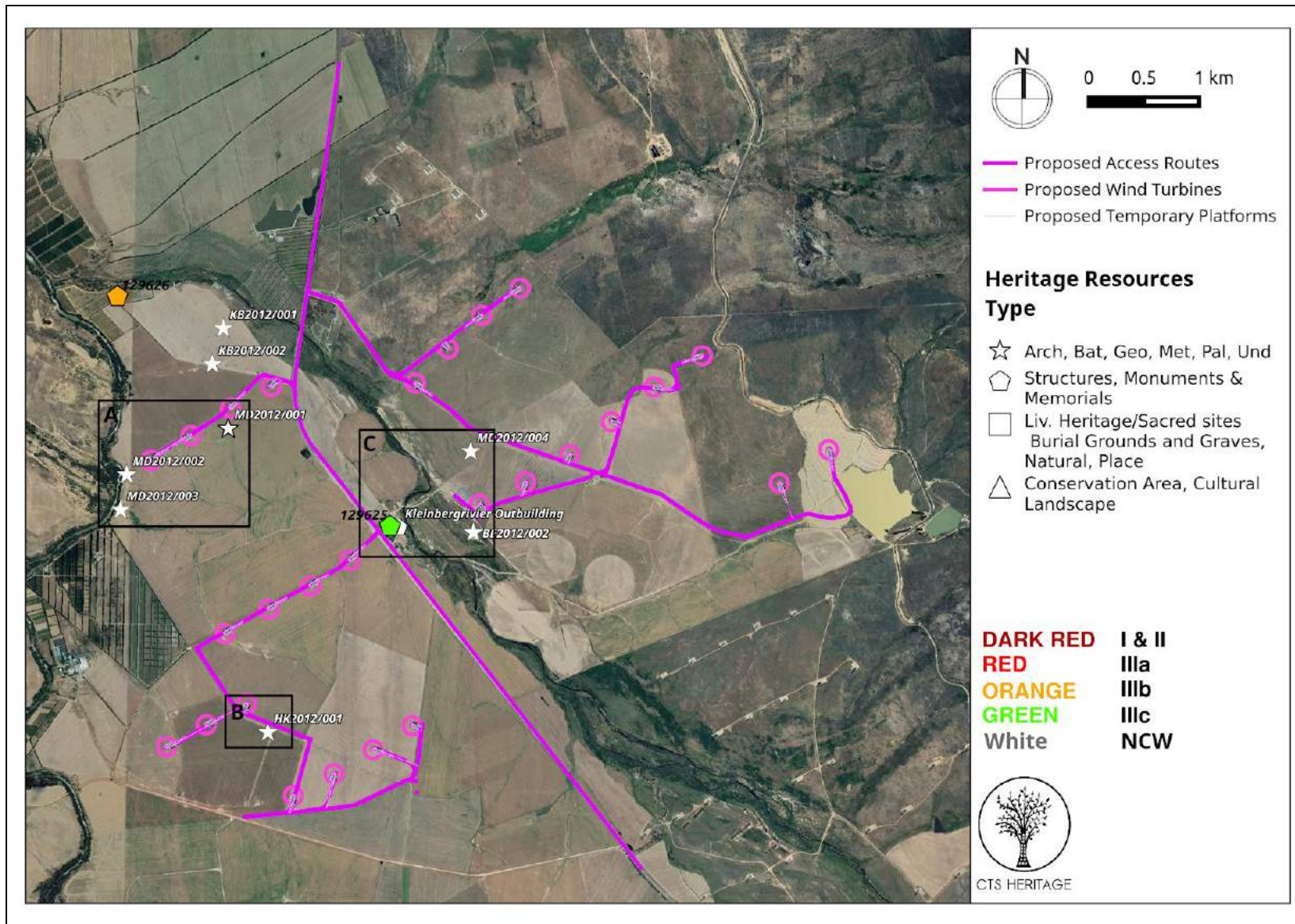


Figure 3a. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with Jayson Orton sites and SAHRIS Site IDs indicated. Please See Appendix 4 for full description of heritage resource types.

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Figure 3b. Heritage Resources Map. Heritage Resources Inset A

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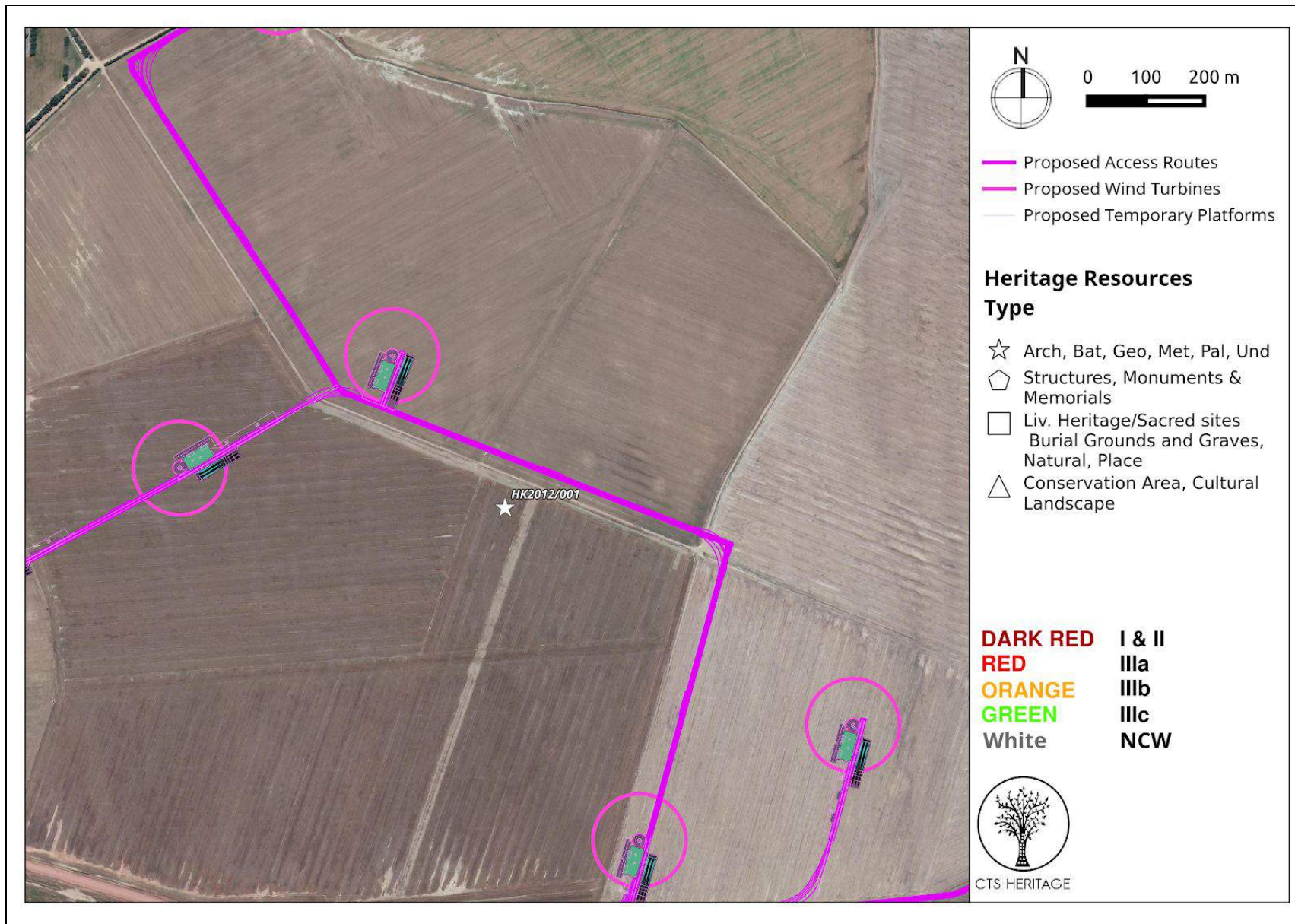


Figure 3c. Heritage Resources Map. Heritage Resources Inset B

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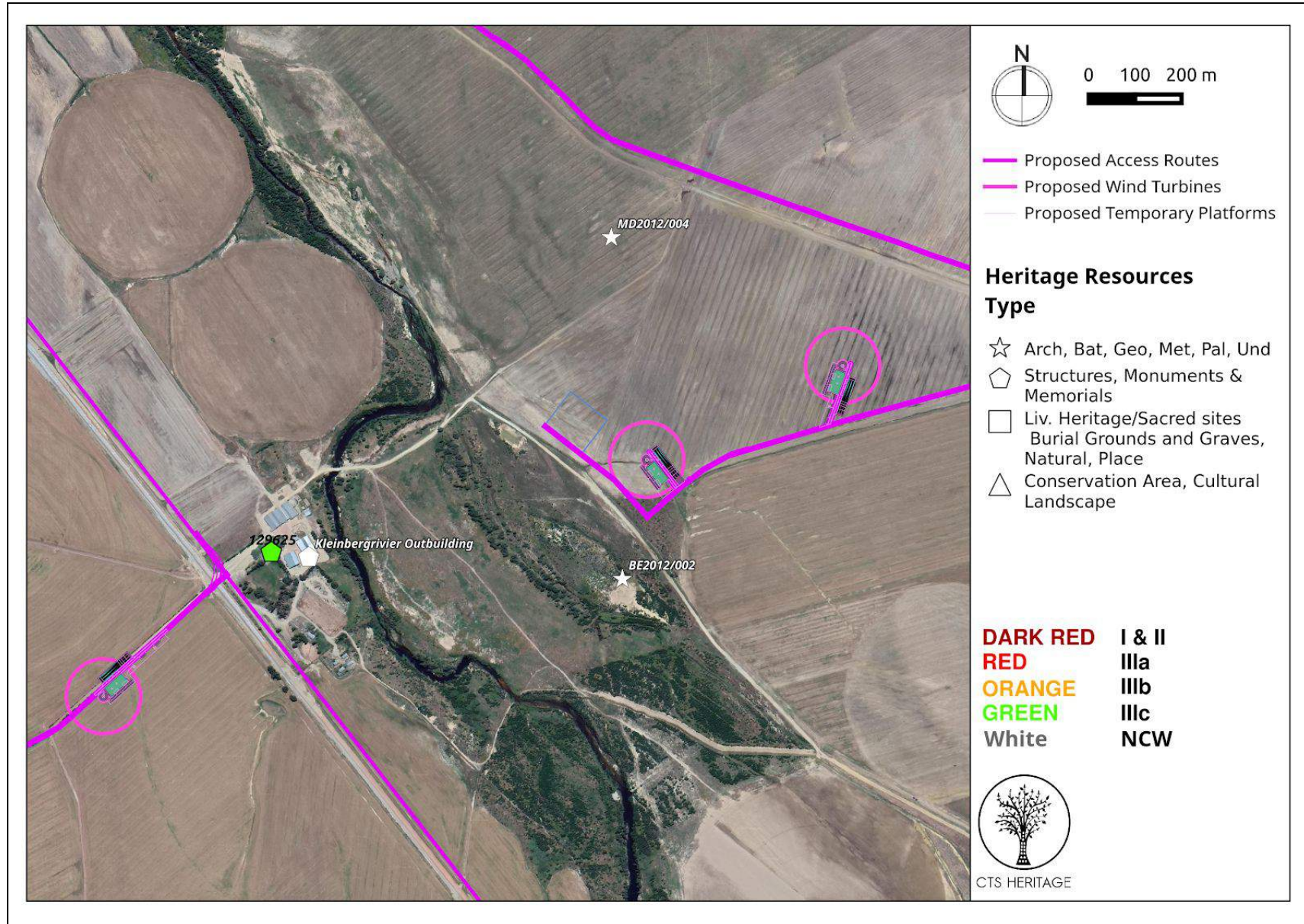


Figure 3d. Heritage Resources Map. Heritage Resources Inset C

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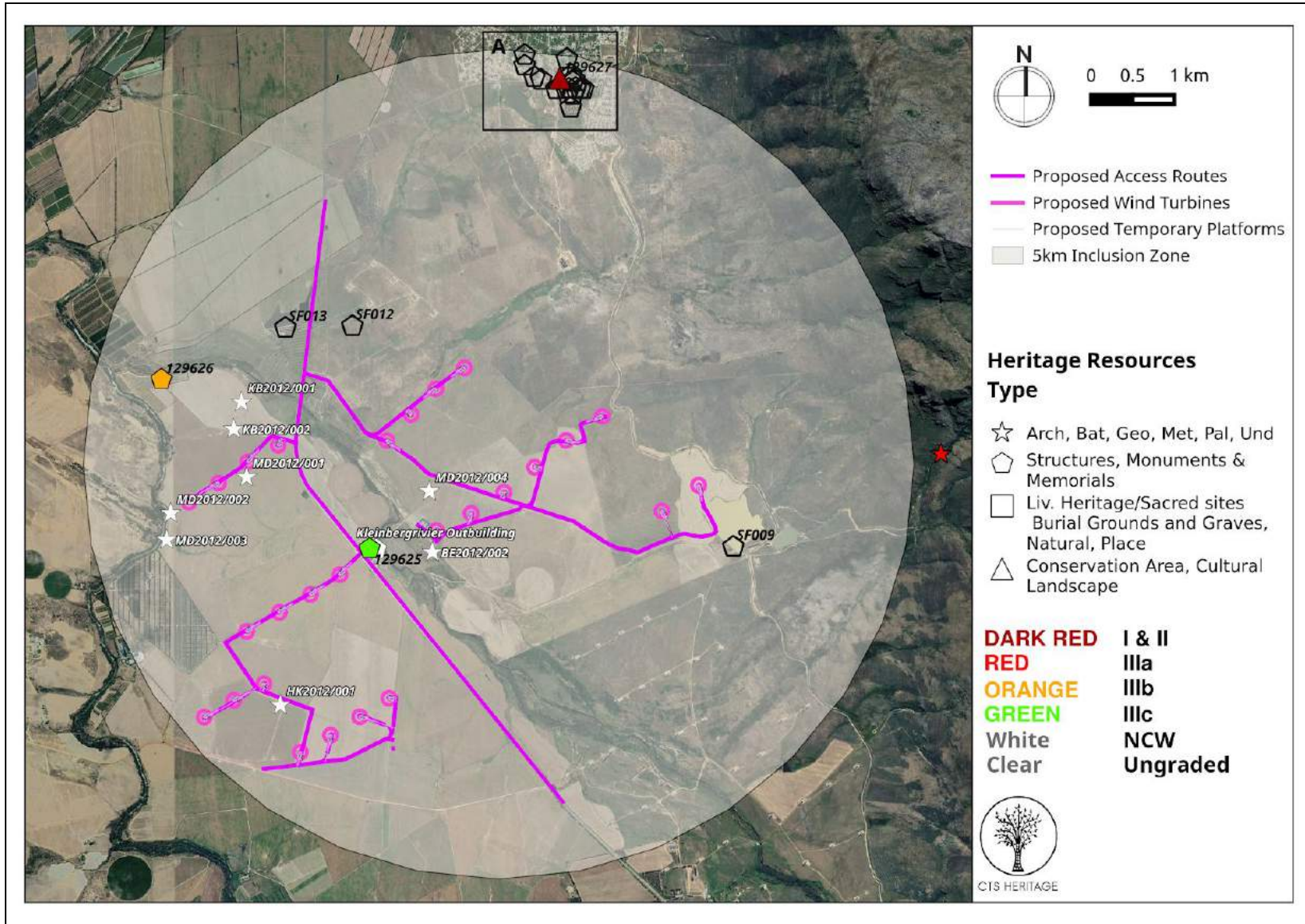


Figure 3e. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs and Jayson Orton, Jim Hislop Sites indicated. Please See Appendix 4 for full description of heritage resource types.

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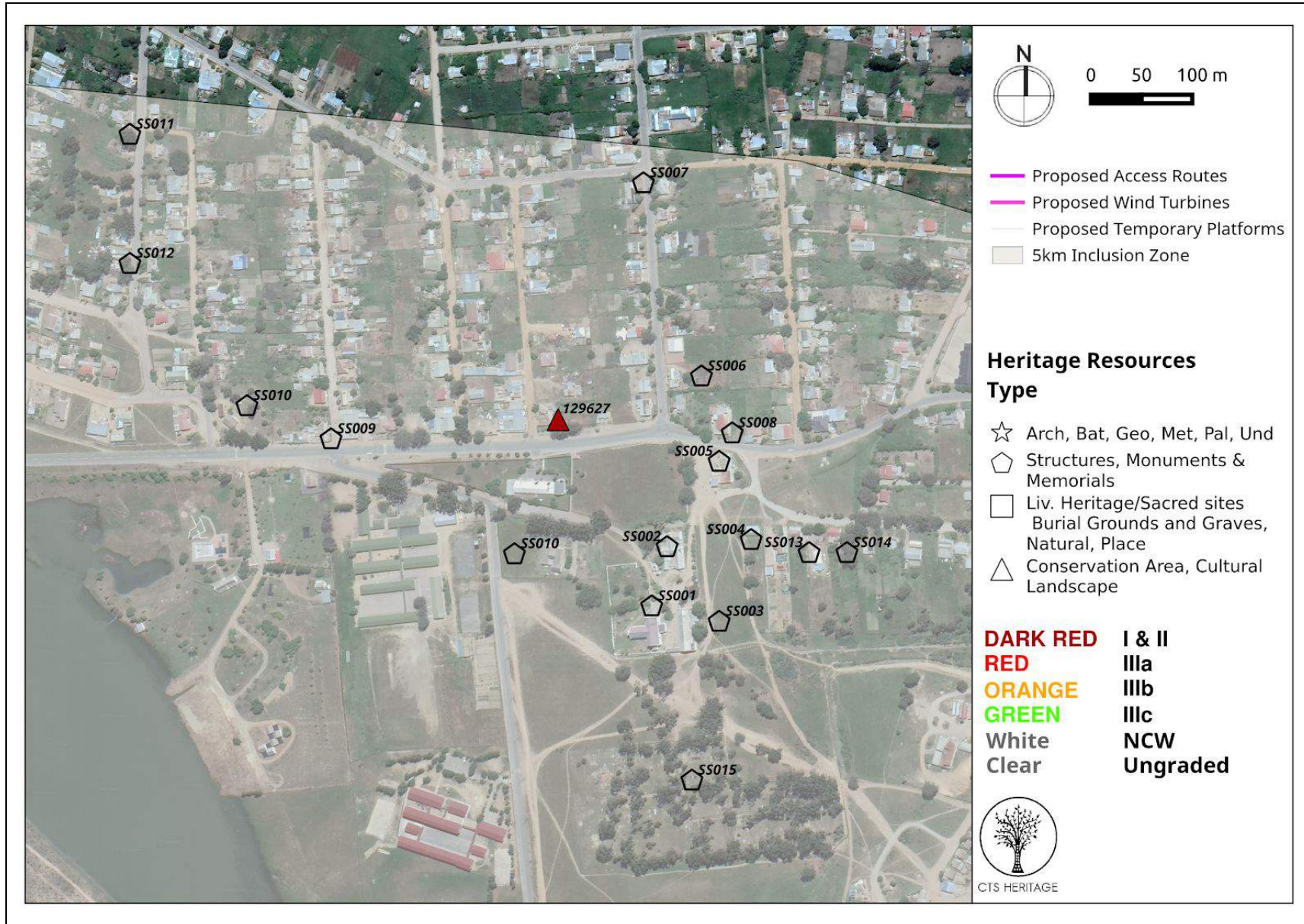


Figure 3f. Heritage Resources Map. Heritage Resources map 3e Inset A

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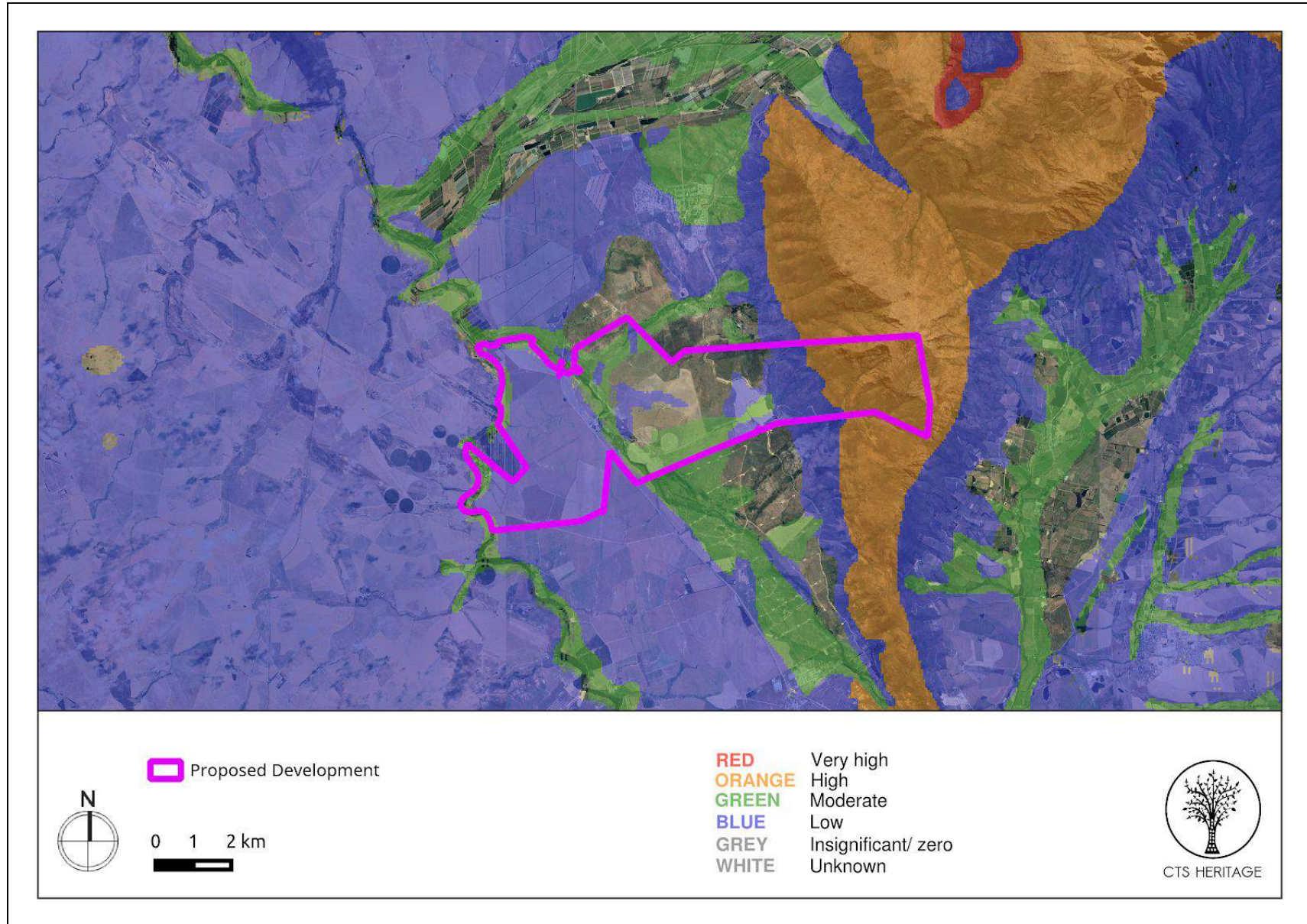


Figure 4. Palaeosensitivity Map. Indicating Moderate and Very High fossil sensitivity underlying the study area. Please See Appendix 3 for full guide to the legend.

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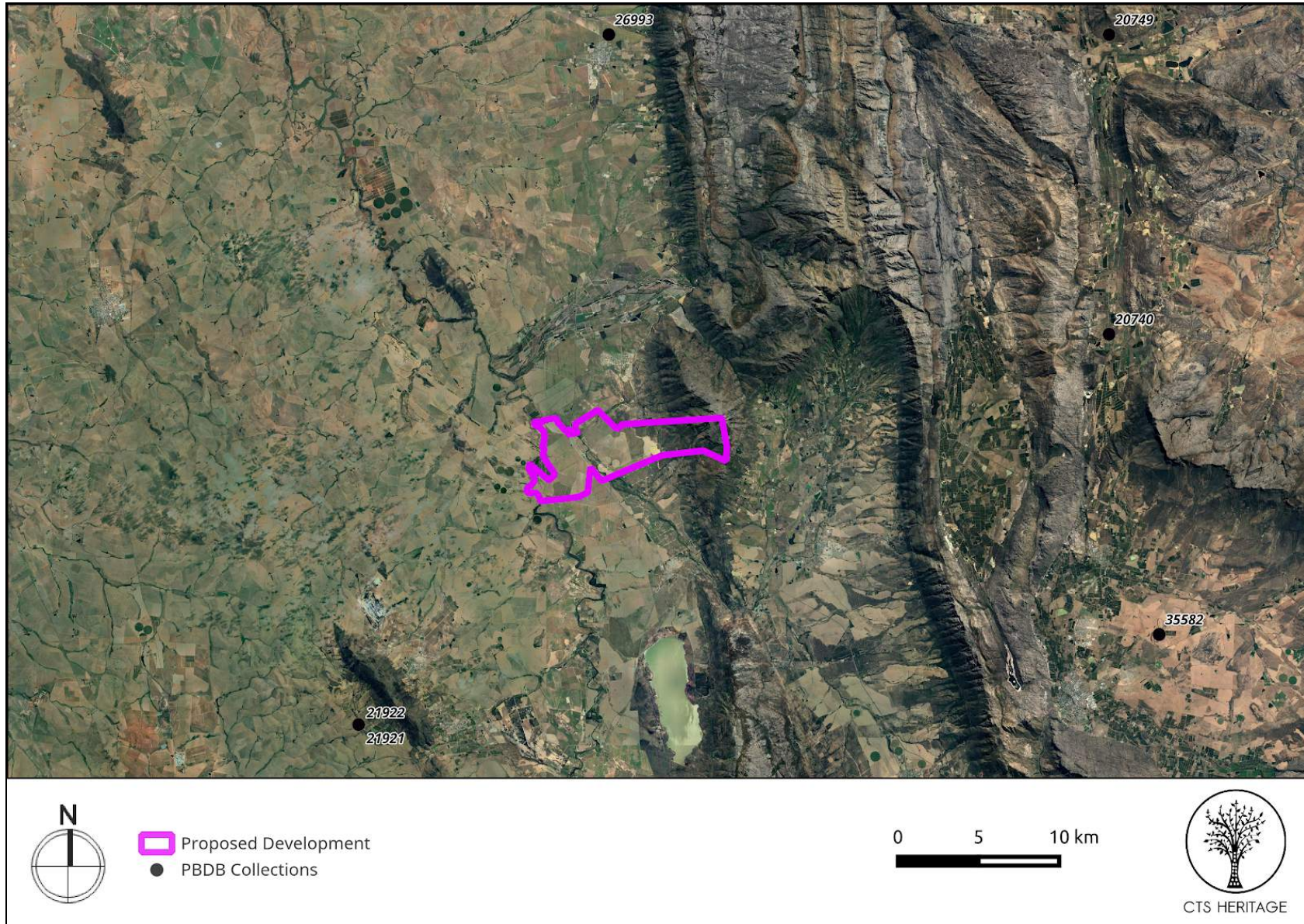


Figure 5. Map of known Palaeontological Sites. Extracted from the Palaeobiology Database (PBDB - <https://paleobiodb.org/#/>) More detail in Appendix 1

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Figure 6.1. Contextual Photographs. October 2019, Existing turbines of the Gouda WEF



Figure 6.2. Contextual Photographs. October 2019, Existing turbines of the Gouda WEF along the R44



Figure 6.3. Contextual Photographs. October 2019, Overlooking the proposed development area, with existing turbines of the Gouda WEF along the R44



