

Heritage Statement

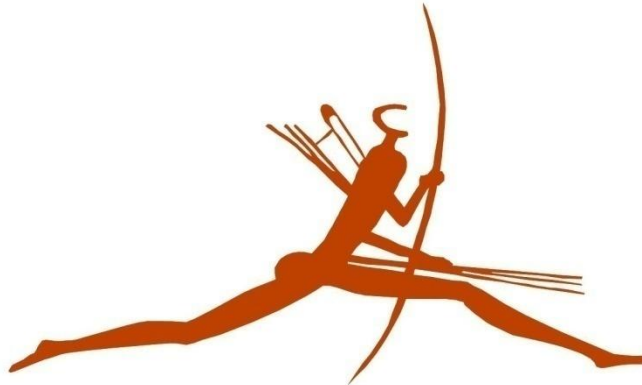
for

**PROPOSED REMOVAL AND REPLACEMENT OF THE EXISTING
ROAD AND CULVERT INFRASTRUCTURE LOCATED ALONG
DIVISION ROAD (DR) 1791 KM 1.59, STOPPAD ROAD, CROSSING
FARMS 591, FARM 586 AND FARM 306 ON PORTION 22
WITTEDRIFT, BITOU LOCAL MUNICIPALITY, GARDEN ROUTE
DISTRICT**

for

Sharples Environmental Services cc, Madeleine Knoetze and Jessica Gossman ,
PO Box 9087, George, 6530, Telephone: 0215545195, E-mail:
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by



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19 February 2024
Revised with inputs on 27th of February 2025

Summary - Conclusions & Recommendations

The proposed activity involves repair works to a road at a river crossing that was damaged by flooding in 2023. The river crossing or bridge is less than 50 m in length and the temporarily affected area is 55 m long and 385 m² in extent. Consequently, the scope and nature of the proposed activity does not trigger the National Heritage Resources Act (Act 25 of 1999; NHRA) nor the requirement for a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC). It is also noted that the affected locality is in a road reserve and is already disturbed and transformed by transport infrastructure.

The following conclusions and recommendations are arrived at after reviewing information obtained through:

- The National Heritage Resources Act (Act 25 of 1999; NHRA),
- The appointed Environment Assessment Practitioner (Sharples Environmental Services),
- SAHRIS Palaeo Map and inputs from palaeontologist Prof John Pether,
- maps and Google Earth aerial imagery, and
- a site inspection (archaeological/heritage walk-through).

Because the scope and nature of the proposed activity does not trigger the NHRA nor the requirement for a NID application to HWC, historical aerial photographs and SG Diagrams were not obtained, and a basic background investigation was not conducted. Palaeontological inputs were obtained because the DFFE screening tool reports flagged certain areas.

Palaeontology: “In view of the low volume of affected deposits and the likelihood that fossil bones which may occur would be members of the modern (pre-historic) fauna the palaeontological impact of the re-establishing of the causeway is LOW” (Pether 2024, Pg. 2). “Fossil bone finds are unlikely, but with some possibility, and just in case it is recommended that the Heritage Western Cape Fossil Finds Procedure (HWC-FFP) is included in the Environmental Management Plan (EMP) for the construction earthworks, basically “If fossil bones are uncovered during excavations stop work at that spot and report to Heritage Western Cape”. The links to the HWC and the FFP are below (Pether 2024, Pg. 2, Appendix A).

Heritage / Archaeology: although the road and river crossing are likely older than 60 years, they were damaged by flooding in 2023 and there are no structural or architectural features of heritage value associated with the locality or transport infrastructure. No heritage resources were identified in the temporarily and permanently affected area. Furthermore, the proposed activity does not trigger the NHRA and the locality is already disturbed and transformed by transport infrastructure.

From an archaeological and palaeontological perspective, the activities will not involve the disturbance or excavation of previously undisturbed sediments, and the temporary bypass will involve the importation of sediments rather than excavation. It follows that there will be no new impact resulting from the proposed activities.

On heritage grounds, due to the transformed nature of the site and the absence of heritage resources or themes in and around Site 5, the proposed repair works will have a negligible to zero impact on the visual or aesthetic heritage value of the area. The rural landscape already contains transport infrastructure and the proposed repair works will not alter the cultural landscape. The proposed repair works will in no way alter the heritage value of the area. For

the same reason there will be negligible to no cumulative impact on the heritage value of the area.

The positive socio-economic impact, including short-term jobs as well as the need for safe transport infrastructure outweigh the negligible to zero negative impacts this project may have on heritage resources.

Consequently, it is recommended that a Notification of Intent to Develop application to Heritage Western Cape is not required and that no further heritage studies, mitigation, or management measures are needed.

On heritage grounds it is recommended that the proposed activity may proceed in full and without limitations or conditions.

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1. Name, Bio-sketch and Declaration of Specialist

I, Peter Nilssen (PhD in archaeology, University of Cape Town, 2000), herewith confirm that I am a Professional member - in good standing - of the Association of Southern African Professional Archaeologists (ASAPA), including the Cultural Resource Management section of the same association since 1989 (ASAPA professional member # 097). I am an accredited Principal Investigator for archaeozoology (specialist analysis), coastal, shell midden and Stone Age archaeology; Field Director for Colonial Period archaeology; and Field Supervisor for Iron Age archaeology and Rock Art. I have worked as a professional archaeologist in Cultural Resource Management since 1989 and have completed more than 280 heritage-related impact assessments and mitigation projects as Principal Investigator.

