ATT: SAMORNAY SMIDT

PROPOSED UPGRADING OF PROTEA ROAD, PAARL.

EXTERNAL ENVIRONMENTAL AUDIT REPORT IN TERMS OF REGULATION 34 OF THE NEMA EIA REGULATIONS, 2014 (AS AMENDED).

DEA&DP EIA REF. NO. 16/3/3/1/B3/28/1089/19
NEAS REF. NO. WCP/EIA/0000716/2019

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KAPP ENVIRONMENTAL CONSULTANTS

KAPPEC

05 March 2025

DETAILS OF THIS REPORT

Status of this Report	**Final Regulation 34 External Compliance Audit Report**
Date Submitted	05 March 2025
Public Review Period	Not Applicable
Report Title	Proposed Upgrading of Protea Road, Paarl
Applicant	**The Head of Department** **Department of Transport and Public Works** Private Bag X9185 Cape Town 8000 Ms. Melanie Hofmeyr (021) 483 5713 melanie.hofmeyr@westerncape.gov.za
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DISCLAIMER

This report has been prepared for the Department of Transport and Public Works represented by Ms. Melanie Hofmeyr and is subject to and issued in accordance with the agreement with Kapp Environmental Consultant (Pty) Ltd. (KAPPEC).

The opinions expressed in this report have been based on the information supplied to KAPPEC by the Client and the relevant Environmental Assessment Practitioner. The Author has exercised all due care in reviewing the supplied information, but conclusions from the review are reliant on the accuracy and completeness of the supplied data. KAPPEC does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. KAPPEC accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party.

Opinions presented in this report apply to the site conditions and features as they existed at the time of the writing of this report, and those reasonably foreseeable.

LETTER OF UNDERTAKING AND STATEMENT OF INDEPENDENCE

I Renier Kapp, as the appointed independent Environmental Assessment Practitioner (EAP) hereby declare that I:

- Will perform the work relating to the appointment in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- Other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- Work performed for this study was done in an objective manner irrespective of how such findings may be favourable or not to the applicant;
- declare that there are no circumstances that may compromise my objectivity in performing such work;
- All facts and findings will be presented in an objective manner in accordance with my professional experience and information derived from the study;
- have expertise in conducting the independent audit, including knowledge of the relevant legislation and any guidelines that have relevance to the development; and
- All particulars furnished in this report are true and correct.

(Renier Kapp)

Signature of the Principle Environmental Assessment Practitioner

Kapp Environmental Consultants (Pty) Ltd (KAPPEC)

Name of Company

05 March 2025

Date

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ABBREVIATIONS

MMP ..... Maintenance Management Plan

DEFF ..... Department of Environment, Forestry and Fisheries

DWS ..... Department of Water Affairs and Sanitation

EA ..... Environmental Authorization

EAP ..... Environmental Assessment Practitioner

ECO ..... Environmental Control Officer

EIA ..... Environmental Impact Assessment

EMP ..... Environmental Management Programme

DEO ..... Designated Environmental Officer

KAPPEC ..... Kapp Environmental Consultants

I&AP ..... Interested and Affected Parties

RE ..... Resident Engineer

APPENDICES

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INTRODUCTION

Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) has been appointed on behalf of the Department of Transport and Public Works (the Applicant) as the independent environmental practitioners to undertake an external compliance audit in fulfilment of Condition 15 of the Environmental Authori zation (the EA) and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended).

An Environmental Authorisation (EA) was granted to the Department of Transport and Public Works on June 12, 2020 (DEA&DP EIA Ref: 16/3/3/1/B3/28/1089/19) in terms of the National Environmental Management Act, 1998 (Act 107 Of 1998) and The Environmental Impact Assessment Regulations, 2014 (as amended).

This external audit, conducted in alignment with the National Environmental Management Act (NEMA), is to increase the contractor's compliance rating in terms of the approved Environmental Authorization and the EMPr. The body of this report will incorporate the auditable conditions and requirements contained in both the EA and the EMP. The conditions of the EA have been summarized in the report including its corresponding level of compliance with each condition.