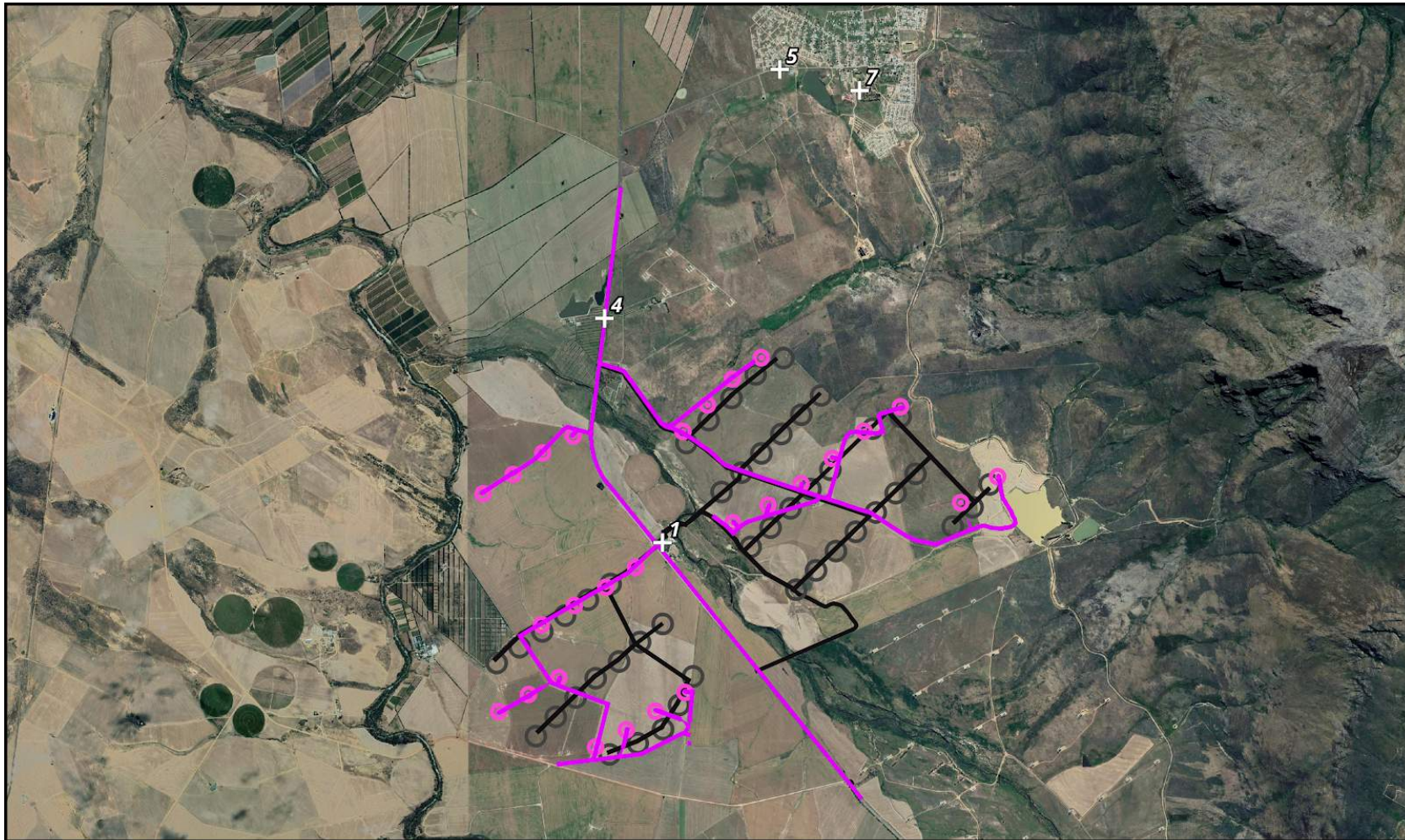
Figure 6.4. Contextual Photographs. October 2019, De Mond Farm house (SAHRIS ID 129626)



Figure 6.5. Contextual Photographs. October 2019, View from De Mond Farm house towards proposed WEF - the turbines will be screened by the tree line



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- Proposed Amended Layout
- Authorised Layout
- + Photo Locations



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Figure 7. Photograph Simulation Map. Map indicating the points from which the below photographs were taken

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Figure 7.1a. Photograph Simulation. From Point 1 - Kleinbergvriër Farm house - status quo

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Figure 7.1b. Photograph Simulation. From Point 1 - Kleinbergrivier Farm house - as per EA (110m hub height)

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Figure 7.1c. Photograph Simulation. From Point 1 - Kleinberggrivier Farm house - proposed amendment (140m hub height)

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Figure 7.2a. Photograph Simulation. From Point 4 - Intersection - status quo

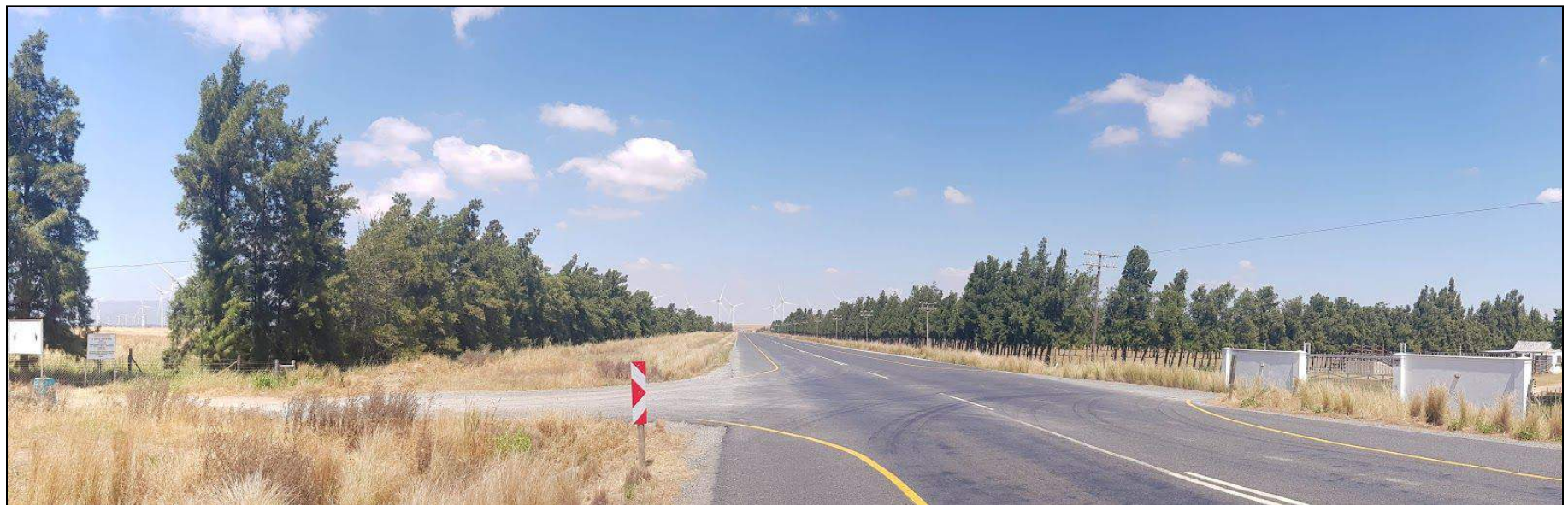


Figure 7.2b. Photograph Simulation. From Point 4 - Intersection - as per EA (110m hub height)

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Figure 7.2c. Photograph Simulation. From Point 4 - Intersection - proposed amendment (140m hub height)



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Figure 7.3a. Photograph Simulation. From Point 5 - Road towards Saron - status quo

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Figure 7.3b. Photograph Simulation. From Point 5 - Road towards Saron - as per EA (110m hub height)



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Figure 7.3c. Photograph Simulation. From Point 5 - Road towards Saron - proposed amendment (140m hub height)

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Figure 7.4a. Photograph Simulation. From Point 7 - Saron Church and Cemetery - status quo



Figure 7.4b. Photograph Simulation. From Point 7 - Saron Church and Cemetery - as per EA (110m hub height)

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Figure 7.4c. Photograph Simulation. From Point 7 - Saron Church and Cemetery - proposed amendment (140m hub height)



8. Comparative Heritage Assessment

Background:

The ZEN Wind Energy Facility was the subject of a full EIA process in terms of NEMA in 2012, with Environmental Authorisation granted for this development in November 2016. The area proposed for the ZEN WEF was subject to a thorough and comprehensive Heritage Impact Assessment conducted by ACO Associates in 2012. This HIA assessed impacts to the Built environment; Historic settlements; Scenic routes; the cultural landscape; and archaeology.

The proposed ZEN WEF development is located approximately 3km south of Saron and is bordered by the existing Gouda WEF to the south. The following amendments are proposed as part of this assessment for the ZEN Wind Energy Facility, and have been mapped in Figures 1f and 3a to 3d:

- Reduction in the number of turbines from 46 to 27;
- Increase rated power of turbines from 3 MW to up to 6 MW per WTG
- Increase rotor diameter from 122 m to up to 165 m;
- Increase hub height from 110 m to up to 140 m;
- Increase in the overall capacity of the wind energy facility from 140 MW to up to 147 MW;
- Potential increase to dimensions of the crane pad and laydown area (storage area per turbine);
- Increase in the concrete foundation from 20m x 20m x 4m to 25m x 25m x 6m;
- Update of the layout; and
- Change the holder of the EA.

This assessment is not intended to be a Heritage Impact Assessment in terms of section 38(3). The purpose of this assessment is therefore to assess the change in impact on heritage resources associated with the implementation of the proposed amendments and to ensure that the proposed amendments to the ZEN WEF development do not negatively impact on heritage resources based on the field assessments and Heritage Impact Assessment already conducted (Orton, 2012). Orton's HIA (2012) is attached for reference as Appendix 5.

Comments from HWC

HWC responded to the submission of the HIA in a letter dated 23 January 2013 which stated that the Impact Assessment Committee of HWC did not consider the HIA, and required that

- The VIA deal explicitly with visual impacts on and from the historic core of Saron, and on and from any historical farmstead within 5km of the turbines
- The VIA be conducted by an appropriately qualified and experienced professional with respect to visual impacts on the cultural landscape
- Comment in respect of heritage parties in Saron be obtained

Savannah Environmental responded to HWC's comments in a letter dated 13 August 2013 (Appendix 6), however HWC did not accept this letter as sufficient. Orton also responded to HWC's comments in a letter dated 14 November 2013 (Appendix 5), following which EA was granted for the proposed development in November 2016. As such, HWC's requirements articulated above have not been responded to in terms of this project. We attempt to do so below through the inclusion of additional information and photo simulations that indicate likely visual impact on the historic core of Saron, and on the historical farmsteads within 5km of the turbines (Figures 7, 7.1 to 7.4). However, it is



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important to note that the cultural landscape has changed drastically since 2013 through the development of the Gouda WEF on the neighbouring property (Figures 6.1 and 6.2). The turbines of the Gouda WEF are 100m high, and thus are 40m shorter than the proposed ZEN WEF turbines. However, the existing Gouda WEF, and the included photo simulations, do demonstrate the likely impact of the proposed ZEN WEF on the cultural landscape.

Archaeology

Orton's HIA (2012) identified a number of archaeological heritage resources in his assessment (Figures 3a to 3d and Appendix 1), none of which were determined to be conservation-worthy. According to Orton (2012); "Impacts to archaeological resources will undoubtedly occur but these will not be of high significance. Furthermore, mitigation can be easily accomplished where this might be required. Should dense scatters of ESA artefacts be impacted then mitigation should entail in situ recording of the material to create a record of the artefacts and technology. No LSA sites were found in the immediate WEF area but should any be located later they would possibly require some degree of formal excavation. Table 4 formally evaluates the potential impacts to archaeology which are found to be of medium significance before mitigation and low after mitigation."

Based on the available information, the proposed amendments to the EA and site layout will NOT increase the significance of impacts to significant archaeological heritage resources originally identified in the HIA and EIA report or lead to any additional impacts.

Orton (2012) recommended that "If any change to the layout is made pre-construction then a follow-up inspection of the new layout should be made, particularly for archaeological resources which are point-specific on the landscape". However, as the archaeological resources identified by Orton (2012) were determined to be not conservation-worthy, it is unlikely that conservation-worthy archaeology will be impacted by the proposed amended layout. In addition, the proposed amended layout largely aligns with the previously approved layout which was inspected by Orton (2012) other than the location of seven of the proposed 27 turbines, all of which are located on previously cultivated fields.

Palaeontology

According to the SAHRIS Palaeosensitivity Map (Figure 4), the area proposed for development is underlain by geological sediments of low, moderate and high sensitivity for impacts to palaeontology. As per Orton's HIA (2012), "The study area is underlain by deposits of the Malmesbury Group (low-lying areas) and Cape Supergroup (mountains). According to Almond and Pether (2008) the Malmesbury Group is of low palaeontological significance with no fossils recorded as yet. The Cape Supergroup rocks contain several units with varying palaeontological significance. Generally, the shale units have higher significance than the sandy units but are not well represented in the study area. The lowest rocks, if present, would be Piekenierskloof Formation conglomerates (J. Compton, pers. Comm., 2010), while Peninsula Sandstone would overlie them. Norman and Whitfield (2006:fig. 19) show that the more significant Cederberg shale only occurs in the very high reaches of the mountains where turbines would not be constructed. The only shale unit that might be present lower down is the Graafwater Formation, which occurs between the Piekenierskloof and Peninsula Sandstone Formations, but this would be very thin here if present at all."

Based on the available information, the proposed amendments to the EA and site layout will NOT increase the significance of impacts to palaeontological heritage resources originally identified in the HIA and EIA report or lead to any additional impacts.

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Built Environment Heritage

Orton's HIA (2012) identified a number of built environment heritage resources in his assessment (Figures 3a to 3d and Appendix 1). According to Orton (2012); "No built environment elements will be directly impacted. However, indirect (visual) impacts will be felt by farm houses and outbuildings in the vicinity. The houses at the Kleinberggrivier and Die Mond werfs are most significant but still do not attract high gradings. For this reason, visual impacts to them and their contexts are not seen as very significant. The house at Die Mond will be 2.9 km from the nearest turbine on the current layout, while the Kleinberggrivier farmhouse will be 930 m from its nearest turbine. Neither house is of suitable merit to prevent construction or to suggest that larger buffers should be incorporated – these buffers are quite adequate. No further mitigation measures are suggested."

The built environment heritage of Saron and its surrounds has been investigated by Cape Town Properties Histories (Appendix 7). These resources have been included in Figure 3a. Five of these historic properties fall within 5km of the proposed development area (Figure 3e). Two of the five historic structures were assessed by Orton (2012). In terms of the proposed amended layout, the house at Die Mond will be 1.5 km from the nearest turbine, while the Kleinberggrivier farmhouse will be approximately 500m from its nearest turbine. A further three historical farmsteads located within 5km of the proposed ZEN WEF were identified by Cape Town Properties Histories (SF009, SF012 and SF013 in Figure 3e). As part of this comparative assessment, photo simulations of the likely impact of the proposed WEF on some of these identified structures of significance were developed (Figures 7.1 and 7.2).

Based on the available information, the proposed amendments to the EA and site layout will increase the significance of impacts to the context of significant built environment heritage resources originally identified in the HIA and EIA report and will lead to additional impacts.

The impacts to the sense of place of the Kleinberggrivier farmhouse will be negatively impacted by the amended layout, however the proposed amended layout does comply with the recommendations made by Orton (2012) that "Buffers around historical houses should be a minimum of 500 m but preferably as large as possible".

Visual Impacts to historic settlements and to the Cultural Landscape

According to Orton (2012); "Saron is a historical settlement whose context and character retain heritage significance. Furthermore, there are several individual structures of significance within the core part of the village. The key aspect of the impacts to this settlement is visibility of the turbines. Much of the settlement is visually protected at the very local scale due to the many trees that form part of its structure and character. It is only on the very southern limits of the village, close to the historic mission station and graveyard, that one will be able to see the uppermost part of the turbines. The only mitigation that could occur would be to reduce the number of turbines on high ground in the eastern part of the town so as to reduce the overall visibility of turbines from the mission station."

According to the Visual Impact Assessment that was conducted; "The region has a rural, pastoral character with scattered isolated homesteads occurring within the study area. Large areas, especially within the mountains, have been given over to conservation, or remain in a natural state. The greater environment is considered to have distinctive landscape character and a high visual quality. The sense of place is quite distinctive. The anticipated visual impact of the facility on the regional visual quality, and by implication on the sense of place of the region, is expected to be of moderate significance. No mitigation of this impact is possible, but measures are recommended as best practice."

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Further, Orton (2012) notes that “The core historical area of Saron is considered an important cultural landscape and its impacts will be the same as those identified above for the historical settlement. The wider Swartland cultural landscape will also be affected but with lesser significance due to its great size and the proximity of the Gouda WEF.” Importantly, subsequent to Orton’s HIA (2012), HWC declared the Historic Mission Station of Saron as a Provincial Heritage Site (Provincial Gazette for Western Cape No. 7202, 29 November 2013, Page 30) based on its high social and historical cultural significance.

As part of this comparative assessment, photo simulations of the likely impact of the proposed WEF on the historic core of Saron were developed (Figures 7.3 and 7.4). It is noted that the nearest turbine to Saron is located approximately 2.5km from the southern edge of the town. From the historic core of Saron, the turbines are shielded from view from the trees around the cemetery, as well as a small koppie located to the south of Saron.

In terms of the Heritage Guidelines emanating from the Provincial Spatial Development Framework by Winter and Oberholzer (2013), the following guidelines apply to large-scale developments located within the contexts of historic settlements such as Saron:

- Avoid large scale infrastructural developments such as windfarms, transmission lines and solar energy facilities where these disrupt the relationship between historical settlements and their landscape setting
- Retain view-lines and vistas focused on prominent landscape features

In response to these guidelines, importantly, the proposed WEF does not impact on the dramatic mountain backdrop to the Saron Mission, and the proposed WEF does not disrupt view-lines and vistas between the Saron Mission and the mountains to the east.

Based on the available information, the proposed amendments to the EA and site layout will decrease the significance of visual impacts to historic settlements and to the Cultural Landscape originally identified in the HIA and EIA report and will not lead to any additional impacts. This is due to the reduction in the number of turbines proposed from 46 to 27.

Orton’s (2012) recommendations that, if possible, turbines on high ground within close visual proximity to Saron should be relocated to less prominent positions and the final layout should seek to be as consolidated as possible in order to maintain a tight cluster with the other proposed facilities in the area remain appropriate in terms of mitigation options.

Visual Impacts to Scenic Routes

According to Orton (2017); “Scenic routes will be impacted by the proposed WEF. However, the clustering of turbines from the three facilities planned in this area helps to centralise the impacts to one area and the impacts that the Zen WEF will have need to be considered in the light of these other facilities. Due to the nature of the land – with the only large visual buffer (the mountains) being located behind the WEF relative to the scenic routes – no mitigation will be possible for scenic routes.” Since Orton’s assessment, the Gouda WEF has been constructed. The proposed ZEN WEF will be located along the same scenic route as the Gouda WEF and as such, will be experienced as part of the same renewable energy landscape.

In terms of the Heritage Guidelines emanating from the Provincial Spatial Development Framework by Winter and Oberholzer (2013), the following guidelines apply to

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large-scale developments located within the contexts of scenic routes such as the R44:

- Prohibit obstruction of sea and mountain views along proclaimed scenic routes and avoid visual intrusions, such as inappropriate signage (billboards) and infrastructure, including transmission lines. Also, prevent the obstruction of views towards important cultural features.
- Use by-laws to establish visual buffer zones with setbacks and height restrictions along scenic routes. (E.g. 100m setbacks for major national / provincial routes, and 30m for secondary routes, but these are dependent on view corridors and other local conditions).

In response to these guidelines, the proposed ZEN WEF is likely to obstruct views of the Tulbagh Mountains from the R44 scenic route, as well as view of the Saron Mission from the R44. However, the proposed amended layout does comply with the recommended visual buffer zones as the nearest turbine to the R44 is located approximately 200m away.

Based on the available information, the proposed amendments to the EA and site layout will decrease the significance of visual impacts to scenic routes originally identified in the HIA and EIA report and will not lead to any additional impacts. This is due to the reduction in the number of turbines proposed from 46 to 27.

Comment in respect of heritage parties in Saron

As per Orton's covering letter to the HIA dated 13 November 2013, "During the EIA a public consultation process was carried out. Savannah Environmental has indicated that nobody from Saron raised any concerns or objections during this process and neither did the local municipality. It is submitted that if local residents are not willing to comment or have no objections then little more can be done to obtain comment from them. The process should be unbiased and eliciting responses should thus not be condoned. The public participation process is thus seen as having fulfilled the requirement of HWC in this regard." Be that as it may, the proposed ZEN WEF falls within the area of interest indicated by the Drakenstein Heritage Foundation, and it borders on the area of interest indicated by the Tulbagh Valley Heritage Foundation. It is therefore recommended that these bodies be provided with 30 days in which to comment on the proposed amendments to the EA and this comparative assessment.

Conclusion

Overall, it is anticipated that the proposed amendments indicated above will not have an adverse impact to heritage resources in general, and in respect of visual impacts will even decrease significance due to the reduction in the number of turbines proposed. In terms of impacts to significant built structures, the proposed amendments to the EA and site layout *will* increase the significance of impacts to significant built environment heritage resources originally identified in the HIA and EIA report and will lead to additional impacts. The impacts to the sense of place of the Kleinberggrivier farmhouse will be negatively impacted by the amended layout, however the proposed amended layout does comply with the recommendations made by Orton (2012) that "Buffers around historical houses should be a minimum of 500 m but preferably as large as possible".

Recommendations

It is recommended that the proposed amendments to the EA be endorsed on condition that the following conditions be adhered to:

- A no development area of 500m around significant structures or 100m of the R44 scenic route be maintained
- The Drakenstein Heritage Foundation and the Tulbagh Valley Heritage Foundation be provided with 30 days in which to comment on this comparative assessment
- If any archaeological resources, palaeontological resources or burials are encountered during any stage of the development then work in the immediate vicinity should be stopped, the resources and/or remains protected and the finds reported to HWC. Exhumation and/or excavation would be required at the expense of the developer.

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Table 1: Impact Assessment Table

NATURE: Significant archaeological, palaeontological, built environment, cultural landscape and scenic route heritage resources were identified during the field assessment. These resources may be impacted by the construction and operational phase of the proposed ZEN WEF.

		Archaeology		Palaeontology		Built Environment		Historic Settlements and Cultural Landscape		Scenic Routes
MAGNITUDE	L (2)	No significant archaeological resources identified.	L (2)	Palaeontological sensitivity of the development area considered to be low overall	M (6)	The context of some historical structures will be negatively impacted	M (6)	The context of the significant Saron Mission settlement will be negatively impacted	M (6)	The scenic route of the R44 will be negatively impacted
DURATION	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.
EXTENT	L (1)	Localised within the site boundary	L (1)	Localised within the site boundary.	L (1)	Localised within the site boundary.	R (3)	Regional impacts to nearby historic settlements of heritage significance (Saron)	R (3)	Regional impacts to nearby scenic routes (R44)
PROBABILITY	L (2)	Improbable	L (1)	Very improbable	D (5)	Definite	H (4)	Highly probable	D (5)	Definite
SIGNIFICANCE	L	$(1+5+2)2 = 16$	L	$(1+5+2)1 = 8$	M	$(1+5+6)5 = 60$	M	$(3+5+6)4 = 56$	H	$(3+5+6)5 = 70$
STATUS		Neutral		Neutral		Negative		Negative		Negative
REVERSIBILITY	L	Any impacts to heritage resources that do occur are irreversible	L	Any impacts to heritage resources that do occur are irreversible		Any impacts to heritage resources that do occur are irreversible		Any impacts to heritage resources that do occur are irreversible		Any impacts to heritage resources that do occur are irreversible
IRREPLACEABLE LOSS OF RESOURCES?	L	Possible	L	Possible		Possible		Possible		Possible
CAN IMPACTS BE MITIGATED		Yes		Yes		Somewhat		No		Somewhat

MITIGATION:

- If any archaeological resources, palaeontological resources or burials are encountered during any stage of the development then work in the immediate vicinity should be stopped, the resources and/or remains protected and the finds reported to HWC. Exhumation and/or excavation would be required at the expense of the developer.
- A no development area of 500m around significant structures or 100m of the R44 scenic route be maintained

RESIDUAL RISK: The nature and scale of the proposed ZEN WEF will have a negative impact on the cultural landscape of the Saron Mission settlement, viewsheds towards and from the Mission, and viewsheds from the R44 scenic route towards the mountains.