As the appointed independent specialist (archaeologist) for this project hereby declare that I:

- act as an independent specialist in this application,
- regard the information contained in this report as it relates to my specialist input/study to be true and correct,
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act,
- have and will not have no vested interest in the proposed activity proceeding,
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act,
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2014 (specifically in terms of regulation 13 of GN No. R. 982) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification, and
- am aware that a false declaration is an offence in terms of regulation 48 of GN No. R. 982.



Signature of the specialist:

Date: **19 February 2024**

2. Introduction & Background

Due to storm and flood damage, the Garden Route District Municipality proposes to repair roads and river crossings to ensure safe passage of vehicles. The environmental application, currently a Basic Assessment Report, is being facilitated by Madeleine Knoetze of Sharples Environmental Services cc (hereafter SES) who compiled a Screening Tool Report for the project (Knoetze 2023). Because the proposed development footprint is less than 5000 m² in extent and the causeway (bridge) is less than 50 m in length, the National Heritage Resources Act (Act 25 of 1999, NHRA) is not triggered and a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC) is not required. Nevertheless, due to the DFFE Screening Tool Report results and through SES, the applicant appointed this author to provide a Heritage Statement regarding the NHRA and heritage resources.

This document is not a Heritage Impact Assessment, but rather, is a scoping report that provides supporting information for recommendations made here regarding heritage resources and the NHRA.

This Heritage Statement serves to inform the Environmental Application process with respect to heritage resources and the NHRA in connection with the proposed activity and to make recommendations regarding the potential impact on heritage resources and the requirement for any further specialist investigations.

3. Site Location and Development Proposal

Site 5 (DR1791 km 1.59: Leermansdrift River – Bitou) is situated some 1,5 km NW of Wittedrift and 6.5 km NW of Plettenberg Bay, Western Cape Province (Locality Map and Figures 1, 2 & 3). Property details are given in Table 1 below (Knoetze 2023).



Locality Map. General location of the study area (yellow marker) NW of Plettenberg Bay, Western Cape Province. Courtesy of Google Earth 2022.

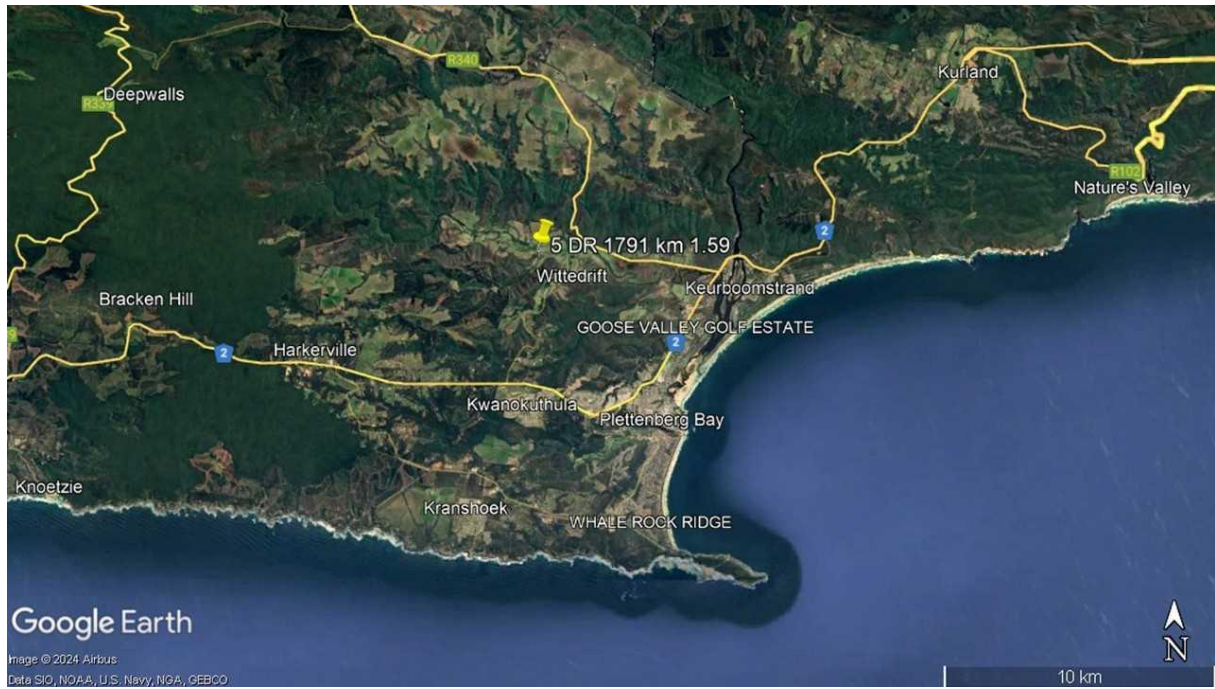


Figure 1. Enlarged from Locality Map showing Site 5 (labelled yellow marker) relative to Plettenberg Bay and Wittedrift, Western Cape. Courtesy of Cape Google Earth 2022. (A4 version below)