The methodology followed for conducting the environmental audit included:

- Compilation of background information for site visit
- Site Visit (5 December 2024)
- Documentation audit
- Compilation of environmental audit report
- Submission of environmental audit report (05 March 2025)

The items have been included in table format and compliance will be indicated based on assigned colour significance as per Table 1 below:

TABLE 1: COMPLIANCE RATING

Colour	Compliance Rating Significance
GREY	A grey item indicates that a compliance rating is not relevant. Item is listed for awareness although will not/cannot be rated.
GREEN	An item is marked green to indicate complete compliance in line with the EMP.
YELLOW	An item is marked yellow to indicate sufficient compliance although possibly not as prescribed in the EMP.
ORANGE	An item is marked orange to indicate a non-compliance although the resulting impact is not deemed significant.
RED	An item is marked red to indicate a significant or ongoing non-compliance which needs to be addressed as per the EAP instruction.

PROJECT DESCRIPTION

Overview

The proposed project entails upgrading Protea Road (Divisional Road 1098) from a gravel to a tar-surfaced road, along with significant stormwater infrastructure improvements. Protea Road spans approximately 8.779 km, extending from the R44 West to the R304 and traversing primarily the Drakenstein municipal area, with a small section within the Stellenbosch municipal jurisdiction.

This upgrade aims to enhance traffic capacity and safety for the approximately 728 vehicles using this route daily, addressing increased demands due to regional population and vehicular growth.

The upgrade also mitigates challenges posed by limited gravel resources and deteriorating road conditions.

Stormwater Infrastructure Improvements

The project includes upgrading four culverts within watercourses to improve drainage and minimise erosion. Specific details for each culvert are as follows:

1. **km 1.3112 (Klapmuts River)**
    - Retain the existing in-situ culvert structure and clear debris.
    - Add a new in-situ culvert adjacent to the existing one to increase flow capacity.
    - Connect the outlet to the existing lined open drain.
2. **km 2.312 (Channelled Valley Bottom Wetland)**
    - Replace the existing culvert with four 1500mm x 900mm box culverts.
    - Construct new inlet and outlet structures with reno-mattresses for erosion control (approx. 13m x 1.5m).
    - Install a drop inlet to maintain existing wetland water levels.
3. **km 4.326 (Unchannelled Valley Bottom Wetland)**
    - Replace the existing 600mm culvert with a 1200mm x 900mm box culvert.
    - Construct new inlet and outlet structures with reno-mattresses for erosion control (approx. 7m x 1.5m).
4. **km 5.102 (Unchannelled Valley Bottom Wetland)**
    - Replace the existing 600mm culvert with a new 600mm pipe culvert.
    - Construct new inlet and outlet structures with reno-mattresses for erosion control (approx. 6m x 1.5m).

Environmental Considerations

The project involves clearance of natural vegetation, including sections classified as Critical Biodiversity Areas (CBAs). Rehabilitation measures, developed by Bergwind Botanical Surveys & Tours, are outlined in the Environmental Management Plan (EMP). These measures include:

- Mitigating impacts on sensitive flora through specific rehabilitation plans.
- Implementing post-construction vegetation restoration along the road reserve.

Regulatory Compliance

The road upgrade and culvert construction trigger listed activities under the National Environmental Management Act (NEMA) due to:

- Construction within watercourses increasing the development footprint.
- Clearance of CBA vegetation.

Environmental Authorization is being sought for these activities, specifically under GN R. 327 Activity 19 and GN R. 324 Activity 12. The application is supported by detailed freshwater and botanical impact assessments.

Alignment and Road Safety Enhancements

Protea Road's alignment will largely remain unchanged, except for minor re-alignment between km 0.6 and km 1.0. The surfacing and stormwater upgrades will enhance local infrastructure, provide a safer travel route, and reduce long-term maintenance costs.

LISTED ACTIVITIES

The Amended EA subsequently authorised the applicant to undertake the underneath **listed activities**:

Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):

Activity 19:

Activity Description:
The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from —
(i) a watercourse;
but excluding where such infilling, depositing, dredging, excavation, removal or moving—
(a) will occur behind a development setback;
(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;
(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or
(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.