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APPENDIX 1

List of built environment and archaeological heritage resources identified in the HIA by Orton (2012), and within 5km of the development area

Site ID	Site/Observation no.	Full Site Name/Description	Site Type	Grading
129626	Die Mond Farmhouse	Die Mond Farmhouse	Building	Grade IIIb
129625	Kleinbergrivier Farmhouse	Kleinbergrivier Farmhouse	Building	Grade IIIc
129627	Saron	Saron Mission Station PHS Declared November 2013	Cultural Landscape	Grade II
NA	Kleinbergrivier outbuilding	Kleinbergrivier outbuilding	Building	NCW
NA	Die Mond outbuilding	Die Mond outbuilding	Building	NCW
NA	MD2012/001	ESA artefact scatter including handaxes	Artefacts	NCW
NA	MD2012/002	LSA artefact scatter including hammerstone	Artefacts	NCW
NA	MD2012/003		Artefacts	NCW
NA	MD2012/004	ESA artefact scatter including handaxes	Artefacts	NCW
NA	KB2012/001		Artefacts	NCW
NA	KB2012/002		Artefacts	NCW
NA	HK2012/001	ESA artefact scatter including handaxes	Artefacts	NCW
NA	BE2012/002	MSA artefact scatter	Artefacts	NCW
N/A	SS001	RHENISH MISSION CHURCH (NOW UNITED REFORMED CHURCH) Work on this simple but attractive gabled mission church for the Rhenish Mission Society began in 1852, and it was completed one year later. Originally thatched, the church was extended in 1896, and given a back wing, thus forming a T-shape. Although it was altered again in 1949 and the roof is now of corrugated iron, the church still provides an aesthetically pleasing focal point of the historic mission complex.	Building	Ungraded

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N/A	SS002	DE LEEUWENKLIP HOUSE (DR PARSONAGE/COMMUNITY CENTRE)	Building	Ungraded
N/A	SS003	<p>MISSION SCHOOL (CHURCH HALL)</p> <p>After De Leeuwenklip farm was bought for the establishment of a mission town, the existing farm buildings were adapted for use in the new settlement until funds for new buildings were available. The De Leeuwenklip wine cellar was converted into a mission school. Fransen does not mention where this wine cellar building stood, but it may have been one of the buildings that stood in line with the water mill. The school operated in the wine cellar until 1877, when a dedicated school building was built next to the church. This is still standing, although it has been extended over the decades, and now acts as the church hall.</p>	Building	Ungraded
N/A	SS004	<p>WATER MILL (DEMOLISHED?)</p> <p>One of the few buildings of the village that predated the establishment of the mission town, the old water mill was dated by Fransen to c.1795. It was already in a perilous state in 2004 when The Old Buildings of the Cape was published, and Fransen describes it as a "mere shell".</p> <p>A newer building (post-2004?), standing at a different angle, appears to now stand on the site of the ruined mill</p>	Building	Ungraded
N/A	SS005	<p>MISSION STORE</p> <p>A rare flat-roofed building in Saron, this mission store, facing a square close to the De Leeuwenklip werf, is notable for its length and segmental pedimented facade.</p> <p>Hans Fransen dated the building's woodwork to c.1870.</p> <p>It is the only remaining building of four (including the mill) that stood in a line opposite the De Leeuwenklip homestead , and may have replaced/incorporated one of its outbuildings.</p>	Building	Ungraded
N/A	SS006	<p>3 KERK STREET</p> <p>Badly altered, with modern windows, but retains a loft door and evidence of side wolwe-end gable. Probably originally thatched? Flat-roofed extension/outbuilding on the right.</p>	Building	Ungraded
N/A	SS007	<p>CORNER LANG & KERK STREETS</p> <p>Rare thatched house with wolwe-end gables. Modern windows. Flat-roofed additions at the back.</p>	Building	Ungraded
N/A	SS008	MAIN ROAD (BETWEEN MEVI AND KERK STREETS)	Building	Ungraded

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		House with loft door and pitched-roof of corrugated iron, possibly once thatched. The verandah has been built-in, and there are other extensive flat-roofed extensions.		
N/A	SS009	CNR MAIN ROAD & KLING STREET Interesting squat Cape Revival gable. Corrugated iron roof and partially filled-in veranda. Numerous outbuildings behind on rear strip plot.	Building	Ungraded
N/A	SS010	CNR MAIN ROAD & KEEROM STREET Vacant and derelict (plaster peeling off), but quite authentic three-bay cottage with exterior chimney. Corrugated iron roof probably replaced thatch, hence the little roof lights above each window/door.	Building	Ungraded
N/A	SS011	PLEIN STREET RUIN Ruined mud-brick building set back from the road. Some walls still standing.	Building	Ungraded
N/A	SS012	PLEIN STREET RUIN 2 (CLOSE TO MAIN ROAD) Three-bay ruined mud-brick house (no roof). Now reduced to being used as a parking garage.	Building	Ungraded
N/A	SS013	DAM STREET COTTAGE 1 19th-century three-bay cottage on a long plot, better preserved than most in the village. Corrugated-iron roof and verandah.	Building	Ungraded
N/A	SS014	DAM STREET COTTAGE 2 19th-century three-bay cottage with large garden plot behind, less altered than most in the village and almost identical to the one mentioned above. Corrugated-iron roof and verandah, with round roof lights.	Building	Ungraded
N/A	SS015		Building	Ungraded
N/A	SF009	BONNE ESPERANCE A rectangular house with corrugated iron roof, and a ruined outbuilding nearby.	Building	Ungraded
N/A	SF012	KLEINE BERG RIVIER (LOT C) This is a portion (Lot C) of the farm previously known as De Mond van de Kleine Berg Rivier, granted to M.N. Smuts on 15 December 1846 and transferred to Nicolaas H.J. Louw on 22 August 1917.13 (SG Diag. Nr. 1014/1914). There are numerous buildings on the property, including an irregular T-shaped house. The cadastral map of Porterville dated 1975 shows a cluster of buildings on the farm labelled "The Junction"14 (see the sidebar for its occupants in 1927).	Building	Ungraded

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N/A	SF013	KLEINE BERG RIVIER (FORMERLY MOND VAN DE KLEIN BERG RIVIER) Another portion of the SF012 farm. Rectangular farmhouse.	Building	Ungraded
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Sites from PalaeoBiology Database in figure 5

Collection No.	Collection	Formation	Reference
21922	Kasteelberg Midden B	Mapped incorrectly	R. G. Klein and K. Cruz-Urbe. 1989. Faunal Evidence for Prehistoric Herder-Forager Activities at Kasteelberg, Western Cape Province, South Africa. <i>South African Archaeological Bulletin</i> 44 :82-97
21921	Kasteelberg Midden A	Mapped incorrectly	R. G. Klein. 1986. The Prehistory of Stone Age Herders in the Cape Province of South Africa. <i>South African Archaeological Society Goodwin Series</i> 5 :5-12
26993	Shelly Fauna of the Disa Member, Cedarberg Formation, Western Cape Province	Cedarberg	L. R. M. Cocks, C. H. C. Brunton, and A. J. Rowell, I. C. Rust. 1970. The first Lower Palaeozoic fauna proved from South Africa. <i>Quarterly Journal of the Geological Society of London</i> 125 :583-603
20740	Gydo Mt.	Blinkberg Sandstone	J. M. Anderson and H. M. Anderson. 1985. <i>Palaeoflora of Southern Africa. Prodrum of South African Megaflores Devonian to Lower Cretaceous</i> . Rotterdam: A.A. Balkema.
20749	Boplaas	Waboomberg	J. M. Anderson and H. M. Anderson. 1985. <i>Palaeoflora of Southern Africa. Prodrum of South African Megaflores Devonian to Lower Cretaceous</i> . Rotterdam: A.A. Balkema
35582	Gydo Formation (1st Shale), Ceres Area	Gydo	R. D. F. Oosthuizen. 1984. Preliminary catalogue and report on the biostratigraphy and palaeogeographic distribution of the Bokkeveld fauna. <i>Transactions of the Geological Society of South Africa</i> 87 :125-140

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APPENDIX 2

Reference List from SAHRIS

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
4402	AIA Phase 1	Jonathan Kaplan	01/12/2005	A Phase 1 Archaeological Impact Assessment of Two Proposed Borrow Pits Along the DR 1154 Riebeek Kasteel
4406	AIA Phase 1	Jonathan Kaplan	01/02/2007	Phase 1 Archaeological Impact Assessment: Proposed Development Ongegund Phase 2 Portion of Farm 1177 and Farm 618 Malmesbury, Western Cape Province
4419	AIA Phase 1	Jonathan Kaplan	01/11/2005	Phase 1 Archaeological Impact Assessment Proposed Housing Development Portion 11 of the Farm Vrischgewaagd No. 401 Malmesbury
4420	AIA Phase 1	Jonathan Kaplan	01/01/2006	Phase 1 Archaeological Impact Assessment Proposed Development Farm Drie Heuvels No.399 Malmesbury
4424	AIA Phase 1	Jonathan Kaplan	01/02/2007	Archaeological Investigation Proposed Realignment of DR 1153 Riebeeks Rivier Malmesbury
4444	AIA Phase 1	Jonathan Kaplan	02/05/2007	Phase 1 Archaeological Impact Assessment of the Proposed Construction of Chicken Houses on Portions 4 & 18 of the Farm Schoenmakersfontein No. 486 Riebeek West, Western Cape Province
4530	AIA Phase 1	Hilary Deacon	21/08/2007	Archaeological Impact Assessment: Tomis Abattoir Compost Facility (Farm Annex Schoongezicht 254/5, Division Tulbagh, Drakenstein Municipality, Western Cape)
4736	AIA Phase 1	Jonathan Kaplan	01/01/2006	Phase 1 Archaeological Impact Assessment Proposed Development Farm Erfdeel No.374 Tulbagh
4737	AIA Phase 1	Jonathan Kaplan	01/01/2007	Phase 1 Archaeological Impact Assessment: Proposed Development Life Style Village Portion 13 (Portion of Portion 3) of the Farm 244 Zagte Valley Tulbagh
6619	AIA Phase 1	Jonathan Kaplan	04/08/2008	Archaeological Impact Assessment: Proposed Development of Erf 2021, Riebeek Kasteel, Western Cape Province
6625	AIA Phase 1	Jonathan Kaplan	11/08/2008	Archaeological Scoping Proposed Development of Erf 321, Riebeek Kasteel, Western Cape Province
6635	AIA Phase 1	Jonathan Kaplan	30/01/2009	Archaeological Assessment: Proposed Rezoning of Erf 407, Riebeek Kasteel, Western Cape Province
6750	AIA Phase 1	Jonathan Kaplan	29/05/2008	Archaeological Impact Assessment: Proposed Vodacom Base Station and Connecting Powerline Heuningberg (Nuwedrif Farm) Malmesbury
6843	AIA Phase 1	Jayson Orton	01/10/2008	Archaeological Impact Assessment: Gouda Erf 20010, Western Cape
7071	AIA Phase 1	Jonathan Kaplan	01/02/2009	Archaeological Impact Assessment: Proposed Upgrading of the Klein Berg River Irrigation Scheme Tulbagh,

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Western Cape Province				
7638	AIA Phase 1	Jonathan Kaplan	26/05/2009	Archaeological Impact Assessment: Proposed Development of Portion of Erf 326 and 327, Riebeeck West, Western Cape Province
7776	AIA Phase 1	Jonathan Kaplan	08/09/2008	Archaeological Impact Assessment: Proposed Development of Erf 42, Riebeeck Kasteel, Western Cape Province
7876	AIA Phase 1	Jonathan Kaplan	01/02/2005	Phase 1 Archaeological Impact Assessment Schalkenbosch Estate Tulbagh: The Proposed Conservancy Estate
7877	AIA Phase 1	Jonathan Kaplan	01/04/2005	Phase 1 Archaeological Impact Assessment Schalkenbosch Estate Tulbagh the Proposed Golf Estate and Wellness Centre
7878	AIA Phase 1	Jonathan Kaplan	01/09/2004	Phase 1 Archaeological Impact Assessment, Schalkenbosch Estate, Tulbagh
8298	AIA Phase 1	Jonathan Kaplan	24/01/2008	Phase 1 Archaeological Impact Assessment: Proposed Borrow Pit for the Reconstruction of Trunk Road 22 and Main Road 305 Between Gouda and Wolseley, Western Cape Province
8488	HIA Phase 1	Timothy Hart, Erin Finnegan	01/03/2008	Heritage Impact Assessment of Proposed Expansion of the Riebeeck West Portland Cement Facility Malmesbury District, Western Cape
252185	Heritage Impact Assessment Specialist Reports	Jayson Orton	09/11/2012	Heritage Impact Assessment for the Proposed ZEN Wind Energy Facility, Tulbach Magisterial District, Western Cape Province

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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DARD	Department of Agriculture and Rural Development (KwaZulu-Natal)
DEA	Department of Environmental Affairs (National)
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
DEDTEA	Department of economic Development, Tourism and Environmental Affairs (Free State)
DENC	Department of Environment and Nature Conservation (Northern Cape)
DMR	Department of Mineral Resources (National)
GDARD	Gauteng Department of Agriculture and Rural Development (Gauteng)
HIA	Heritage Impact Assessment
LEDET	Department of Economic Development, Environment and Tourism (Limpopo)
MPRDA	Mineral and Petroleum Resources Development Act, no 28 of 2002
NEMA	National Environmental Management Act, no 107 of 1998
NHRA	National Heritage Resources Act, no 25 of 1999
PIA	Palaeontological Impact Assessment
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
VIA	Visual Impact Assessment

Full guide to Palaeosensitivity Map legend

	RED:	VERY HIGH - field assessment and protocol for finds is required
	ORANGE/YELLOW:	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	GREEN:	MODERATE - desktop study is required
	BLUE/PURPLE:	LOW - no palaeontological studies are required however a protocol for chance finds is required
	GREY:	INSIGNIFICANT/ZERO - no palaeontological studies are required
	WHITE/CLEAR:	UNKNOWN - these areas will require a minimum of a desktop study.

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APPENDIX 4 - Methodology

The Heritage Screener summarises the heritage impact assessments and studies previously undertaken within the area of the proposed development and its surroundings. Heritage resources identified in these reports are assessed by our team during the screening process.

The heritage resources will be described both in terms of **type**:

- Group 1: Archaeological, Underwater, Palaeontological and Geological sites, Meteorites, and Battlefields
- Group 2: Structures, Monuments and Memorials
- Group 3: Burial Grounds and Graves, Living Heritage, Sacred and Natural sites
- Group 4: Cultural Landscapes, Conservation Areas and Scenic routes

and **significance** (Grade I, II, IIIa, b or c, ungraded), as determined by the author of the original heritage impact assessment report or by formal grading and/or protection by the heritage authorities.

Sites identified and mapped during research projects will also be considered.

DETERMINATION OF THE EXTENT OF THE INCLUSION ZONE TO BE TAKEN INTO CONSIDERATION

The extent of the inclusion zone to be considered for the Heritage Screener will be determined by CTS based on:

- the size of the development,
- the number and outcome of previous surveys existing in the area
- the potential cumulative impact of the application.

The inclusion zone will be considered as the region within a maximum distance of 50 km from the boundary of the proposed development.

DETERMINATION OF THE PALAEOLOGICAL SENSITIVITY

The possible impact of the proposed development on palaeontological resources is gauged by:

- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in three categories, namely low, medium and high. In most instances the extent of the map corresponds to the extent of the development for which the specific report

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was undertaken.

Low coverage will be used for:

- desktop studies where no field assessment of the area was undertaken;
- reports where the sites are listed and described but no GPS coordinates were provided.
- older reports with GPS coordinates with low accuracy ratings;
- reports where the entire property was mapped, but only a small/limited area was surveyed.
- uploads on the National Inventory which are not properly mapped.

Medium coverage will be used for

- reports for which a field survey was undertaken but the area was not extensively covered. This may apply to instances where some impediments did not allow for full coverage such as thick vegetation, etc.
- reports for which the entire property was mapped, but only a specific area was surveyed thoroughly. This is differentiated from low ratings listed above when these surveys cover up to around 50% of the property.

High coverage will be used for

- reports where the area highlighted in the map was extensively surveyed as shown by the GPS track coordinates. This category will also apply to permit reports.

RECOMMENDATION GUIDE

The Heritage Screener includes a set of recommendations to the applicant based on whether an impact on heritage resources is anticipated. One of three possible recommendations is formulated:

(1) The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

This recommendation is made when:

- enough work has been undertaken in the area
- it is the professional opinion of CTS that the area has already been assessed adequately from a heritage perspective for the type of development proposed

(2) The heritage resources and the area proposed for development are only partially recorded - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for the proposed development.

This recommendation is made in instances in which there are already some studies undertaken in the area and/or in the adjacent area for the proposed development. Further studies in a limited HIA may include:

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- improvement on some components of the heritage assessments already undertaken, for instance with a renewed field survey and/or with a specific specialist for the type of heritage resources expected in the area
- compilation of a report for a component of a heritage impact assessment not already undertaken in the area
- undertaking mitigation measures requested in previous assessments/records of decision.

(3) The heritage resources within the area proposed for the development have not been adequately surveyed yet - Few or no surveys have been undertaken in the area proposed for development. A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development.

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APPENDIX 5 - HIA (Orton, 2012)

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14th November 2013

Ravisha Ajodhapersadh & Karen Jodas
By email: ravisha@savannahsa.com & karen@savannahsa.com

ZEN WIND ENERGY FACILITY : COMMENTS RESPONDING TO HWV LETTER AND REVISED LAYOUT

Dear Ravisha and Karen

Thank you for supplying the revised layout for the proposed ZEN Wind Energy Facility. This letter serves to respond to both this revised layout as well as to the letter issued by Heritage Western Cape and dated 23 January 2013. It can be submitted to HWC in the hope that it will address their concerns.

Revised layout

The revised layout has resulted in a number of turbines moving to one or other side along the rows but two turbines have been moved to new locations entirely. The original and revised layouts are illustrated below. The revisions are not significant in terms of archaeological resources, but the original recommendation of a follow up survey to check the final layout still applies. This survey would be quite brief due to the limited number of layout changes.

Significantly, the revised layout has not removed turbines from the northern part of the project area (closest to Saron). Reduction in the number of turbines in this area would very much reduce the visual impacts on and experienced from the historic core of Saron. The turbines that should be removed would need to be determined by the VIA practitioner based on land altitude at the facility and the town, the screening effect of the rocky ridge between the town and the proposed facility and the altitude of the turbine hubs and blades.

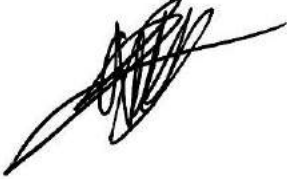
HWC letter

It is noted that in their letter of 23 January 2013 HWC rejected the HIA dated 09 November 2012 on the basis of an inadequate VIA. The first point to note here is that HWC **did not** request a VIA in their NID response (dated 18 July 2012) despite the fact that a visual specialist study was recommended in the NID (dated 28 June 2012). HWC therefore cannot now retrospectively request a visual study for impacts that were already known and anticipated. In compiling the HIA I made use of the scoping VIA compiled by Metro GIS in good faith as I felt it was necessary to do this in support of my conclusions. The final VIA was not available at the time of submission of the HIA. Although HWC has a clause stating that they reserve "the right to request additional information as required", I believe that they had every opportunity to request the visual study in their response to the NID, since visual impacts to Saron were obvious from the start. This HWC clause is perfectly acceptable in terms of unexpected impacts that have been discovered during compilation of the HIA but to use it to reverse their own decision relating to the need for a visual study does not seem appropriate.

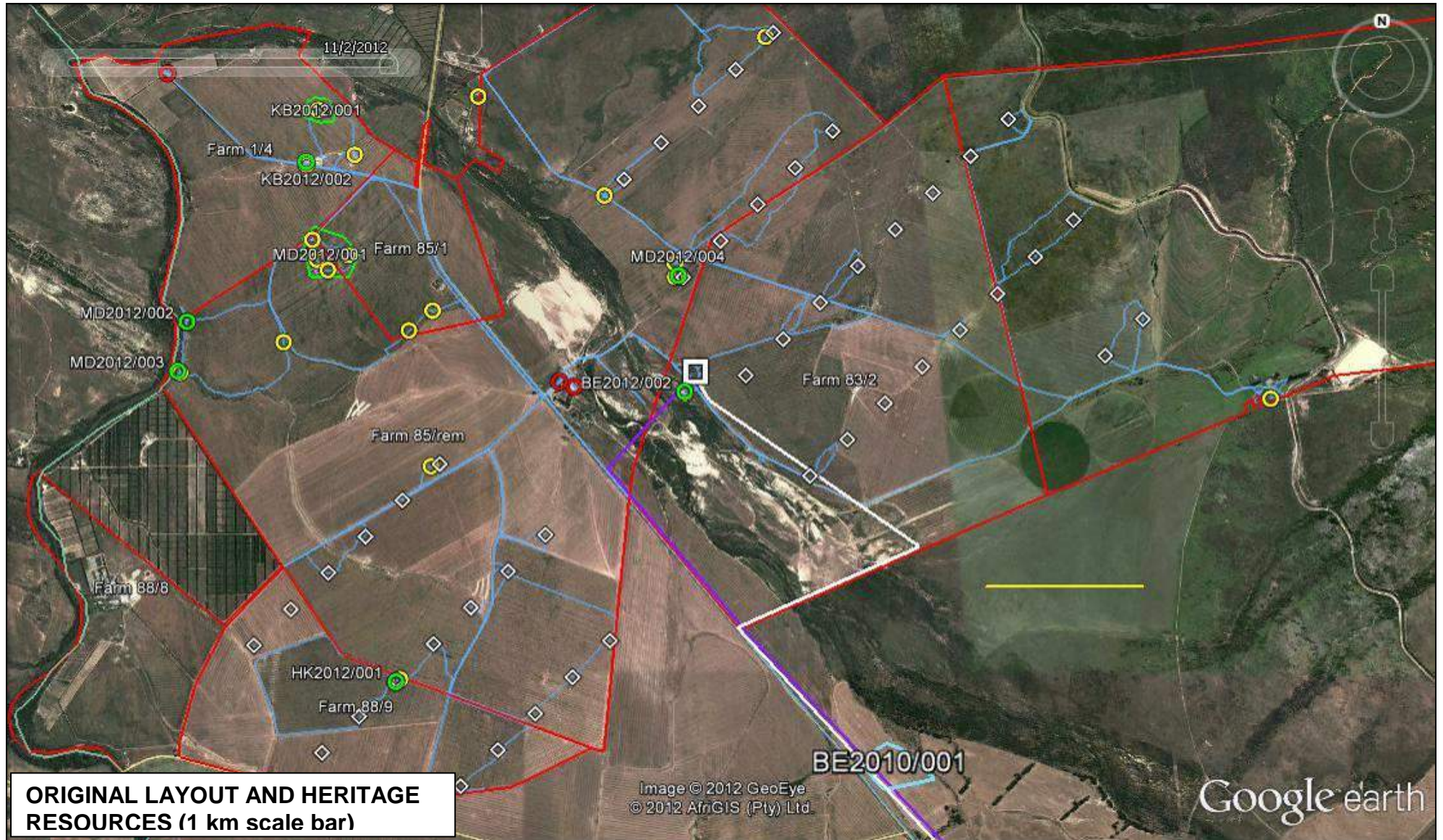
The HWC request for comment from "parties in Saron" is also noted. During the EIA a public consultation process was carried out. Savannah Environmental has indicated that nobody from Saron raised any concerns or objections during this process and neither did the local municipality. It is submitted that if local residents are not willing to comment or have no objections then little more can be done to obtain comment from them. The process should be unbiased and eliciting responses should thus not be condoned. The public participation process is thus seen as having fulfilled the requirement of HWC in this regard.

Point 10 of the HWC letter is unfounded. The HIA did indeed assess the visual impacts to Saron and the committee is encouraged to reread pages 21 to 28 of the HIA to find the relevant information. Through a combination of my own experience and the conclusions reached by the visual specialist, I concluded that visual impacts of medium significance (significance score of 55, where on the Savannah rating scale 61 or more would have been high) would be experienced for cultural landscapes and the historical settlement of Saron. Mitigation was suggested as discussed above. It should be stressed again that HWC failed to request a visual specialist study but that input from the scoping VIA was sought in the HIA.

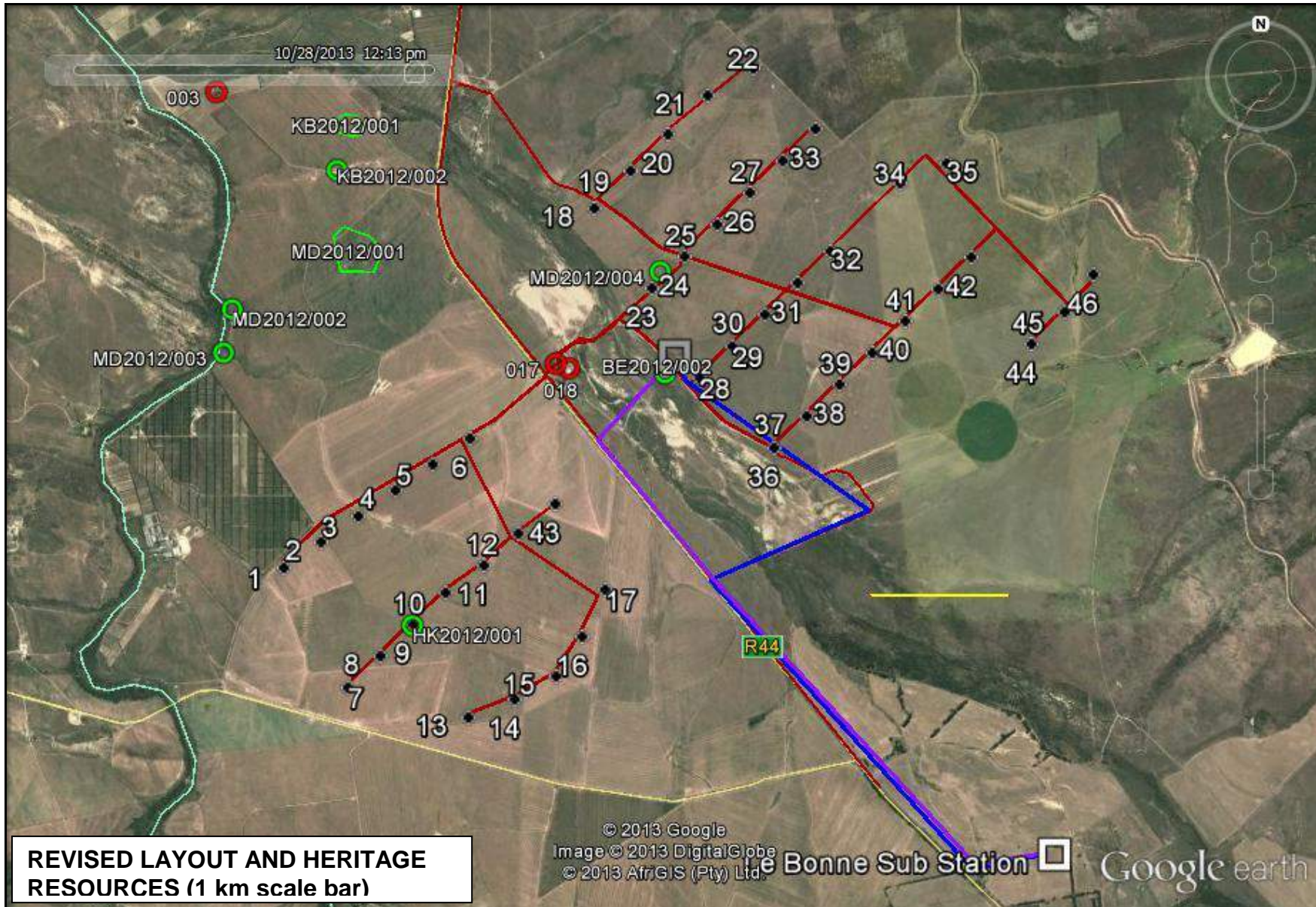
Yours sincerely

A handwritten signature in black ink, appearing to read 'Jayson Orton', with a long horizontal stroke extending to the right.

Jayson Orton



ACO Associates cc. Company Reg: CK 2008/234490/23 VAT Reg: 4160257996
Members: D Halkett & T Hart Associates: J. Orton, L. Webley



**REVISED LAYOUT AND HERITAGE
RESOURCES (1 km scale bar)**

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED ZEN WIND ENERGY FACILITY, TULBAGH MAGISTERIAL DISTRICT, WESTERN CAPE

(Assessment conducted under Section 38 (8) of the
National Heritage Resources Act (No. 25 of 1999) as part of an EIA)

Prepared for

Savannah Environmental (Pty) Ltd

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09 November 2012



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EXECUTIVE SUMMARY

ACO Associates was appointed by Savannah Environmental (Pty) Ltd to assess the potential impacts to heritage resources that might arise through construction of the Zen wind energy facility (WEF) on seven farm portions between Gouda and Saron in the Western Cape Province. The Zen WEF would include wind turbines with foundations and gravel work areas, underground and overhead cables, connecting roads and a substation.

Heritage Western Cape requested assessment of impacts to the built environment, historic settlements, scenic routes, cultural landscapes and archaeology and asked for provisional grading of heritage resources.

The site is predominantly under dry-land agriculture (wheat) and is also used for grazing. The study area is relatively flat but includes minor undulations. It rises significantly in the extreme east where it meets the mountains. The site lies on both sides of the Klein Berg River and the Berg River forms its western margin.

A three-day field survey of the site revealed Early Stone Age archaeological resources in variable densities, built environment heritage in two parts of the study area (both farm werfs) and also in the nearby historical settlement of Saron as well as cultural landscapes and scenic routes.

The archaeological resources are of limited significance and, if they cannot be avoided, they could be very easily mitigated. The identified heritage structures will be subjected to visual impacts to their context but they are not of sufficient merit to warrant very large buffers. Medium significance impacts are expected to the context of the Saron mission settlement. These impacts could be reduced to low significance through excluding turbines located on high ground close to the village and relocating them to lower ground further away. The settlement is also the most significant cultural landscape in the area and would similarly benefit from this mitigation. The other cultural landscape is the Swartland agricultural area but, due to its size and the clustering of this and other similar developments, the impacts to it are considered not to be new and will not be significantly increased through the proposed new development. Scenic routes will be variably affected but, as with the Swartland landscape, the clustering of turbines helps contain impacts and no new types of impacts will be experienced.

Based on the layout assessed here, impacts to heritage resources are not likely to be very significant and no "red flag" issues have been identified. Archaeological resources of medium to low significance will be directly impacted, while buildings, cultural landscapes and scenic routes will all receive indirect impacts of medium to low significance. It is recommended that, subject to the agreement of Heritage Western Cape, the proposed project should be allowed to proceed. However, the following conditions should be adhered to:

- If any change to the layout is made pre-construction then a follow-up inspection of the new layout should be made, particularly for archaeological resources which are point-specific on the landscape;
- If possible, turbines on high ground within close visual proximity to Saron should be relocated to less prominent positions;
- Buffers around historical houses should be a minimum of 500 m but preferably as large as possible;
- The final layout should seek to be as consolidated as possible in order to maintain a tight cluster with the other proposed facilities in the area (the present layout does this quite well); and
- If any burials are encountered during any stage of the development then work in the immediate vicinity should be stopped, the remains protected and the finds reported to HWC or an archaeologist. Exhumation would be required at the expense of the developer.