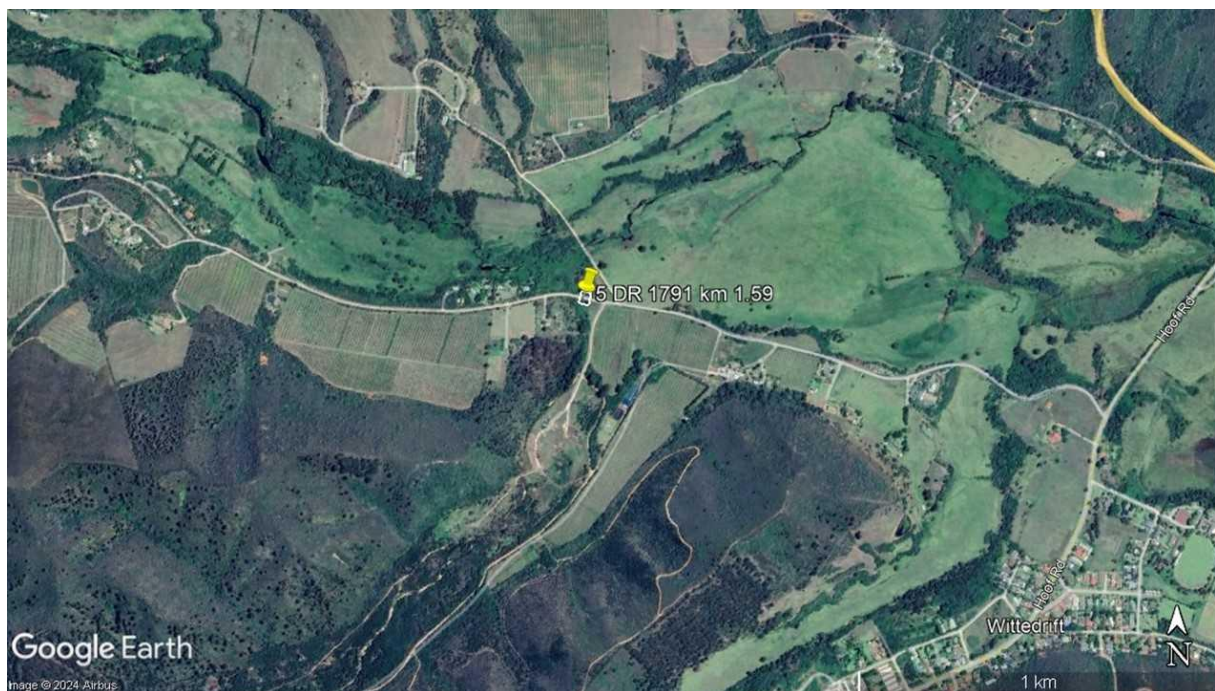


Figure 2. Enlarged from Figure 1 showing Site 5 (labelled yellow marker) relative to Wittedrift, Western Cape. Courtesy of Cape Google Earth 2022. (A4 version below)

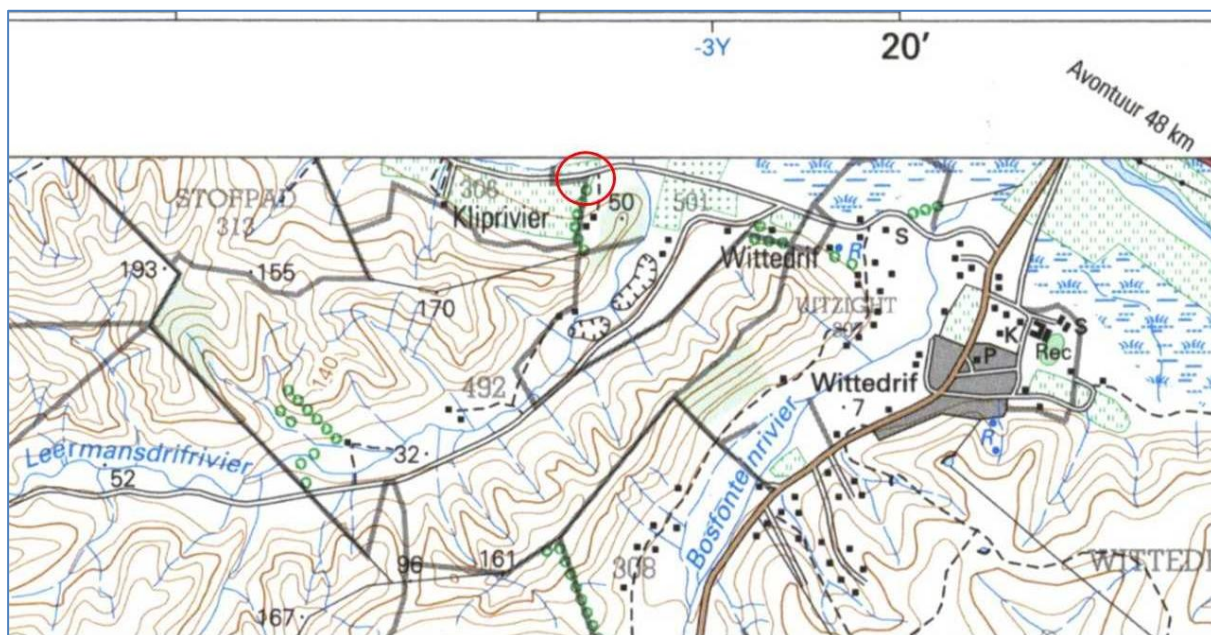


Figure 3. Enlarged portion of 1:50 000 topographic map 3423 AB 1998 Plettenberg Bay showing Site 5 (red circle) relative to Wittedrift, Western Cape Province. Courtesy of the Chief Directorate Surveys and Mapping, Mowbray. (A4 version below)

Table1. Property details (Knoetze 2023).