Upgrading of the culverts require the infilling or depositing and excavation of more than 10m³ of material within a watercourse.

Listing Notice 3 of the NEMA EIA Regulations, 2014 (as amended):

Activity 12:

Activity Description:
The clearance of an area of 300 square metres or more of indigenous vegetation except where such indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.
i. Western Cape
i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;
ii. Within critical biodiversity areas identified in bioregional plans;
iii. Within the littoral active zone or 100 metres inland from the high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;
iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or

v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.

Upgrading of Protea Road will result in the clearance of 300 square metres or more of indigenous vegetation within a critically endangered ecosystem listed in terms of section 52 of the NEMBA.

REGULATION 34 EXTERNAL AUDIT REQUIREMENTS

This section will attempt to detail the content requirements to be included as part of a Regulation 34 Audit Report as outlined in terms of Appendix 7 of Regulation 982 of the 2014 EIA Regulations.

Environmental audit report

The environmental audit report must provide recommendations regarding the need to amend the EMPr, and where applicable, the closure plan.

Objective of the environmental audit report

The objective of the environmental audit report is to

a) report on –
    i. the level of compliance with the conditions of the environmental authorisation and the EMPr, and where applicable, the closure plan; and
    ii. the extent to which the avoidance, management and mitigation measure provided for in the EMPr, and where applicable, the closure plan achieve the objectives and outcomes of the EMPr, and closure plan;
b) identify and assess any new impacts and risks as a result of undertaking the activity;
c) evaluate the effectiveness of the EMPr, and where applicable, the closure plan; and
d) identify shortcomings in the EMPr, and where applicable the closure plan, and
e) identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr, and where applicable, the closure plan.

Content of environmental audit reports

(1) An environmental audit report prepared in terms of these Regulations must contain –

a) details of the –
    i. independent person who prepared the environmental audit report; and
    ii. expertise of the independent person that compiled the environmental audit report;
b) a declaration that the independent auditor is independent in a for as may be specified by the competent authority;
c) an indication of the scope of, and purpose for which, the environmental audit report was

prepared;

d) a description of the methodology adopted in preparing the environmental audit report;

e) an indication of the ability of the EMPr, and where applicable, the closure plan to –

   i. sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on-going basis;
   ii. sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and
   iii. ensure compliance with the provisions of environmental authorisation, EMPr, and where applicable, the closure plan;

f) a description of any assumptions made, and any uncertainties or gaps in knowledge;

g) a description of any consultation process that was undertaken during the course of carrying out the environmental audit report;

h) a summary and copies of any comments that were received during any consultation process; and

i) any other information requested by the competent authority.