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1. INTRODUCTION

ACO Associates was appointed by Savannah Environmental (Pty) Ltd to assess the potential impacts to heritage resources that might arise through construction of the Zen wind energy facility (WEF) on seven farm portions between Gouda and Saron in the Western Cape Province (Figure 1). The affected farm portions are as follows:

- Kleinbergrivier 1 portion 4 (189.0206 ha);
- Bonne Esperance 83 portion 1 (1338.4515 ha);
- Bonne Esperance 83 portion 2 (554.2158 ha);
- Moolenaars Drift 85 remainder (1013.9586 ha);
- Moolenaars Drift 85 portion 1 (88.1139 ha); and
- Hartebeestekraal 88 portion 8 (170.7188 ha);

The proposed WEF would include the following components:

- Up to 46 wind turbines of up to 110 m hub height;
- Concrete bases to support the turbine towers;
- Gravel working areas at the base of each turbine;
- Underground cables linking the turbines;
- One substation on site;
- Internal access roads running between the turbines; and
- New overhead power lines to link to a nearby substation.

A Notification of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC). HWC responded with their requirements for the Heritage Impact Assessment (HIA). HWC specifically requested assessment of impacts to the following heritage resources:

- Built environment;
- Historic settlements;
- Scenic routes;
- The cultural landscape; and
- Archaeology.

They also requested that the heritage resources be graded. The present report aims to meet these requirements.

2. HERITAGE LEGISLATION

The National Heritage Resources Act (NHRA) No. 25 of 1999 protects a variety of heritage resources including palaeontological, prehistoric and historical material (including ruins) more than 100 years old (Section 35), human remains older than 60 years and located outside of a formal cemetery administered by a local authority (Section 36) and non-ruined structures older than 60 years (Section 34). Landscapes with cultural significance are also protected under the definition of the National Estate (Section 3 (3.2d)). Section 38 (2a) states that if there is reason to believe that heritage resources will be affected then an impact assessment report must be submitted. This report fulfils that requirement.

Since the project is subject to an Environmental Impact Assessment (EIA), Heritage Western Cape is required to provide comment on the proposed project in order to facilitate final decision making by the Department of Environmental Affairs and Development Planning (DEA&DP).

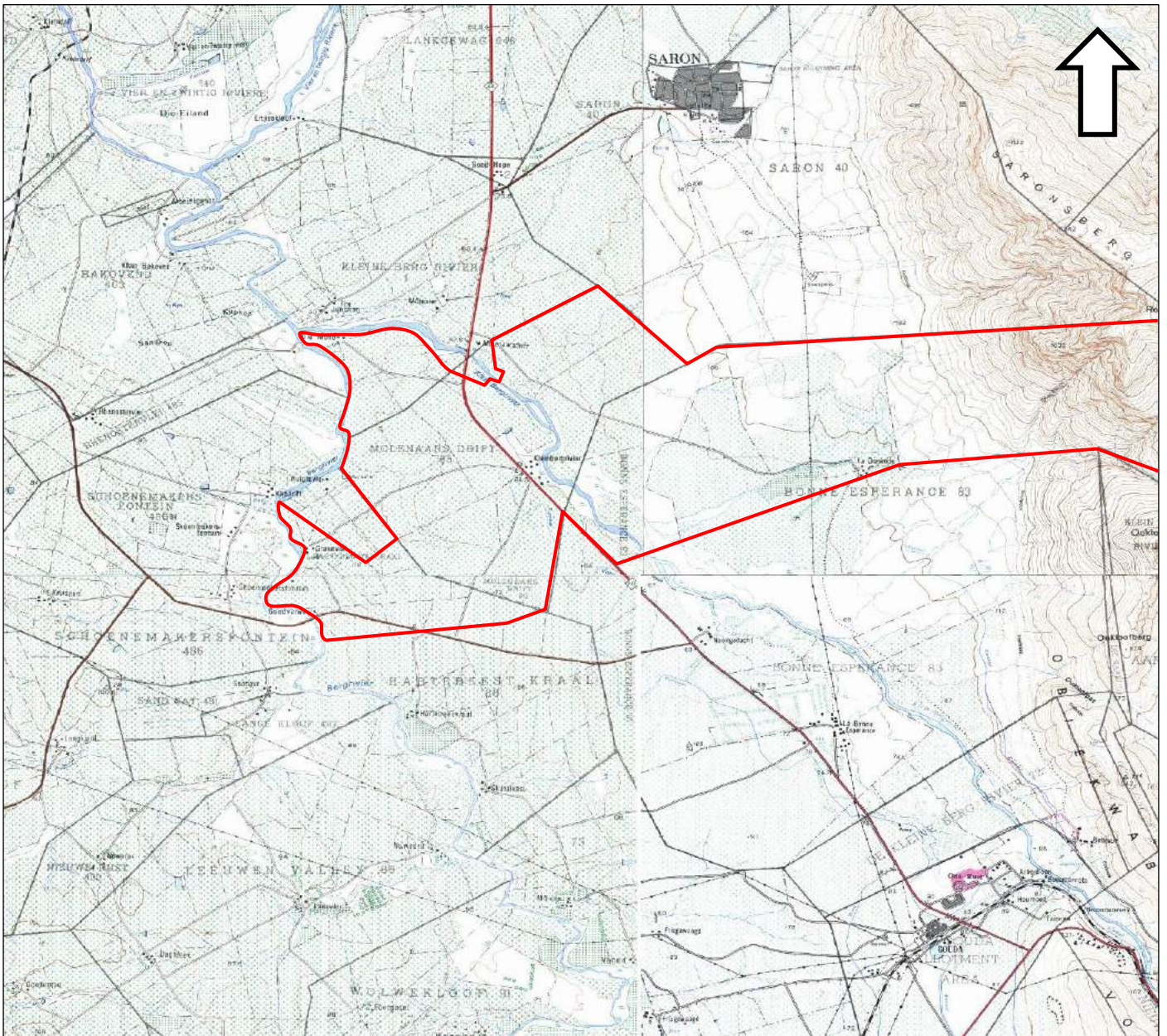


Figure 1: Map of the vicinity around Gouda (in the south) and Saron (in the north) showing the boundary of the study area (red polygon). The eastern end of the properties is just out of picture in the high mountains.

3. METHODS

3.1. Literature survey

A survey of available literature was carried out to assess the general heritage context into which the development was to be set. This literature included published material and unpublished commercial reports. The information so gained was used to inform the field survey.

3.2. Field survey

Three days (31st October to 2nd November 2012) were spent on site examining the turbine locations and the general surroundings of the proposed WEF. The landscape and heritage resources were recorded photographically and GPS co-ordinates were taken to locate specific heritage resources.

3.3. Grading

Provisional grading of the heritage resources was requested by HWC and, to this effect, the guidelines suggested by Winter and Baumann (2005: box 5) have been consulted.

3.4. Impact assessment

The impact assessment was done following a standardised scale provided to the specialists by Savannah Environmental.

3.5. Limitations

Several parts of the study area were being harvested at the time of study and these areas could not be physically examined. In other areas, where harvesting was partly completed, there was still too much straw on the ground for good visibility. Other areas were fallow and visibility was better. Overall, the limitations on visibility are unlikely to significantly affect the outcome of the study.

4. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The site is almost entirely under cultivation but a strip through the middle, running north-south, contains the Klein Berg River and a few small patches in the easternmost areas are partly recovered fynbos. The Berg River forms the western-most boundary of the site while in the east the site extends to the summit of the Saronsberg Mountains – this elevated land east of the canal is, however, completely excluded from the study. The topography is largely flat but includes some gently undulating land with rivers and small streams running through it. There is a general rise towards the east near the foot of the Saronsberg. Tall vegetation is generally absent with the exception of a few indigenous trees along a small water course in the west and gum and other trees around the farm houses and along the rivers.

The substrate was quite variable from very fine shale soil with fragmented shale fragments to densely-packed cobbles. The majority was shale soil with scattered cobbles in varying densities. Ground cover also varied greatly from fallow fields with minimal or much vegetation cover to fields that were either partly harvested or still coated in wheat. As such ground visibility varied considerably.

Figures 2 to 8 illustrate the range of surface conditions and appearances within the study area.



Figure 2: Wheat lands to the west of the R44.



Figure 3: View towards the west from Turbine 44.



Figure 4: A small stream running through the western part of the site towards the Berg River (behind the trees in the distance).



Figure 5: Fallow fields.



Figure 6: Fallow and overgrown fields.



Figure 7: Partially harvested fields.



Figure 8: Unharvested wheat.

5. HERITAGE CONTEXT

5.1. Palaeontology

The study area is underlain by deposits of the Malmesbury Group (low-lying areas) and Cape Supergroup (mountains). According to Almond and Pether (2008) the Malmesbury Group is of low palaeontological significance with no fossils recorded as yet. The Cape Supergroup rocks contain several units with varying palaeontological significance. Generally, the shale units have higher significance than the sandy units but are not well represented in the study area. The lowest rocks, if present, would be Piekenierskloof Formation conglomerates (J. Compton, pers. comm., 2010), while Peninsula Sandstone would overlie them. Norman and Whitfield (2006:fig. 19) show that the more significant Cederberg shale only occurs in the very high reaches of the mountains where turbines would not be constructed. The only shale unit that might be present lower down is the Graafwater Formation, which occurs between the Piekenierskloof and Peninsula Sandstone Formations, but this would be very thin here if present at all.

5.2. Pre-colonial archaeology

Only two archaeological research projects have been carried out in the nearby vicinity. One involved a survey of the Swartland area around Porterville (Hart, 1984, 1987), while the second saw two small rock shelters being excavated (Smith *et al.*, 1991) with a view to exploring the relationship between hunter-gatherers and herders in the south-western Cape. A few impact assessments have also been conducted (Orton, 2008a, 2008b, 2010; Webley & Hart, 2010). These studies inform the following archaeological review.

The earliest period of pre-colonial archaeology present in the region is the Early Stone Age (ESA) which occurred until about 200 000 years ago. Artefacts pertaining to this period of prehistory are commonly encountered all along the western edge of the Cape Fold Belt Mountains. Most often they are associated with river terraces where the cobbles served as a source of stone material for manufacture of the artefacts. Such artefacts have been recorded in the vicinity of the study area where Hart (1984, 1987) found ESA artefacts to be closely associated with rivers and focused on stony hills and ridges. Orton (2008b) found ESA artefacts scattered in farmland on the lower mountain slopes between Saron and Porterville, while closer to Gouda extensive ESA scatters were found near the base of the mountain (Orton 2010). Webley and Hart (2010) found no archaeology in an area to the southwest of Gouda, but in the town Orton (2008a) found a large number of ESA artefacts. These artefacts were suggested to be in primary context with many exposed by the excavation of the canal system in the area. As such they are of greater research value.

After 200 000 years ago and extending up until some 40 000 to 20 000 years ago is the Middle Stone Age (MSA). Hart (1984, 1987) records the occurrence of MSA artefacts in similar locations to ESA ones throughout his study area. No other reports of MSA artefacts are known.

The Later Stone Age (LSA) extends from the end of the MSA until the arrival of European colonists some 350 years ago. By far the majority of archaeological sites found in South Africa pertain to the last 5000 years. The two small rock shelter excavations conducted by Smith *et al.* (1991) yielded material demonstrating that the area was certainly used by the San and the Khoekhoen. The latter only appeared in South Africa within the last 2000 years, although the exact time of arrival is still very much under debate. The Voelvlei rock shelter had three radiocarbon dates conducted with the upper two being in the 15th and 16th centuries and the oldest one, from the base of the site, falling within the 2nd century AD. This last is claimed by the authors to be from a level predating the introduction of pottery to the site. Driebos was never dated but the finds suggest material of a similar age (Smith *et al.*, 1991).

The rock shelter excavations were conducted as part of Smith's wider interest in the origins of the herding economy in the Western Cape. He proposed that the Khoekhoen moved between winter pastures at the coast (specifically the Vredenburg Peninsula) to summer pastures inland (Smith, 1983, 1984). The latter would have been on the Malmesbury shales where the nutritious

Renosterveld vegetation grew. His cycle of transhumance passed through the Gouda area, following the course of the Great Berg River (Figure 9).

It was largely to test Smith's (1983, 1984) hypothesis that Hart (1984) conducted his extensive survey of the region around Porterville and Saron. His success was limited, with just 16 LSA sites being found in the areas searched. Most were very ephemeral and all but one lay in ploughed land. The artefacts were generally very informal and likely indicate considerable expediency in manufacture. Few conclusions could be drawn from the results of the survey, but they do show quite clearly that LSA material is widely found out in the open, away from rock shelters.

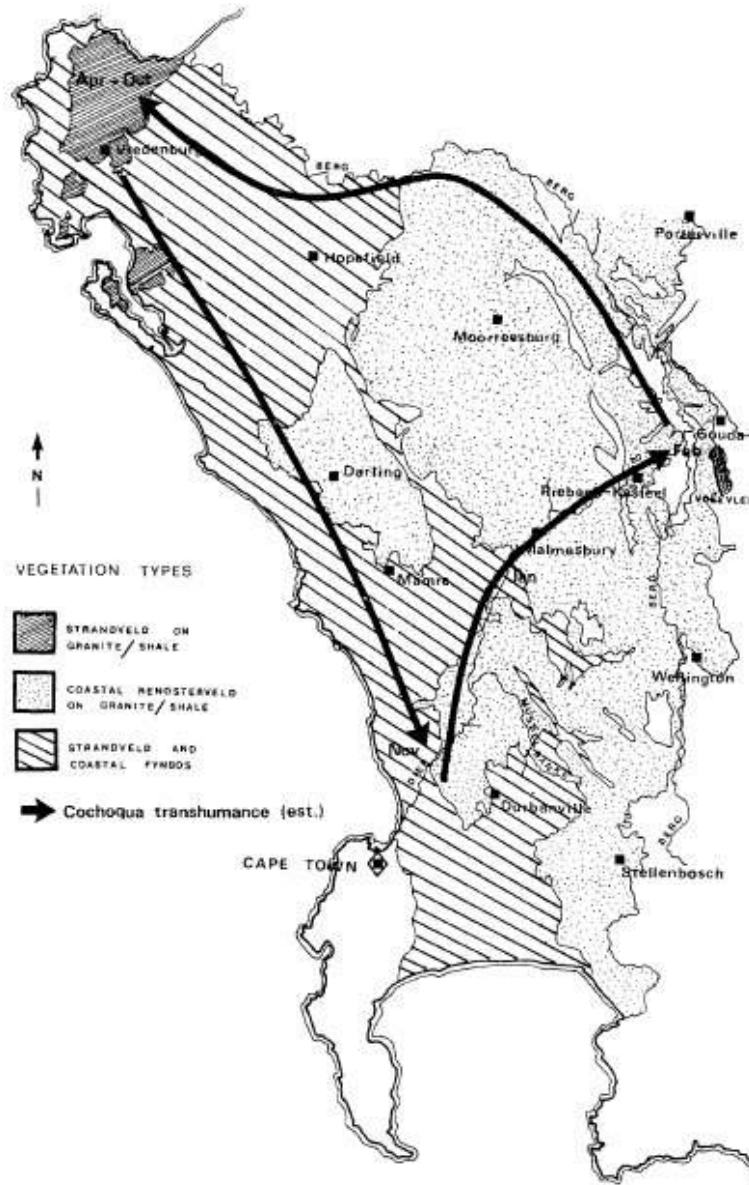


Figure 9: Estimation of the route of seasonal transhumance used by the south-western Cape Khoekhoen. The stippled area denotes Renosterveld which was suggested to have been important for summer grazing. Gouda and the Voelvlei Dam lie at middle right (source: Smith 1984: fig. 1).

Whether the Nuwekloof was used in pre-colonial times as a major thoroughfare is unknown, but the one clue we do have is that Pieter Potter, the first European to set foot in the kloof, was unable to find his way through and reported that no path existed (Mossop, 1927).

Rock art is present in the area with both the shelters documented by Smith *et al.* (1991) containing art. Furthermore, although this is subject to confirmation in the field, there is a rocky

outcrop labelled on maps as “Boesmanrots¹” just east of the town and which may contain rock art. Mossop (1927) describes the rock but mentions no art. Several rock art sites are reported to occur in the region around Porterville (SA-Venues, 2010) with the famous European galleon being a notable inclusion (Parkington, 2003). It is reported that Thomas Bain discovered rock art sites in the vicinity of Nuwekloof when he was building the pass (Storrar & Komnick, 1984). The precise age of rock paintings is unknown but those with European content, such as the galleon, clearly indicate that the tradition of painting on the walls of rock shelters and boulders continued into the colonial period.

5.3. Colonial period

5.3.1. Regional development

The distinct character and vast amount of heritage present in Tulbagh generally overshadows the history of the smaller surrounding towns. Tulbagh was founded in 1743 when a church was built at the suggestion of Baron Gustaf Willem van Imhoff, the newly appointed governor of the Netherlands Indies, who was visiting the Cape. It was several generations, though, until the settlement developed into a town (Fransen, 2006). The name “Tulbagh” was only given in 1805 to replace the original “Roodezand” (Ross, 2002). The smaller towns to the west all came about in later years as shown in Table 1.

Table 1: Origins of towns in the vicinity of Gouda (Fransen 2006).

Town	Founding date	Type of town
Tulbagh	1743	Church town
Saron	1846	Mission settlement
Riebeek-West	1855	Church town
Porterville	1863	Church town
Riebeek Kasteel	1863	Church town

5.3.2. Development of Saron and Gouda

Saron began as a mission station in the mid-19th century. The Reverend JH Kulpmann started the mission station on a farm called De Leeuwenklip in 1846 and six years later it fell under the control of the Rhenish Mission Society with a church inaugurated one year later (Fransen, 2006).

Gouda does not feature in Fransen’s (2006) list of towns originating prior to 1900 and a map of the south-western Cape dating from circa 1902 shows nothing in the vicinity of Gouda². The town started on a farm named Gouda and various origins of the name have been suggested. All share the notion of the word being Khoekhoen. It may have been from a word meaning “antelope” or “honey kloof” (Western Cape Tourism, 2007). The former meaning is also mentioned by Nienaber and Raper (1977) who mention the use of the “Bushman Rock³” as a lookout point to scan the area for antelope to hunt. Other sources point towards a meaning along the lines of a dirty road or one with dung or faeces on it. They are certain, however, that the name does not relate to the town of that name in the Netherlands.

A precise date for the beginnings of the settlement at Gouda is unknown but it initially served as a railhead for Porterville until the new line linking Porterville with Riebeek West through Hermon was

¹ But see an alternative origin of this name alluded to in Section 5.3.2 below.

² Untitled map held in the UCT Dept of Archaeology collection.

³ Referred to in Section 5.2 above.

constructed in 1929 (Siyabona Africa Travel, 2008). Prior to this the settlement was known as Porterville Road⁴. While all of the northern part of the town is relatively recent, a number of the houses in the southern part are likely more than 60 years of age and thus included as protected heritage.

In recent years the town has been used as a centre for fruit packing with a large warehouse having been built in the eastern part.

5.3.3. Roads and railways

Although this aspect of heritage predates the establishment of Gouda, it is probably for reasons of transport that the vicinity of Gouda is most significant in heritage terms. All these features are located to the south of the project area but the direction one faces when travelling out of the Nuwekloof Pass into the Swartland means that the proposed development would be in full view from these early transport routes.

Ross (2002) describes several early passes that existed between the Swartland and the Tulbagh Valley, which was originally known as "Roodezand". The first of these stemmed from the need to find the Khoekhoe people and their herds of domestic stock for trading purposes. An expedition in 1658 was sent out by Van Riebeeck. On this expedition a surveyor named Pieter Potter became the first European to see the Tulbagh Valley when he climbed a ridge some miles the north of the river and gained a view into the valley. He had previously tried to walk through the kloof but found the going too difficult along the river (Mossop, 1927).

In 1699 Willem Adriaan van der Stel, then governor at the Cape, opened the Roodezand valley to farming, naming it "Land van Waveren" after a place in the Netherlands. In order to provide access to the valley a new pass some 4 km to the north was made (Ross, 2002). Mossop (1927) suggests this new pass to have been somewhere near the spot where Potter had ascended. Despite W.A. van der Stel's new name, the name "Roodezand" was still in common use for the Tulbagh valley and the pass became known as "Roodezand Pass". A rather poor pass, it had a very steep slope on its eastern side, was narrow and in places thickly wooded. Ross (2002) notes Kolbe's statement in 1731 that for these reasons wagons were frequently taken apart and carried over the pass before being reassembled on the other side.

Burman (1963) managed to relocate the old pass but found it to be heavily overgrown. This is in keeping with Kolbe's description but a modern aerial photograph shows a very clear track. This clarity may well be as a result of modern use of the track by locals. Burman (1963) describes the track leading northwards from the summit as being cut into the hillside by up to three feet in places. He noted piles of rocks along the roadside and also located a built-up section where the track crossed a water-course. There were even some places where wagon tracks were visible cut into the rocks as is the case, more famously, at the old Gantouw Pass above Gordon's Bay (Orton, 2009).

From Ross's (2002) account that Potter climbed a spur north of the river, the precise location of his climb seems unclear but Burman (1963: 49) states that Potter climbed to "a nek a few miles further north" (of the river) and that "the early travellers followed Potter's route over the top of the range, and this became known as the Roodezand (Red Sands) Pass". Whether these two passes were at one and the same place is thus not known but perhaps the spur referred to by Ross (2002) is the one immediately south of the pass?

As a result of the difficulties associated with the Roodezand Pass, the local farmers tried to improve its quality but no satisfactory solution was forthcoming. They then turned their attention to the river valley and succeeded in creating a road along the northern side of the river that was not too steep. Since it afforded access to the Roodezand, it took on the name of Roodezand Kloof. To avoid confusion the old pass became known as Oude Roodezand Kloof and the new one Nieuwe Roodezand Kloof. The abbreviations Oudekloof and Nieuwekloof soon followed. By the 1760s

⁴ A 1910 survey diagram that will be discussed below mentions 'Porterville Road Station'.

Nieuwekloof had become the primary means of access to the Tulbagh valley (Ross, 2002). A toll was levied as a contribution towards maintenance of the road and this resulted in some farmers still driving their cattle over the old pass to avoid the toll fee (Burchell, 1822). Burchell illustrated the pass as it appeared in 1811 (Figure 10).

Two early travellers who used the pass left the descriptions of it. Carl Thunberg (1793 in Ross, 2002) passed through in 1772 stating that:

“the cleft through which we passed from the sandy plain that lies towards the Cape, but gradually rises until it comes to Roodezand, is one of the few chasms left by the long range of mountains through which it is possible for a wagon to pass, though possibly not entirely without danger. In some places it is so narrow two wagons could not pass each other.”

William Burchell (1822: 137-138), passing through in 1811, described the kloof as:

“a narrow winding defile of about three miles in length, just enough to allow passage for the Little Berg River on each side of which the mountains rise up abruptly and lofty. Their rocky sides are thickly clothed with bushes and trees from their summits down to the water... Along the steep and winding sides, a road has been cut, which follows the course of the river, at a height above it generally between fifty and a hundred feet; in one part rising much higher, and in another, descending to the bottom, and leading through the river, which, at this time, was not more than three feet deep, although often so much swollen by the rains, as to be, for a day or two, quite impassable.”

The remains of this pass, too, were found to be still in existence by Burman (1963), although it was in a very state with low-lying sections washed away and others blocked by tumbled rocks. He also notes the scars of “remskoene”⁵ to be present in places on this pass.

With the renaming of Tulbagh, the pass changed names again, becoming “Tulbagh Kloof”. The drifts that had to be crossed were problematic and in 1855 Thomas Bain examined the kloof recommending an alternative route on the south-western side of the river. This road was built between 1859 and 1860 and carried road traffic for more than a next century thereafter. Bain was also asked to plan a railway through the kloof which he did in 1873 and 1874 (Ross, 2002). The section designed by Bain was part of the Cape Town to Kimberley railway that was constructed in sections up until 1885 (Table 2). Although originally intended to serve the Western Cape farming community, the railway was rapidly extended to Kimberley as a result of the diamond rush. The Nuwekloof section followed a very similar line to the road (Figure 11) and was opened on 1st September 1875, while the final leg to Kimberley was opened prior to final completion on 28 November 1885 (Walker, 2001). The modern road through the kloof was constructed in the 1960s and opened in 1968. The name “Nuwekloof Pass” was chosen for the new road (Ross, 2002).

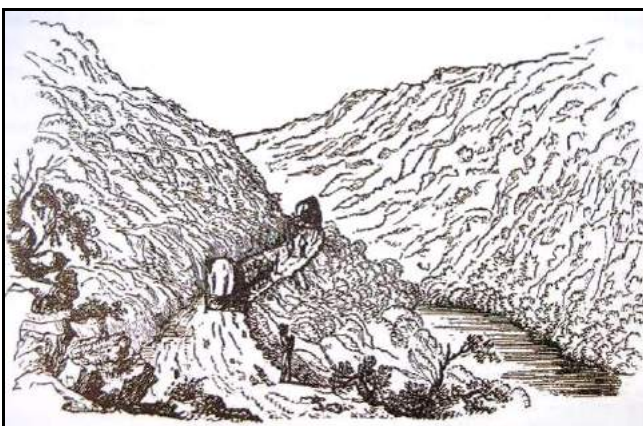


Figure 10: Burchell’s sketch of the Nuwekloof Pass from his 1811 travels (Source: Ross, 2002: 3).



Figure 11: View of Thomas Bain’s road and railway alignments running side-by-side through Nuwekloof (Source: Ross, 2002: 4).

⁵ Remskoene are the iron shoes fitted to the wheels to act as brakes and to protect the wooden wheels from damage on the rough rocks on steep sections of the pass.

Table 2: Development of the Cape Town to Kimberley railway line (Walker, 2001).

Town	Date opened
Paarl	18-03-1863
Wellington	04-11-1863
Tulbagh	01-09-1875
Worcester	16-06-1876
Kimberley	28-11-1885

As stated earlier, Gouda originally served as the railhead for Porterville and was known for this reason as Porterville Road. A new line running from Hermon through Riebeeck Kasteel and Riebeeck West and on to Porterville was opened in 1929 (Siyabona Africa Travel, 2008).

5.3.4. Water infrastructure

A multitude of canals and lei water furrows surround Gouda and Saron. The Voëlvlei Dam to the south of Gouda was built in 1952 and some of the canals and furrows post-date its construction. These include the long channel that runs from a kloof northeast of Saron bringing water to Voëlvlei Dam as well as the shorter one that brings water from a weir on the Klein Berg River. Although their precise age is unknown, they post-date 1952 and are thus not of heritage concern. Some may be as recent as the 1980s.

Others, however, are related to the earlier agricultural activities around the Saron mission station and Gouda vicinity and many were present already on aerial photographs dating from 1938 (Orton, 2008a). Although not structures in the usual sense, they are man-made, greater than 60 years of age and should be considered as protected heritage.

5.4. Built environment

Although most original structures are long gone from Saron, several old buildings of heritage significance do remain. Among these is the now much-altered parsonage - the original manor house of De Leeuwenklip - which probably dates to about 1780. The church of 1853, its hall which began life as the town school, the old mission store and the remnants of a pre-mission water mill (c. 1795) are also of interest in Saron (Fransen, 2006).

The Langverwaght homestead, near Vier-en-twintig-rivieren, dates to around 1840 and another more recent house at Vier-en-twintig-rivieren is also of some heritage value (Fransen, 2006).

Gouda is not particularly old but it is quite likely that structures greater than 60 years of age and of heritage conservation value are present in the town. Farming has certainly been taking place in the region for a long time and farm complexes will certainly include buildings of value.