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	HELDERWATER	586	0	34°0'30.82S	23°18'44.13E	Farm
2		591	0	33°59'50.1S	23°19'37.99E	Farm
3	WITTEDRIFT	306	0	34°0'10.33S	23°20'45.02E	Farm
4		501	0	34°0'1.5S	23°19'34.86E	Farm Portion
5		591	0	33°59'58.41S	23°19'38.13E	Farm Portion
6		501	0	34°0'6.21S	23°19'29.19E	Farm Portion
7	WITTEDRIFT	306	22	34°0'5.63S	23°19'13.26E	Farm Portion
8		501	1	34°0'18.69S	23°19'9.13E	Farm Portion
9		501	2	33°59'56.61S	23°19'40.74E	Farm Portion
10	HELDERWATER	586	0	34°0'29.72S	23°18'50.75E	Farm Portion

The proposed repair works will “Replace existing causeway with new but much bigger openings; provide inlet and outlet apron slab and wing walls; raise road about 600 mm estimated - temporary deviation road downstream bypass will be 4 m wide and 55 m long. The information suggests that the bypass extends approximately 2.5 m beyond the road reserve, which represents an area of approximately 68 m². The total development footprint of the bypass road will be ca. 385 m² “(from SES).

From an archaeological and palaeontological perspective, the activities will not involve the disturbance or excavation of previously undisturbed sediments, and the temporary bypass will involve the importation of sediments rather than excavation. It follows that there will be no new impact resulting from the proposed activities.

4. Study Area

Site 5 is within a road reserve and only the temporary bypass will exceed the road reserve by about 2.5 m. The area was previously disturbed by the construction of the road and causeway

as well as by water damage during flooding. The reason for the proposed activity is to repair the road and causeway that were damaged during flooding in 2023. The immediate surroundings are overgrown. Examples of site 5, damage to transport infrastructure, and the immediate surroundings are shown in Figures 4 and 5.



Figure 4. Site 5 and immediate surroundings viewed from the East (top) and viewed from the West (bottom).



Figure 5. Site 5 showing damage to causeway.

5. Background Information, Previous Heritage Studies & Heritage Resources

Because the proposed activity does not trigger the NHRA, and a NID application to HWC is not required, a basic background heritage investigation is not warranted for the project. Nevertheless, inputs from palaeontologist, Prof John Pether, are given below (Appendix A).

Palaeontology

A DFFE screening tool report was obtained by SES as part of the initial stages of the environmental application process and palaeontology was not flagged at all (Knoetze 2023).

The SAHRIS Palaeo Map, however, shades this area green (MODERATE sensitivity) and indicates that a desktop study is required. Consequently, Prof Pether was consulted for professional inputs (Pether 2024).

Prof Pether's full report is presented below in Appendix A, and he concludes as follows: "In view of the low volume of affected deposits and the likelihood that fossil bones which may occur would be members of the modern (pre-historic) fauna the palaeontological impact of the re-establishing of the causeway is LOW" (Pether 2024, Pg. 2).

"Fossil bone finds are unlikely, but with some possibility, and just in case it is recommended that the Heritage Western Cape Fossil Finds Procedure (HWC-FFP) is included in the Environmental Management Plan (EMP) for the construction earthworks, basically "If fossil bones are uncovered during excavations stop work at that spot and report to Heritage Western Cape". The links to the HWC and the FFP are below" (Pether 2024, Pg. 2).

Archaeology & Cultural Heritage

The DFFE screening tool map and table for the archaeological and cultural heritage theme sensitivity indicates that the proposed development footprint falls within an area of LOW sensitivity (Figure 6).

A cursory desktop study indicated that no heritage-related studies were conducted at Site 5 or in the immediate surroundings, and a site inspection by this author revealed that no archaeological or cultural heritage resources of significance occur within the affected area. Also note that the affected area is already disturbed and transformed by transport infrastructure. Consequently, in agreement with the DFFE screening tool report, the proposed development footprint area is of LOW sensitivity concerning the archaeological and cultural heritage theme.