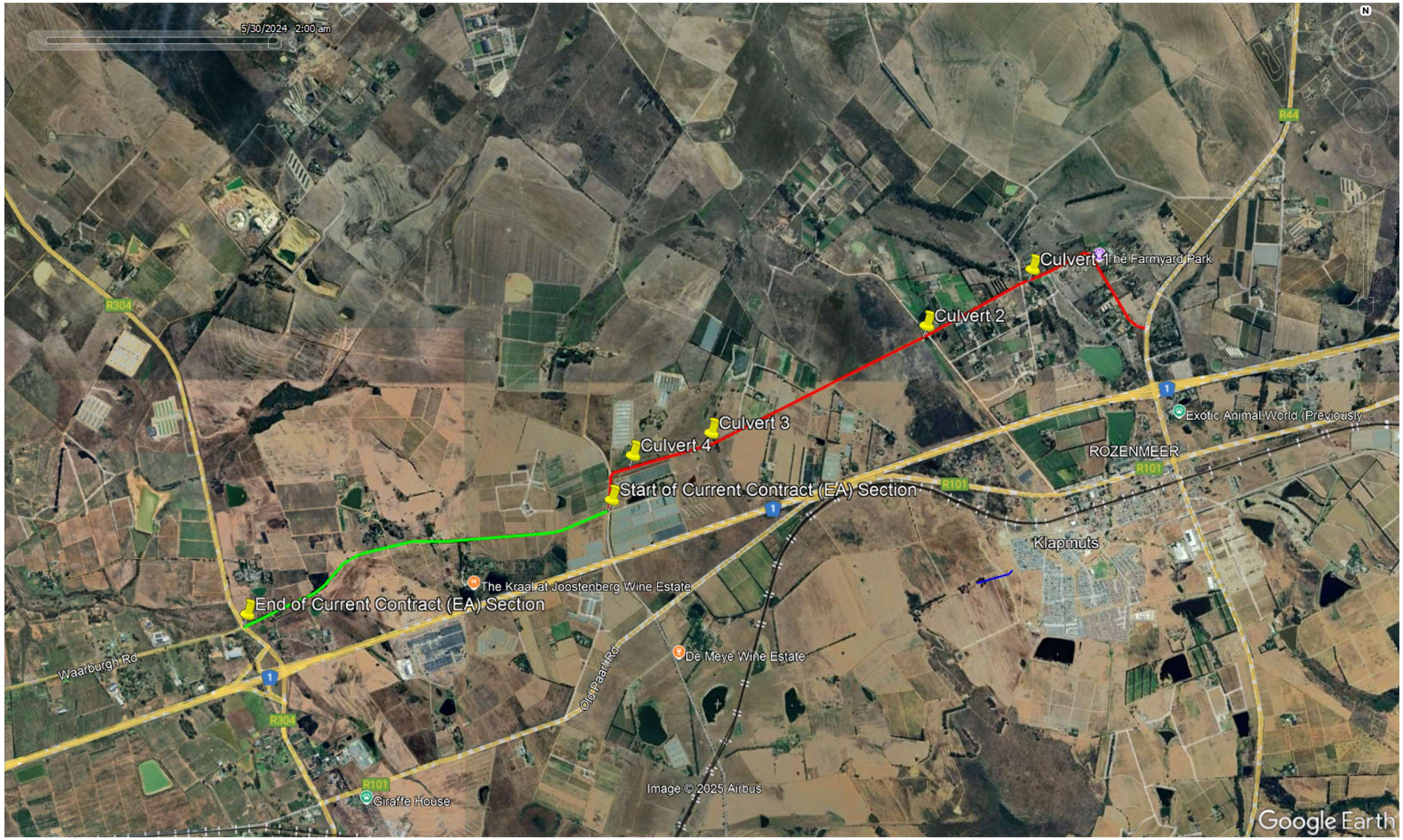


FIGURE 1: LOCALITY MAP FOR EA ACTIVITIES

FIGURE 2: LOCALITY MAP FOR OFFICES, SITE CAMP AND STOCKPILES

CONDITIONS OF AUTHORISATION

TABLE 2: ENVIRONMENTAL AUTHORISATION GENERAL CONDITIONS AND COMPLIANCE

No.	EA CONDITIONS	COMPLIANCE FINDING
1.	The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Alternative, as described in the BAR dated March 2020 on the site as described in Section C above.	The preferred alternative, as authorised, is being implemented on-site.
2.	The Environmental Authorisation is valid for a period of **five years** from the date of issue, within which commencement must occur.	A letter to notify the department of the intended commencement of activities was submitted to the Department on 14 September 2023. The holder commenced construction in March 2024, and the EA was granted on the 12th of June 2020, thus within 5 years.
3.	The development must be concluded within **ten years** from the date of commencement of the listed activities.	This is noted. Construction is well underway and as scheduled.
4.	The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.	Noted, the holder holds responsibility for the actions undertaken by all parties on site.
5.	Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.	Noted. No changes or deviations from the scope of the project description have occurred since the EA was obtained/approved.
6.	Seven calendar days' notice, in writing, must be given to the	A notification of commencement was sent to DEA&DP on the