6. FINDINGS

6.1. Archaeology

6.1.1. Early and Middle Stone Age

Early Stone Age (ESA) material was common but its density varied considerably according to location. In general, the eastern side of the farm had very few artefacts, while in the west artefacts were present throughout the area but more frequently encountered towards the north than the south (Figure 12). These occurrences are not really 'sites' in the typical sense, since the

material is largely in secondary context having been left on the surface after erosion of the overlying deposits. However, in some areas there were particularly high concentrations of artefacts which must broadly reflect the original locations of concentrations after they were made. Figure 12 shows the locations of these concentrations. In general, ESA material in such contexts is considered of little heritage value but the relatively high densities of artefacts encountered in places around Gouda suggest this not to be the case here – some mitigation might be appropriate if these scatters were to be disturbed.

In the areas where ESA artefacts were denser there were certainly also many more isolated artefacts. However, the good scatters were obvious when one encountered them. Figures 13 to 20 show examples of artefacts and hand-axes found at such localities, while Figure 21 shows a selection of cobble cores from a scatter that was composed almost exclusively of such artefacts. Why such a high frequency of cores should be present in the absence of large numbers of flakes is unknown. A peculiar find was an eroding sand dune close to the Klein Berg River and which contained much river gravel and weathered artefacts. These artefacts included a large number of relatively small flakes and very few larger flakes or cores (Figures 22 & 23). Whether these are ESA or MSA is unknown but, given the paucity of larger artefacts, they may well be MSA. In one or two areas there were occasional flakes which, from their smaller size and reduced patination, may well have been MSA. In general, however, it seems that the MSA is poorly represented on the landscape.

6.1.2. Later Stone Age

Two small LSA scatters were found on the banks of the Berg River in the far west of the site. Neither was dense. Both included flaked artefacts in quartz and one had a small quartzite hammer stone and one quartzite flake present (Figures 24 & 25).

A small number of isolated quartz flakes were found in sandy ground close to the proposed substation location. They were too dispersed to be able to distinguish any source areas but with the bush present there it is quite likely that an LSA site is present in the immediate vicinity.

A light scatter of LSA artefacts was also observed around a small rocky koppie on the southern outskirts of Saron. The koppie was inspected for rock art but found to contain none.

6.1.3. Historical archaeology

No historical artefacts were seen anywhere in the study area.

6.1.4. Graves

No graves were seen in the study area and the farmer commented that no graves were known to be present on the farm at all. Some of the sandy areas close to the river may well contain unmarked pre-colonial graves but, given their proximity to the river, these areas are unlikely to be disturbed by the proposed development. Unmarked graves are extremely unlikely in the areas with shale and cobble substrates.

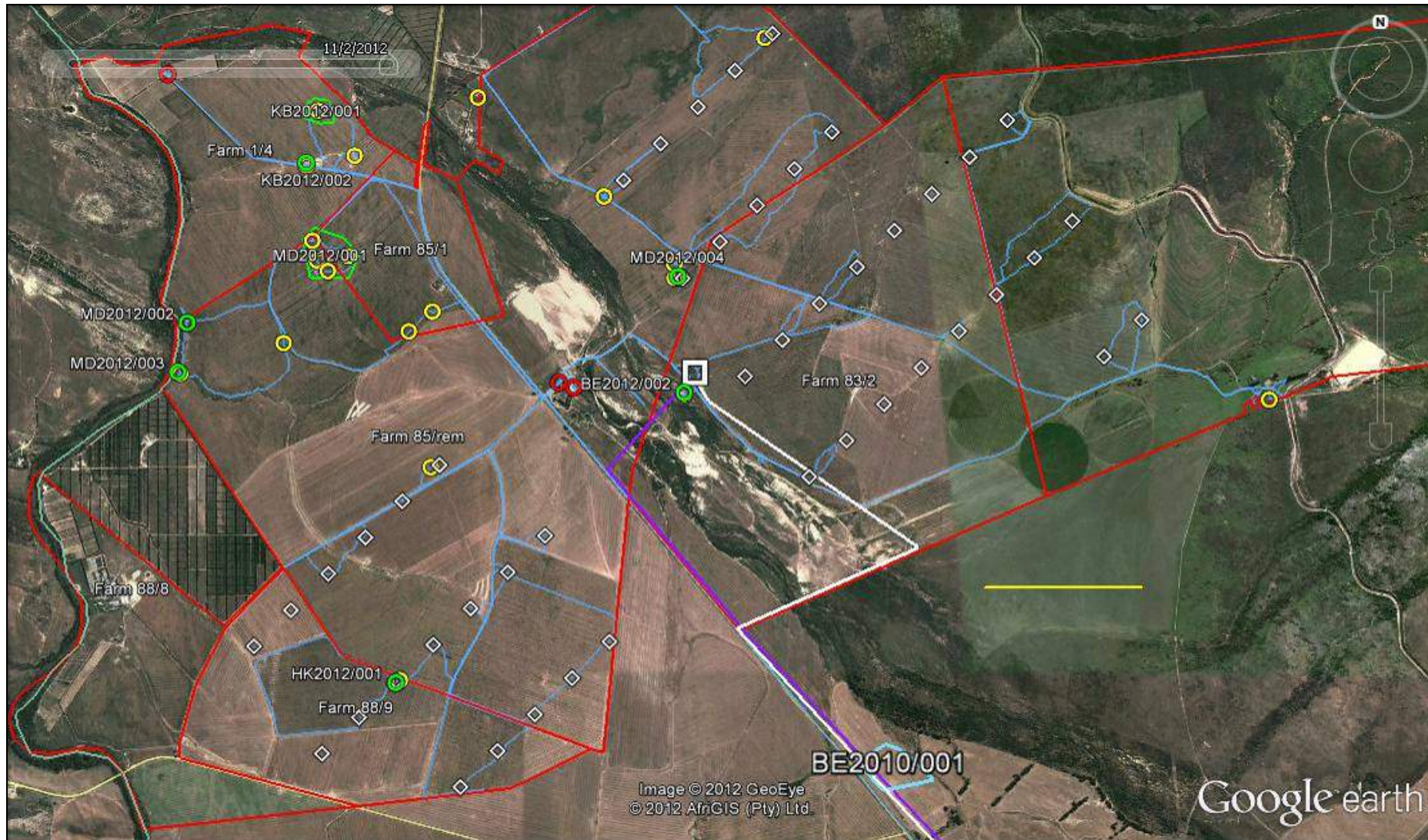


Figure 12: Aerial view of the study area showing the locations of the dense ESA scatters. Green circles and polygons denote archaeological sites, yellow circles denote other archaeological occurrences and red circles denote built environment features greater than 60 years of age. The white diamonds are the turbine locations, the white square the substation and the blue lines the walk-paths from the survey. The yellow bar for scale at lower right is 1 km long.



Figure 13: Artefacts from point 001 (MD2012/001).



Figure 14: The hand-axe from point 001 (MD2012/001).



Figure 15: Artefacts from point 005 (HK2012/001).



Figure 16: The hand-axe from point 005 (HK2012/001).



Figure 17: The hand-axe from point 006 (HK2012/001).



Figure 18: The hand-axe from point 023 (MD2012/004)



Figure 19: The hand-axe from point 023 (MD2012/004).



Figure 20: The hand-axe from point 023 (MD2012/004).



Figure 21: A selection of cobble cores from point 022 (MD2012/004).



Figure 22: The location of point 019 (BE2012/002).



Figure 23: Artefacts from point 019 (BE2012/002).



Figure 24: The location of the LSA artefacts at point 012 (MD2012/002).



Figure 25: Artefacts from point 012 (MD2012/002). At left is a quartzite hammer stone.

The proposed power line routes along the R44 to the proposed substation to the south will cross through one of the areas with a high concentration of ESA artefacts as identified by Orton (2010). However, the excavation of a few power line pylons in that area is not deemed to be of any significance and is not considered any further here.

6.2. Built environment

Figure 12 shows the location of the two old structures in the Kleinberggrivier Farm werf (red circles in the centre of the image) and those at Die Mond (upper left hand corner). The structures in Saron will not be given individual consideration here since they are relatively far from the proposed development. However, as a whole they will be considered under historical settlements below.

The Kleinberggrivier werf has two old buildings. The main house (Figure 26) is large and it is not possible without a detailed examination to tell its original form. It has almost certainly been added to over the years but its primary plan form is still the same as it was in 1938 (Figure 27). Tim Hart (pers. comm. 2012), who has been inside the house, confirms that there is virtually no original fabric remaining visible. The second structure of antiquity is a store room/outbuilding that likely dates to the late 19th century or early 20th century. It is in very poor condition and of little heritage value (Figures 28 & 29). A few other buildings are present in the 1938 photograph but have been demolished now but one small outbuilding east of the main house may still be the same as that present today.



Figure 26: The main house on the Kleinberggrivier farm werf. The inset shows the roof plan of the house with the front to lower left.

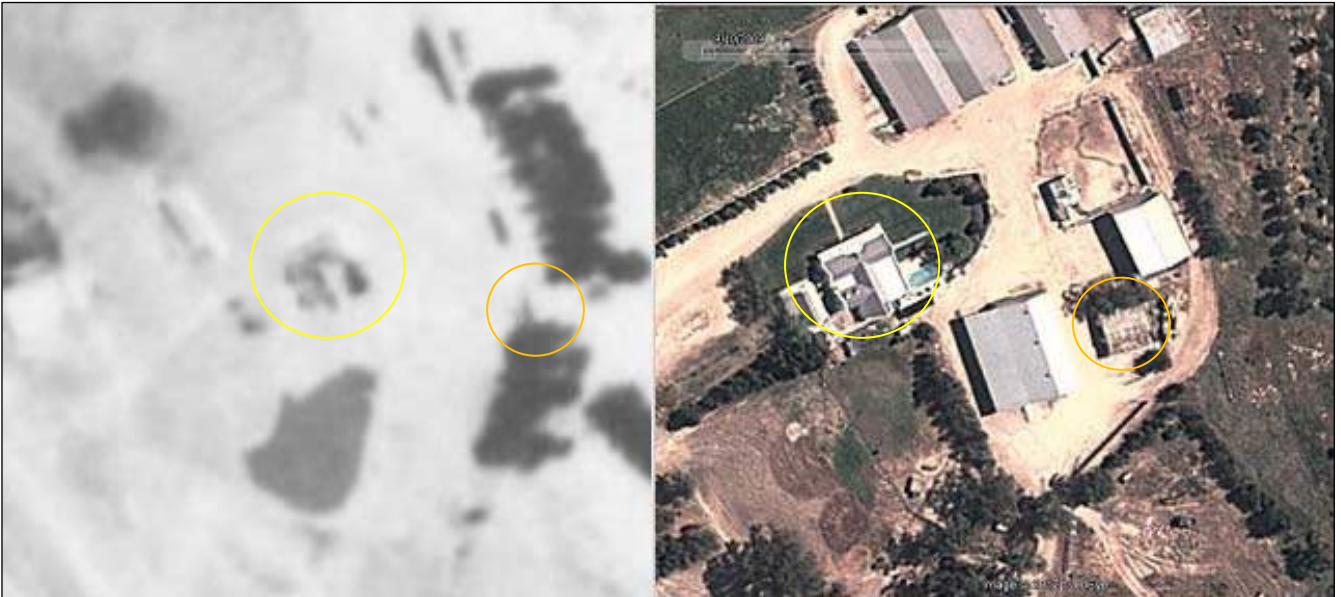


Figure 27: Extract from the 1938 (left) and modern (right) aerial photographs showing the changes to the farm werf at Kleinbergrivier. The two house and shed described above are indicated.



Figure 28: West side of the outbuilding at Kleinbergrivier.



Figure 29: The south side of the outbuilding at Kleinbergrivier.

Two old buildings occur at the Die Mond werf. The werf is situated at the junction of the Kleinberg and Berg Rivers, hence its name. The main house (Figure 30), despite having been modified and added to at various times, retains enough original features to indicate a late 19th century age. There are differing roof heights which allows for the possibility that the core is older with the front and back wings having been added later. The outbuilding/barn located to the west of the main house is also of 19th century age. Its original core is obvious with the lean-tos having been added later (Figure 31). It is apparent from Figure 32 that old structures have been removed from this werf but the main house and the shed are clearly visible.



Figure 30: The main house at Die Mond. The inset shows the roof plan with the front at the bottom.



Figure 31: The outbuilding/barn at Die Mond.



Figure 32: Extract from the 1938 (left) and modern (right) aerial photographs showing the Die Mond farm werf.

6.3. Historical settlements

The village of Saron was originally a mission town established on the farm De Leeuwenklip by the Reverend JH K lpmann in 1846. In 1852 the Rhenish Missionary Society took control of the settlement but it is now under the Dutch Reformed Church (Fransen 2004). Fransen (2004) notes that, in contrast to other mission towns, Saron has been much altered over the years. This was firstly due to dilapidation, then to modernisation and finally the village suffered a degree of earthquake damage in 1969. Nevertheless, structures dating to the mid-19th to early 20th centuries are scattered throughout the main part of the town (Figure 33). These range from the main mission church to commercial stores to large residential houses and many small cottages (Figures 34 to 39). Fransen (2006: 146) states of Saron that "of all mission villages, Saron near Porterville – once Rhenish, now Dutch Reformed – has perhaps lost its character most completely, though it retains a much-altered church of 1853, and a parsonage that was once the original farmhouse of De Leeuwenklip retaining a splendid gable of c.1780." This may be, but nevertheless, the old part of the village currently has a pleasant rural, leafy character which should be preserved. The difference between this original part, which was no doubt originally laid out to promote subsistence agriculture – and the new "low-cost housing" part of town is obvious (Figures 40 & 41).

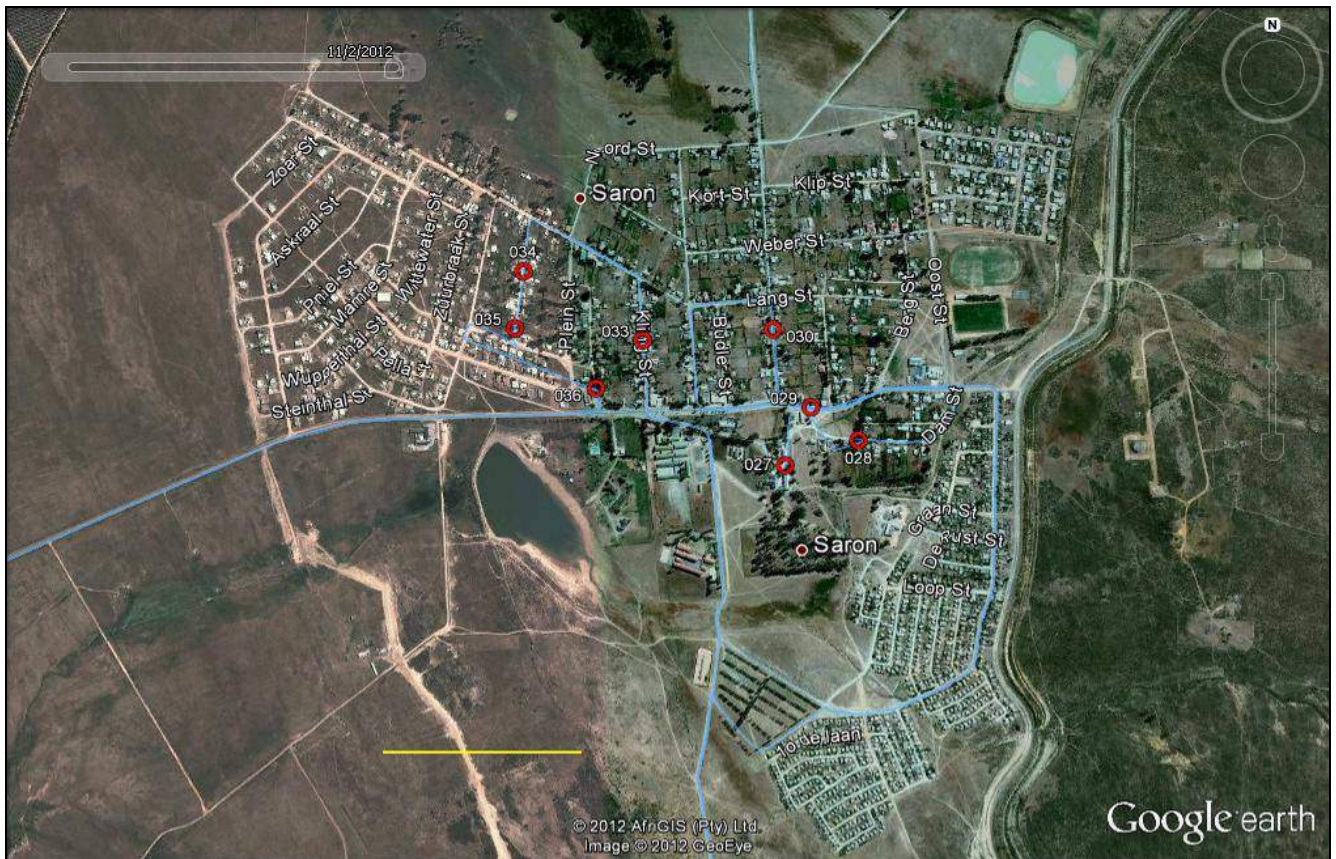


Figure 33: Aerial view of Saron showing the approximate positions of mid-19th to early 20th century buildings (red circles). Note that these are just a few that were marked during the survey and that many roads were not travelled. The yellow bar for scale is 500 m long.



Figure 34: View southwards of the church, parsonage, hall and their surrounding wall.



Figure 35: The rear of the parsonage.



Figure 36: The mission church.



Figure 37: A commercial store in an art deco style.



Figure 38: A 19th century house close to the mission church.



Figure 39: An early 20th century or possibly late 19th century house with later modifications.



Figure 40: Aerial view of part of the old village. **Figure 41:** Aerial view of part of the new area.

To the south of the old part of Saron lies the main mission area. Comprised of the church, its hall, the parsonage (original farmhouse), the walled cemetery and a few other older buildings, this area has a spacious feel to it with large open spaces and many tall trees (Figures 34, 42 & 43).



Figure 42: View eastwards towards the central mission area showing the church and its walled garden.

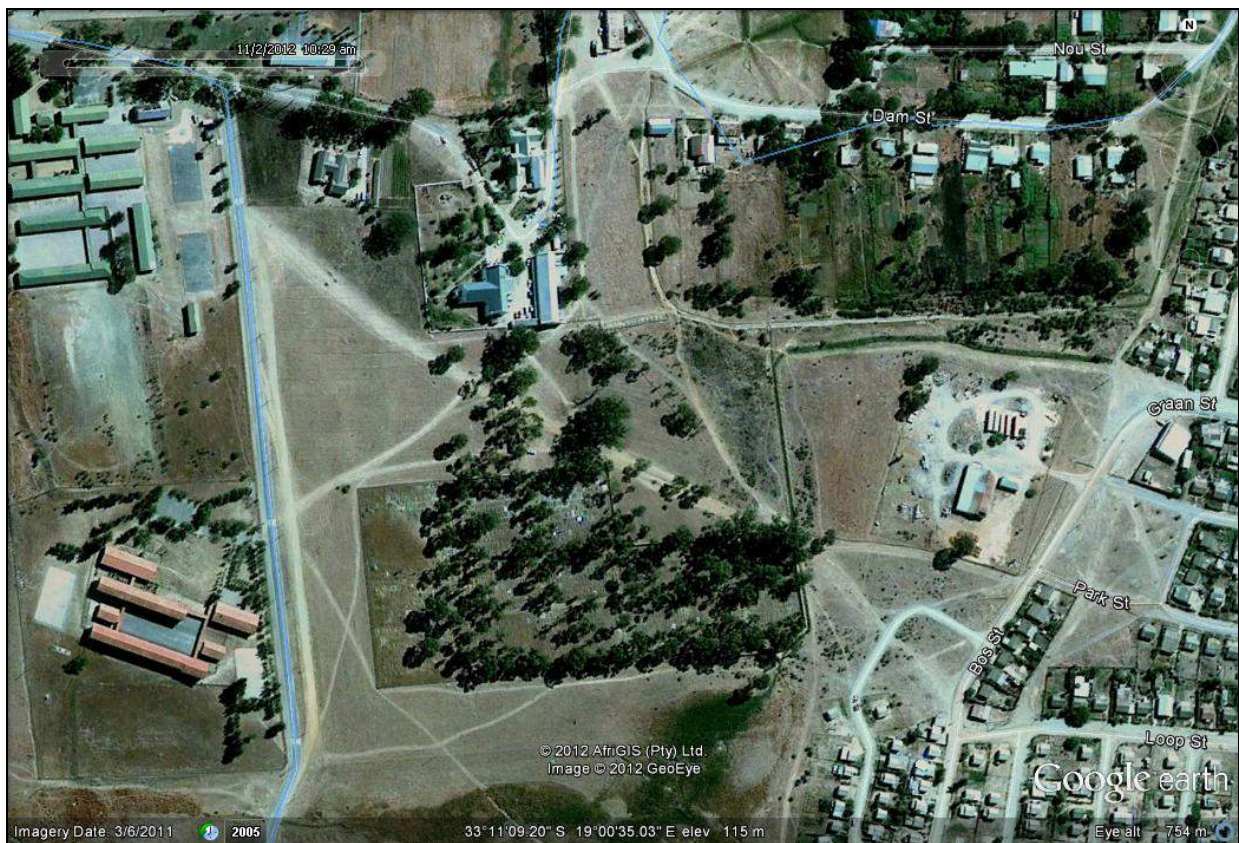


Figure 43: Aerial view of the main mission area on the southern side of the village. The T-shaped church lies in the centre, the hall to its east, the H-shaped parsonage to its north and the large walled cemetery to the south. The many large trees are obvious.

It is the central mission area and accompanying old village area to its north as described here that are of heritage significance and which should be protected from undue visual impacts. Although no visual specialist study was requested by HWC for the proposed WEF discussed here, it should be seen as an important component in the decision-making process. The scoping VIA indicates that the entire village of Saron lies well within the core area of visual impact (<5km from the WEF) and will be visually exposed to turbines (Du Plessis 2012). However, the many trees in the village will mitigate this impact to a large degree.

Although a few buildings undoubtedly predate 1900, the village of Gouda appears not to have been present as a settlement prior to this time. The majority of buildings are quite recent and the town has no significance as a historical settlement.

6.4. Cultural landscapes

The historic settlement at the heart of Saron is itself a cultural landscape. Despite substantial increases to the town's footprint in recent years, the original core (Figure 44) is still clearly evident today (see Figure 33). It is characterised by large trees, quaint houses – many with old fabric – and a reasonable density of early dwellings. A low, rocky ridge lies directly between Saron and the proposed WEF (Figure 45). This ridge will, to some degree, shield the town from visual impacts associated with the WEF, although the turbines will still be visible above it. The nearest turbine will be 2.6 km from the new township and 3.3 km from the historic core of Saron. Crucially, the core area has many large trees (Figures 46 & 47) which contribute to the quality of the landscape and greatly reduce the length of views from within the village. The trees would also serve to shield the old village from the proposed WEF to some degree (Figure 48). Figure 46 is a view from the rocky ridge to the south of the town and shows the marked contrast between the core historical settlement and the newly laid out high density township settlement to its south. The new township has, to some degree, detracted from the quality of the urban cultural landscape.



Figure 44: 1938 (left) and modern (right) aerial photographs of Saron with the historic core area outlined in purple. It is clear that the village was focused on agriculture but today, sadly, the substantial agricultural lands to the northwest of the town have fallen into disuse.

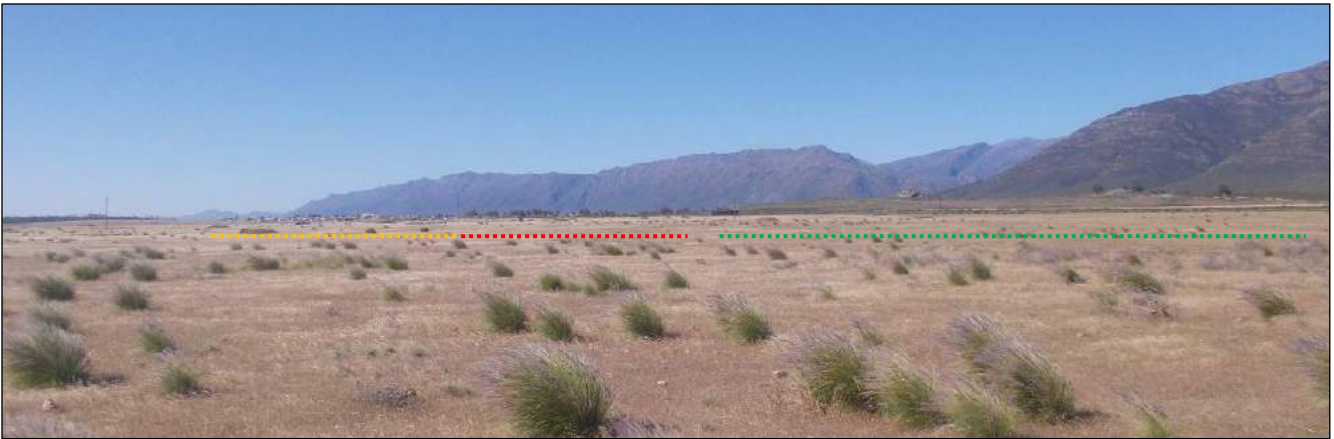


Figure 45: View north-eastwards from the northernmost part of the study area. The positions of the historical core (above the red line), and western addition to Saron (orange line) are indicated, as is the position of the rocky ridge (green line).



Figure 46: View towards the northeast from the rocky ridge south of Saron. The historic core of the village lies among the many trees, while the newer township developments are to the south (right and side in this image) and west (barely visible behind the dam in picture).

