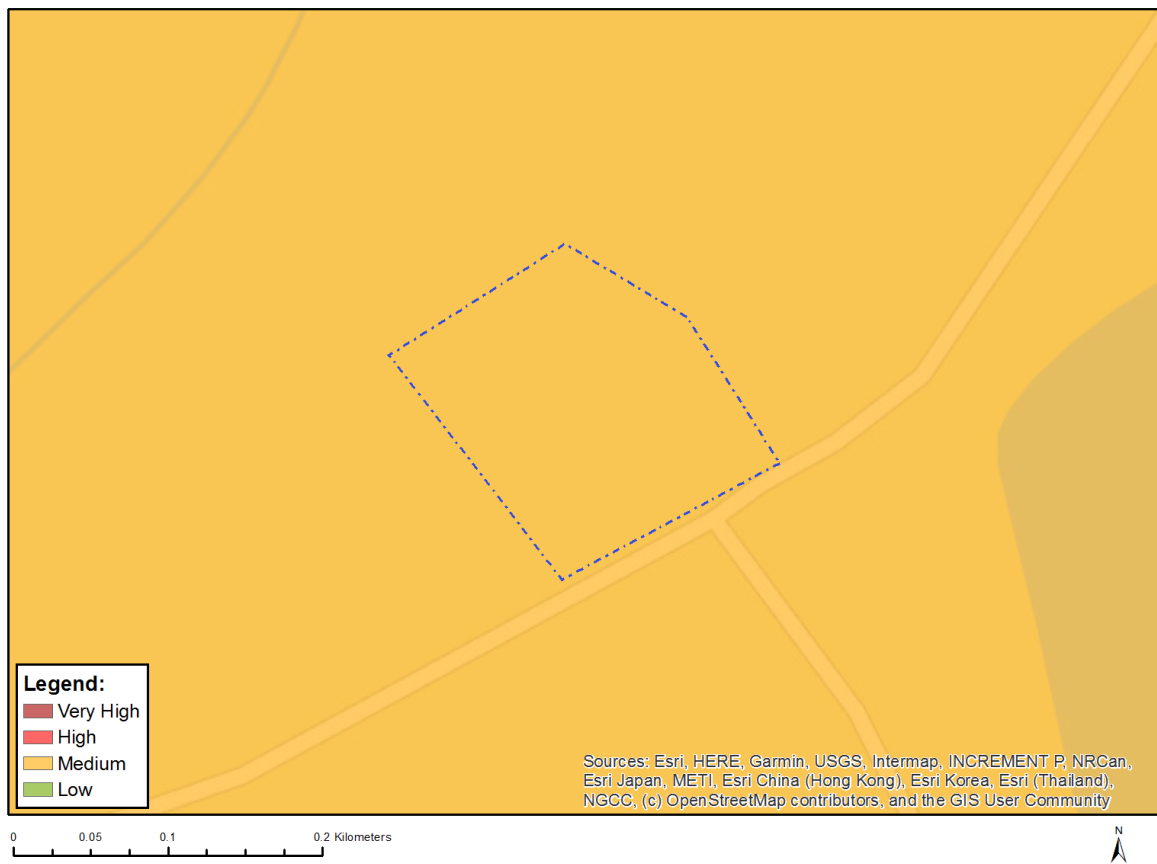


## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 15 and 35 km from a civil aviation radar
Medium	Between 8 and 15 km of other civil aviation aerodrome

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

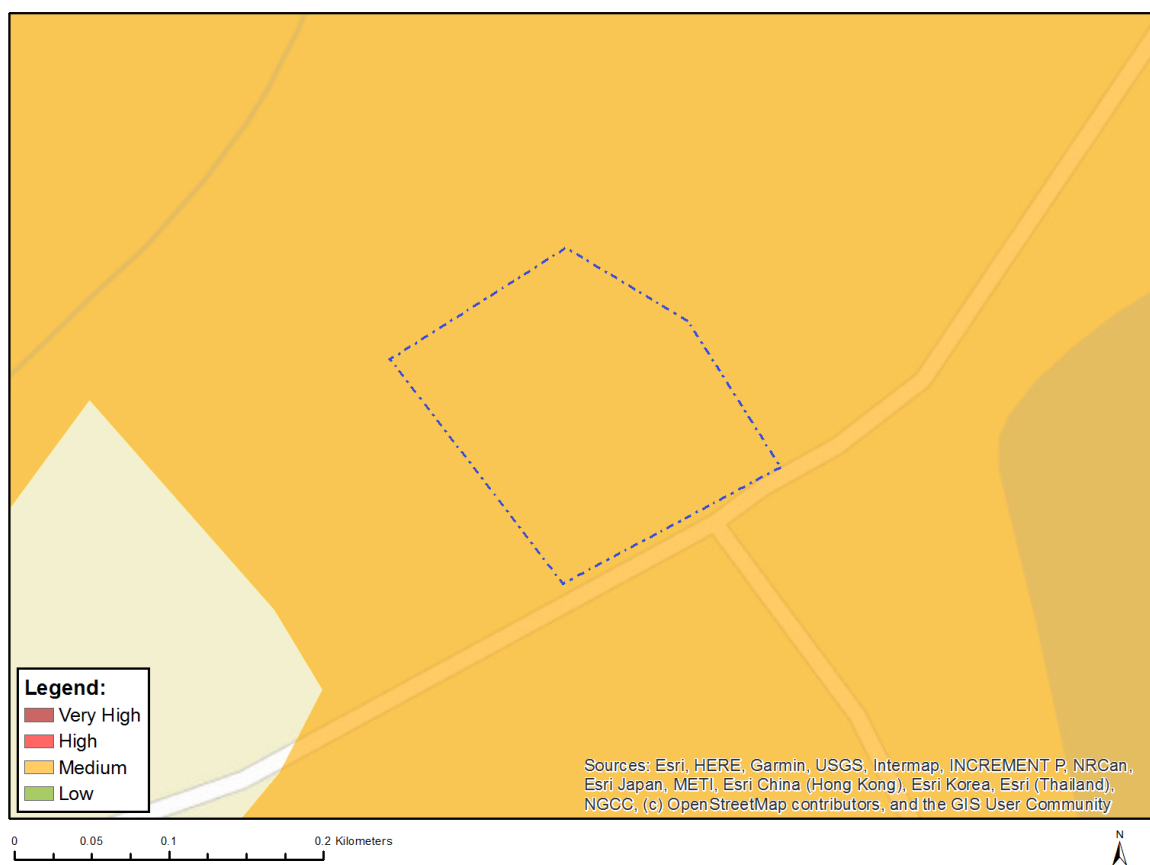


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

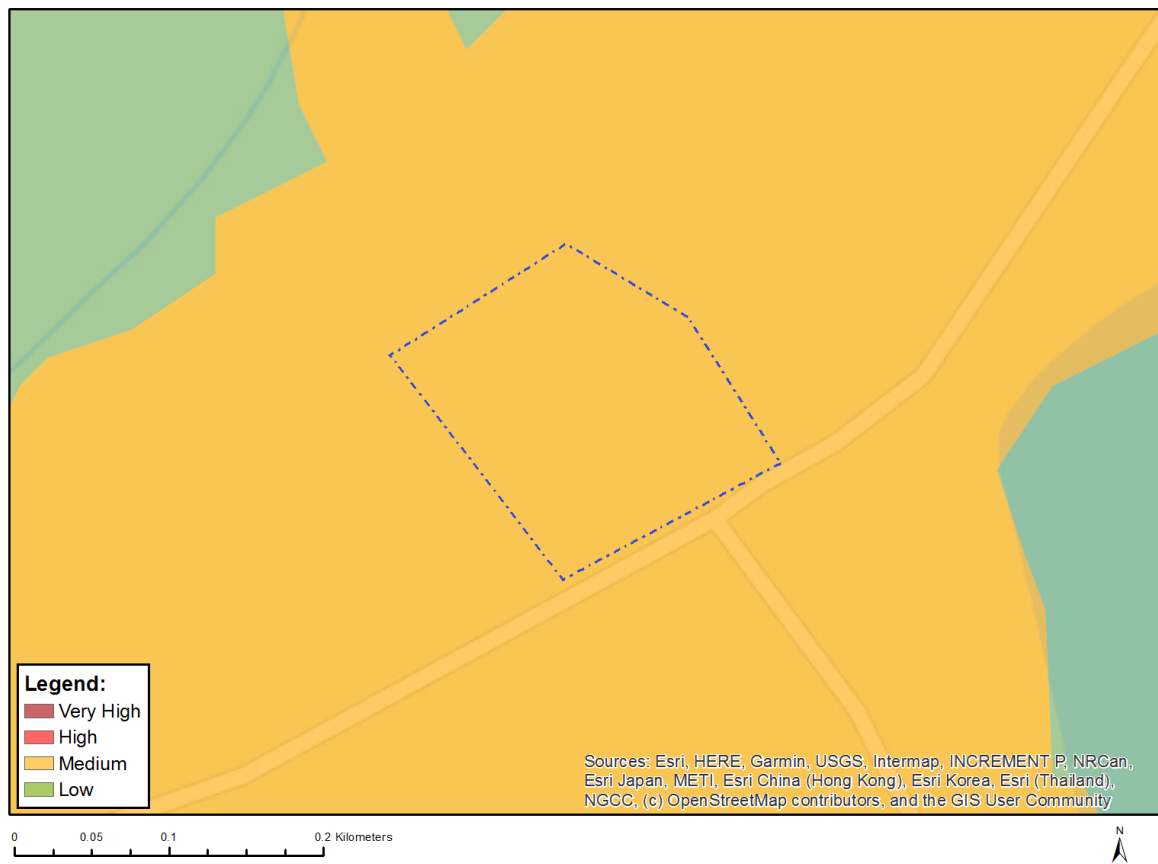


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Lampranthus aureus
Medium	Lampranthus dilutus
Medium	Lampranthus filicaulis
Medium	Lampranthus leptaleon
Medium	Lampranthus peacockiae
Medium	Lampranthus scaber
Medium	Lampranthus sociorum
Medium	Lampranthus spiniformis
Medium	Antimima aristulata
Medium	Erepsia patula
Medium	Erepsia ramosa
Medium	Ruschia diversifolia
Medium	Ruschia schollii



Medium	<i>Drosanthemum hispidifolium</i>
Medium	<i>Xiphiophora lanceolata</i>
Medium	<i>Psoralea fascicularis</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Aspalathus aculeata</i>
Medium	<i>Aspalathus araneosa</i>
Medium	<i>Aspalathus attenuata</i>
Medium	<i>Aspalathus globosa</i>
Medium	<i>Aspalathus macrantha</i>
Medium	<i>Aspalathus muraltioides</i>
Medium	<i>Otholobium rotundifolium</i>
Medium	<i>Rafnia lancea</i>
Medium	<i>Lebeckia plukenetiana</i>
Medium	<i>Podalyria argentea</i>
Medium	<i>Podalyria sericea</i>
Medium	<i>Leucadendron argenteum</i>
Medium	<i>Leucadendron corymbosum</i>
Medium	<i>Leucadendron daphnoides</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucospermum grandiflorum</i>
Medium	<i>Leucospermum gueinzii</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>canaliculatum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Leucospermum lineare</i>
Medium	<i>Protea burchellii</i>
Medium	<i>Protea laticolor</i>
Medium	<i>Protea scorzonifolia</i>
Medium	<i>Diastella buekii</i>
Medium	<i>Serruria kraussii</i>
Medium	<i>Serruria pinnata</i>
Medium	<i>Serruria gracilis</i>
Medium	<i>Merciera tetraloba</i>
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Anthospermum ericifolium</i>
Medium	<i>Lobostemon capitatus</i>
Medium	<i>Lobostemon regulariflorus</i>
Medium	<i>Echiostachys incanus</i>
Medium	<i>Aristea lugens</i>
Medium	<i>Tritoniopsis elongata</i>
Medium	<i>Hesperantha spicata</i> subsp. <i>spicata</i>
Medium	Sensitive species 631
Medium	Sensitive species 533
Medium	Sensitive species 1134
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Geissorhiza humilis</i>
Medium	<i>Geissorhiza erosa</i>
Medium	<i>Sparaxis grandiflora</i> subsp. <i>grandiflora</i>
Medium	<i>Ixia erubescens</i>
Medium	<i>Ixia rouxii</i>
Medium	<i>Ixia sarmentosa</i>
Medium	Sensitive species 560
Medium	Sensitive species 1253
Medium	Sensitive species 1
Medium	Sensitive species 830
Medium	Sensitive species 112
Medium	Sensitive species 1140
Medium	Sensitive species 298
Medium	Sensitive species 807
Medium	Sensitive species 452
Medium	Sensitive species 567