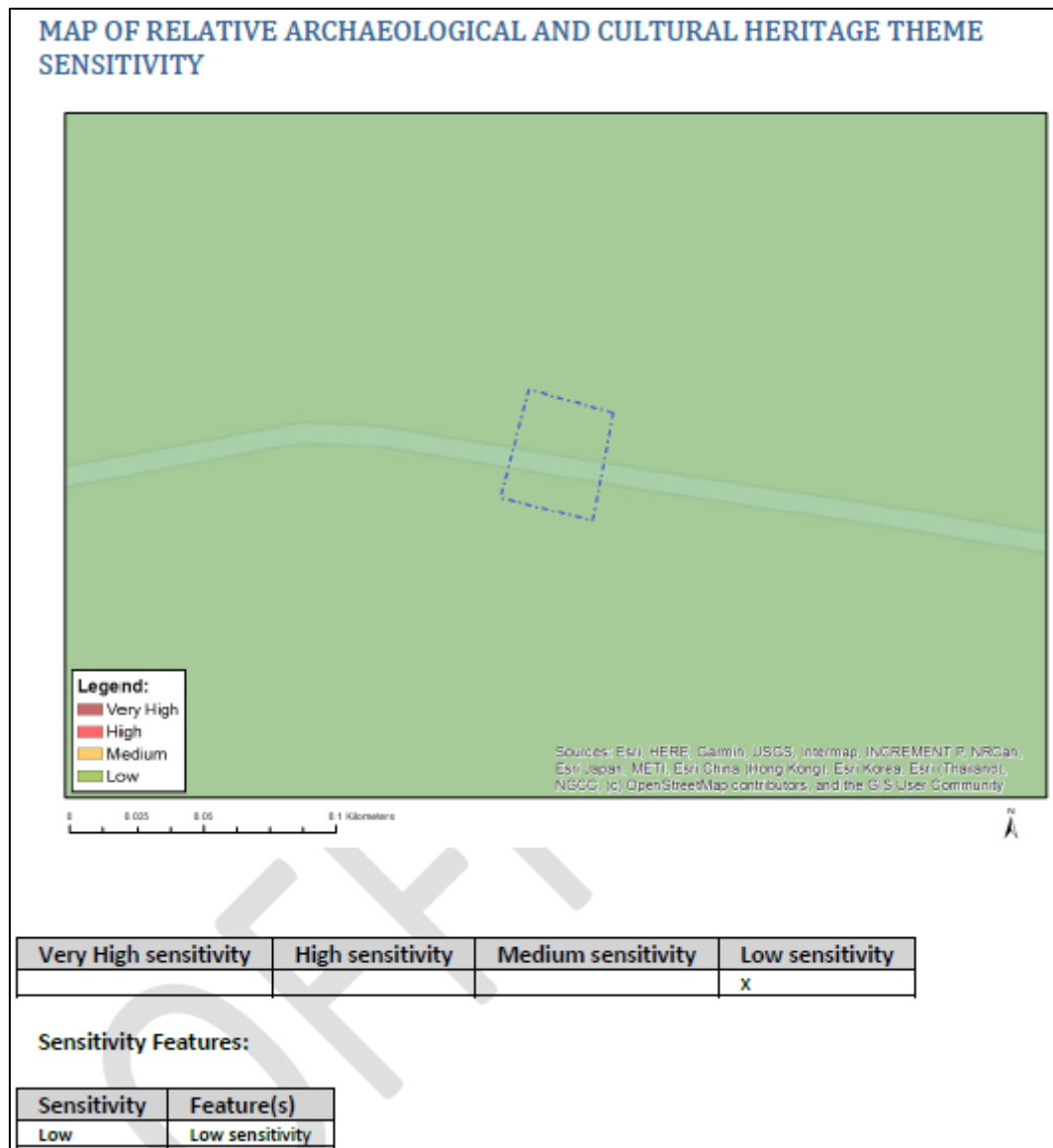


Figure 6. Map of relative archaeological and cultural heritage theme sensitivity from the DFFE screening tool report (Knoetze 2023). The development footprint, Site 5, is represented by the dashed blue line.

Because the proposed activity does not trigger the NHRA nor the need for a NID application to HWC, a detailed desktop study and literature review are beyond the scope of this report.

6. SG Diagrams, Historic Aerial Photographs and Results of Site Inspection

Because the proposed activity does not trigger the NHRA nor the need for a NID application to HWC, historic aerial photographs were not obtained or consulted for this report. A cursory examination of SG Diagrams (not included in this report) does not indicate any structures or features of heritage value in the affected area. Given the above, no information pertaining to colonial period ownership and occupation of Site 5 is presented here as the area has been a road reserve for some time.

Google Earth “historic” imagery was carefully examined for indications and traces of heritage resources such as built structures, roads, features, and evidence for other human-related impacts. No heritage resources of significance were identified within the affected area of Site 5.

An independent site inspection of Site 5 was conducted on 8 February 2024 by means of a foot survey that covered the footprint of the proposed activity. Archaeological visibility was moderate to good and adequate for the purpose of this report. Examples of the studied area are shown above in Figures 4 and 5.

Survey tracks and observations were fixed with a handheld Garmin Etrex 30x GPS to record the investigated area (Figure 7). A high quality, comprehensive digital photographic record was made with a DooGee S86 mobile phone, including location data for photographs. All GPS and photographic data are available on request.

The affected area was examined with a focus on the potential impact of the proposed repair works on heritage related resources of both colonial and pre-colonial origin. Heritage resources listed in Section E of the HWC NID application form were considered but are not listed here unless they are present on or in the immediate vicinity of the development footprint, or if they are anticipated to occur on or in the immediate vicinity of the property.

Due to the previously disturbed and transformed nature of the study area, the fact that the vast bulk of structural and surface sediments are imported, ongoing human-related activities, damage due to flooding, as well as inspection of the affected area and exposed surfaces, adequate observations and information are available for this report and recommendations made herein.

Notwithstanding the substantially transformed status of Site 5, the approach was:

- to evaluate the visual / aesthetic sensitivity of the area, and
- to inspect the footprint of the proposed activity to gain an understanding of its archaeological / heritage content and context.



Figure 7: Study area (yellow marker and white rectangle) with GPS-fixed survey tracks (red lines). (A4 version below).