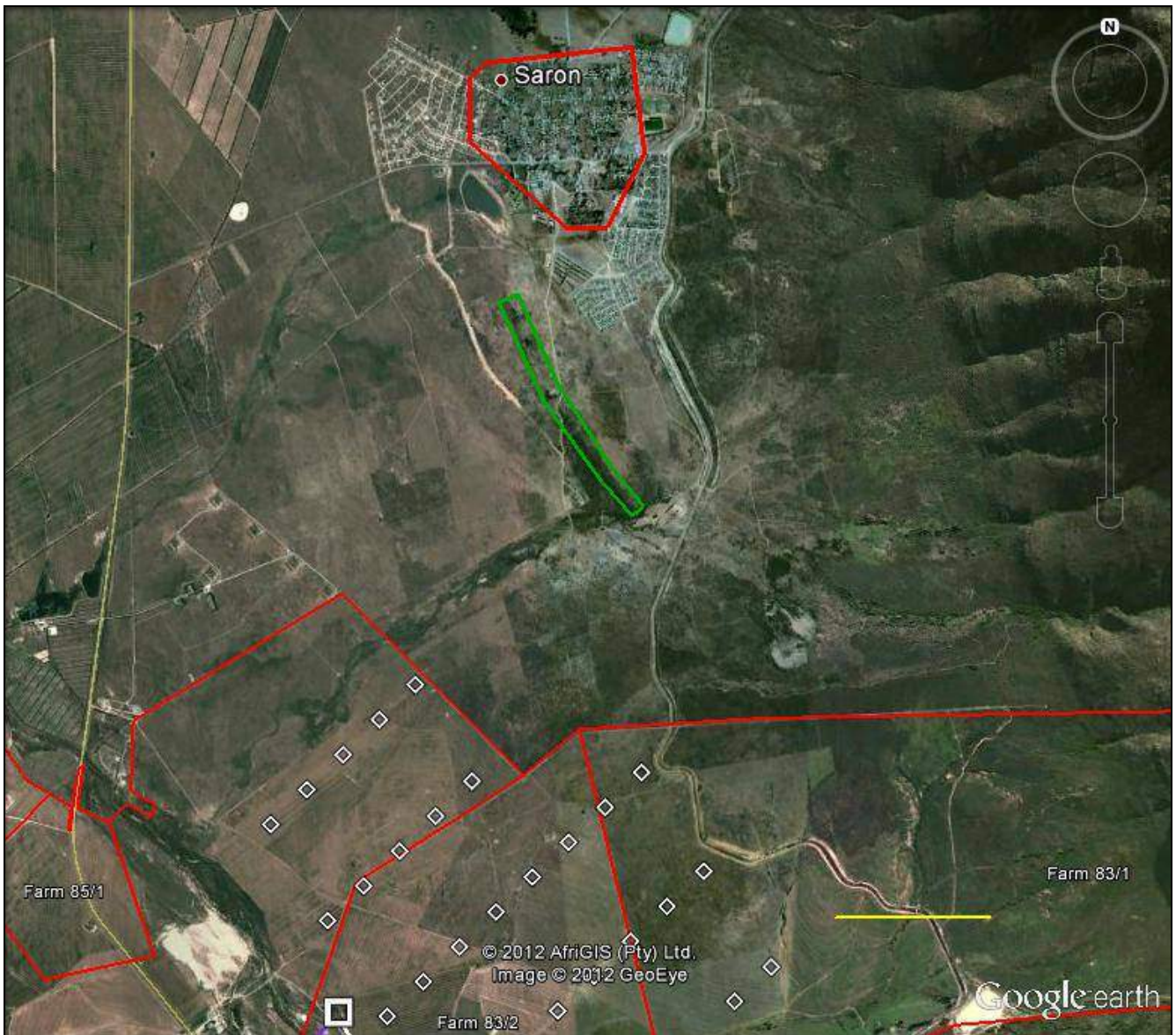


Figure 47: Aerial view of the northern part of the study area showing the relationship between the historic core of Saron (red polygon in the north) and the proposed wind turbine positions (white diamonds). The green polygon in the middle delimits the rocky ridge and the yellow bar for scale at lower right is 1 km long.



Figure 48: View southwards towards the proposed WEF (behind the rocky ridge and some 3.3 km from the photographer) from within the walled garden at the mission church.

However, taking the Figure 48 view as an example, a scale drawing suggests that a viewer standing at 100 m above sea level (the approximate elevation of the church), looking towards the ridge which is approximately 130 m above sea level and 1.2 km distant would see the top of a 100 m high tower (and, obviously, all of the blade length) standing on land at 90 m above sea level and at about 3.4 km distance. The scoping VIA suggests that this distance is still within the core area of impact (<5km) and that in general turbines in this landscape would be comfortably visible within the medium range of 5 km to 10 km (Du Plessis 2012). This view would only be from a few specific locations where trees do not shield the WEF – the vast majority of viewpoints in the village would be completely protected from seeing the WEF.

The other cultural landscape of concern is the greater Swartland agricultural area that stretches more than 60 km to the north, west and south. In this regard it is pertinent to know that the Gouda WEF has been authorised and its construction will begin in early 2013. It lies to the south of the proposed Zen WEF and a further WEF has been applied for immediately to its west. The Gouda WEF will introduce 46 turbines to the landscape. The guideline document for introducing wind energy to the Western Cape suggests that it is best to place wind energy developments in clusters far flung from one another rather than having them spread across vast open landscapes (CNdV 2006). With the exception of a few small mountains, the Swartland is relatively flat and certainly has an appearance of vastness (Figures 2, 3 & 49). It is thus advisable to keep wind turbines close together and, in the light of the pending construction of the Gouda WEF, the present location thus seems appropriate.



Figure 49: View towards the south from the rocky ridge south of Saron. The proposed Zen WEF will lie between 2.3 and 7.5 km from the photographer within the pale brown wheat fields visible close to the skyline.

6.5. Scenic routes

The scoping VIA has determined that many roads will be impacted by the proposed WEF. However, only some of these should be considered as scenic routes. These include the R44 that bisects the site, the R46 that runs through Nuwekloof to the south and the R311/R46 that runs from northwest to southeast from Moorreesburg through Riebeeck West and Riebeeck Kasteel to the R44 well south of the site. The N7 is also a scenic route but is located – at its nearest – some 26 km from the proposed facility.

The R44 that runs approximately north-south between Gouda to the south and Porterville to the north will be the most heavily affected scenic route. Importantly, the presently proposed WEF will be located on both sides of this road which means that one would travel through the middle of the facility if it were constructed (Figure 50). In contrast, the Gouda WEF to the south will be built on the east side only, although another WEF has been proposed immediately over the road to the west and is currently being assessed for authorisation by DEA&DP. Should both be constructed then impacts will be much the same as for the proposed Zen WEF.

The R46 out of Nuwekloof (itself a significant heritage resource because of the early transport infrastructure it contains) will also be affected. However, it should be borne in mind that the Gouda WEF will be constructed immediately in front of the proposed Zen WEF and thus no new impact will be experienced.

The R46/R311 at its nearest is 13.5 km southwest of the study area and will not be significantly impacted due to the distance. The turbines, although visible, would be very small in the distance.

The important aspect here is the clustering of turbines as noted by CNdV (2006). This refers to cumulative impact. CNdV (2006) recommends that clusters of wind turbines be located a minimum of 30 km and preferably about 50 km apart in appropriate landscapes. The next closest clusters (assuming construction) would be around the town of Moorreesburg, just less than 30 km to the west and Wolseley some 28 km to the southeast. Although these distances are not ideal, a precedent for WEF construction has already been set around the Saron-Gouda area by the existing authorisation of one wind energy facility. It seems best to add to this cluster rather than spreading more widely as this would contain the already unavoidable visual impacts to the scenic route.

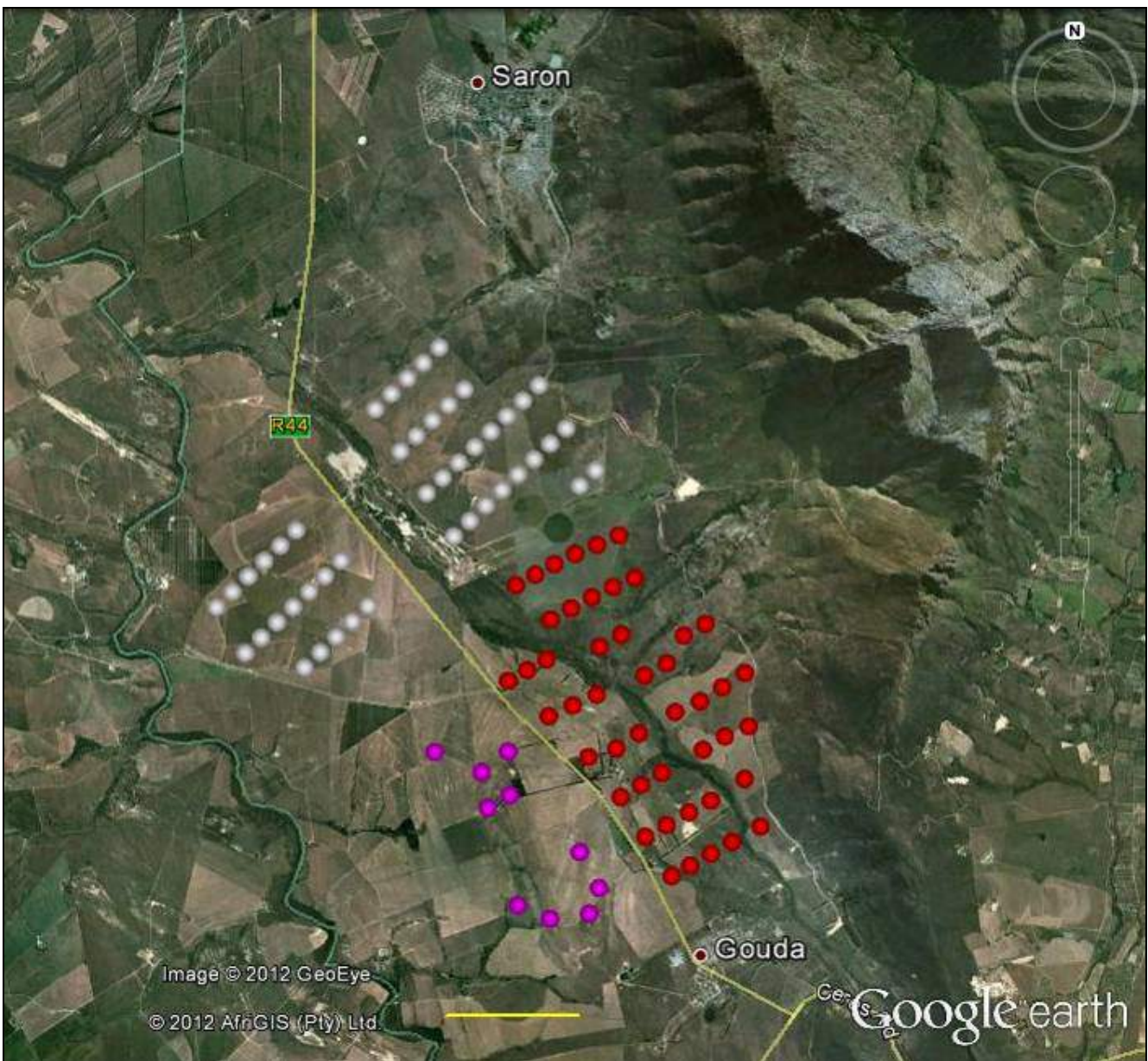


Figure 50: Aerial view of the study area showing the proposed Zen WEF, (white dots), the proposed iNca Gouda WEF (pink) and the Gouda WEF (red) which is due for construction in early 2013. The yellow bar for scale at the bottom is 2 km long.

7. GRADING

Following the guidelines of Winter and Baumann (2005: box 5), the archaeological resources and built environment resources are provisionally graded as shown in Table 3 below. Grading is a means of generalising the degree of heritage significance attached to the resources present. The archaeological resources are of limited significance and do not merit any grading. The farm houses are altered to varying degrees but that at Die Mond appears to contain more original fabric and/or joinery and, upon inspection of its interior, may in fact merit a 3B grading. Furthermore, its context is better with the Kleinberggrivier werf having had modern storage facilities and farm outbuildings added to it. While some individual structures within the historic settlement of Saron likely merit a 3A grading, the majority of its historical structures should probably be 3C or ungraded. However, the overall context of the historic core of Saron is deemed of reasonable significance and might be considered as a grade 3B heritage resource.

Table 3: Provisional grading of heritage resources in the ZEN WEF study area.

Heritage resource	Provisional grading
MD2012/001	ungraded
MD2012/002	ungraded
MD2012/003	ungraded
MD2012/004	ungraded
KB2012/001	ungraded
KB2012/002	ungraded
HK2012/001	ungraded
BE2012/002	ungraded
Kleinberggrivier farmhouse	3C
Kleinberggrivier outbuilding	ungraded
Die Mond farmhouse	3B/C
Die Mond outbuilding	ungraded
Saron historical settlement as a whole	3B

8. ASSESSMENT OF IMPACTS

8.1. Archaeology

Impacts to archaeological resources will undoubtedly occur but these will not be of high significance. Furthermore, mitigation can be easily accomplished where this might be required. Should dense scatters of ESA artefacts be impacted then mitigation should entail *in situ* recording of the material to create a record of the artefacts and technology. No LSA sites were found in the immediate WEF area but should any be located later they would possibly require some degree of formal excavation. Table 4 formally evaluates the potential impacts to archaeology which are found to be of medium significance before mitigation and low after mitigation.

Table 4: Assessment of archaeological impacts.

Nature: Destruction and/or disturbance of archaeological sites and/or artefacts.		
	Before mitigation	After mitigation
Extent:	Local (1)	Local (1)
Duration	Permanent (5)	Permanent (5)
Magnitude	Low (4)	Small (0)
Probability	Probable (3)	Probable (3)
Significance	Medium (30)	Low (15)

Status	Negative	Negative
Reversibility	No	
Irreplaceable loss of resources?	Yes	
Can impacts be mitigated?	Yes	
Mitigation: In situ recording of ESA artefacts and excavation of LSA sites (if ever found to be impacted).		
Cumulative impacts Other similar archaeological material would be impacted by other similar developments in the area but, given the widespread nature of this material, cumulative impacts are not significant.		

8.2. Built environment

No built environment elements will be directly impacted. However, indirect (visual) impacts will be felt by farm houses and outbuildings in the vicinity. The houses at the Kleinberggrivier and Die Mond werfs are most significant but still do not attract high gradings. For this reason, visual impacts to them and their contexts are not seen as very significant. The house at Die Mond will be 2.9 km from the nearest turbine on the current layout, while the Kleinberggrivier farmhouse will be 930 m from its nearest turbine. Neither house is of suitable merit to prevent construction or to suggest that larger buffers should be incorporated – these buffers are quite adequate. No further mitigation measures are suggested. Table 5 assesses the impacts to the built environment and finds them to be of medium significance. This is perhaps slightly inflated by the system used to calculate significance due to the high score for duration of impact.

Table 5: Assessment of built environment impacts.

Nature: Reduction in quality of the visual context of heritage structures.		
	Before mitigation	After mitigation
Extent	Local (2)	Local (2)
Duration	Long term (4)	Long term (4)
Magnitude	Low (4)	Low (4)
Probability	Definite (5)	Definite (5)
Significance	Medium (50)	Medium (50)
Status	Negative	Negative
Reversibility	Yes, reversible when turbines are removed	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	No	
Mitigation: None suggested		
Cumulative impacts Other similar developments will not significantly alter the impacts to these resources and cumulative impacts are thus not significant.		

8.3. Historical settlements and cultural landscapes

Saron is a historical settlement whose context and character retain heritage significance. Furthermore, there are several individual structures of significance within the core part of the village. The key aspect of the impacts to this settlement is visibility of the turbines. Much of the settlement is visually protected at the very local scale due to the many trees that form part of its structure and character. It is only on the very southern limits of the village, close to the historic mission station and graveyard, that one will be able to see the uppermost part of the turbines. The only mitigation that could occur would be to reduce the number of turbines on high ground in the eastern part of the town so as to reduce the overall visibility of turbines from the mission station. Table 6 rates the impacts formally, finding them to be of medium significance before mitigation and low significance should mitigation as suggested be applied.

Table 6: Assessment of impacts to historical settlements and cultural landscapes.

Nature: Impact on historical settlements and cultural landscapes.		
	Before mitigation	After mitigation
Extent	Regional (3)	Regional (2)
Duration	Long term (4)	Long term (4)
Magnitude	Low (4)	Minor(2)
Probability	Definite (5)	Highly probable (4)
Significance	Medium (55)	Low (24)
Status	Negative	Negative
Reversibility	Yes, reversible when turbines are removed	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	
Mitigation: Move turbines from high ground to reduce visibility from the mission station		
Cumulative impacts: The other proposed similar facilities are located to the south and will not affect Saron.		

The core historical area of Saron is considered an important cultural landscape and its impacts will be the same as those identified above for the historical settlement. The wider Swartland cultural landscape will also be affected but with lesser significance due to its great size and the proximity of the Gouda WEF that is shortly due for construction. No specific rating table is supplied since the ratings in Table 6 are appropriate for cultural landscapes too.

8.4. Scenic routes

Scenic routes will be impacted by the proposed WEF. However, the clustering of turbines from the three facilities planned in this area helps to centralise the impacts to one area and the impacts that the Zen WEF will have need to be considered in the light of these other facilities. Due to the nature of the land – with the only large visual buffer (the mountains) being located behind the WEF relative to the scenic routes – no mitigation will be possible for scenic routes. Table 7 assesses the impacts finding them to be of medium significance.

Table 7: Assessment of impacts to scenic routes.

Nature:		
	Before mitigation	After mitigation
Extent	Local (2)	Local (2)
Duration	Long term (4)	Long term (4)
Magnitude	Moderate (6)	Moderate (6)
Probability	Definite (5)	Definite (5)
Significance	Medium (60)	Medium (60)
Status	Negative	Negative
Reversibility	No	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	No	
Mitigation: None suggested		
Cumulative impacts: The addition of a further WEF will increase the impacts but given that all are in a cluster this is not a highly significant increased impact.		

9. CONCLUSIONS

Based on the layout assessed here, impacts to heritage resources are not likely to be very significant and no “red flag” issues have been identified. Archaeological resources of medium to low significance will be directly impacted, while buildings, cultural landscapes and scenic routes will all receive indirect impacts of medium to low significance. It is concluded that, on heritage issues, the proposed WEF may proceed.

Archaeological mitigation, if required, could be easily carried out under a permit issued to the archaeologist by Heritage Western Cape. Since no other heritage resources will be directly impacted no other permits would be required for implementation of the proposed development.

10. RECOMMENDATIONS

It is recommended that, subject to the agreement of Heritage Western Cape, the proposed project should be allowed to proceed. However, the following conditions should be adhered to:

- If any change to the layout is made pre-construction then a follow-up inspection of the new layout should be made, particularly for archaeological resources which are point-specific on the landscape;
- If possible, turbines on high ground within close visual proximity to Saron should be relocated to less prominent positions;
- Buffers around historical houses should be a minimum of 500 m but preferably as large as possible;
- The final layout should seek to be as consolidated as possible in order to maintain a tight cluster with the other proposed facilities in the area (the present layout does this quite well); and
- If any burials are encountered during any stage of the development then work in the immediate vicinity should be stopped, the remains protected and the finds reported to HWC or an archaeologist. Exhumation would be required at the expense of the developer.

11. ENVIRONMENTAL MANAGEMENT PROGRAMME

Input to the EMP is only required for archaeological resources as other heritage resources will not be directly impacted.

OBJECTIVE: Reduction of archaeological impacts	
Project component/s	Turbines, power lines, substation and roads
Potential Impact	Destruction of/damage to archaeological resources
Activity/risk source	Construction of the proposed WEF
Mitigation: Target/Objective	Recording of the archaeological resources by an archaeologist

Mitigation: Action/control	Responsibility	Timeframe
In situ recording of artefact scatters to be impacted	Archaeologist	Pre-construction

Performance	Archaeological resources successfully mitigated prior to
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Indicator	construction
Monitoring	None required after mitigation

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CTS HERITAGE

APPENDIX 6 - HWC Correspondence

CTS Heritage

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Enquiries Troy Smuts

Tel: 021 483 9543

Email: justin.bradfield@pgwc.gov.za

Date: 18/07/2012

Case No: 120703TS04M

Auto IDs: 1858 - 1934

**RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP
In terms of section 38(8) of the National Heritage Resources Act (Act 25 of 1999)
and the Western Cape Provincial Gazette 6061, Notice 298 of 2003**

Attention: Ms Karen Jodas
Savannah Environmental (Pty) Ltd
PO Box 148
Sunninghill
2157

CASE NUMBER: 120703TS04M

NID: PROPOSED ZEN WIND ENERGY FACILITY, ON FARMS BONNE ESPERANCE 83 PTN 1,2; FARM 88 PTN 4; KLEINBERGRIVIER 1 REM PTN 4 AND MOOLENAARS DRIFT 85 REM AND REM OF PTN 1

The matter above has reference.

Your NID dated 28 June 2012 was tabled and the following was discussed:

1. The site is located between Saron and Gouda off the R44
2. The proposal is to construct a Wind Farm with up to 60 wind turbines for up to 110m in height
3. Underground cables will be used to like the turbines and over head powerlines will be linked to a existing substation.
4. Historic farm buildings are likely to lose their sense of place.
5. The site is situated along a scenic route.
6. Historic rural towns are likely to be visually impacted on be the presence of the wind farm.
7. Archaeological resources from the Early Stone Age are known to occur in the area and could be impacted on.
8. Unmarked graves may be encountered.
9. Malmesbury sediments are unlikely to contain fossils.

1. Since there is reason to believe that heritage resources will be impacted upon, HWC requires an HIA in terms of S. 38(3) of the NHRA (Act 25 of 1999) assessing the impacts on the following heritage resources which it has identified; the built environment, historic settlements, scenic routes, the cultural landscape and archaeology.
2. An integrated set of recommendations is required which also grades the heritage resources.

Our Ref: HMICAPE WINELANDS|WITZENBERG|TULBAGH|ZEN WND ENERGY

Enquiries Troy Smuts
Tel: 021 483 9543
Email: justin.bradfield@pgwc.gov.za

Date: 18/07/2012
Case No: 120703TS04M
Auto IDs: 1858 - 1934



Terms and Conditions:

Heritage Western Cape reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number above.

Yours faithfully



Andrew B Hall
Chief Executive Officer
Heritage Western Cape

Enquiries: Troy Smuts
Tel: 021 483 9543
Email: justin.bradfield@pgwc.gov.za

Date: 23/01/2013
Case No: 120703TS04M
Auto IDs: 1858 - 2276



INTERIM COMMENT

In terms of section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

Attention: Ms Karen Jodas
Savannah Environmental (Pty) Ltd
PO Box 148
Sunninghill
2157

CASE NUMBER: 120703TS04M

HIA: PROPOSED ZEN WIND ENERGY FACILITY, ON FARMS BONNE ESPERANCE 83 PTN 1,2; FARM 88 PTN 4; KLEINBERGRIVIER 1 REM PTN 4 AND MOOLENAARS DRIFT 85 REM AND REM OF PTN 1

The matter above has reference.

Heritage Western Cape is in receipt of your correspondence on the above matter, dated 9 November 2012 and the following discussed:

1. The proposed development is to place up to 46 3MW wind turbines. The hub height will be up to 110m with a rotor diameter of up to 110m.
2. Access roads and a workshop/ office of approximately 100x100m will be constructed.
3. A 200x 200m on site substation to facilitate the grid connection will be built and a new (6.5km) 132kV power line will connect the new substation to the grid
4. The geological deposits of the site are of the Malmesbury Group and are of low palaeontological significance.
5. Numerous stone artefacts scatters were found across the site with greater concentrations of material found in the north.
6. Early Stone Age material is more prevalent on the land scape with only a few scatters of MSA and only 3 scatters of LSA found, though these were on the banks of the Berg river and a koppie.
7. The village of Gouda was not deemed a highly significant historic settlement.
8. The village of Saron was established in 1846 and is seen as having heritage significance, particularly the central mission area.
9. The Wind Energy Farm will have turbines 3.3km from the historic core of Saron.
10. There will be considerable visual impacts on this historic village of Saron from the wind farm which was not covered in the HIA.

Decision:

The Committee resolved not to deal with the matter and require that the Visual Impact Assessment deal explicitly with the visual impacts on and from the historical core of Saron and on and from any historical homestead within 5km of the turbines. Furthermore the Committee requires that assessment of the visual impacts be made by an appropriately qualified and experienced professional with respect to visual impacts on cultural landscape. Furthermore, the Committee requested that the comment in respect of heritage of parties in Saron be obtained.



Enquiries: Troy Smuts
Tel: 021 483 9543

Date: 23/01/2013
Case No: 120703TS04M
Auto IDs: 1858 - 2276

Email: justin.bradfield@pgwc.gov.za

Terms and Conditions:

Heritage Western Cape reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number above.

Yours faithfully

Andrew B Hall
Chief Executive Officer
Heritage Western Cape

From the desk of Ravisha Ajodhanpersadh
E-mail: ravisha@savannahSA.com



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13 August 2013

Heritage Western Cape
Private Bag X9067
Cape Town
8001

Email: justin.bradfield@pgwc.gov.za

ATT: Troy Smuts

HWC Case Number: 120703TS04M

**ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED ZEN WIND
ENERGY FACILITY, NEAR SARON, WESTERN CAPE (DEA REF NO:
14/12/16/3/3/2/322)**

Dear Sir

Savannah Environmental acknowledges receipt of the letter from Heritage Western Cape (HWC) sent on 23 January 2013 regarding the proposed Zen Wind Energy Facility. This letter serves as a response to the letter from the HWC on the proposed project. Please take note of the following:

- HWC requires that the Visual Impact Assessment deal explicitly with the visual impacts on and from the historical core of Saron and on and from any historical homestead within 5km of the turbines.

Please note that the HIA has been undertaken by ACO Associates (specialists in heritage impact assessment). The HIA report assessed impacts on the town of Saron. In addition, the Visual Impact Assessment (VIA) assessed the impacts of the project on the town of Saron. These are attached for HWC's consideration.

- Furthermore the Committee requires that assessment of the visual impacts be made by an appropriately qualified and experienced professional with respect to visual impacts on cultural landscape.

Please note that the HIA and VIA were undertaken by professional specialists. Together, these two studies assessed the impact on heritage and cultural resources, related to visual impacts of the proposed Zen Wind Energy Facility. It is suggested that HWC consider both the HIA & VIA reports when considering the project.

- The Committee requested that the comment in respect of heritage of parties in Saron be obtained.

To date, no objection/ concerns have been raised by the local residents and the Local Municipality. Please advise which other "parties" from Saron should be consulted, as this is as unclear requirement contained in the letter from HWC.

UNIT 10, BUILDING 2, 5 WOODLANDS DRIVE OFFICE PARK, CNR. WOODLANDS DRIVE & WESTERN SERVICE ROAD, WOODHEAD, JOHANNESBURG

PO BOX 148, SUMMINGHILL, 2157, GAUTENG

TEL: +27 (0)11 656 3237 • FAX: +27 (0)11 656 0547 • E-MAIL: INFO@SAVANNAHSA.COM

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DIRECTORS: K M JODAS • J THOMAS • M MATSABU

COMPANY REGISTRATION NO.: 2006/000127/07

VAT REGISTRATION NO.: 4780226736

In addition, a letter of recommendation for exemption from any palaeontological studies from a palaeontologist is attached to this letter. HWC's final comment on the project is required, as this is a requirement for the EIA process and the Department of Energy's bidding process for renewable energy projects.

Should you have any queries, kindly contact me.

Kind Regards



Ravisha Ajodhapersadh

Attachments:

- **Heritage Impact Assessment**
- **Visual Impact Assessment**
- **Letter of recommendation for exemption from any palaeontological studies**

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Enquiries Troy Smuts
Tel: 021 483 9543
Email: troy.smuts@westerncape.gov.za

Date: 18 December 2013
Case No: 120703TS04M
Auto IDs: 1858 - 2759



LETTER
In terms of section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

Attention: Ms Karen Jodas
Savannah Environmental (Pty) Ltd
PO Box 148
Sunninghill
2157

Zikhona R25
↳ arlene@savannahsa.o
↳ 011 656 3237.

CASE NUMBER: 120703TS04M
HIA: PROPOSED ZEN WIND ENERGY FACILITY, ON FARMS BONNE ESPERANCE 83 PTN 1,2; FARM 88 PTN 4; KLEINBERGRIVIER 1 REM PTN 4 AND MOOLENAARS DRIFT 85 REM AND REM OF PTN 1

The matter above has reference.

Heritage Western Cape is in receipt of your correspondence on the above matter, dated 14 November 2013 and the following was noted:

On consideration of arguments presented, the Committee felt that the inclusion of the visual impact on the landscape in the study, was sufficiently indicated in the response to the NID and a full assessment of the visual impact of the proposal, is required.

Decision:

1. Heritage Western Cape abides by its previous decision.

Terms and Conditions:

- 1. Heritage Western Cape reserves the right to request additional information as required.
- 2. This letter does not constitute conclusion of processes under the National Heritage Resources Act (Act 25 of 1999). These processes may only proceed further once the contents of this letter have been adhered to. Please note that no final documentation may be submitted to the Environmental Authority until the process under the NHRA has been concluded.

Should you have any further queries, please contact the official above and quote the case number above.