Medium	Sensitive species 863
Medium	<i>Pauridia alba</i>
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Oxalis strigosa</i>
Medium	<i>Erica filiformis</i> var. <i>filiformis</i>
Medium	<i>Erica sacciflora</i>
Medium	<i>Erica abietina</i> subsp. <i>perfoliosa</i>
Medium	<i>Hermannia rugosa</i>
Medium	Sensitive species 769
Medium	Sensitive species 222
Medium	Sensitive species 444
Medium	Sensitive species 259
Medium	Sensitive species 478
Medium	Sensitive species 756
Medium	<i>Adenogramma rigida</i>
Medium	<i>Wachendorfia brachyandra</i>
Medium	<i>Hessea cinnamomea</i>
Medium	Sensitive species 847
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 133
Medium	<i>Trianoptiles solitaria</i>
Medium	<i>Cannomois arenicola</i>
Medium	<i>Hypodiscus rugosus</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio papillosus</i>
Medium	<i>Restio pratensis</i>
Medium	Sensitive species 985
Medium	Sensitive species 120
Medium	Sensitive species 384
Medium	Sensitive species 682
Medium	<i>Lachnaea uniflora</i>
Medium	<i>Metalasia capitata</i>
Medium	<i>Senecio verbascifolius</i>
Medium	<i>Athanasia capitata</i>
Medium	<i>Arctotis angustifolia</i>
Medium	Sensitive species 1042
Medium	<i>Agathosma propinqua</i>
Medium	<i>Cliffortia ericifolia</i>
Medium	<i>Cliffortia marginata</i>
Medium	<i>Cliffortia phillipsii</i>
Medium	<i>Muraltia decipiens</i>
Medium	<i>Muraltia macropetala</i>
Medium	Sensitive species 811
Medium	Sensitive species 262
Medium	Sensitive species 616
Medium	<i>Wurmbea inusta</i>
Medium	<i>Phylica dioica</i>
Medium	<i>Phylica strigulosa</i>
Medium	<i>Phylica thunbergiana</i>
Medium	<i>Orthochilus litoralis</i>
Medium	<i>Codonrhiza azurea</i>
Medium	<i>Skiatophytum skiatophytoides</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Lampranthus glaucus</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Psoralea alata</i>
Medium	<i>Aspalathus lebeckioides</i>
Medium	<i>Aspalathus recurva</i>
Medium	<i>Ophioglossum bergianum</i>
Medium	Sensitive species 593

Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	<i>Elegia squamosa</i>
Medium	<i>Restio paludosus</i>
Medium	<i>Restio rigoratus</i>
Medium	<i>Lachnaea capitata</i>
Medium	<i>Lachnaea grandiflora</i>
Medium	<i>Cotula pusilla</i>
Medium	Sensitive species 1225

## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Ecological support area 2
Very High	Vulnerable ecosystem
Very High	Strategic Water Source Areas

## **APPENDIX F**

### Notice of Intent to Development (NID)

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## **APPENDIX F (i)**

Heritage Western Cape comment on NID for New Retreat Site

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**Our Ref:** HM/ CAPE WINELANDS/ STELLENBOSCH/ FARM 1674/3  
**Case No.:** 20032005SB0331E  
**Enquiries:** Stephanie Barnardt  
**E-mail:** [stephanie.barnardt@westerncape.gov.za](mailto:stephanie.barnardt@westerncape.gov.za)  
**Tel:** 021 483 5959  
**Cell:** 076 481 8392 (during national lockdown)  
**Date:** 14 April 2020

Boschendal (Pty) Ltd  
Boschendal Farm  
Pniel Main Road (R310)  
Pniel  
7680

[stephen@boschendal.co.za](mailto:stephen@boschendal.co.za) , [mike@archrsa.com](mailto:mike@archrsa.com) , [katie@archrsa.com](mailto:katie@archrsa.com)



**RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED**  
**In terms of Section 38(2) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape**  
**Provincial Gazette 6061, Notice 298 of 2003**

**NOTIFICATION OF INTENT TO DEVELOP: PROPOSED NEW RETREAT, PORTION 3 OF FARM BOSCHENDAL 1674, SUBMITTED IN TERMS OF SECTION 38(2) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)**

**CASE NUMBER:** 20032005SB0331E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 4 April 2020. This matter was discussed at the Heritage Officers meeting held on 8 April 2020.

You are hereby notified that, since there is reason to believe that the proposed new Retreat, Portion 3 of Farm Boschendal 1674 will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following:

- Impacts to archaeological heritage resources
- Visual impacts study of the proposed development
- Social study of the proposed development
- Landscape study of the proposed development

The required HIA must have an integrated set of recommendations.

The comments of relevant registered conservation bodies and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.

HWC reserves the right to request additional information as required.

Applicants are strongly advised to review and adhere to the time limits contained the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link <http://www.hwc.org.za/node/293>

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

Yours faithfully

.....  
Dr. Mxolisi Dlamuka  
**Chief Executive Officer**

[www.westerncape.gov.za/cas](http://www.westerncape.gov.za/cas)

**Street Address:** Protea Assurance Building, Green Market Square, Cape Town, 8000 • **Postal Address:** P.O. Box 1665, Cape Town, 8000  
• **Tel:** +27 (0)21 483 5959 • **E-mail:** [ceoheritage@westerncape.gov.za](mailto:ceoheritage@westerncape.gov.za)

**Straatadres:** Protea Assuransie-gebou, Groentemarkplein, Kaapstad, 8000 • **Posadres:** Posbus 1665, Kaapstad, 8000  
• **Tel:** +27 (0)21 483 5959 • **E-pos:** [ceoheritage@westerncape.gov.za](mailto:ceoheritage@westerncape.gov.za)

**Idilesi yendawo:** kumgangatho 3, kwisakhiwo iprotea Assurance, Greenmarket Square, eKapa, 8000 • **Idilesi yeposi:** Inombolo yebhokisi yeposi 1665, eKapa, 8000 • **Iinombolo zomnxeba:** +27 (0)21 483 5959 • **Idilesi ye-imeyile:** [ceoheritage@westerncape.gov.za](mailto:ceoheritage@westerncape.gov.za)

## **APPENDIX F (ii)**

NID for permanent pipeline to Lanquedoc

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## APPLICATION FORM NOTIFICATION OF INTENT TO DEVELOP (NID) SECTION 38 (1) AND SECTION 38 (8)

**Heritage Western Cape Reference No:**

*To be completed by the applicant*

21032905

**Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA)**

***As per Section 38 (1) (e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.***

*This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to HWC*

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience. All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

The following information is to be included upon submission to HWC:

1. Proof of payment with correct reference number
2. Completed and signed application form – the application form must be completed in full in order to be considered
3. Power of Attorney
4. Locality Map
5. Images of the site and its context
6. Additional information pertaining to the heritage of the site

**Application and associated documentation to be emailed to [ceoheritage@westerncape.gov.za](mailto:ceoheritage@westerncape.gov.za)**

### A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

Department of Environmental Affairs Development Planning (Western Cape); Department of Mineral Resources (National); Department of Environmental Affairs (National);  
Reference Number (if applicable):

**Please tick the applicable section:**



This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority: DEAD&P



This development will not require a NEMA application.



**B. BASIC DETAILS****PROPERTY DETAILS:**

Name of property: Rhonen and Lanquedoc, and Langedok	
Street address or location (eg: off R44): Lanquedoc Main Road, Lanquedoc	
Erf or farm number/s: Erf 1 Lanquedoc, consolidation of 2/1176 (Rhonen and Lanquedoc) and 8/1173 (Langedok)	Coordinates: S 33°53'20.47" E 18°58'22.92" (A logical centre point. Format based on WGS84.)
Town or District: Groot Drakenstein	Municipality: Stellenbosch
Extent of property: 42.48 Ha	Current use: Transport
Predominant land use/s of surrounding properties: Residential, agriculture, tourism	

**REGISTERED OWNER OF PROPERTY:**

Name and Surname: Dwars River Valley Community Development Trust		
Address De Borden Lands, Lanquedoc, Western Cape, 7681		
Telephone c/o 021 4230328	Cell c/o 072 7967754	E-mail c/o katie@archrsa.com
<b>APPLICANT/ AUTHORISED AGENT:</b>		
Name and Surname: Dwars River Valley Community Trust		
Address: De Borden Lands, Lanquedoc, Western Cape, 7681		
Telephone c/o 021 4230328	Cell c/o 072 7967754	E-mail c/o katie@archrsa.com
<p>By the submission of this form and all material submitted applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.</p>		

Signature of Owner: \_\_\_\_\_ Date: \_\_\_\_\_

Should the owner not be able to sign, the applicants/ agents must attach copy of power of attorney to this form.

Signature of Applicant/ Authorised Agent: \_\_\_\_\_ Date: \_\_\_\_\_

Applicants/ agents must attach copy of power of attorney to this form.

**C. DEVELOPMENT DETAILS:**

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.

<input type="checkbox"/>	S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.	S38(1)(c) Any development or activity that will change the character of a site -  <input type="checkbox"/> (i) exceeding 5 000m <sup>2</sup> in extent; <input type="checkbox"/> (ii) involving three or more existing erven or subdivisions thereof; <input type="checkbox"/> (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.
<input type="checkbox"/>	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	
<input type="checkbox"/>	S38(1)(d) Rezoning of a site exceeding 10 000m <sup>2</sup> in extent.	
<input checked="" type="checkbox"/>	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details:	If you have checked any of the three boxes above, describe how the proposed development will change the character of the site:

If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:

Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: DEAD&P

Present phase at which the process with that authority stands: This application is being incorporated into the BAR for the New Retreat development, and is currently at pre-PPP phase.

Provide a full description of the nature and extent of the proposed development or activity including its potential impacts:

The Stellenbosch Municipality has granted permission for the proposed New Retreat development on Portion 11 of Farm 1674, Boschendal, to connect to the municipal water supply via the existing Lanquedoc water main.

This connection requires 317m of pipeline aligned within the road reserve of the existing Lanquedoc Main Road, and a further 522m of pipeline to be laid within centre of the oncoming lane of the Boschendal Farm Road, Ou Wapad. The pipeline will be 160mm uPVC pipe, and the alignment will bridge over an existing culvert along the Lanquedoc alignment, and fix to the bridge over a watercourse before entering Boschendal.

Estimated value cost of the project in South African Rands:

R \_\_\_\_\_

#### D. ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

**Provide a short history of the site and its environs** (Include sources where available):

Boschendal Farm was granted in 1688, and has been farmed together with the adjacent farm, Rhodes for over 350 years. The two farms comprise several highly significant farm werfs and associated buildings that include illustrate the change and development of the farms through that time. Portion 11 of 1674 is largely devoid of intrinsically significant structures, but contains elements that illustrate labour practices in the C20th, in cottages.

Lanquedoc is a settlement commissioned by Rhodes, and designed by Sir Herbert Baker following the collapse of the wine industry at the end of the C19th. It was intended to attract and keep workers in the area who were not farmers on a large scale. Modern R Lanquedoc comprises the historic workers' cottage have been built to accommodate workers who were moved off Boschendal in the early 2000s.

**Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:**

<input checked="" type="checkbox"/>	<p><b>Places, buildings, structures and equipment of cultural significance</b></p> <p>Description of resource: The pipeline will be laid in the road reserve of the Lanquedoc Main Road, and will pass through the graded landscape of Boschendal. The Stellenbosch Municipal Heritage Inventory has graded the Boschendal landscape in this area as a Grade IIIB landscape, while the landscape surrounding Lanquedoc carries a IIIA grading.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input checked="" type="checkbox"/>	<p><b>Places to which oral traditions are attached or which are associated with living heritage</b></p> <p>Description of resource: The Ou Wapad holds intangible significance as a traditional, historic route through the landscape, connecting the disparate settlements of Thembaletu, Lanquedoc, Pniel and</p>

	<p>Kylemore</p> <p>Description of impact on heritage resource: No impacts will occur to the intangible significance of the wapad as its location and alignment remains unchanged.</p>
<input checked="" type="checkbox"/>	<p><b>Historical settlements and townscapes</b></p> <p>Description of resource: The pipeline will be laid in the road reserve of the main road leading to the historic settlement of Lanquedoc.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input checked="" type="checkbox"/>	<p><b>Landscapes and natural features of cultural significance</b></p> <p>Description of resource: This portion of Boschendal carries a IIIB grading, while the landscape surrounding Lanquedoc carries a IIIA grading.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input type="checkbox"/>	<p><b>Geological resources of scientific or cultural importance</b></p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p><b>Archaeological resources</b> (Including archaeological sites and material, rock art, battlefields &amp; wrecks):</p> <p>Description of resource: Stone artefacts are fairly commonly found in the area, predominantly in the form of ex situ Early Stone Age tools. Excavations at Solms Delta farm to the north of Boschendal yielded a highly significant Later Stone Age open site on the banks of the Dwars River.</p> <p>Description of impact on heritage resource: It is possible that sites similar to that identified at Delta may occur elsewhere in the Dwars River Valley. The excavation of the trench to lay the pipe could encounter similar material during the course of excavation.</p>
<input type="checkbox"/>	<p><b>Palaeontological resources</b> (ie: fossils):</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p><b>Graves and burial grounds</b> (eg: ancestral graves, graves of victims of conflict, historical graves &amp; cemeteries):</p> <p>Description of Resource:</p> <p>Description of Impact on Heritage Resource:</p>
<input type="checkbox"/>	<p><b>Other human remains:</b></p> <p>Description of resource:</p>

	Description of impact on heritage resource:
<input checked="" type="checkbox"/>	<p><b>Sites of significance relating to the history of slavery in South Africa:</b></p> <p>Description of resource: Slave history is an inescapable component of Boschendal history, and with slave labour having been used on the farm for more than a century, any development on the land should be cognisant of this past. Portion 11 of 1674 is unlikely to hold much significant evidence for past slave activities as the area was always marginal to Boschendal, having been used for pasture until fairly recently; as such no slave dwellings or similar structures are located there, and any cultural material would be ephemeral at best.</p> <p>Description of impact on heritage resource: No impacts are anticipated due to the marginal, under utilised nature of this portion of Boschendal, and the limited disturbance likely to arise from the proposed activities.</p>
<input type="checkbox"/>	<p><b>Other heritage resources:</b></p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<p><b>Describe elements in the environs of the site that could be deemed to be heritage resources:</b> The cultural landscape is of high significance, although less so in this portion of Boschendal than others. The area does fall within the Grade I Cape Winelands Cultural Landscape which has been put forward for inclusion on the UNESCO list of World Heritage Sites</p> <p><b>Description of impacts on heritage resources in the environs of the site:</b> No impacts are anticipated to the CWCL Grade I landscape.</p>	

**Summary of anticipated impacts on heritage resources:**

The proposed development will entail the excavation of a trench in the Lancquedoc Main Road road reserve, and within the alignment of the Boschendal Farm Road, Ou Wapad. Once the pipe is laid, these excavations will be closed up again and made good.

As such, with the exception of possible, accidental uncovering of in situ archaeological material during pipeline excavation, no impacts are anticipated to heritage resources.

The excavations will occur within disturbed contexts, i.e. road alignments, and any significant material is expected to be below ground, if present at all. For these reasons, prior archaeological survey is not likely to yield any results. Periodic monitoring of the excavation should be undertaken to inspect for any in situ archaeological material, however.

**E. ILLUSTRATIVE MATERIAL:**

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD/ USB in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

## F. RECOMMENDATION

In your opinion do you believe that a heritage impact assessment is required? ☐ Yes ☒ No

Monitoring by an archaeologist should be conducted during trenching for the pipeline

Recommendation made by:

Name Katie Smuts

Capacity Archaeologist and Heritage Practitioner

**PLEASE NOTE:** No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.

## G. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required, please complete this section of the form.

### DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA

In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:

<input type="checkbox"/>	Heritage resource-related guidelines and policies.
<input type="checkbox"/>	Local authority planning and other laws and policies.
<input type="checkbox"/>	Details of parties, communities, etc. to be consulted.
<input type="checkbox"/>	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details:
<input type="checkbox"/>	Other. Provide details:

**PLEASE NOTE:** Any further studies which Heritage Western Cape requires should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto. Please refer to the *Guidelines for Heritage Impact Assessments required in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)*



26 October 2019

3rd Fl. Protea Assurance Building  
Green Market Square,  
Cape Town  
8000

**ATTENTION:** Ms. Waseefa Dhansay

**RE:** Bertha New Retreat, Pipeline: Erf 1, Lanquedoc, 11/1674 and 1730  
Boschendal, Ref 21032905

Dear Ms Dhansay,

The Bertha Retreat development on 11/1674 Boschendal is the subject of an HIA that has been seen at IACom and APM for interim comment, but has not yet been submitted for final comment.

Subsequent to the compilation of the HIA, permission was granted by Stellenbosch Municipality to connect the proposed new development to the existing water supply at Lanquedoc. This connection is to be via a new pipeline laid within the road reserves of the farm road (Old Wapad) on 11/1674 and 1730 Boschendal, and of Lanquedoc Main Road across Erf 1.

For the purposes of the NEMA process, the application is being bundled with the development, but it was determined that this could be handled as a separate NID application in terms of the relevant heritage processes. A NID and accompanying report were duly compiled in terms of Section 38(8) of the NHRA. The submission of the NID has, however, been delayed due to difficulties initially with identifying, and then with obtaining signatures from the landowners of Erf 1. Despite the relevant development area falling within the road reserve, the land is in the ownership of the Dwars River Valley Community Development Trust (DRVCDT), and efforts since August 2021 have failed to secure signature, although this is understood to arise from

75 Morningside Road, Ndabeni 7405. PO Box 16390 Vlaeberg 8018

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Co. Reg. No. CC CK 1990/006711/23

**Mike Scurr** | Director M Phil (CBE) (UCT) BArch (UCT) BAS (UCT) Pr.Arch MIArch CIA  
**Shaun Adendorff** | Director PhD IndPsych (UWC) MBA (UKZN) PgDipBusMgt (UND) BArch (UCT) BAS (UCT) MIArch CIA  
**John Rennie** | Consultant BArch (UCT) Dip Conservation Studies (York) Pr.Arch MIArch CIA

administrative difficulties within the Trust, rather than opposition to the proposed pipeline.

As heritage input is a necessary component of the NEMA process, the failure to procure landowner permission to submit the NID is currently jeopardizing the environmental process not only of the pipeline but of the wider New Retreat development.

Given the NID recommends that no further heritage studies are required in terms of the pipeline development, we are of the opinion that the signature of the owner is not necessary in so far as the proposed development does not trigger the need for a HIA and HWC is a commenting authority in this process. Should the HWC Response to the NID differ from our submission, and find that heritage studies are required, landowner permission would be sought prior to the submission of any HIA.

Kind regards,

A handwritten signature in blue ink, appearing to read 'Mike Scurr', with a stylized flourish at the end.

Mike Scurr

Rennie Scurr Adendorff Architects CC.



**APPLICATION FORM  
NOTIFICATION OF INTENT TO DEVELOP (NID)  
SECTION 38 (1) AND SECTION 38 (8)**

**Heritage Western Cape Reference No:**

To be completed by the applicant

21032905

**Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA)**

*As per Section 38 (1) (e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.*

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to HWC

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience. All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

The following information is to be included upon submission to HWC:

1. Proof of payment with correct reference number
2. Completed and signed application form – the application form must be completed in full in order to be considered
3. Power of Attorney
4. Locality Map
5. Images of the site and its context
6. Additional information pertaining to the heritage of the site

**Application and associated documentation to be emailed to [ceoheritage@westerncape.gov.za](mailto:ceoheritage@westerncape.gov.za)**

**A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)**

Department of Environmental Affairs Development Planning (Western Cape); Department of Mineral Resources (National); Department of Environmental Affairs (National);  
Reference Number (if applicable):

**Please tick the applicable section:**



This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority: DEAD&P



This development will not require a NEMA application.

**B. BASIC DETAILS****PROPERTY DETAILS:**

Name of property: Boschendal Farm	
Street address or location (eg: off R44): Off R310, Boschendal	
Erf or farm number/s: 11/1674; 1730	Coordinates: S 33°53'31.50" E 18°58'09.50" (A logical centre point. Format based on WGS84.)
Town or District: Groot Drakenstein	Municipality: Stellenbosch
Extent of property: 273.18 Ha	Current use: Agriculture
Predominant land use/s of surrounding properties: Residential, agriculture, tourism	

**REGISTERED OWNER OF PROPERTY:**

Name and Surname: Boschendal (Pty) Ltd		
Address Boschendal Farm, Pniel Main Road (R310), Pniel, 7680		
Telephone c/o 021 4230328	Cell c/o 072 7967754	E-mail c/o katie@archrsa.com
<b>APPLICANT/ AUTHORISED AGENT:</b>		
Name and Surname: Boschendal (Pty) Ltd		
Address: Boschendal Farm, Pniel Main Road (R310), Pniel, 7680		
Telephone c/o 021 4230328	Cell c/o 072 7967754	E-mail c/o katie@archrsa.com

By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.

Signature of Owner:

Date: 27 August 2021

Should the owner not be able to sign, the applicants/ agents must attach copy of power of attorney to this form.

Signature of Applicant/ Authorised Agent:

Date: 27 August 2021

Applicants/ agents must attach copy of power of attorney to this form.

**C. DEVELOPMENT DETAILS:**

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.

<input type="checkbox"/>	S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.	S38(1)(c) Any development or activity that will change the character of a site -
<input type="checkbox"/>	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	
<input type="checkbox"/>	S38(1)(d) Rezoning of a site exceeding 10 000m <sup>2</sup> in extent.	
<input checked="" type="checkbox"/>	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details:	<input type="checkbox"/> (i) exceeding 5 000m <sup>2</sup> in extent; <input type="checkbox"/> (ii) involving three or more existing erven or subdivisions thereof; <input type="checkbox"/> (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years. If you have checked any of the three boxes above, describe how the proposed development will change the character of the site:

If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:

Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: DEAD&P

Present phase at which the process with that authority stands: This application is being incorporated into the BAR for the New Retreat development, and is currently at pre-PPP phase.

Provide a full description of the nature and extent of the proposed development or activity including its potential impacts:

The Stellenbosch Municipality has granted permission for the proposed New Retreat development on Portion 11 of Farm 1674, Boschendal, to connect to the municipal water supply via the existing Lanquedoc water main.

This connection requires 317m of pipeline aligned within the road reserve of the existing Lanquedoc Main Road, and a further 522m of pipeline to be laid within centre of the oncoming lane of the Boschendal Farm Road, Ou Wapad. The pipeline will be 160mm uPVC pipe, and the alignment will bridge over an existing culvert along the Lanquedoc alignment, and fix to the bridge over a watercourse before entering Boschendal.

#### D. ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

**Provide a short history of the site and its environs** (Include sources where available):

Boschendal Farm was granted in 1688, and has been farmed together with the adjacent farm, Rhodes for over 350 years. The two farms comprise several highly significant farm werfs and associated buildings that include illustrate the change and development of the farms through that time. Portion 11 of 1674 is largely devoid of intrinsically significant structures, but contains elements that illustrate labour practices in the C20th, including Thembaletu hostel and 1980s labourers' cottages.

Lanquedoc is a settlement commissioned by Rhodes, and designed by Sir Herbert Baker following the collapse of the wine industry at the end of the C19th. It was intended to attract and keep workers in the area who were now needed to farm Rhodes' fruit farms on a large scale. Modern Lanquedoc comprises the historic workers' cottages as well as new lowcost and RDP houses that have been built to accommodate workers who were moved off Boschendal in the early 2000s.

**Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:**

<input checked="" type="checkbox"/>	<p><b>Places, buildings, structures and equipment of cultural significance</b></p> <p>Description of resource: The pipeline will be laid in the road reserve of the Lanquedoc Main Road, and will pass through the graded landscape of Boschendal. The Stellenbosch Municipal Heritage Inventory has graded the Boschendal landscape in this area as a Grade IIIB landscape, while the landscape surrounding Lanquedoc carries a IIIA grading.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input checked="" type="checkbox"/>	<p><b>Places to which oral traditions are attached or which are associated with living heritage</b></p> <p>Description of resource: The Ou Wapad holds intangible significance as a traditional, historic route through the landscape, connecting the disparate settlements of Thembaletu, Lanquedoc, Pniel and</p>

	<p>Kylemore</p> <p>Description of impact on heritage resource: No impacts will occur to the intangible significance of the wapaad as its location and alignment remains unchanged.</p>
<input checked="" type="checkbox"/>	<p><b>Historical settlements and townscapes</b></p> <p>Description of resource: The pipeline will be laid in the road reserve of the main road leading to the historic settlement of Lanquedoc.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input checked="" type="checkbox"/>	<p><b>Landscapes and natural features of cultural significance</b></p> <p>Description of resource: This portion of Boschendal carries a IIIB grading, while the landscape surrounding Lanquedoc carries a IIIA grading.</p> <p>Description of impact on heritage resource: No impacts will occur to places of cultural significance as the pipeline will be below ground</p>
<input type="checkbox"/>	<p><b>Geological resources of scientific or cultural importance</b></p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p><b>Archaeological resources</b> (Including archaeological sites and material, rock art, battlefields &amp; wrecks):</p> <p>Description of resource: Stone artefacts are fairly commonly found in the area, predominantly in the form of ex situ Early Stone Age tools. Excavations at Solms Delta farm to the north of Boschendal yielded a highly significant Later Stone Age open site on the banks of the Dwars River.</p> <p>Description of impact on heritage resource: It is possible that sites similar to that identified at Delta may occur elsewhere in the Dwars River Valley. The excavation of the trench to lay the pipe could encounter similar material during the course of excavation.</p>
<input type="checkbox"/>	<p><b>Palaeontological resources</b> (ie: fossils):</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p><b>Graves and burial grounds</b> (eg: ancestral graves, graves of victims of conflict, historical graves &amp; cemeteries):</p> <p>Description of Resource:</p> <p>Description of Impact on Heritage Resource:</p>
<input type="checkbox"/>	<p><b>Other human remains:</b></p> <p>Description of resource:</p>

	Description of impact on heritage resource:
<input checked="" type="checkbox"/>	<p><b>Sites of significance relating to the history of slavery in South Africa:</b></p> <p>Description of resource: Slave history is an inescapable component of Boschendal history, and with slave labour having been used on the farm for more than a century, any development on the land should be cognisant of this past. Portion 11 of 1674 is unlikely to hold much significant evidence for past slave activities as the area was always marginal to Boschendal's farming activities, having been used for pasture until fairly recently; as such no slave dwellings or similar structures are located there, and any cultural material would be ephemeral at best.</p> <p>Description of impact on heritage resource: No impacts are anticipated due to the marginal, under utilised nature of this portion of Boschendal, and the limited disturbance likely to arise from the proposed activities.</p>
<input type="checkbox"/>	<p><b>Other heritage resources:</b></p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<p><b>Describe elements in the environs of the site that could be deemed to be heritage resources:</b> The cultural landscape is of high significance, although less so in this portion of Boschendal than others. The area does fall within the Grade I Cape Winelands Cultural Landscape which has been put forward for inclusion on the UNESCO list of World Heritage Sites</p> <p><b>Description of impacts on heritage resources in the environs of the site:</b> No impacts are anticipated to the CWCL Grade I landscape.</p>	

**Summary of anticipated impacts on heritage resources:**

The proposed development will entail the excavation of a trench in the Lancquedoc Main Road road reserve, and within the alignment of the Boschendal Farm Road, Ou Wapad. Once the pipe is laid, these excavations will be closed up again and made good.

As such, with the exception of possible, accidental uncovering of in situ archaeological material during pipeline excavation, no impacts are anticipated to heritage resources.

The excavations will occur within disturbed contexts, i.e. road alignments, and any significant material is expected to be below ground, if present at all. For these reasons, prior archaeological survey is not likely to yield any results. Periodic monitoring of the excavation should be undertaken to inspect for any in situ archaeological material, however.

**E. ILLUSTRATIVE MATERIAL:**

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD/ USB in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

## F. RECOMMENDATION

In your opinion do you believe that a heritage impact assessment is required? ☐ Yes ☒ No

Monitoring by an archaeologist should be conducted during trenching for the pipeline

Recommendation made by:

Name Katie Smuts

Capacity Archaeologist and Heritage Practitioner

**PLEASE NOTE:** No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.

## G. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required, please complete this section of the form.

### DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA

In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:

<input type="checkbox"/>	Heritage resource-related guidelines and policies.
<input type="checkbox"/>	Local authority planning and other laws and policies.
<input type="checkbox"/>	Details of parties, communities, etc. to be consulted.
<input type="checkbox"/>	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details:
<input type="checkbox"/>	Other. Provide details:

**PLEASE NOTE:** Any further studies which Heritage Western Cape requires should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.  
Please refer to the *Guidelines for Heritage Impact Assessments required in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)*

## **APPENDIX F (iii)**

Interim response from Heritage Western Cape on Heritage Impact  
Assessment

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**Our Ref:** HM/ CAPE WINELANDS / STELLENBOSCH/ FARM 11/1674  
**Case No.:** 20032005SB0331E  
**Enquiries:** Stephanie-Anne Barnardt  
**E-mail:** stephanie.barnardt@westerncape.gov.za  
**Tel:** 021 483 5959

Katie Smuts  
katie@archrsa.com



**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**

**HERITAGE IMPACT ASSESSMENT: PROPOSED RE-PURPOSE OF YORK FARM COTTAGES (BOSCHENDAL), R310, DWARS RIVER VALLEY, FARM 11\_1674, STELLENBOSCH, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)**

**CASE NUMBER: 20032005SB0331E**

The matter above has reference.

This matter was discussed at the Impact Assessment Committee (IACom) meeting held on 21 July 2021. It was noted that the matter was tabled at Archaeology, Palaeontology and Meteorites Committee (APM) meeting held on the 16 July 2021 whereby the Committee supports the HIA and its findings as well as the recommendations on page 18 of the AIA prepared by Rennie Scurr Adendorff as follows;

- The development team/site foreman should be advised of the type of materials that could occur on site;
- An appropriately experienced archaeologist should conduct a site visit, once during and again after any deep excavation activities on site, prior to backfilling or construction, to identify any evidence for in situ, subsurface LSA material;
- Should any significant, in situ material be encountered on site, work in that area must stop immediately, and HWC should be notified so that they can advise of the appropriate way forward; this may include further inspection and mitigation by an archaeologist;

Should any human burials, or potential burials be encountered, all work should cease in that area, and HWC should be notified immediately to determine the appropriate course of action.

**INTERIM COMMENT:**

The Committee provisionally supports the HIA and approach prepared by Rennie Scurr Adendorff and dated 22 June 2021 as well as APM comments on the AIA. HWC awaits submission of final HIA (inclusive of the public participation process) to comply with S38(3) of the NHRA.

HWC 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.

.....  
Michael Janse van Rensburg  
**Chief Executive Officer: Heritage Western Cape**



[www.westerncape.gov.za/cas](http://www.westerncape.gov.za/cas)

**Street Address:** Protea Assurance Building, Green Market Square, Cape Town, 8000 • **Postal Address:** P.O. Box 1665, Cape Town, 8000  
• **Tel:** +27 (0)21 483 5959 • **E-mail:** ceoheritage@westerncape.gov.za

**Straatadres:** Protea Assuransie-gebou, Groentemarkplein, Kaapstad, 8000 • **Posadres:** Posbus 1665, Kaapstad, 8000  
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**Idilesi yendawo:** kumgangatho 3, kwisakhiwo iprotea Assurance, Greenmarket Square, eKapa, 8000 • **Idilesi yeposi:** Inombolo yebhokisi yeposi 1665, eKapa, 8000 • **Iinombolo zomnxeba:** +27 (0)21 483 5959 • **Idilesi ye-imeyile:** ceoheritage@westerncape.gov.za

## **APPENDIX G**

Proof of application to the Department of Water and Sanitation

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## **APPENDIX G (i)**

New Retreat GA pre – application submission

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## New Retreat: Proof of Pre-application GA submission on e-wulaas

← → ↻ Not secure | dwa.gov.za/ewulaasprod/ExtMain.aspx

**Water User(s)**  
Boschendal (Pty) Ltd  
Pre-Application Enquiry - Agterdam Cottages- Refurbishment and Expansion  
Pre-Application Enquiry Submitted - Bertha Retreat - Redevelopment of cottages  
FE5 Tented Camp & FE16 Boardwalk

**Application Information** (mandatory fields is indicated with a \*)

\*Authorised Signatory for Application Submission: Ms Marielle Penwarden  
\*Primary Contact Person for Application: Ms Marielle Penwarden  
\*Type of Application: New Registration  
\*Application Name: Bertha Retreat - Redevelopment of cottages near a river and wetland (Max 100 characters - Example: Sandworks on Vaalriver in Parys)  
\*Why are you applying for a Water Use Application? Construction activities and a self-contained sewage package plant of 40m³  
\*What is the Main Activity that will take place for this Application? works within 100m of a river and 500m of a wetland, but the nuances of water use  
\*Primary Sector & Activity: Complete Sector & Activity Agriculture  
Warms Register Number (not relevant to new applications)  
\*Description of Activities in Relation to the Water Use Application (for what purpose)  
Redevelopment of existing, derelict workers cottages into accommodation, this includes a small sewage package plant (40m³) - within 100m of a river and within 500m of a wetland- discussions need to be held regarding the best options for use of the treated wastewater from the sewage package plant-some would be used for toilet flushing, but there would still be more left over- water would be treated to irrigation standards and so could be used for irrigation

**Location of Main Activity**  
\*Step 1 - Select the Nearest Town where the Main Activity is taking place: Kylemore - 18.9514, -33.9156  
\*Step 2 - Select the Nearest Point where the Main Activity is taking place  
Latitude: -33.888048316589256 Longitude: 18.974499184035867  
QUAT: G10C WMA: Berg Authorisation Office: Berg-Olifants - Belville  
Do you have an Authorisation from the Department in Respect of this Application? Yes No  
How many People will Benefit from the Acquisition of the WU Licence? Complete Equity & Gender Status: 700  
\*Indicate the following in relation to the primary Water Use on this Application  
\*Is the Water Use currently in Operation? Yes No  
\*Total Volume (Cubic Meters/Year): 0 \*Total Discharge Volume (Cubic Meters/Year): 4416 \*Distance to the Nearest Watersource (km): 0.013  
\*I hereby Confirm that the Information provided is True and Accurate

07:29 2020/09/07

← → ↻ Not secure | dwa.gov.za/ewulaasprod/ExtMain.aspx

**Request Client Link, please supply the following information to**

**Client and Application Information**  
Province of Client's Main Activities / Operations: Western Cape  
Client Type: Commercial  
Type of Application: New  
Proposed Name for Application: Bertha Retreat - Redevelopment of cottages near a river and wetland  
Summary of Water Uses (Give a list of the water use relevant to this client link): Development within 500m of a wetland and within 100m of a river, installation of a sewage package plant within 100m of a river, potential need for dewatering during construction  
Brief Summary of the Client's Activity: Redevelopment of existing, derelict workers cottages into accommodation - within 100m of a river and within 500m of a wetland  
Property Description: Portion 11 of Farm 1674, Paarl  
Registration number (if any):  
As appears on the Water Use Registration Certificate: Berg-Olifants - Belville  
DWA Regional Office: Berg-Olifants - Belville

**Consultant Contact Person**  
Consultancy Name: Chand Environmental  
Consultant Contact Person Name & Surname: Marielle Penwarden  
Consultant Contact Person Email: mariella@chand.co.za

www.dwa.gov.za says  
Request sent to the regional WUL Manager in Berg-Olifants - Belville, you will be notified via e-Mail upon successful assignment, your Reference number for this request is CT14306.