The road and causeway at Site 5 are likely older than 60 years but are damaged and do not have any structural features of heritage value. Given the existing transport infrastructure at Site 5, any archaeological or palaeontological resources that may have occurred in the affected area are disturbed and compromised by human-related activities and imported sediments. No archaeological or heritage resources of colonial or pre-colonial origin were identified within the study area or in its immediate vicinity. No intact fossil-bearing sediments were seen.

On heritage grounds, due to the transformed nature of the site and the absence of heritage resources or themes in and around Site 5, the proposed repair works will have a negligible to zero impact on the visual or aesthetic heritage value of the area. The rural landscape already contains transport infrastructure and the proposed repair works will not alter the cultural landscape. The proposed repair works will in no way alter the heritage value of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

7. Conclusions and Recommendations

The proposed activity involves repair works to a road at a river crossing that was damaged by flooding in 2021. The river crossing or bridge is less than 50 m in length and the temporarily affected area is 55 m long and 385 m² in extent. Consequently, the scope and nature of the proposed activity does not trigger the National Heritage Resources Act (Act 25 of 1999; NHRA) nor the requirement for a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC). It is also noted that the affected locality is in a road reserve and is already disturbed and transformed by transport infrastructure.

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Heritage / Archaeology: although the road and river crossing are likely older than 60 years, they were damaged by flooding in 2023 and there are no structural or architectural features of heritage value associated with the locality or transport infrastructure. No heritage resources were identified in the temporarily and permanently affected area. Furthermore, the proposed activity does not trigger the NHRA and the locality is already disturbed and transformed by transport infrastructure.

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The positive socio-economic impact, including short-term jobs as well as the need for safe transport infrastructure outweigh the negligible to zero negative impacts this project may have on heritage resources.

Consequently, it is recommended that a Notification of Intent to Develop application to Heritage Western Cape is not required and that no further heritage studies, mitigation, or management measures are needed.

On heritage grounds it is recommended that the proposed activity may proceed in full and without limitations or conditions.

8. References & Bibliography

Heritage Western Cape (HWC), 2021a. Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to Heritage Western Cape.

Heritage Western Cape (HWC), 2021b. Guide for Minimum Standards for Archaeology and Palaeontology Reports Submitted to Heritage Western Cape.

Pether, J, 2024. Brief Palaeontological Impact Statement, New Causeway – Leermansdrifrivier – Site 5 DR1791 km 1.59, Wittedrift Area, Bitou Municipality, Garden Route District, Western Cape.

Knoetze, M. 2023. Screening Report for an Environmental Authorization as Required by the 2014 EIA Regulations – Proposed Site Environmental Sensitivity, Proposed Culvert Replacements, Site 5, Western Cape Government, Dept of Transport and Public Works, Western Cape Province.