Yours faithfully

Andrew B Hall
Chief Executive Officer
Heritage Western Cape



CTS HERITAGE

APPENDIX 7 - Research by Cape Town Properties Histories (Hislop, 2019)

CTS Heritage

16 Edison Way, Century City, 7441

Tel: +27 (0)87 073 5739 **Email:** info@ctsheritage.com **Web:** www.ctsheritage.com

Saron



A HISTORICAL *study* *of a* MISSION STATION



Produced by

CAPE TOWN PROPERTY HISTORIES

Jim Hislop: 083 950 9586; wheatfields.windmills@gmail.com

5 Upper Chamberlain Street, Woodstock, Cape Town

Historical background

The Rhenish mission station of Saron, near Porterville, was founded on the 18th-century farm of De Leeuwenklip



THE MISSION VILLAGE of Saron is situated at the foothills of the Groot Winterhoek Mountains, south of Porterville.

Following the abolition of slavery at the Cape in 1834 (followed by a four-year period of forced “apprenticeship” ending in 1838), the purpose of the mission station was to house and educate freed slaves from the surrounding farms as well as the displaced indigenous peoples who were living nearby.¹ Mission stations such as Saron then became sources of seasonal labour for farmers in the surrounding area.²

Reverend Johannes H. Kulpmann of the German-based Rhenish Missionary Society established a mission station on the 2 300ha De Leeuwenklip farm (owned by the De Waal family) in 1846.³

The werf then consisted of a fine c.1780 gabled homestead, a water mill, smithy and wine cellar, with a werf wall surrounding the farmyard.⁴



In 1852 the mission then came under the Rhenish Mission Society’s direct control, and a mission church was built next to the De Leeuwenklip

homestead.⁵ The De Waal farmhouse then became the church’s pastorie, before being turned into a community centre; a purpose that it still serves today.⁶

The little village has suffered the ravages of time, more so than other mission stations like Elim and Genadendal. The mission church has been extended and altered numerous times since it was built in 1852, and the De Leeuwenklip opstal has been badly altered over the past few decades. Many of the modest mid-19th-century mission houses have been modernised and the earthquake of 1969 (which famously damaged much of Tulbagh’s Church Street), also caused some damage at Saron.⁷ Some of the houses are now in a state of ruin (*see page 6*).

However, there are still some streets of interest (that still have

a few oak trees and less-altered houses), and many mid-19th-century houses still have long strip plots behind them (presumably previously used for micro-farming and kitchen gardens), which contribute to the rural character of the village.

Additionally, the De Leeuwenklip homestead (now a community centre), could be at least partially restored by removing the unsightly facebrick veranda. Its elaborate holbol gable is still one of the village's finest architectural features. There is also a fairly large graveyard next to the church, which forms part of the historic mission complex.

On 1 December 2013 the Saron mission complex (now under

auspices of the Dutch Reformed Church) was declared a Provincial Heritage Site by the Department of Cultural Affairs and Sport, and Heritage Western Cape. The date was chosen because it marked the 175th anniversary of the emancipation of slaves at the Cape.⁸

The following pages look at some of the remaining 18th- and 19th-century buildings and surrounding farms.



FIG. 1C
Henry Salt, *Roodezand Pass*, from *Twenty Four Views in St. Helena, the Cape, India, Ceylon, the Red Sea, Abyssinia, and Egypt* (London: Henry Miller, 1809)



FIG 1A The 1852 mission church still provides an attractive focal point at the mission complex.

FIG 1B De Leeuwenklip's fine gable.

FIG 1C Henry Salt's 1809 painting of the Roodezand Pass depicts the landscape near Saron in the early 19th century.

FIG 1D Mid-19th-century mission houses.



Some characterful 19th-century mission houses are still found at Saron

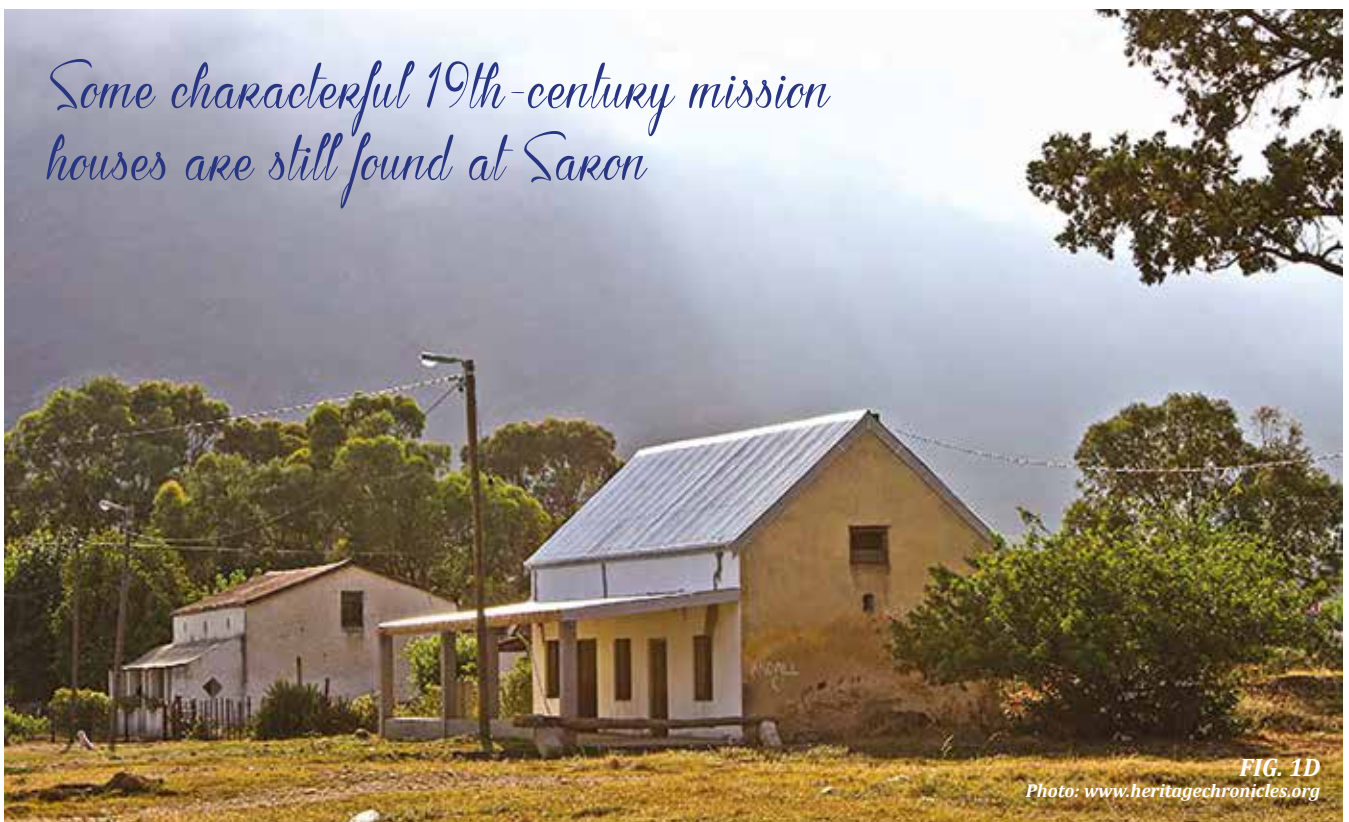


FIG. 1D
Photo: www.heritagechronicles.org

Buildings of interest (central town)

Historic buildings noted by Hans Fransen in *The Old Buildings of the Cape*, as well as additional buildings and ruins of possible interest sourced on Google Streetview



Aerial photo: Cape Farm Mapper, gis.eisenburg.com/apps/cfm (15 January 2016)

CENTRAL SARON

LEGEND

- | | |
|---|---|
| ① Rhenish Mission Church (now United Reformed Church)
(Provincial Heritage Site) | ⑧ Main Road (between Mevi and Kerk Streets) |
| ② De Leeuwenklip House (DR Parsonage/Community Centre) | ⑨ Cnr Main Road & Kling Street |
| ③ Mission School (Church Hall) | ⑩ Cnr Main Road & Keerom Street |
| ④ Water mill (partially demolished?) | ⑪ Plein Street ruin 1 |
| ⑤ Mission store | ⑫ Plein Street ruin 2 (close to Main Road) |
| ⑥ 3 Kerk Street | ⑬ Dam Street cottage 1 |
| ⑦ Cnr Lang & Kerk Streets | ⑭ Dam Street cottage 2 |
| | ⑮ Cemetery (Provincial Heritage Site) |





FIG. XX: The Rhenish Mission Church, now the United Reformed Church

Photo: Andrew Hall

① RHENISH MISSION CHURCH (NOW UNITED REFORMED CHURCH)

Farm Nr: RE/2/40

Lat: -33.185125 | Lon: 19.008874

Provincial Heritage Site

Work on this simple but attractive gabled mission church for the Rhenish Mission Society began in 1852, and it was completed one year later.

Originally thatched, the church was extended in 1896, and given a back wing, thus forming a T-shape.

Although it was altered again in 1949 and the roof is now of corrugated iron, the church still provides an aesthetically pleasing focal point of the historic mission complex.¹

② DE LEEUWENKLIP HOUSE (DR PARSONAGE/COMMUNITY CENTRE)



Photo: Andrew Hall

Off Dam Street

Farm Nr: RE/2/40

Lat: -33.184380 | Lon: 19.009093

See page xx for history and description.

③ MISSION SCHOOL (CHURCH HALL)



Off Dam Street (opposite United Reformed Church)

Farm Nr: RE/2/40

Lat: -33.185161 | Lon: 19.009276

After De Leeuwenklip farm was bought for the establishment of a mission town, the existing farm buildings were adapted for use in the new settlement until funds for new buildings were available. The De Leeuwenklip wine cellar was converted into a mission school. Fransen does not mention where this wine cellar building stood, but it may have been one of the buildings that stood in line with the water mill (*Fig. 4C, pg 11*).

The school operated in the wine cellar until 1877, when a dedicated school building was built next to the church. This is still standing, although it has been extended over the decades, and now acts as the church hall.²

④ WATER MILL (DEMOLISHED?)

One of the few buildings of the village that predated the establishment of the mission town, the old water mill was dated by Fransen to c.1795. It was already in a perilous state in 2004 when *The Old Buildings of the Cape* was published, and Fransen describes it as a "mere shell".³ A newer building (post-2004?), standing at a different angle, appears to now stand on the site of the ruined mill (*Fig. 4C, pg 11*).

⑤ MISSION STORE



Farm Nr: RE/3/40

Main Road, opposite De Leeuwenklip homestead (community centre)

Lat: -33.183693 | Lon: 19.009680

A rare flat-roofed building in Saron, this mission store, facing a square close to the De Leeuwenklip werf, is notable for its length and segmental pedimented facade.

Hans Fransen dated the building's woodwork to c.1870.⁴ It is the only remaining building of four (including the mill) that stood in a line opposite the De Leeuwenklip homestead (*Fig. 4C, pg 11*), and may have replaced/ incorporated one of its outbuildings.

EIKENHOF

Northern perimeter of Saron

In *The Early Buildings at the Cape* Fransen includes a mid-19th century, L-shaped house with half-hipped ends and low reed ceilings, called Eikenhof, in the "northern perimeter" of the town (he provides no address).⁵ He may be referring to ⑦ Cnr Lang & Kerk Streets.



⑥ 3 KERK STREET

Erf 56

Lat: -33.182848 | Lon: 19.009067

Badly altered, with modern windows, but retains a loft door and evidence of side wolwe-end gable. Probably originally thatched? Flat-roofed extension/outbuilding on the right.



⑨ CNR MAIN ROAD & KLING STREET

Erf 125

Lat: -33.183389 | Lon: 19.005340

Interesting squat Cape Revival gable. Corrugated iron roof and partially filled-in veranda. Numerous outbuildings behind on rear strip plot.



⑫ PLEIN STREET RUIN 2 (CLOSE TO MAIN ROAD)

Erf 168

Lat: -33.181943 | Lon: 19.003315

Three-bay ruined mud-brick house (no roof). Now reduced to being used as a parking garage.



⑦ CORNER LANG & KERK STREETS

Erf 87

Lat: -33.181236 | Lon: 19.008485

Rare thatched house with wolwe-end gables. Modern windows. Flat-roofed additions at the back.



⑩ CNR MAIN ROAD & KEEROM STREET

Erf 126

Lat: -33.183235 | Lon: 19.004551

Vacant and derelict (plaster peeling off), but quite authentic three-bay cottage with exterior chimney. Corrugated iron roof probably replaced thatch, hence the little roof lights above each window/door.



⑬ DAM STREET COTTAGE 1

Erf 2

Lat: -33.184657 | Lon: 19.010470

19th-century three-bay cottage on a long plot, better preserved than most in the village. Corrugated-iron roof and verandah.



⑧ MAIN ROAD (BETWEEN MEVI AND KERK STREETS)

Erf 54

Lat: -33.183172 | Lon: 19.009633

House with loft door and pitched-roof of corrugated iron, possibly once thatched. The verandah has been built-in, and there are other extensive flat-roofed extensions.



⑪ PLEIN STREET RUIN

Erf 176

Lat: -33.180832 | Lon: 19.003317

Ruined mud-brick building set back from the road. Some walls still standing.



⑭ DAM STREET COTTAGE 2

Erf 4

Lat: -33.184270 | Lon: 19.010941

19th-century three-bay cottage with large garden plot behind, less altered than most in the village and almost identical to the one mentioned above. Corrugated-iron roof and verandah, with round roof lights.

De Leeuwenklip

The mission village of Saron was established on what was originally the farm of De Leeuwenklip. The opstal of this farm is still standing in much-altered form



FIG 3A A rare historical photograph of the De Leeuwenklip homestead (and group of mission children) when it was still largely intact (c.1910). Note the thatched roof, double casement windows with shutters, and fanlight (now all gone). A modern facebrick veranda added a few decades ago has now obscured most of the facade, which has also been given sash windows and a French front door.

DE LEEUWENKLIP HOMESTEAD (DR PARSONAGE/COMMUNITY CENTRE)

Off Dam Street

Farm Nr: RE/2/40

Lat: -33.184380 | Lon: 19.009093

In 1762, Cornelis de Waal obtained a 60-morgen piece of land on a freehold basis.¹ After his death, his widow Hilletjie Mostert inherited it, after which it passed to their son Jan de Waal in 1774.²

He is the likely builder of the De Leeuwenklip homestead (c.1780), which still boasts an elaborate holbol gable, consisting of two sets of scrolls topped by an attractive plaster scallop shell.³

Lady Anne Barnard, during her trip to the interior in 1799, visited De Leeuwenklip farm (then owned by Jan de Waal) and compared the surrounding area to her native Scotland, and noted the farming activities of the time: "Nothing

struck me remarkably on the road except the strong resemblance there is in the first part of the country we passed to part of Fife - lands carrying good corn, but there is little plantation... I saw no vineyards or Orange trees here Corn and cattle are the Chief commodities"⁴

Judging by the numerous farms containing 'leeu' in their names, the area must have been home to many lions during the VOC period, and Barnard explains how De Leeuwenklip got its name: "After travelling some miles more and passing the Lions rocks [Leeuwenklip], so called from a fierce

one having been killed there about 50 years ago ..."⁵

She also provides a description of then owner Jan De Waal and his family: "... we reached the House of Myneer du Wal [De Waal], a wealthy Man of rather a higher class than the other Boors, and one of the tallest Men I had seen. He and his Wife welcomed us with cordiality, a tall daughter was of the party who looked rather older than her Mother, a very good looking Brother, but a cub, and a youngish looking tall Man in a calico powdering gown, with a great deal of manner who talk'd Dutch but looked so

De Leeuwenklip's holbol gable is still well preserved, despite the state of the building



FIG. 3B By the time Hans Fransen visited the homestead in c.1965 for his first edition of *The Old Houses of the Cape*, the thatch had been replaced by corrugated iron, a veranda had been added and the ground floor casement windows had been replaced with small sashes and even the gable casement's shutters had been removed.

FIG. 3C The homestead is now in a bad state, but still occupied as a community centre. The facebrick veranda and stoep stairs are post-c.1965 additions.



FIG. 3B
Photo: Hans Fransen, 1965

*like a French Man and like the late Prince Louis D'Areberg that I could by in means translate him..."*⁶

She also describes the interior of the homestead: "We slept this night in the best furnished and handsomest room we had yet been in, both the beds had curtains and every bed 4 ... there was magnificence but our glass still required a Chair to mount up to ..." ⁷

When De Leeuwenklip farm was purchased for the establishment of the mission village in 1846, the homestead was converted into the mission's parsonage. Today it is used as a community building, and over the decades it has undergone various alterations, firstly being given an Edwardian veranda, then

an incongruous facebrick one.⁸ The side gables were clipped when the corrugated iron roof was installed (pre-1965), but have since been recreated as half-correct holbols.⁹

The house once had casement windows throughout, but by 2004 when Fransen revisited, only a few survived in the inner courts (although judging by Fig. 3J, these may now also be gone).¹⁰ Some fine inner single-panel doors survive (Fig. 3E), as well as two gabled stinkwood wall cupboards (Fig. 3K), now increasingly rare.¹¹

Another survivor from De Leeuwenklip's farming days is the old, crumbling werfmuur (Fig. 3G).¹² There is also a surviving belltower (Fig 3D).

De Leeuwenklip and the mission church still form the historic core of the village

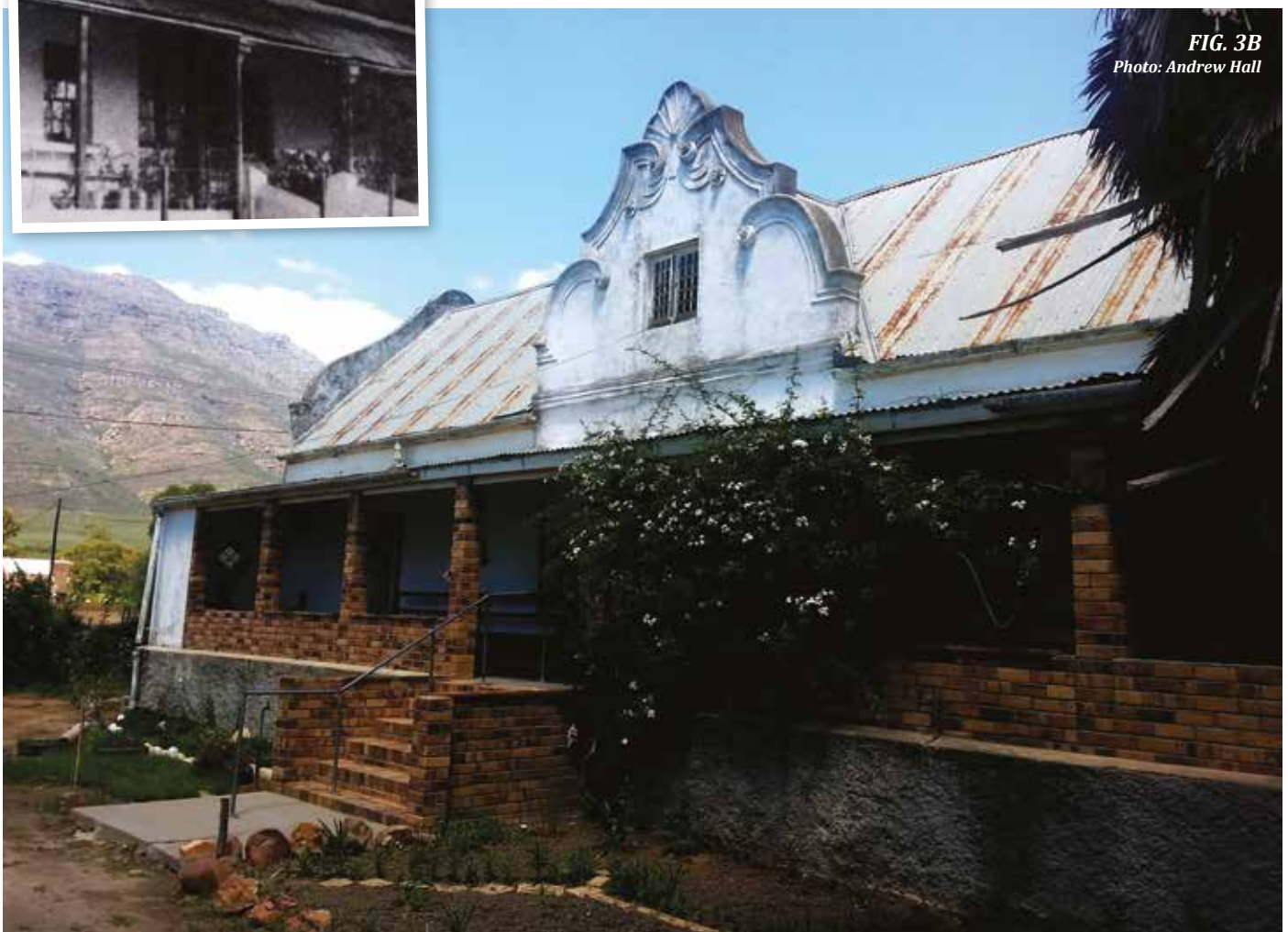


FIG. 3B
Photo: Andrew Hall

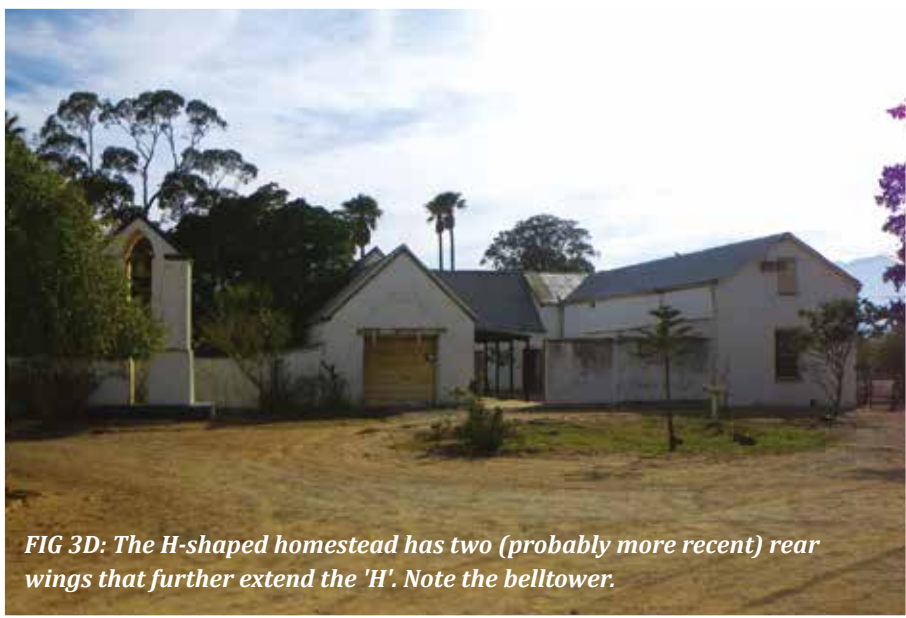


FIG 3D: The H-shaped homestead has two (probably more recent) rear wings that further extend the 'H'. Note the belltower.



FIG 3E



FIG. 3J



FIG. 3H



FIG. 3F



FIG. 3I



FIG. 3G



FIG. 3K



FIG. 3E: Fine single-panel doors remain.

FIG. 3F: Original window opening for double casements (now metal windows).

FIG. 3G: The crumbling werf wall.

FIG. 3H: A surviving brass escutcheon plate without original handle.

FIG. 3I: Side view of the homestead.

FIG. 3J: View of one of the side courts (the side gables are modern). Note the exposed unbaked mud bricks.

FIG. 3K: The interior retains some fine Cape Dutch features such as the twin gabled wall cabinets, beamed ceilings and flush single-panel doors.



DE LEEUWENKLIP WERF (SURVEY DIAGRAMS)

FIG. 4A

SG. Diag. Nr. 1941/1933

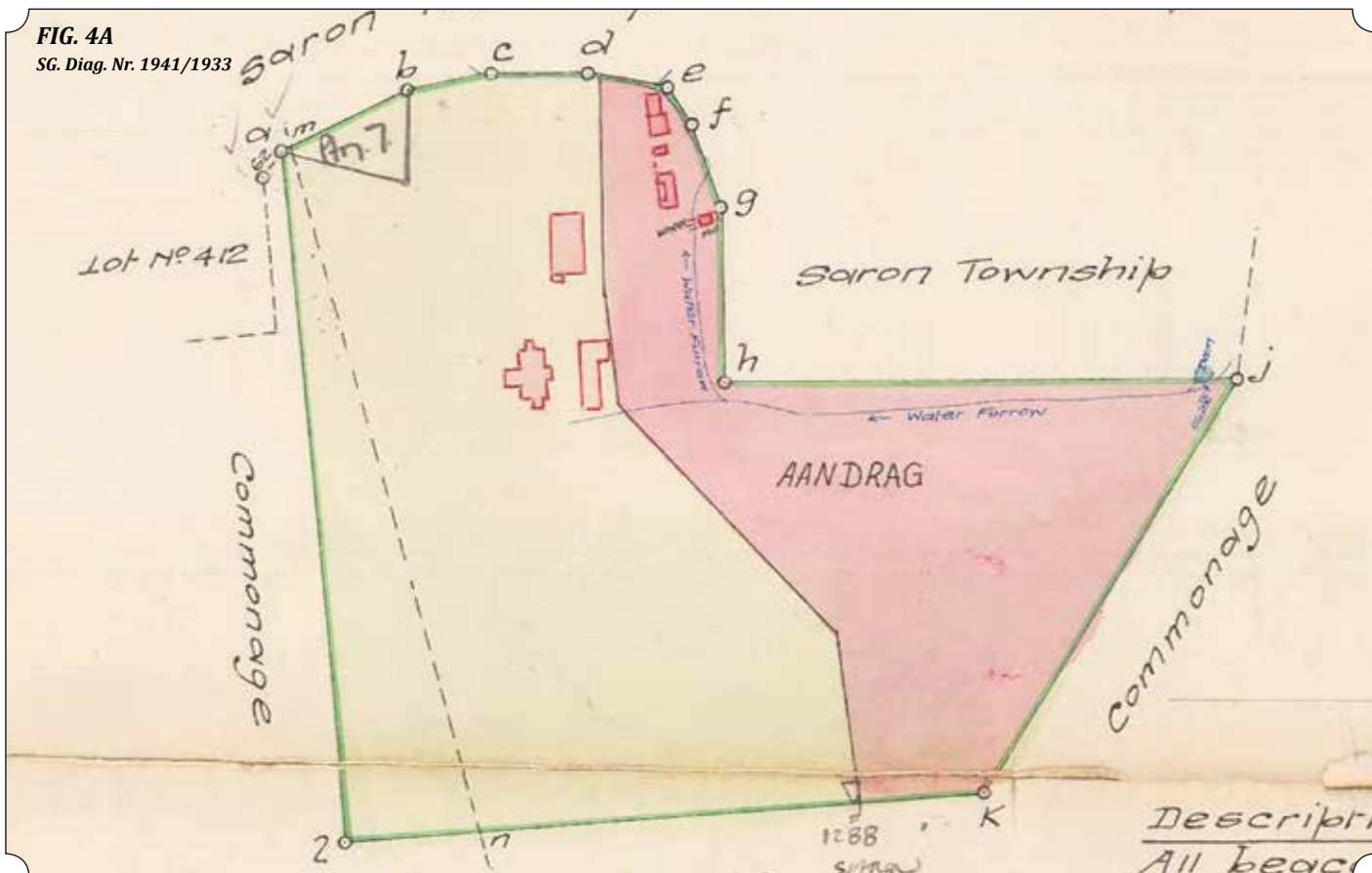


FIG. 4B

Aerial photo: gis.elsenburg.com/apps/cfm (15 January 2016)



FIG. 4A (SEE ALSO FIG. 4C): A 1933 survey diagram showing the extant farm buildings of the Leeuwenklip werf, the mission church and school.

FIG. 4B: The same historic werf (outlined in red) as it looked in 2016. See Fig. 4D for a close-up view. Note the cemetery, now neglected.