OK

16:26 2020/08/20

## **APPENDIX G (ii)**

Pre – application meetings \_ 2 December 2020, 16 February 2021

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13 May 2021

THE PROPOSED DEVELOPMENT OF A "NEW RETREAT" ON A PORT

CHAND REFERENCE NO: 03005

DEA&DP Pre-Application Reference Number: 16/3/3/6/7/1/B4/12/1086/20

DWS Reference: WU17609

**PRE-APPLICATION MEETING WITH THE DEPARTMENT OF WATER &  
SANITATION  
KEY NOTES\_FINAL**

**DATE:** 16 February 2021  
**VENUE:** MS Teams  
**TIME:** 11:00 – 12:30  
**FACILITATOR:** Ms. Marielle Penwarden

**1. Attendees**

FULL NAME	INITIAL	ORGANISATION
Warren Dreyer	WD	Department of Water and Sanitation
Rafieka Johaar	RJ	Department of Water and Sanitation
Shaddai Daniel	SD	Department of Water and Sanitation
Kate Snaddon	KS	Freshwater Consulting Group
William George	WG	Boschendal
Mike Hurworth	MH	MH&A Consulting
Donia Kamstra	DK	Profica
Marielle Penwarden	MP	Chand Environmental Consultants

**2. Agenda**

- Welcome and Introduction
- Site and Proposal
- Feedback/Discussion
- Close

**3. Discussion**

**3.1 Welcome and Introduction**

- a) MP welcomed attendees to the second pre-application meeting, which is being held as a follow-up to the first meeting to provide the Department of Water and Sanitation (DWS) with the flood-line information they had requested in the previous meeting of 2 December 2020.

**3.2 Site and Proposal**

- a) MP showed attendees photographs of the site (refer to Appendix A) and a video thereof.
- b) MP explained that the flood-line analysis had indicated that the whole site is within the 1:100 year flood-line, which is as a result of the dam overflow (refer to flood-line in Appendix B, as displayed during the meeting).

- c) MP noted that the proposed development has been updated to include flood management measures and stream rehabilitation works (refer to Appendix C for the preliminary plans shown at the meeting).
- d) MP clarified that proposed flood protection measures include re-instatement of existing berms and increasing the size of the culverts upstream (under the ou wapad) and lowering the road level to a drift. MP added that stream rehabilitation would also be included, as per recommendations in the freshwater impact assessment report (to be updated).
- e) MH further clarified that the proposed culverts and road level drop would serve to create overflow path, rather than providing an obstruction that results in uncontrolled sheet flow. He added that there are existing berms, but that they are not functioning as they had previously due to collapse in some areas. MH noted that the current height is likely to be acceptable, but that hydrological modelling would be required to confirm this.
- f) WG also clarified that the intention for the cottages is to rehabilitate as much as possible rather than have new builds. WG noted that two cottages would have to be rehabilitated completely and with the others, the intention would be to keep floor slabs and foundations and then rebuild the footprint.
- g) Regarding the proposed servicing (refer to Appendix C for the plans shown in the meeting), MH noted that the blue line is Wemmershoek Bulk main (located deep under the stream), the red line is the sewer and conservancy tank, noting that there are currently two separate septic tanks and soakaways on site. MH added that the proposed lines have been devised to be as close as possible to the existing cottages and the pump has been designed to be located within an area which is already disturbed. MH also clarified that sewage would be pumped to a conservancy tank for removal from site (but that the long term plan is to connect to the Pniel Waste-Water Treatment Works).
- h) Following a question from SD in that regard, MH confirmed that water for landscaping would come from the potable water line.

### 3.3 Feedback and Discussion

The discussion is summarised in Table 1.

**Table 1 Discussion Summary**

	QUESTION	ANSWER
1	SD: What was the original purpose of the berms?	MH: Unsure, but presumably for flood prevention.
2	DK: Are the berms a result of the creation of the stream?	MH: This was a historic watercourse, but previous interventions have affected the watercourse.
3	SD: KS would need to confirm whether the berms are still required, and if so, how would they be altered? SD noted it is important to reduce risk of materials in berms being eroded away during high flood events.	MH: The slope would remain as natural as possible, noting that the 1:2 and 1:5 flood events do not/ would not reach the berms, but others would. MH: Planting and natural storage should provide enough stabilization of the berms. MH: Note that there would be no digging deeper into the stream bed and the proposal would retain current invert levels. There would also be erosion protection to prevent scouring. KS: Note that the stream is currently heavily eroded and incised along a section of river below the site, because of all the flow currently received.
4	SD: Would there be new berms or replacement of existing berms?	MH: The berms have been surveyed and the existing berms would be re-instated, so there would be no additional berming, with the intention being to only put back what was there previously.
5	KS: What would the berm height be?	MH: The intention would be to keep to heights

		that they were previously, but the current hydrologic modelling underway would determine the required height and note that it would also need to allow for freeboard.
6	SD: What kind of traffic would go over the berms?	MH: In the past cattle has moved over the berms, but the proposed development would restrict cattle from accessing the site. WG confirmed that cattle will not graze there any longer.
7	WD: Is it possible to improve the channel so that no berm is needed? Perhaps through lowering the level of the stream?	KS: Theoretically, yes, but this would cause a greater impact, so it is not ideal as it would disturb more of the watercourse.
8	SD noted concern regarding water velocity (and changes as a result of the proposed development) and the downstream impacts. This should be addressed in the risk assessment.	MH & KS: The velocity would be considered in the updated flood-line study, flood management design and rehabilitation plan. MH: Note there would be no deepening of the watercourse and it would flow naturally.
9	SD: The stream should be rehabilitated, and diversity created.	KS: Noted, this will be included in the rehabilitation plan.
10	SD: Note that rehabilitation must also make sure that the wetland is accounted for.	KS: Noted, this will be included in the rehabilitation plan.
11	RJ noted that the risk assessment matrix would need to be updated and provided to DWS.	KS noted this and confirmed that it would be included in the updated Freshwater Impact Assessment Report.
12	SD and RJ noted that the Rehabilitation Plan/ Maintenance Management Plan would need to provide an overview of what is proposed and what will be done when.	All agreed that the freshwater impact assessment report would be updated with a rehabilitation plan that would cover specific rehabilitation and maintenance measures for the site/proposed development and note general principles for the farm, with the understanding that DWS will, in future, require a Maintenance Management Plan for the farm.
13	SD indicated that DWS would, in future, ask for a Maintenance Management Plan for the entire farm, but that it does not need to be developed in detail for the New Retreat project.	This was noted by the project team.

### 3.4 Close

- a) MP thanked all attendees for their time and closed the meeting at 12:30.



## **LIST OF APPENDICES**

**Appendix A:** Photographs of the site

**Appendix B:** Flood Line Site

**Appendix C:** Preliminary Plans \_ Flood management measures & stream rehabilitation works

## **APPENDIX A**

Photographs of the site

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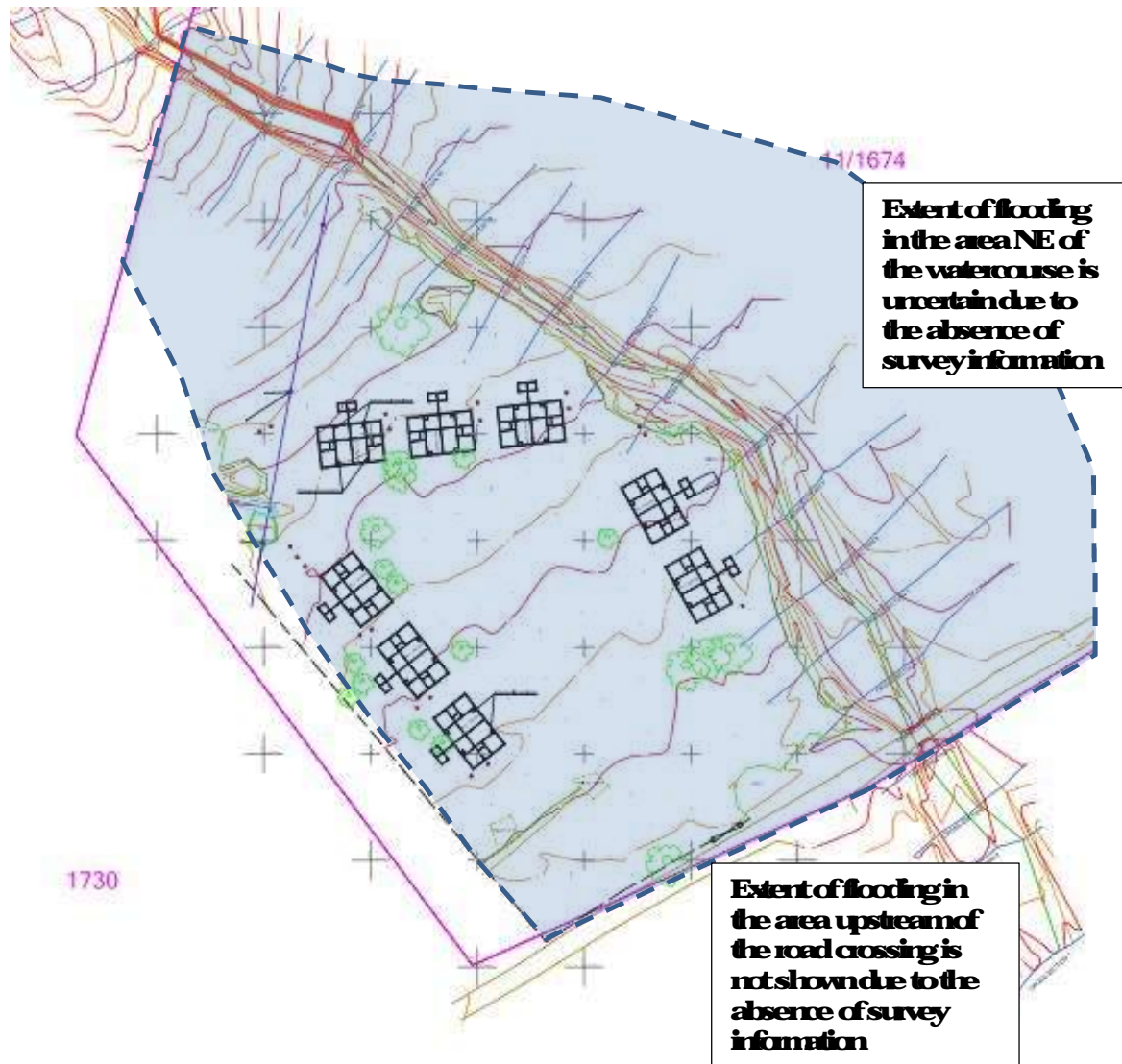
## **APPENDIX B**

Flood line site

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## Annexure D: Flood Lines: Existing

**The shaded area on this diagram indicates the extent of the site that is likely to be affected by the 100 year flood due to water bypassing and/or overtopping the existing road crossing. The extent of flooding upstream of the road crossing is not shown.**