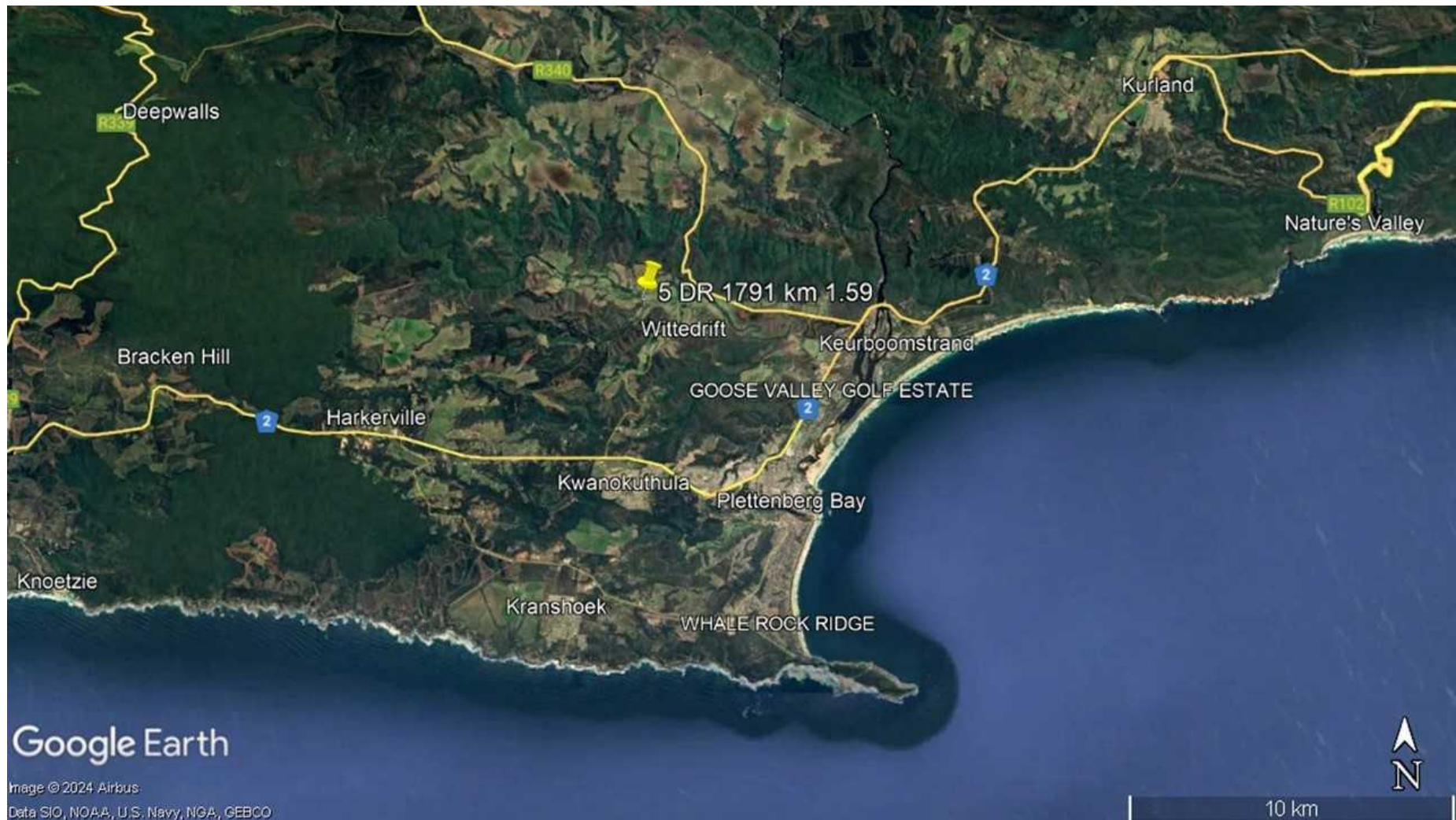


Figure 1. Enlarged from Locality Map showing Site 5 (labelled yellow marker) relative to Plettenberg Bay and Wittedrift, Western Cape. Courtesy of Cape Google Earth 2022.

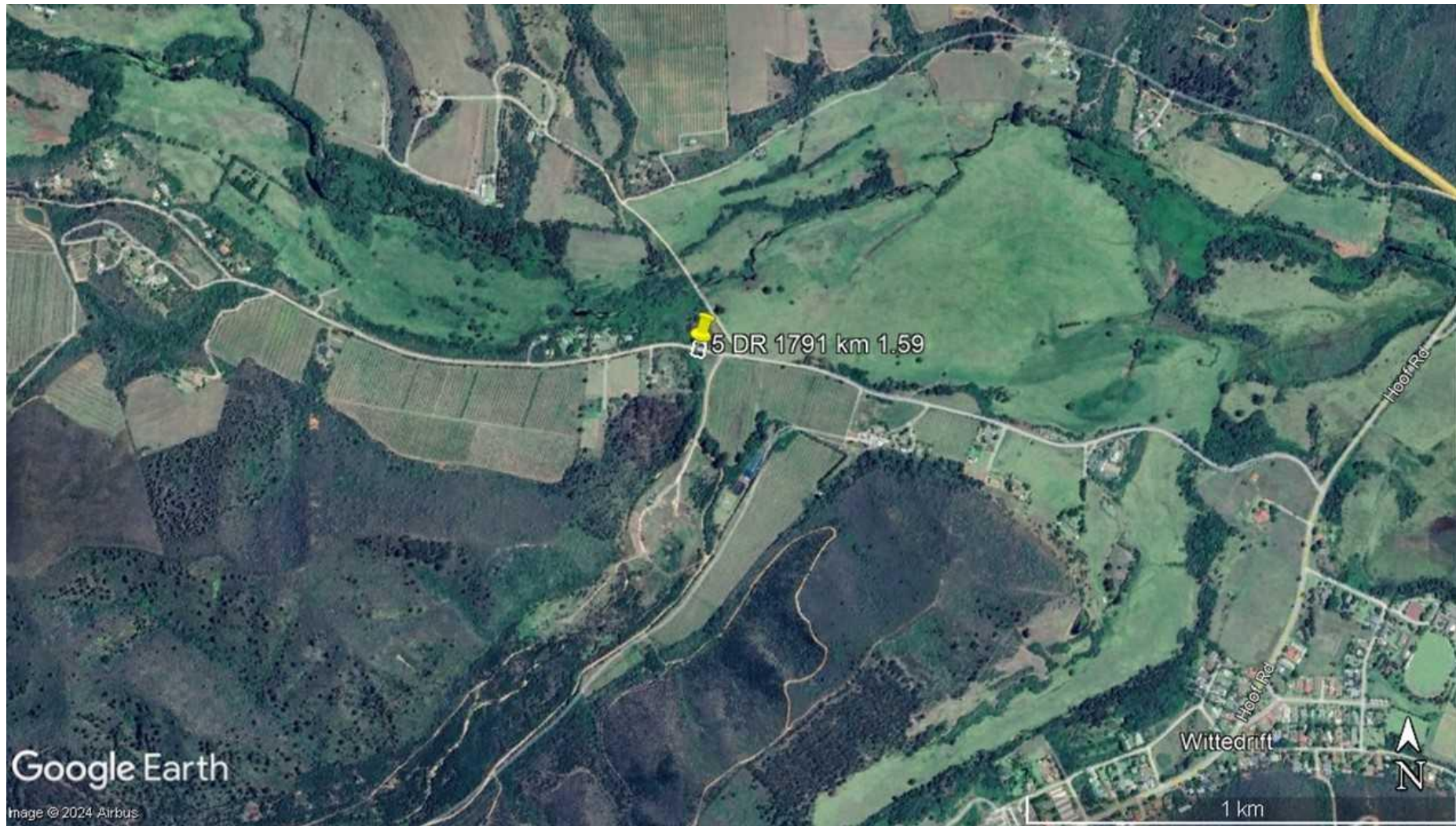


Figure 2. Enlarged from Figure 1 showing Site 5 (labelled yellow marker) relative to Wittedrift, Western Cape. Courtesy of Cape Google Earth 2022.