FIG. 4C

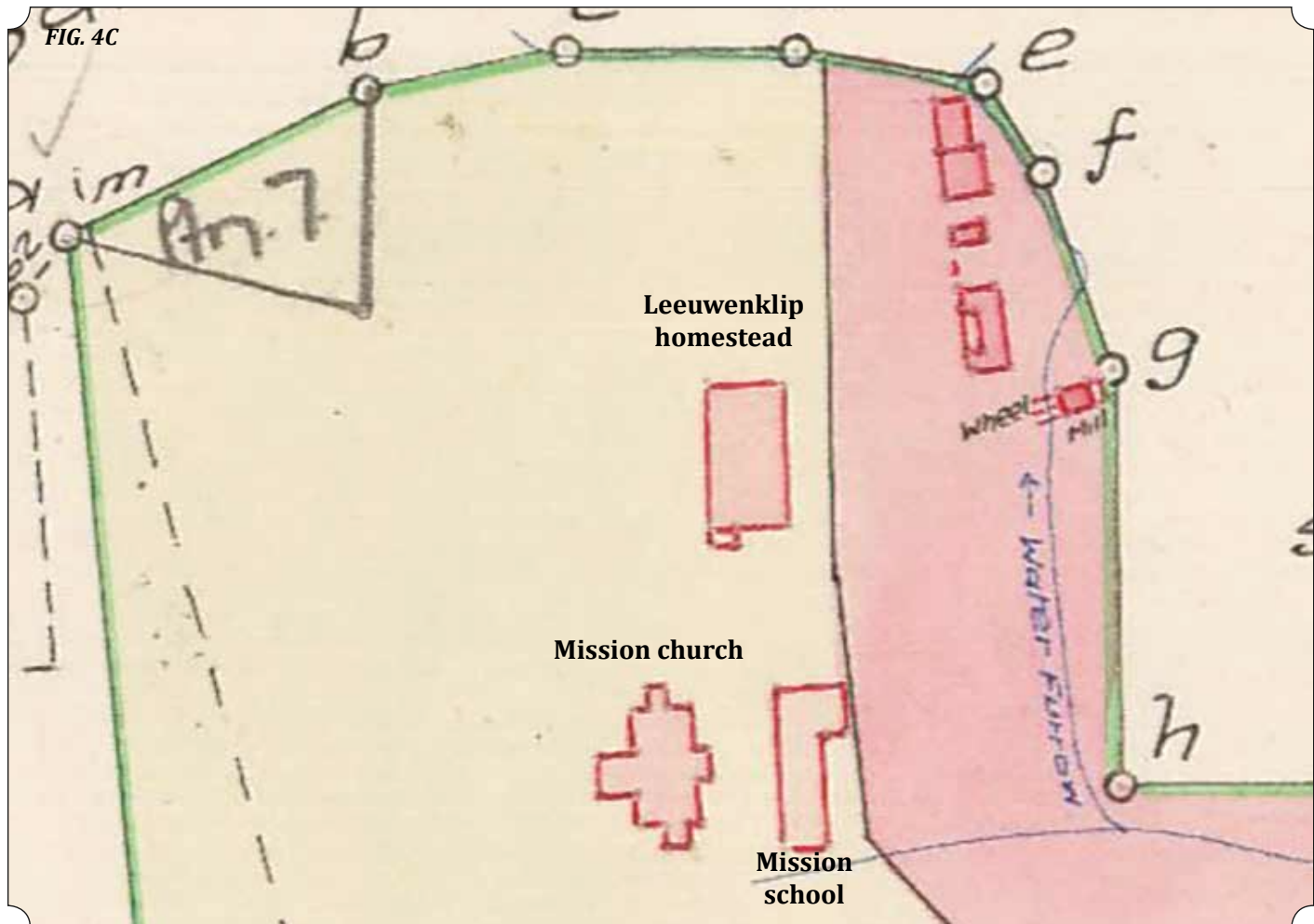


FIG. 4D

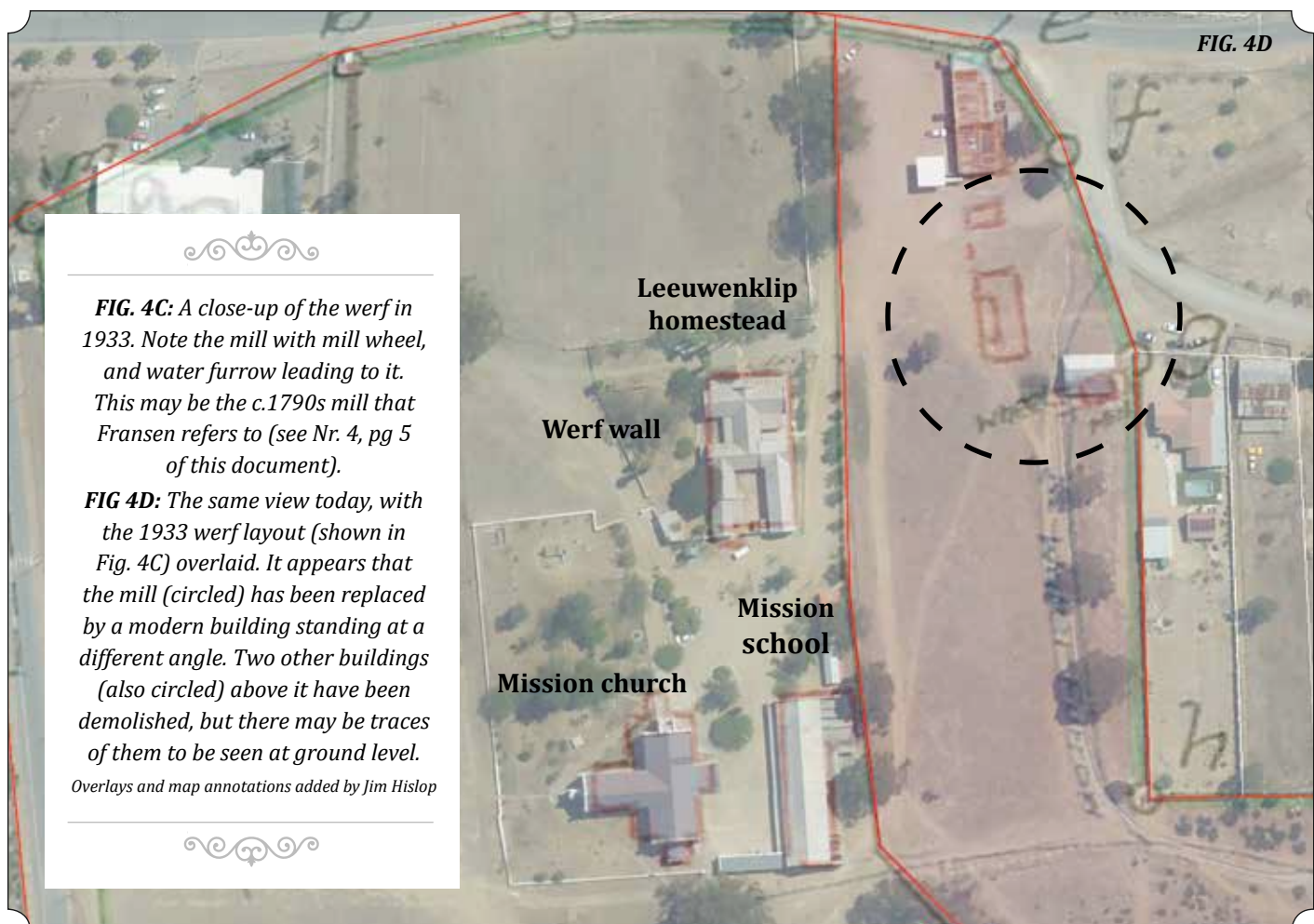


FIG. 4C: A close-up of the werf in 1933. Note the mill with mill wheel, and water furrow leading to it. This may be the c.1790s mill that Fransen refers to (see Nr. 4, pg 5 of this document).

FIG 4D: The same view today, with the 1933 werflayout (shown in Fig. 4C) overlaid. It appears that the mill (circled) has been replaced by a modern building standing at a different angle. Two other buildings (also circled) above it have been demolished, but there may be traces of them to be seen at ground level.

Overlays and map annotations added by Jim Hislop

Outlying farms

Farms with possible buildings of interest, within a 15km radius of the Saron village perimeter (sourced from Fransen and Google Streetview)

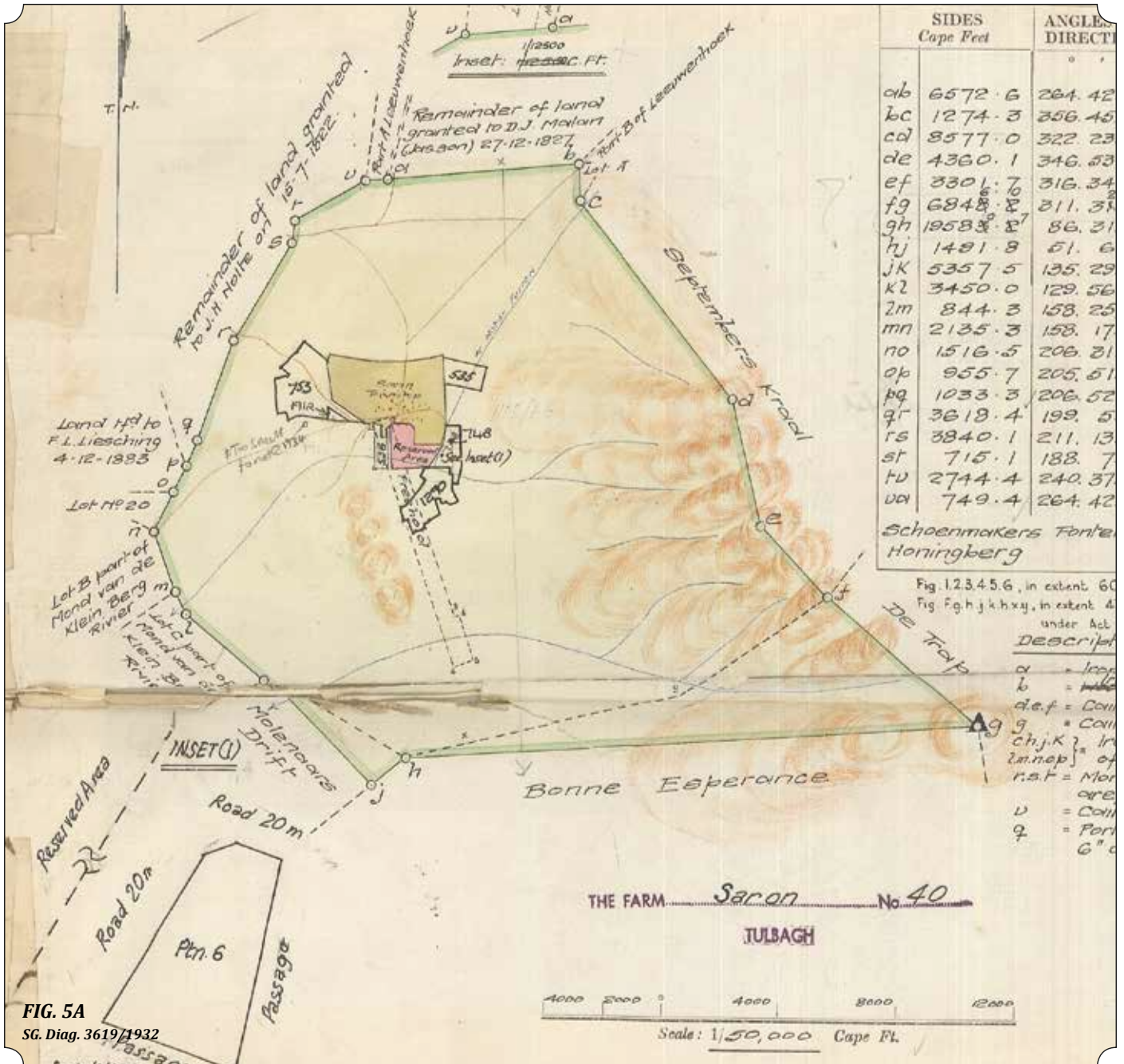


FIG. 5A
SG. Diag. 3619/1932

FIG. 5A: A 1932 survey diagram (attached to the certificate of amended title No. 8456, dated 15 December 1933 in favour of the Rhenish Mission Society of Barmen, Germany) showing the outer perimeters of the mission village of Saron, as well as surrounding farms. The red section (reserved area) contains the De Leeuwenkip werf.

FIG. 5B (OPPOSITE PAGE): An modern aerial photograph showing the same area (with surrounding farm boundaries marked).

FARMS NEAR SARON (TULBAGH DISTRICT)



FIG. 5B

LEGEND



- | | | |
|--|--|--|
| ① LANKGEWAG
<i>Farm RE/346</i> | ⑥ LEEUWENHOEK
<i>Farm 11/12</i> | ⑪ BUFFALO DRIFT/RUIGTEVLEI
(FORMERLY MOLENAARSDRIFT)
<i>Farm 458</i>
(<i>Ruigtevlei Farm</i>) |
| ② UN-NAMED
<i>Farm 8/387</i> | ⑦ DE HOEK ESTATES/
SEPTEMBER'S KRAAL
<i>Farm RE/35</i> | ⑫ KLEINE BERG RIVIER
(LOT C)
<i>Farm 3/1</i> |
| ③ UN-NAMED
<i>Farm RE/2/38</i> | ⑧ DE TRAP
<i>Farm 68</i> | ⑬ KLEINE BERG RIVIER
<i>Farm 3/1</i> |
| ④ UN-NAMED (FORMERLY
WATERVLIE)T
<i>Farm 444</i> | ⑨ BONNE ESPERANCE
<i>Farm 1/83</i> | ⑭ HALFMANSHOF (PORTION)
<i>Farm 6/11</i> |
| ⑤ LUSHOF
<i>Farm 336</i> | ⑩ BONNE ESPERANCE (PORTION)
<i>Farm 2/83</i> | |

* *Approximate position of opstal*

Refer to the map on the previous page for locations in relation to Saron

① **LANKGEWAG**



Farm RE/346

Off the R44

LAT: -33.168878 | LON: 18.989550

Subdivided portion of land transferred to J.H. Nolte on 15 July 1822 (see Fig.5A, pg 12)¹. H-shaped, thatched and gabled homestead accessed via a tree-lined avenue, with an F-shaped thatched second house or outbuilding facing a dam. This is possibly the H-shaped house that Fransen refers to as "Langverwacht".² (Fig. 6B, pg 16).

② **UN-NAMED**



Farm 8/387

Off the R44

Lat: -33.162861 | Lon: 18.990487

Possibly also a portion of land transferred to J.H. Nolte on 15 July 1822³ (part of Lankgewag?). Rectangular thatched homestead close to a dam with little wings on either side and flat-roofed wing at the back. Numerous outbuildings.



③ **UN-NAMED**

Farm RE/2/387

Off the R44

Lat: -33.160940 | Lon: 18.996260

L-shaped, thatched house with hipped ends (no gables), with a long thatched, hipped outbuilding behind and other smaller thatched outbuildings alongside the house.

④ **UN-NAMED (FORMERLY PART OF WATERVLIET)**



Farm 444

Off the R44

Lat: -33.151622 | Lon: 18.991109

Running along the Vier-en-Twintig River; this 200-ha farm appears to have two smallish houses (one next to the river with a corrugated iron roof and one next to a dam with corrugated iron roof and side gables). Accessed directly off the R44 via modern gateposts leading to a tree-lined avenue.

⑤ **LUSHOF**



Farm 336

Lat: -33.158216 | Lon: 19.007546

Off the R44 (entrance opposite the top end (north) of Kerk Street, Saron

A remnant of an earlier farm (Leeuwenhoek?) granted to D.J. Malan (Jas. son) on 27 December 1827⁴ (see Fig.5A, pg 12). U-shaped thatched house (no gables)

with L-shaped extension accessed via a tree-lined avenue. Long thatched outbuilding (without gables), and various smaller outbuildings. Possible walled family cemetery east of the house.

⑥ **LEEUVENHOEK**



Farm 11/12

Lat: -33.152180 | Lon: 19.019476

Portion of land granted to D.J. Malan (Jas. son) on 27 December 1827⁵ (see Fig.5A, pg 12). Numerous buildings. Subject to a land restitution claim in 1994 by Christo Frantz on behalf of the Saron Gemeenskap Rhenish Missionary Society of Saron.⁶

⑦ **DE HOEK ESTATES/**



SEPTEMBER'S KRAAL

De Hoek Road, off the R44

Farm RE/35

Lat: -33.156269 | Lon: 19.033834

Next to the Groot Winterhoek Nature Reserve, September's Kraal is a farm that was subject of a land restitution claim in 1994.⁷ The farm appears to form part of De Hoek estates (occupied by J. Hosking and J. Thudichun in 1927).⁸ There are a few houses and outbuildings (some semi-ruined), including a thatched house with irregular groundplan (perhaps modern; now De Hoek Estate guesthouse) and a gabled house with corrugated iron roof.

⑧ DE TRAP

Farm 68

Lat: -33.199523 | Lon: 19.067026

A large farm (793 morgen in 1874)⁹, bordering on September's Kraal and extending almost as far as Twee Jonge Gezellen in Tulbagh.¹⁰ (Government Land Surveyor Diag. Nr 847/1875). No farm buildings visible from Google Earth.

⑨ BONNE ESPERANCE



Off the R44 (next to the windfarm)

Farm 1/83

Lat: -33.234603 | Lon: 19.030395

A rectangular house with corrugated iron roof, and a ruined outbuilding nearby.

⑩ BONNE ESPERANCE (PORTION)

Bordering the R44

Farm 2/83

Lat: -33.229826 | Lon: 19.002482

A portion of the once larger Bonne Esperance farm. There appear to be no major buildings, but possibly some small ruined outbuildings/labourers' cottages.

⑪ BUFFALO DRIFT/RUIGTEVLEI (FORMERLY MOLENAARSDRIFT)



Ruigtevlei Farm, R44

Farm 458

Lat: -33.217189 | Lon: 18.991324

Tel: 072 599 5663; buffalodrift.co.za

Originally Molenaarsdrift¹¹, this farm (Ruigtevlei), now forms part of the Buffalo Drift portfolio of guesthouses.

There is a T-shaped, gabled house next to the R44 (near the Klein-Berg River) with corrugated iron roof, verandah and flat-roofed additions. Small outbuilding next to the house and more dilapidated outbuildings nearer the river. Occupied by the Dyers in 1927.¹² (See sidebar).

⑫ KLEINE BERG RIVIER (LOT C)



R44

Farm 3/1

Lat: -33.210726 | Lon: 18.980423

This is a portion (Lot C) of the farm previously known as De Mond van de Kleine Berg Rivier, granted to M.N. Smuts on 15 December 1846 and transferred to Nicolaas H.J. Louw on 22 August 1917.¹³ (SG Diag. Nr. 1014/1914).

There are numerous buildings on the property, including an irregular T-shaped house. The cadastral map of Porterville dated 1975 shows a cluster of buildings on the farm labelled "The Junction"¹⁴ (see the sidebar for its occupants in 1927).

⑬ KLEINE BERG RIVIER (FORMERLY MOND VAN DE KLEIN BERG RIVIER)



R44

Farm 3/1

Lat: -33.199235 | Lon: 18.975788

Another portion of the above-mentioned farm. Rectangular farmhouse.

⑭ HALFMANSHOF (PORTION)



Farm 6/11

Lat: -33.147929 | Lon: 18.976946

There are numerous adjoining subdivided portions of Halfmanshof, but this portion has the largest homestead on it, possibly the original Halfmanshof opstal. It consists of a pitched roof house with long parallel wing with hipped roof.

RESIDENTS OF SARON IN 1927

The Donaldson's Cape Directory of 1927 lists the following residents of the village and outlying farms at that time (unfortunately non-white residents are not listed)

RESIDENTS

P. Andrag, general dealer
E. Biesenbach, missionary
F.E. Dyer, general dealer, Berg River
J. van Biljon, mounted S.A.P.

FARMERS

De Hoek - W.M. Bath
Molenaarsdrift - F.J. Dyer senior, R. and W.
Orange Grove - W. Goosen
De Hoek Estates - J. Hosking, J. Thudichun
De Hoop - M.C. Kellerman
Mond van de Klein Berg River - H.A. Lambrechts
(The) Junction - M. Lambrechts, J. Louw, J.A. Rossouw and P. Rossouw
Good Hope - A. Morrison
De Hoek - E.L. Rogers

Donaldson's Cape Directory of 1927 (Ken Donaldson), p1 641

MORE FARMS NEAR SARON (FEATURED IN FRANSEN)

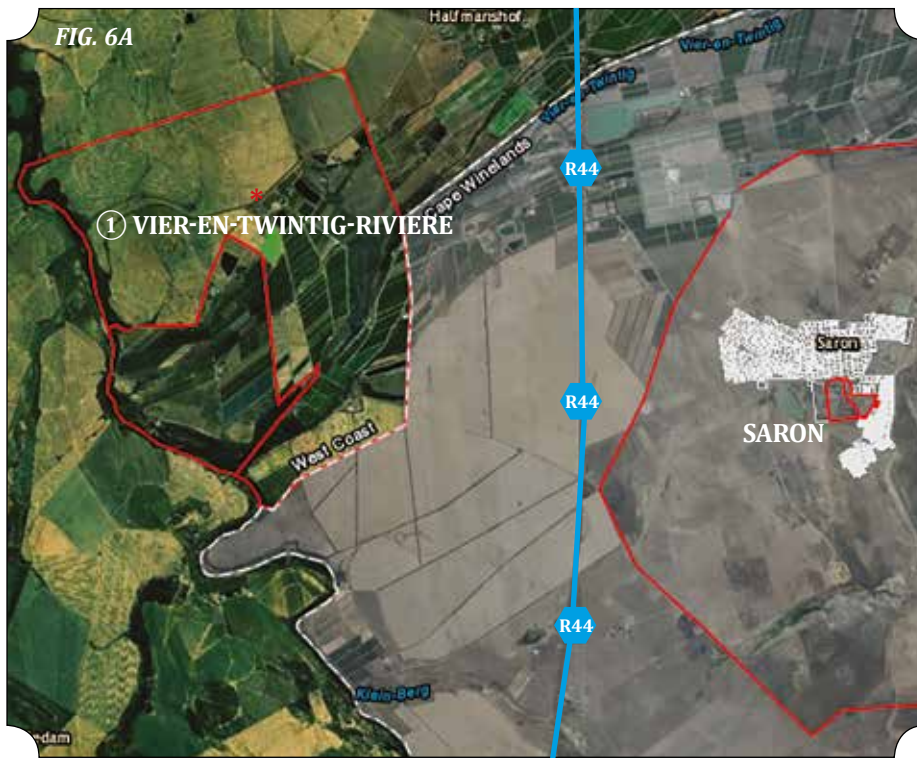


FIG. 6A An aerial photograph showing the western boundary of Saron on the right and the boundaries of the two major portions of the farm Vier-en-Twintig-Riviere, which lies along the river of the same name.

FIG. 6B The H-shaped homestead that Fransen refers to as "Langverwacht" in *The Old Houses of the Cape*, may be the homestead at Lankgewag (Nr. 1, pg 14).

FIG. 6C Portion of the Piketberg cadastral map of 1975, showing the Vier-en-Twintig-Riviere farm. The farm buildings (presumably including the homestead) are circled in pink, and another group of buildings titled De Meule (an old mill?) are circled in black.



FIG. 6B
From *The Old Houses of the Cape*, Fransen, Hans (A.A. Balkema, 1965), p154

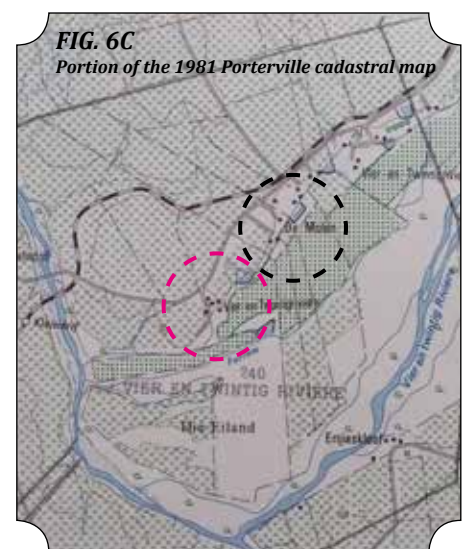


FIG. 6C
Portion of the 1981 Porterville cadastral map

LANGVERWACHT (LANKGEWAG?)

According to Fransen, this is/was a late H-shaped, thatched homestead, c.1840, situated near Vier-en-Twintig-Riviere (see below). He says the farm's name probably isn't original, and describes the gable (which has a round window) as "reminiscent of the Prince Albert type; the end gables are late holbol."¹

He may be referring to Lankgewag, which is situated on the eastern border of View-en-Twintig-Rivieren farm, and appears to match the image above, with an H-shaped ground

plan (see the top left of pg 14 of this document).

VIER-EN-TWINTIG-RIVIERE

Off the R44

Farm 240

Lat: -33.164608 | Lon: 18.942091

In 1706 the first farming licenses in the area were granted to J.S. Botma and B.P. Blom. Today, wheat, table grapes, citrus and olives are farmed here.²

The farm would have been named after the river of the same name (a

group of streams that form a tributary of the nearby Berg River).³

In 2014's *Old Buildings of the Cape*, Fransen described the house at Vier-en-Twintig-Riviere as "a late homestead rectangular and two rooms deep, with a thatch roof and high, triangular gable with rounded top and late-straight-end gables."⁴

The Piketberg cadastral map of 1975 shows a cluster of buildings on the northern portion of the property called De Meul, possibly old mill buildings associated with the farm.⁵ (Fig. 6C).

END NOTES/CREDITS

HISTORICAL BACKGROUND

1. O'Donoghue 2014, pg 19
2. *Ibid*
3. Fransen 2014, pg 345
4. O'Donoghue 2014, pg 131 (primary source: Smidt 2013, no page reference supplied)
5. Fransen 2014, pg 345
6. Fransen 2014, pg 345
7. Fransen 2014, pg 345
8. Western Cape Government, Provincial Heritage Status...
9. O'Donoghue 2014, pg 19

BUILDINGS OF INTEREST (CENTRAL TOWN)

1. Fransen 2014, pg 346
2. *Ibid*, pg 346
3. *Ibid*, pg 346
4. *Ibid*, pg 346
5. Fransen 1980, pg 256

DE LEEUWENKLIP

1. Fransen 2014, pg 345; see also 27/12/1762, OSF 3-15, Deeds Office, Cape Town
2. Fransen 2014, pg 345
3. *Ibid*, pg 345
4. Barker 2009, pg 401
5. *Ibid*, pg 401
6. *Ibid*, pg 401
7. *Ibid*, pg 396
8. Fransen 2014, pg 345
9. *Ibid*, pg 345
10. *Ibid*, pg 345
11. *Ibid*, pg 346
12. *Ibid*, , pg 346

OUTLYING FARMS

1. SG. Diag. 3619/1932 (Fig.5A, pg 12)
2. Fransen 2014, pg 346
3. SG. Diag. 3619/1932 (Fig.5A, pg 12)
4. *Ibid*

5. *Ibid*

6. National Gazettes, No. 40480 of 9 Dec 2016
7. *Ibid*
8. Donaldson's Cape Directory, 1927, pg 1 641
9. SG Diag. Nr. 847/1875
10. *Ibid*
11. SG. Diag. 3619/1932 (Fig.5A, pg 12)
12. Donaldson's Cape Directory, 1927, pg 1 641
13. SG Diag. Nr. 1014/1914

MORE FARMS NEAR SARON (FEATURED IN FRANSEN)

1. Fransen 2014, pg 346
2. Wikipedia
3. Ninham Shand et al 2009, pg 3
4. Fransen 2014, pg 346
5. Porterville cadastral map, 1981

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