## APPENDIX C

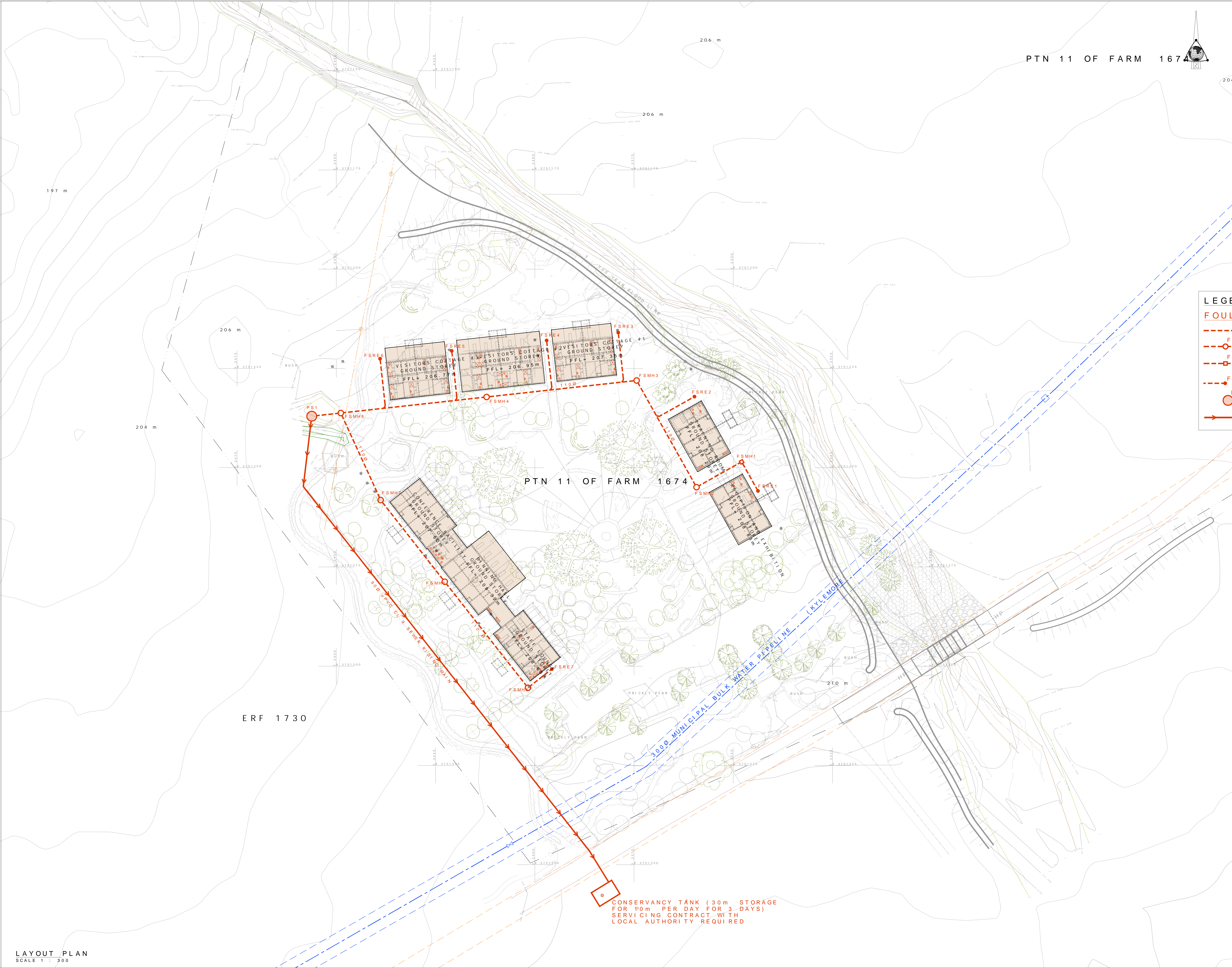
Preliminary Plans \_ Flood management measures & stream  
rehabilitation works.

---









NOTES :

1. NO DIMENSIONS TO BE SCALE
2. ANY DISCREPANCIES TO BE BR
3. ATTENTION OF THE ENGINEER
4. TOPOGRAPHICAL SURVEY BY
5. BURGER & VOLKMAN OF FEBUAR
6. FINAL ARRANGEMENT OF BUI
7. CONFIRMED BY ARCHITECT.
8. EXISTING BULK SERVICES &
9. CONNECTIONS TO BE EXPOSED
10. PRIOR TO WORKS COMMENCING.

LEGEND

**FOUL SEWER**

- - - - - SEWER PIPE, uPVC
- - - - - - SEWER MANHOLE (P
- - - - - - SEWER MANHOLE (B
- - - - - SEWER RODDING EY
- - - - - - SEWER PUMP STATION
- - - - - - RISING MAIN (Ø A

0 10 20 30

ON ORIGINAL (mm)

B	ISSUED FOR INFORMATION	15 FEB
A	ISSUED FOR INFORMATION	12 FEB
REV	DESCRIPTION	DATE

**MH&A** M. HURWORTH & ASSOC

CONSULTING ENGINEERS AND ARCHITECTS

PROJECT MANAGER: Mr. M. Hurworth

ENGINEER: Mr. M. Hurworth

478 POLYMER ROAD

ST. ALBANS, KENILWORTH

TEL: 021 771 2222

FAX: 021 771 2222

EMAIL: info@mhanda.co.za

WEBSITE: www.mhanda.co.za

CLIENT :

BOSCHENDAL ESTATE

PROJECT :

BERTHA RETREAT

PTN 11 OF FARM 1674

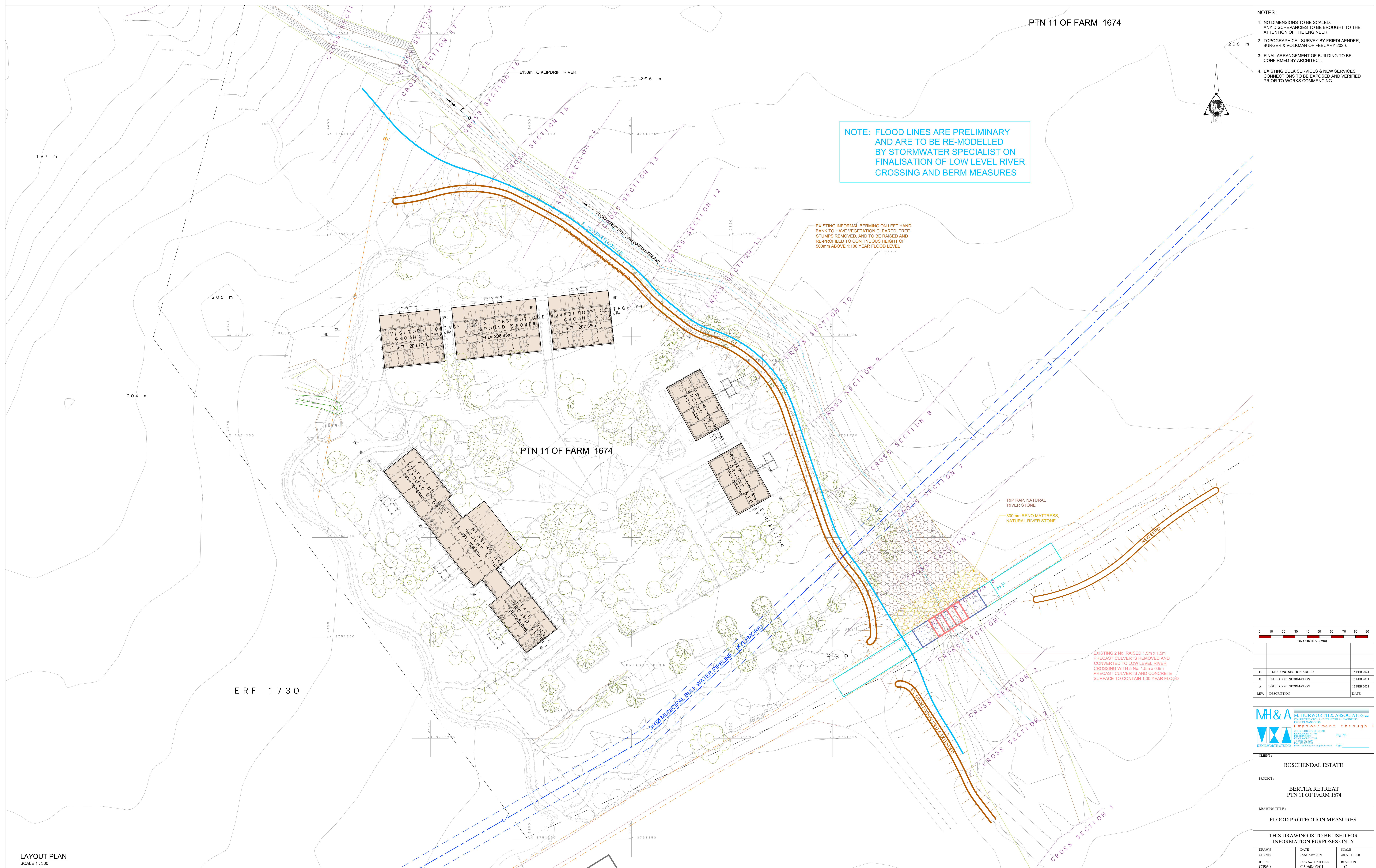
DRAWING TITLE :


PROPOSED FOUL SEWER RETENTION TANK

THIS DRAWING IS TO BE USED FOR INFORMATION PURPOSES ONLY

DRAWN	DATE	SCALE
GLYNIS	JANUARY 2021	A3 AT 1 : 300
JOB No	DRG No / CAD NUMBER	
C5960	C5960 / 04 / 08	





	0	10	20	30	40	50	60	70	80	90	100
ON ORIGINAL (mm)											
C	ROAD LONG SECTION ADDED										18 FEB 2021
B	ISSUED FOR INFORMATION										18 FEB 2021
A	ISSUED FOR INFORMATION										12 FEB 2021
DV	DESCRIPTION										DATE
 <div style="float: right;"> <b>M. HURWORTH &amp; ASSOCIATES cc</b>          CONSULTING CIVIL AND STRUCTURAL ENGINEERS          PROJECT MANAGERS  <i>Empowerment through Engineering</i>          Tel: 01246 817 770          Fax: 01246 817 778          Email: m.hurworth@engpro.co.uk          Reg. No. _____          Sign. _____       </div>											
CLIENT :											
BOSCHENDEN ESTATE											
PROJECT :											
BERTHA RETREAT PTN 11 OF FARM 1674											
DRAWING TITLE :											
FLOOD PROTECTION MEASURES											
THIS DRAWING IS TO BE USED FOR INFORMATION PURPOSES ONLY											
DRAWN GLYNIS	DATE JANUARY 2021				SCALE AO AT 1 : 300						
JOB NO. CS5063-01	DGN NO./ CAD FILE CS5063-01				REVISION C						



## APPENDIX G (iii)

### Confirmation from DWS for a General Authorisation

---

FW: Application have been returned to you (WU17609) - Message (HTML)

File Message Help PDFsam Enhanced 6 Creator Tell me what you want to do

Folder Email... Mark Unread Find Zoom

FW: Application have been returned to you (WU17609)

Marielle Penwarden  
To Front Desk

Tue 2021/05/18 04:25 PM

Environmental Consultants • Public & Stakeholder Engagement Specialists

From: [Ewulaas Do Not Reply@dws.gov.za](mailto:Ewulaas_Do_Not_Reply@dws.gov.za) <[Ewulaas Do Not Reply@dws.gov.za](mailto:Ewulaas_Do_Not_Reply@dws.gov.za)>  
Sent: Tuesday, 18 May 2021 15:39  
To: Marielle Penwarden <[marielle@chand.co.za](mailto:marielle@chand.co.za)>  
Subject: Application have been returned to you (WU17609)

Dear Ms Marielle Penwarden

The following application have been returned to you :

**Boschendal (Pty) Ltd Bertha Retreat - Redevelopment of cottages near a river and wetland (WU17609)**

The reason for the return is as follows :

**APPLICATION FOR REGISTRATION OF WATER USE(S) WITHIN THE AMBIT OF A GENERAL AUTHORISATION IN TERMS OF SECTION 40 OF THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998)**

The Department of Water and Sanitation has assessed your Pre Water Use Licence application enquiry. Please continue to apply for registration of water uses(s) authorized in terms of General Authorization.

You received this email from :

Name : Ms Rafieka Johaar (Assesor)  
e-Mail : [JohaarR@dws.gov.za](mailto:JohaarR@dws.gov.za)  
Tel : +27219416195

## **APPENDIX H**

Exception Notice(s)

---

**NOT APPLICABLE**

## APPENDIX I

Proof of zoning of the properties to be developed

---



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

Our Ref : 1674/11 P  
Contact person : P Molele  
Contact no : (021) 808 8951  
Date : 04 October 2018

## ZONING CERTIFICATE

### Farm No. 1674/11, PAARL DIVISION.

It is hereby certified that the zoning of Farm No. 1674/11 Paarl Division, in terms of the Zoning Scheme Regulations (PN 1048/1988) promulgated in terms of Section 8 of Land Use Planning Ordinance (No. 15 of 1985), is:

### Agricultural Zone I

PRIMARY USE	CONSENT USE <i>Land uses allowed with the consent of Council.</i>
Agriculture	Additional dwelling units Farm stall Farm store Intensive feed farming Riding school Nursery Service trade Tourist facilities Guesthouse Aquaculture Rooftop Base telecommunication station Freestanding base telecommunication station Renewable energy structure

  
PP Director: Planning & Economic Development

Please Note: Where discrepancies exist between the zoning information contained in this certificate and any Council decision, Council's decision override the contents of this zoning certificate.