	Competent Authority before commencement of construction activity. 6.1 The notice must make clear reference to the site details and EIA Reference number given above. 6.2 The notice must also include proof of compliance with the following conditions described herein: Conditions: 7, 8, 12 and 19.	14th of September 2024 and made clear reference to the site details and EIA Reference, it also included proof/comments of compliance with conditions 7, 8, 12 and 19. Please refer to proof of EA conditions below. **Condition 7:** The EA was issued on the 12th of June 2020, and the I&APs were notified of the EA on the 17th of June 2020, thus within 5 days from the EA was issued. **Condition 8:** The listed activities have not commenced within 20 days from the date of issue of the EA. The EA was granted on the 12th of June 2020 and the construction activities commenced in March 2024. **Condition 12:** Guillaume Nel Environmental Consultants (GNEC) has been appointed as the Environmental Control Officer (ECO) to conduct fortnightly audits on compliance in terms of the EA and the Environmental Management Programme (EMPr). **Condition 19:** A search and rescue was done prior to commencement and the plant material is currently stored in GNEC nursery. The plants searched and rescued will be used during rehabilitation.
7.	The holder must in writing, within 14 (fourteen) calendar days of the date of this decision– 7.1 notify all registered Interested and Affected Parties ("I&APs") of – 7.1.1 the outcome of the application; 7.1.2 the reasons for the decision as included in Annexure 3;	The I&AP Notification letter after the approval of the EA was sent on the 17th of June 2020 (5 days after the EA was granted). All of the required information was provided as stipulated in this condition.

	7.1.3 the date of the decision; and 7.1.4 the date when the decision was issued. 7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 (as amended) detailed in Section G below; 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision; 7.4 provide the registered I&APs with: 7.4.1 the name of the holder (entity) of this Environmental Authorisation, 7.4.2 name of the responsible person for this Environmental Authorisation, 7.4.3 postal address of the holder, 7.4.4 telephonic and fax details of the holder, 7.4.5 e-mail address, if any, of the holder, and 7.4.6 contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations (as amended).	
8.	The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.	The holder commenced with the approved listed activities in March 2024, 4 years after the letter to notify the registered I&APs of this decision was sent. (The I&APs were notified on the 17th of June 2020, and the letter of commencement for site preparation was sent on the 14th of September 2023.) No appeals have been lodged against the EA.
9.	The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation	According to the supplied ECO reports and site audit conducted, the contractor is implementing the EMPr on-site.

	is hereby approved and must be implemented.	
10.	The MMP adopted as part of this Environmental Authorisation must be implemented.	Noted, the MMP is included as part of the EMPr and the management activities must be implemented throughout the lifecycle as prescribed.
11.	The EMPr and MMP must be included in all contract documentation for all phases of implementation.	An environmental file is available on-site and includes all the necessary documentation (Method Statements, EA, and required EMPr).
12.	The holder must appoint a suitably experienced environmental control officer ("ECO") before commencement of any land clearing or construction activity to ensure compliance with the EMPr and the conditions contained herein.	Divan Opperman from Guillaume Nel Environmental Consultants was appointed as ECO on the site and submitted monthly reports to DEA&DP.
13.	A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.	A copy of the EA, MMP, and EMPr has been placed on file within the environmental file on site.
14.	Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.	Access to the site referred to in Section C is granted, the environmental reports will be presented to the Competent Authority who requests to see it.
15.	In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr, MMP, and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an **independent person** (not the ECO appointed in terms of condition 12 above) and must contain all the information required in Appendix 7 of the NEMA EIA Regulations,	Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) has been appointed on behalf of the Department of Transport and Public Works (the Applicant) as the independent environmental assessment practitioners to undertake an external compliance audit in fulfilment of Condition 15 of the Environmental Authorization (the EA) and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended).

	2014 (as amended). The holder must undertake an environmental audit every year for the duration of the construction phase and submit Environmental Audit Reports annually to the Competent Authority during the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority within three months after operation commenced. The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).	The I&AP's will be notified within 7 calendar days after the submission of the audit reports to the Competent Authority
16.	Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.	No heritage remains have been exposed during excavations on site as of the time of this report.