Figure 7: Study area (yellow marker and white rectangle) with GPS-fixed survey tracks (red lines).

Appendix A:

John Pether, M.Sc., Pr. Sci. Nat. (Earth Science), Ass. Prof. Herit. Practs.- W. Cape

Geological and Palaeontological Consultant

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16 February 2024

ENGAGED BY:

Dr P Nilssen, Point of Human Origins

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BRIEF PALAEOONTOLOGICAL IMPACT STATEMENT

NEW CAUSEWAY – LEERMANSDRIFTRIVIER – SITE 5 DR1791 km 1.59

Wittedrift Area, Bitou Municipality, Garden Route District, Western Cape

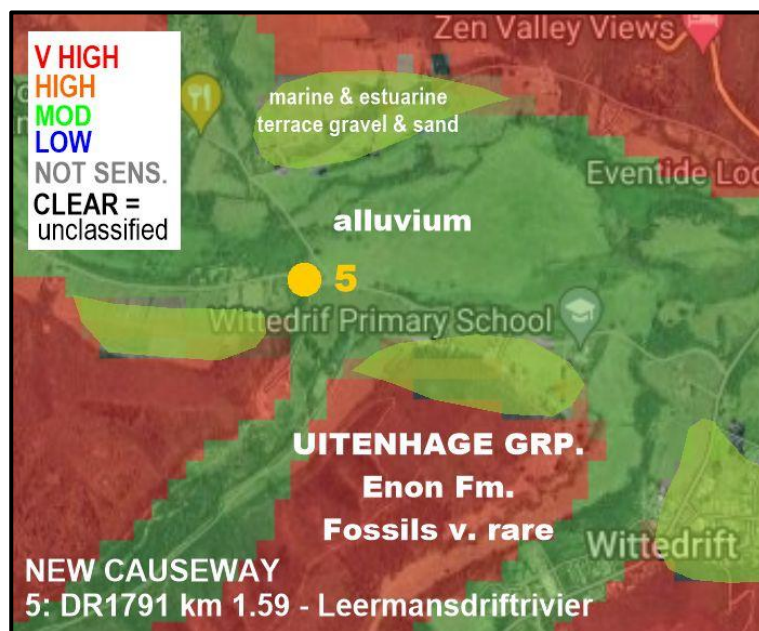


Figure 1. Annotated SAHRIS Palaeontological Sensitivity Map.

The bedrock of the area is the Enon Formation (Figure 1), the lowermost formation of the Uitenhage Group, which is mainly comprised of conglomerates shed from the fault scarps during the break-up by rifting of the super-continent Gondwana, as Africa, South America and Antarctica separated, in the Jurassic Period 170-150 million years ago (Muir, 2018). Fossils are very rare in the Enon Fm., but dinosaur teeth, claws and bone fragments have been found, and lignified “soft-coal” wood occurs sparsely.

Site 5 is situated on the alluvium in the valley of the Bietourivier and the new replacement causeway is across the end of its tributary, the Leermansdriftrivier, where it debouches into the Bietou floodplain. Flanking the floodplain are terraces of “marine & estuarine terrace gravels & sands, partly calcareous” which are now cultivated fields or populated, e.g. Wittedrift village (Figure 1). The course of the Leermansdriftrivier is incised

below the terrace level and the upper alluvium has probably been deposited during the last several thousand years, but older Quaternary alluvium may be intersected by earthworks.

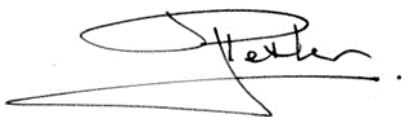
As the context of Site 5 is deposited alluvium, fossils could occur and the SAHRIS palaeontological sensitivity rating for alluvial deposits is Moderate/Green. Theoretically, robust, petrified fossils reworked from the Enon Fm. could occur, but given their scarcity this is improbable. Fossil bones and teeth of late Quaternary age may occur, transported from the upstream catchment. Although previous construction has disturbed the area, floods and disturbance do occasionally unearth fossil material, with consequent fortuitous discoveries. In view of the low volume of affected deposits and the likelihood that fossil bones which may occur would be members of the modern (pre-historic) fauna the palaeontological impact of the re-establishing of the causeway is LOW.

Fossil bone finds are unlikely, but with some possibility, and just in case it is recommended that the Heritage Western Cape Fossil Finds Procedure (HWC-FFP) is included in the Environmental Management Plan (EMP) for the construction earthworks, basically "If fossil bones are uncovered during excavations stop work at that spot and report to Heritage Western Cape". The links to the HWC and the FFP are below:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

HWC: 021 483 9729

Heritage Western Cape will assess the information and liaise with an archaeological or palaeontological specialist, as appropriate.

A handwritten signature in black ink, appearing to read 'John Pether', with a stylized flourish underneath.

John Pether

Muir, R.A. 2018. Recalibrating the breakup history of SW Gondwana: The first U-Pb chronostratigraphy for the Uitenhage Group, South Africa. Ph.D. Thesis, University of Cape Town.