### Beacon Description

D ..... 12mm Iron peg  
E ..... 20mm Iron peg  
All other ..... 16mm Iron pegs

S.G. No.

2865/2003

Approved.

*Abdullah*

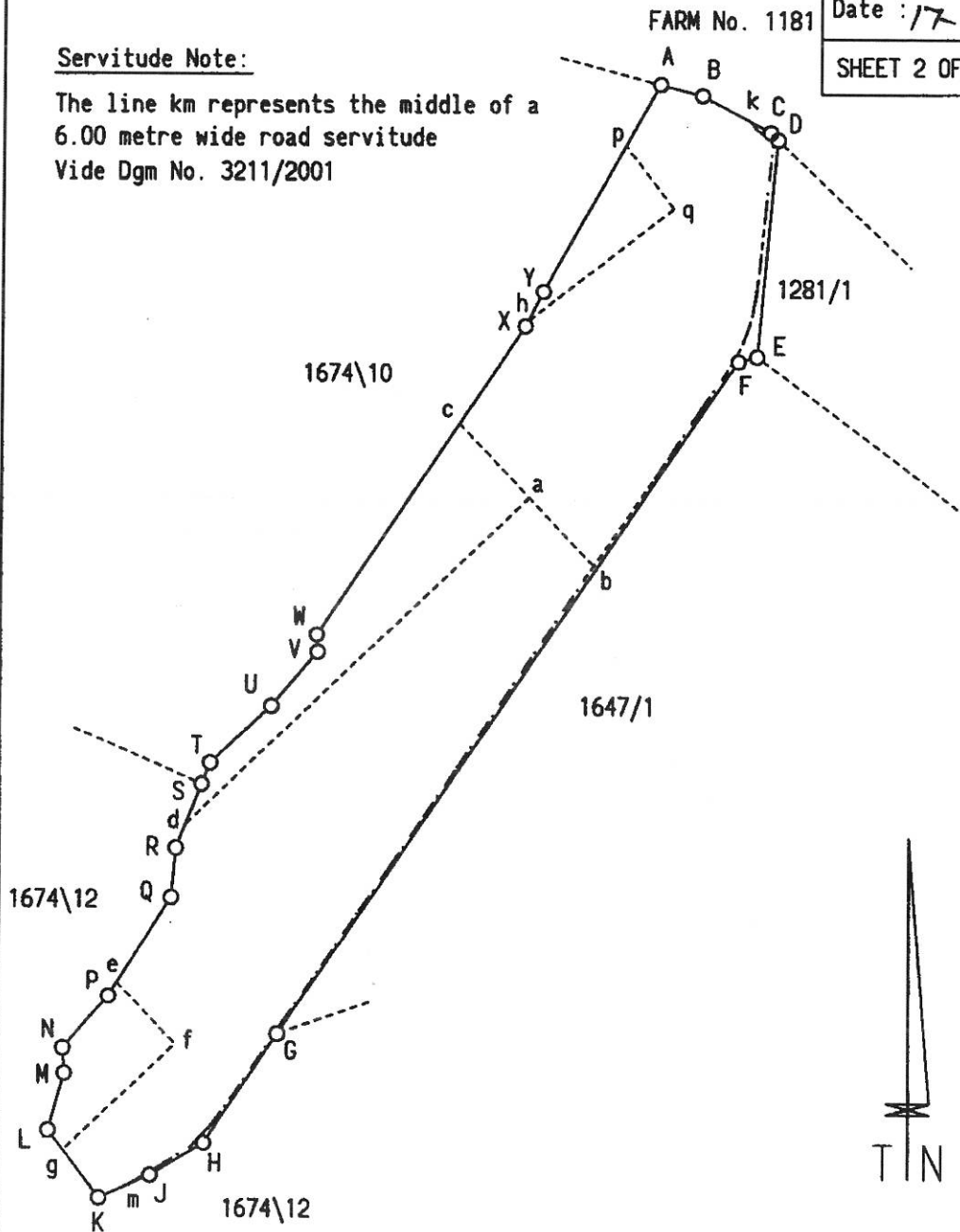
for  
Surveyor - General

Date : 17-9-2003

SHEET 2 OF 2 SHEETS

### Servitude Note:

The line km represents the middle of a  
6.00 metre wide road servitude  
Vide Dgm No. 3211/2001



PORTION 11 OF THE FARM NO. 1674

Administrative District of Paarl

Surveyed in August 2000 - June 2003  
by me

*D P Burger*

PLS 0080

D P Burger

Land Surveyor

SCALE 1 : 12500

FARM 1674/11 PAARL.

APPROVED IN TERMS OF SECT. 4  
OF ACT 70/1970

REF 37419

DATE 2003-07-04

APPROVED IN TERMS OF SECT. 25  
OF ORD. 15/1985

REF 15/4/2/8/77

DATE 2001-05-30



SIDES Metres		ANGLES OF DIRECTION	CO-ORDINATES System WG 19°				S.G. No.
			Y		X		
		Constants :	0,00		0,00		2865/2003
AB	79,63	284 32 50	A	+	1380,92	+ 3749301,78	Approved. <i>Abledgen</i> for Surveyor - General Date : 17-9-2003
BC	141,60	298 38 30	B	+	1303,84	+ 3749321,78	
CD	18,98	314 06 40	C	+	1179,57	+ 3749389,65	SHEET 1 OF 2 SHEETS
DE	399,41	5 15 00	D	+	1165,94	+ 3749402,86	
EF	35,01	74 48 00	E	+	1202,49	+ 3749800,59	
FG	1496,79	34 09 00	F	+	1236,27	+ 3749809,77	
GH	240,24	33 47 10	G	+	2076,53	+ 3751048,45	
HJ	114,83	58 40 30	H	+	2210,13	+ 3751248,12	
JK	101,86	65 45 50	J	+	2308,22	+ 3751307,82	
KL	155,03	143 12 10	K	+	2401,10	+ 3751349,63	
LM	108,85	195 22 30	L	+	2493,96	+ 3751225,49	
MN	45,75	176 11 20	M	+	2465,10	+ 3751120,54	
NP	125,54	220 57 00	N	+	2468,14	+ 3751074,89	
PQ	215,46	211 44 30	P	+	2385,86	+ 3750980,07	
QR	90,96	185 10 40	Q	+	2272,51	+ 3750796,83	
RS	126,15	201 47 10	R	+	2264,30	+ 3750706,24	
ST	41,93	201 48 40	S	+	2217,48	+ 3750589,10	
TU	153,00	226 38 50	T	+	2201,90	+ 3750550,17	
UV	129,99	220 30 20	U	+	2090,65	+ 3750445,14	
VW	33,01	176 26 20	V	+	2006,22	+ 3750346,30	
WX	682,53	213 45 20	W	+	2008,27	+ 3750313,35	
XY	71,64	207 42 00	X	+	1629,03	+ 3749745,88	
YA	437,10	209 26 10	Y	+	1595,73	+ 3749682,45	
497	PNIEL	Δ	+	3832,38	+ 3751650,78		
498	RHODESDAM	Δ	+	4138,34	+ 3749355,50		

The figure A B C D E F G H J K L M N P Q R S T U V W X Y represents 76,0665 hectares of land, being

PORTION 11 OF THE FARM NO. 1674

Situate in the Stellenbosch Municipality  
Administrative District of Paarl  
Surveyed in August 2000 - June 2003  
by me

Province of Western Cape  
*D Burger*  
PLS 0080 D P Burger Pr Land Surveyor

This diagram is annexed to No.	The original diagram is No. 2853/2003	File No. Parl .1674 S.R. No. E 1362/2003
Dated i.f.o.	Annexed to	Comp BH-8DBB ( 3779) LPI C0550000
Registrar of Deeds		

## APPENDIX J

### Existing Approvals

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REFER TO APPENDIX I

## APPENDIX K

### Project Plan

---

New Retreat Basic Assessment Programme  
as of 16 November 2021

Year			2021										2022																									
No.	Task	Duration (working days apart from legislated timeframes	November				December					January				February				March					April				May				June					
			1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	
BA: Pre-Application Activities																																						
1	Identification of I&APs Preliminary identification is completed, but I&AP database is updated throughout the process	Completed																																				
2	Public Review of Draft BAR & HIA and all specialist reports (30 plus 5 days)	Completed																																				
3	Additional Stakeholder Engagements, as required	Completed																																				
4	Update BAR and other specialist reports following comments received	Completed																																				
5	Compile Comments and Response Report	Completed																																				
6	Submit pre-application BAR and CRR to HWC	Completed																																				
BA: Application and Post-Application Activities																																						
7	Completion of Application Form	10																																				
8	Applicant/Project Team Review of Application Form	5																																				
9	Finalisation and Submission of Application Form to DEA&DP Within 90 days from the date of receipt of the application, the Final Basic Assessment Report must be submitted to the authorities.	3																																				
10	DEA&DP to acknowledge Application and provide reference number	2																																				
11	Notification of availability of BAR & HIA and EMPr for public comment	5																																				
12	Public comment Period for BAR & HIA and EMPr Statutory 30-day comment period	30																																				
14	Compilation of CRR #2	10																																				
15	Finalisation of BAR and EMPr for submission	5																																				
16	Applicant/ Project Team Review of final BAR and EMPr	5																																				
17	Amend and submit final BAR and EMPr to DEA&DP	5																																				
18	DEA&DP to Decide on Application	107																																				
19	DEA&DP to notify client of decision	5																																				
20	Notification of decision to I&APs	7																																				
21	BAR 90-day period	90																																				