17.	A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.	No heritage remains have been exposed during excavations on site as of the time of this report.
18.	The relevant requirements with respect to occupational health and safety must be adhered to at all times.	An independent Occupational Health and Safety officer forms part of the project team and assesses the requirements on site.
19.	A search and rescue exercise must be undertaken for the species identified in the spring survey, as recorded and outlined in the Botanical Statement dated 31 October 2019, compiled by Capensis, before commencement of construction activities.	A search and rescue were carried out prior to commencement and the plant material is currently stored within the GNEC nursery. The plants searched and rescued will be used during rehabilitation.
20.	The Rehabilitation Report for Protea Road dated April 2019, compiled by Guillaume Nel Environmental Consultants must be implemented once all construction activities are concluded. The results of the implementation of the rehabilitation measures must be included in the annual independent audits to be conducted in terms of condition 15 above.	Rehabilitation will commence after construction is completed.

SITE AUDIT FINDINGS

A detailed site visit was conducted on the 5th of December 2024 to assess the progress of the ongoing construction activities in line with Condition 15 of the environmental authorization. This current contract underway does not include the upgrade of the entire extent of Protea Road as outlined in the Environmental Authorization. This contract includes the section of Protea Road from the R302 intersection in the west up to the Hercules Pilaar Road intersection in the east which has an extent of approximately 3.3km. None of the larger culverts as outlined in the EA dated 12 June 2020 forms part of the current contract, please refer to Figure 1 above.

The contractors' offices are located within the Joostenberg Vlakte residential smallholding area. An environmental file is on site at the contractors office which includes the information required in the EMPr. The contractors site camp is located west of Protea Road along the Waarburgh Road where permission was sought and obtained from the landowner. The site camp area includes an office for the contractor's representative, lockable storage containers, a chemical toilet, material laydown area, a temporary fencing waste storage area, a two bunded areas for both a bitumen storage tank as well as for bitumen drums, and road aggregates which is stored across the contractors camp.

A bunded area with 110% storage capacity has been constructed for the bitumen tank on site. The contractor confirmed the empty tanks are temporally stored on-site and will be used at another site. A bunded area was also constructed and provided for the empty bitumen bins/containers. At the time of audit, it was noted that an additional bitumen tank was in place and was being utilized at the time of audit. The additional storage tank is located outside of the bunding area. Additional bunding for this tank must be provided, or alternatively this tank should be placed within the existing bunding area.

Topsoil has been stripped at a few locations along the site and is currently stockpiled at Stockpile Areas 1 and 2, as shown in the figures below. Where possible topsoil has been windrowed, but due to limited space on site stockpiling within the stockpile areas have been preferred. The contractor was requested to reduce the height of the topsoil stockpile which exceed 2m and this has been rectified at the time of the audit.

At the time of audit, the wind was excessive and the movement of trucks along the eastern (more clay) section was seen to generate excessive dust. The contractor, however, was undertaking dust suppression along this stretch and two water trucks, as well as a water cart and tractor was observed watering the road surface in this area during the audit. Significant mitigation measures are thus being implemented although it is not possible to completely prevent the generation of dust for the time being.

Bins have been provided along the route and within the site camp. A litter and waste structure are in place within the contractors camp constructed from temporary fencing. Proof of disposal slips have been requested by the ECO which is yet to be provided.

Chemical toilets are in place within the contractors' camp area, as well as along the works areas.

No spills have occurred on site to date as per the ECO reports provided and spill kits are available for oil and hydrocarbon spills. Firefighting equipment must be available on site. No cement residues were noted during the audit.

The approved Rehabilitation Plan will be implemented after the completion of works in the respective areas.

SITE CAMP AND STOCKPILE AREAS

Stockpile Area 1

An area previously disturbed along Waarburgh Road west of Protea Road was identified by the ECO for the 1st stockpile area. Topsoil has been stockpiled in this location.

Demarcations around the topsoil stockpile footprints are still in place.

Stockpile Area 2

An area previously disturbed along Waarburgh Road west of Protea Road was identified by the ECO for the 2nd stockpile area.