EAP

Applicant

DEA&DP

Public Comment Period

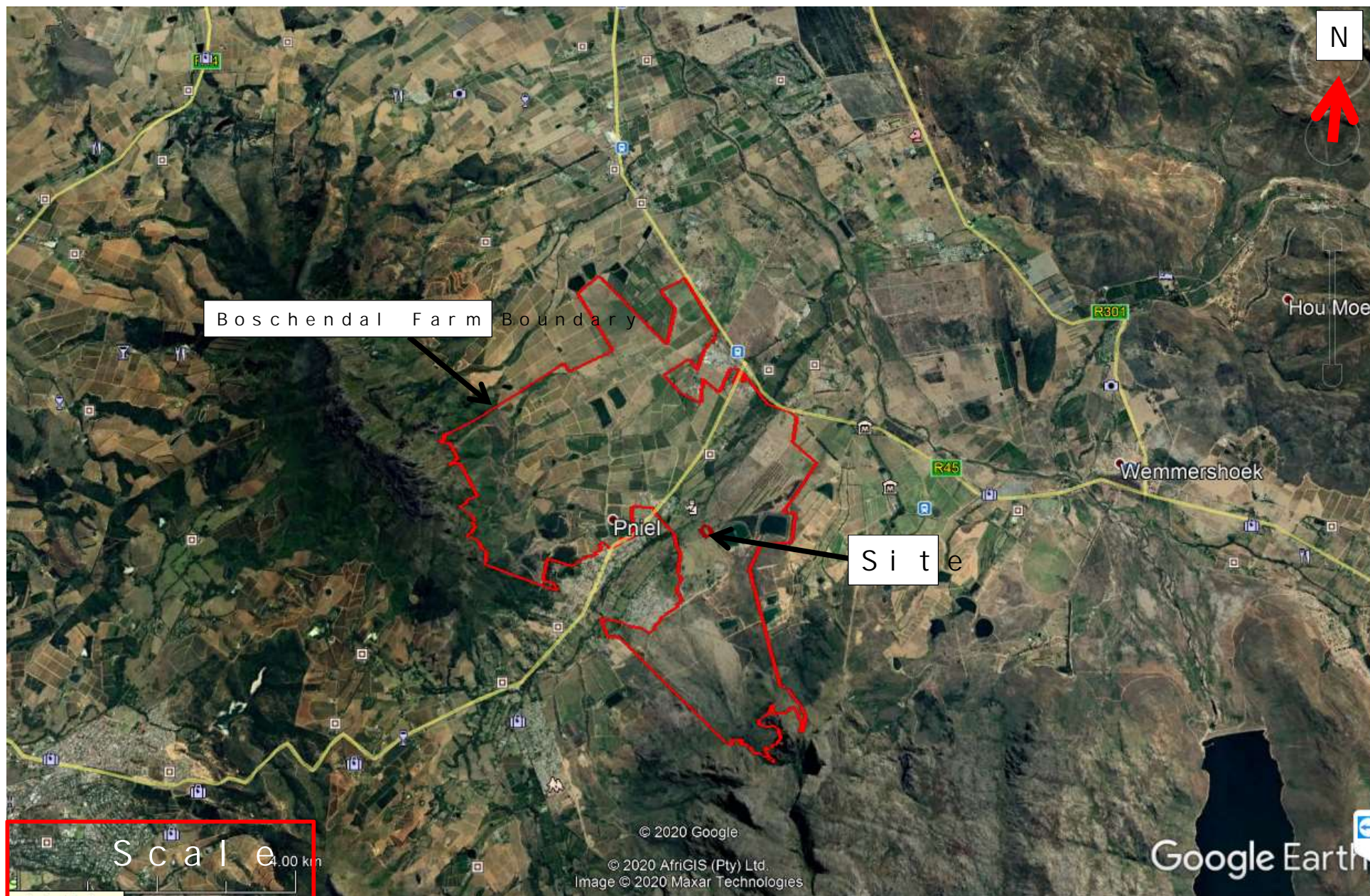
Annual Shutdown Period

## APPENDIX L

### Locality Map

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## APPENDIX M

### Site Development Plan

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## APPENDIX N

### Landscaping Plan

---



TREES:

## SOFT LANDSCAPE HWORR

## WORKS CITED

REV.	DATE	DESCRIPTION
------	------	-------------

---

This TERRA+ Landscape Architect scaled, only written/indicate

This Landscape Plan is in accordance with the Landscape Architectural and Design Methodology, General Management with the Approved Site Development

All hard landscape works that pergolas, paving sub-layers, **Professional Engineers' Specific**

of the islands, 1985 works indicated implemented within 6 months of reevaluation with the appoint

## SOFT LANDSCAPING NOTES

foreign material and stone large  
Existing trees, that are indicat  
accordance with TIERRA+ Tree Docu

with any underground services, a  
works.

All new 100L, 200L, 400L, 1 000L well branched, healthy, vigorous strong root system. Trees are to

SETTING OUT  
All proposed plants' positions a  
pegged out on site by future app  
approved by the Landscape Archit  
planting.

The choice of plant material to irrigation required, once plants long period, following the compl excludes permaculture kitchen ga both require a more regular irri

supply and commissioned and ad  
planting.  
All planting areas (where irriga  
irrigated by a fully automated i  
seasonal adjustment controller on a  
All trees are to be watered on a

sufficient pressure and flow for Contractor to look out for wet s controllers, service/replace dam

PAVING WORKS  
All layer works and compaction to specification and approval

BERA GRAVEL FIX PRO  
Permeable "soft" paving to be do  
Architects details and specifica  
specialist supplier.

TREE PLANTERS, VARIOUS LANDSCAPE  
AND PERGOLAS

Landscape works shall be implemented by District Manager. Environmental completion is achieved, landscape

HORTICULTURAL AND GENERAL MAINTENANCE  
All landscape works indicated within 12  
months after practical completion

For detailed Maintenance Require  
Maintenance Document by TERRA+ L

PROJECT TITLE  
BERTHA RE

BERTHA FOUNDATION



110-ON.		FOR AUTHC	
SCALE	DATE	DRAWN BY	

SIGNED 

# TOP 4

Unit 20, Sussex Studios  
23-25 Sussex Street, Brighton, BN1 1RJ  
01273 325000





## APPENDIX O

### Civil Services Report

---



CONSULTING ENGINEERS

EST 1991

---

## CIVIL ENGINEERING SUPPLEMENTARY SERVICES REPORT

( including Interim Potable Water supply)

PROJECT:

New Retreat, Boschendal Farm  
Ptn. 11 of Farm 1674

PROJECT NUMBER:

S5960 / 2021

DATE

10 November 2021

---

PREPARED BY:	CHECKED BY:
M P MIDDELMANN	M A HURWORTH

## TABLE OF CONTENTS

1	BACKGROUND .....	2
2	WATER SUPPLY .....	2
2.1	LINK INFRASTRUCTURE .....	2
2.2	PRIVATE RETICULATION .....	3
2.3	INTERIM PRIVATE RETICULATION.....	3
3	SEWER RETICULATION.....	4
3.1	PUMPED PRIVATE SYSTEM.....	4
3.2	FUTURE PUMPSTATION AND MUNICIPAL DISCHARGE .....	4
4	STORMWATER MANAGEMENT AND FLOODING .....	5
4.1	STORMWATER MANAGEMENT.....	5
4.2	FLOOD CONTROL.....	5
	APPENDIX A: SEWER LAYOUT .....	7
	APPENDIX B: WATER LAYOUT .....	9
	APPENDIX C: FLOOD PROTECTION.....	11
	APPENDIX D: WATER LINK INFRASTRUCTURE .....	13
5	APPENDIX E : INTERIM POTABLE WATER RETICULATION.....	14

## 1 BACKGROUND

Services reporting for the proposed New Retreat on the Boschendal farm, Portion 11 of Farm 1674, has been addressed in the Neil Lyners & Assoc. report (ref C20087/COR/RS/rs/03) of 12 August 2020.

Subsequent to the Lyners report, Mutaba Hurworth & Assoc. (MH&A) have assumed the civil consultancy service on this project, and there has been further design development as well as engagement with the Stellenbosch Municipality.

The following comment is made on certain engineering services, progressed since the Lyners report, and is supplementary to the Lyners report.

## 2 WATER SUPPLY

### 2.1 LINK INFRASTRUCTURE

It has been confirmed by Stellenbosch Municipality (refer capacity letter by Colin Taylor, dated 19 April 2021) that the preferred water supply option will be from the existing municipal reticulation network in Lanquedoc.

A new 160mm diameter uPVC link main is proposed to be constructed from a connection point (exact location still to be finalised) on the northern fringe of the Lanquedoc PRV water distribution zone.

This pipe will be aligned along Hoof Road and into Boschendal property. A bulk meter will be required at the Boschendal boundary, and the pipeline will continue as a private main up to the Retreat development, on Ptn 11 of Farm 1674.

The route investigation and detail design of this link infrastructure will be subject to a formal engineering approval process.

The water demand for the New Retreat is estimated at 13,4m<sup>3</sup>/day, as indicated in the Lyners report, and the local authority has confirmed that sufficient capacity exists (again, refer capacity letter of 19 April 2021).

MH&A drawing C5960 / 06 Rev B, appended as Annexure D, indicates the link pipeline schematically.

## 2.2 PRIVATE RETICULATION

The link main will continue into Boschendal farm, along Hoof Road, and terminate at the New Retreat, to supply both potable and fire water to the development. This supply will be managed through a private sub-meter, and is proposed to separate on-site into a 110mm uPVC Class 16 fire ring and a 50mm uPVC Class 12 domestic system.

Further layout detail of the private and on-site reticulation is indicated on MH&A drawing C5960 / 04 / 02 Rev H, included in Annexure B.

## 2.3 INTERIM PRIVATE RETICULATION

Due to difficulties experienced in obtaining approvals and consent for traversing private property owned by The Boschendal Trust for the construction of the new bulk water main an alternative interim potable and fire water system is proposed.

The proposal involves tying into the existing York Dam 300mm diam irrigation supply line that currently feeds a part of the Boschendal Estate irrigation reticulation. There is an existing take-off for water supply to existing houses just off Hoof Road withing the York Farm boundary. ( MH&A dwg number C5960/07 RevA refers).

The existing connection will be upgraded to a 160mm connection.

A new 160mm diam uPVC Class 12 pipe will be laid as shown to supply the New Bertha Retreat development.

The new pipe route requires 282m of the abovementioned pipe , excavated and buried within the Hoof Road current road reserve.

Approximately 20m of this pipe will be strapped to the existing culvert structure crossing the perennial stream.

The pipe will terminate at the entrance to the New Bertha Retreat.

A 160 mm diam uPVC Class 12 connection will be T d into the main line and feed the proposed meter chamber within the development boundary.

The internal reticulation will be exactly as proposed for the future Municipal system.



In the interim a holding tank and combination sand filter and Ultra-violet water treatment plant will be installed to treat the irrigation water to the required quality and standard for Municipal potable water.

The Fire Water will be supplied as indicated on the attached layout and will be controlled by Fire Truck.

Further layout detail of the private and on-site reticulation is indicated on MH&A drawing number C5960/07 Rev A Appendix E

### 3 SEWER RETICULATION

#### 3.1 PUMPED PRIVATE SYSTEM

There is no existing functional sewer system for the development. The historic pipe and septic tank systems have been abandoned and will not be rehabilitated.

The new private sewer system comprises a conventional underground 110mm diameter class 34 uPVC gravity pipe and manhole system, collecting waste and ablution flow from all the cottages, as well as washdown from the refuse enclosure.

The system will gravitate to a small underground pumpstation at the western edge of the development. This pumpstation is proposed to comprise two 1,5kW pumps that will operate -return valves, external

wall mounted control panel and alarm link.

The 75mm diameter rising main will be aligned along the south western edge of the development footprint, and discharge is proposed to be contained in a conservancy tank located outside of the development but on private property on the south side of Hoof Road.

The conservancy tank will have capacity for 30m<sup>3</sup>, approximately 3 x the daily flow of 10m<sup>3</sup>. Daily flow is calculated at 75% of daily water consumption. The layout of the on-site sewer system is indicated on MH&A drawing C5960 / 04 / 01 Rev H.

#### 3.2 FUTURE PUMPSTATION AND MUNICIPAL DISCHARGE

The conservancy tank is proposed to be a structure suitable for conversion to a main pumpstation, at a future time when the local authority capacity upgrades to the Dwars River Waste Water Treatment Works (WWTW) between Pniel and Lanquedoc are complete. At this time, the conservancy tank will be equipped as a pumpstation, and a new rising main is

proposed along Hoof Road to discharge into the Lanquedoc pumpstation, which in turn lifts effluent to the WWTW.

The above has been confirmed in principle by Stellenbosch Municipality (refer capacity letter of 19 April), and again will be subject to a formal engineering approval process.

## **4 STORMWATER MANAGEMENT AND FLOODING**

### **4.1 STORMWATER MANAGEMENT**

Stormwater will be managed sensitively, primarily by infiltration through existing soft or new landscaped or permeable surfaces. Car parking areas will be constructed from permeable gravel-fix systems, or permeable grass blocks, and edge restraints will be low and/or have drainage gaps. There will not be any increase in hard surfaces under the post development scenario and it is therefore not envisaged that on-site attenuation will be necessary.

Surface flow that may be generated by extreme or high rainfall events will be allowed to pass through the development by surface escape, without causing flow concentration.

### **4.2 FLOOD CONTROL**

Flood management measures to protect the development from flooding of the adjacent watercourse will be required. These measures comprise the conversion of the existing culvert crossing on Hoof Road to an engineered low level road crossing to contain flood flow safely under and over the new culverts, within the river corridor. The existing berm on the development side of the watercourse will also be formalised to be continuous, reprofiled and raised.

These measures are in accordance with the Flood Study report by Mark Obree of 25 February 2021, and are indicated on the MH&A flood protection drawing C5960 / 05 / 01, included in Annexure C.

Report prepared by:



**M P MIDDELMANN**

Report reviewed by:



**M A HURWORTH**    **Pr Eng**

**MUTABA HURWORTH & ASSOCIATES**

## APPENDIX A: SEWER LAYOUT

Refer Drawing C5960 / 04 / 01 Rev H included overleaf.



## APPENDIX B: WATER LAYOUT

Refer Drawing C5960 / 04 / 02 Rev H included overleaf.