The stockpile area includes provision for topsoil stockpiles, excavated subsoil stockpiles, base aggregate material, and precast stormwater infrastructure laydown areas.

Site Camp

Located adjacent to stockpile area 2 on area previously disturbed along Waarburgh Road west of Protea Road was identified by the ECO. The site camp area includes an office for the contractor's representative, lockable storage containers, a chemical toilet, material laydown area, a temporary fencing waste storage area, a two bunded areas for both a bitumen storage tank as well as for bitumen drums, and road aggregates which is stored across the contractors camp.








ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

TABLE 3: ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

No.	EMP REQUIREMENT	COMPLIANCE FINDING
1.	**Site Demarcation and No-Go/Sensitive Areas**	
1.1	The surveys for the overall project area and construction footprint as approved in the Environmental Authorisation (EA) must be clearly demarcated before the contractors set up their crew camps or begin construction.	Construction commenced in March 2024. The construction footprint includes the roadway servitude which is readily demarcated with farmers fencing along the entire road width. All areas outside the construction footprint need to be clearly seen as no go areas. Additionally, only stockpile and site camp areas were created outside of the works area, for which permissions were sought, and the areas were demarcated at the time of audit.
1.2	The watercourses and the applicable setback area should be clearly demarcated with danger tape by an ECO and marked as a no-go area where no construction activities are planned.	This section of the contract does not include the larger culverts outlined in the EA where the setback areas have been determined. Only smaller stormwater interventions are applicable to this section of works.
1.3	These no-go areas (watercourses and the applicable setback area) must be demarcated with fencing/warning tape and signs before any construction activities commence. These areas and the type of fencing/demarcation must be approved by the relevant specialist involved in the EIA process. The EO and ECO must be on site in order to make sure the correct areas are fully demarcated.	This section of the contract does not include the larger culverts outlined in the EA where the setback areas have been determined. Only smaller stormwater interventions are applicable to this section of works.
1.4	All construction activities must remain within the boundaries of the development area, as demarcated at the start of the construction phase. The construction footprint must be kept to a minimum by constructing boundaries and demarcated around areas not to be disturbed.	The construction footprint includes the roadway servitude which is readily demarcated with farmers fencing along the entire road width. All areas outside the construction footprint need to be clearly seen as no go areas. Additionally, only stockpile and site camp areas were created outside of the works area, for which

		permissions were sought, and the areas were demarcated at the time of audit.
2. 2.1	**Flora** Species found during the spring botanical survey (conducted by Capensis) should be search and rescued and replanted once construction have been completed. This activity is stipulated in the Rehabilitation Plan compiled by GNEC.	Before construction commenced, a search and rescue operation were carried out within the construction footprint of the road reserve and associated culverts. The rescued plant material is currently being stored in GNEC's nursery and will be replanted on-site upon completion of the construction activities.
2.2	Plants that are proclaimed as problem plants or noxious weeds must be excluded from the landscaping plan and these must be removed immediately, should they occur on site.	During the site audit, no alien vegetation was observed along the route reserve within the construction footprint. The Rehabilitation Plan (Appendix H) will be implemented upon the completion of works.
2.3	No plants/trees may be destroyed prior to notify the ECO about the plan. The ECO is to approve all plants to be removed.	Trees along the road which have been carefully trimmed to allow the movement of trucks. The ECO is aware of this and this and no damage to the trees has occurred. *Please refer to Appendix A photo pages.*
2.4	The contractor must rehabilitate the construction camp and any other disturbed areas once construction activities have terminated. Compacted areas will be ripped and mulched in order to ensure recovery of the natural vegetation cover.	Noted, rehabilitation efforts as per the Rehabilitation Plan will begin after construction is completed.
2.5	Once construction is complete, rehabilitation of un-built areas must be undertaken in order to restore the aesthetic & ecological value of the area. It is recommended that a qualified landscape architect, qualified botanist, aquatic specialist and the ECO be consulted with regard to the most appropriate rehabilitation vegetation and structures, where agricultural land uses are not proposed. Active re-vegetation must take place with locally indigenous vegetation under the supervision of the ECO.	Noted, rehabilitation efforts as per the Rehabilitation Plan will begin after construction is completed.

2.6	No open fires shall be allowed on site under any circumstances, fires will only be permitted in adequate facility within the crew camp, Forest Act, 1984 (Act No. 122 of 1984).	No evidence of fires was observed during the site audit.
2.7	Areas supporting intact and semi-intact vegetation should be windrowed in order for the topsoil and vegetation to be replaced once construction activities have concluded.	Topsoil has been stripped at a few locations along the site and is currently stockpiled at Stockpile Area 1 and 2. Topsoil has also been windrowed at some locations along the route, although due to limited space stockpiling was preferred. Windrowed topsoil stockpiles was noted along the largest cutting sections along the route and the topsoil was stockpiled at the top of the cuttings for rehabilitation of the embankments.
2.8	Rehabilitation of the intact and semi-intact habitat area to take place in accordance with the Rehabilitation Plan compiled by GNEC.	Noted, rehabilitation efforts as per the Rehabilitation Plan will begin after construction is completed.
2.9	Any other problem plants must be included in an alien management programme for the site. **Eradication must occur every 6 months.**	During the site audit, no alien vegetation was observed along the route reserve within the construction footprint. The Rehabilitation Plan (Appendix H) will be implemented upon the completion of works.
3.	**Stockpiles**	
3.1	All stockpiled material must be easily accessible on site without any environmental damage of the surrounding properties.	Topsoil and material stockpiles had been windrowed adjacent to the construction area and adequately transported to the designated stockpile areas. Windrowed topsoil stockpiles were noted along the largest cutting sections along the route and the topsoil was stockpiled at the top of the cuttings for rehabilitation of the embankments.
3.2	All temporarily stockpiled material must be stockpiled in such a way that the spread of materials is minimised. In the case of strong wind and/or rain all stockpiled material must be covered with a tarpaulin in order to prevent erosion. All exposed soils must be protected for	Excavated material was placed on one side of the trenches which will be backfilled and reused for cutting, edging, and shaping of the road surface. Construction material stockpiles including aggregates for layer works and stormwater infrastructure are

	the duration of the construction phase with a suitable geotextile (e.g. Geojute or hessian sheeting) in order to prevent erosion and sedimentation of the watercourses in close proximity to these stockpiles.	stockpiled next to the site camp at stockpile area 2. Topsoil and material stockpiles had been windrowed adjacent to the construction area and adequately placed within the designated stockpile areas.
3.3	The stockpiles may only be placed within the demarcated areas, outside of delineated watercourses, the location of which must be approved by the RE, EO or ECO.	Stockpile areas 1 and 2, as previously outlined, have been utilized without prior scanning. The designated stockpile areas are existing disturbed agricultural sites and was identified with the written approval of the landowners. These areas are located outside of the delineated watercourses and the applicable setback zone.
3.4	Stockpiles may not exceed 2 metres in height and their footprint should be kept to a minimum.	The ECO has instructed the contractor to reduce the height of the topsoil stockpile at stockpile area 2, as it exceeds the recommended maximum height of 2 meters. Additionally, the contractor has been advised to remove any non-plant material present on top of the topsoil. This was rectified at the time of audit. *Please refer to the photo pages attached.*
3.5	Stockpiles must be established outside of the delineated watercourses and the applicable setback zone in consultation with the appropriate authority.	The designated stockpile areas are existing disturbed agricultural sites and was identified with the written approval of the landowners. *Please refer to the proof included in the Environmental File attached as Appendix.* These areas are located outside of the delineated watercourses and the applicable setback zone.
4. 4.1	**Topsoil Management** All topsoil must be removed prior to the commencement of any development activities. Topsoil must be stockpiled. Stockpiled topsoil must be regarded as no-go areas.	Topsoil is systematically stripped as construction commences along the route and either windrowed or stockpiled at Stockpile areas 1 and 2.
4.2	Topsoil must be windrowed adjacent to the area where maintenance is required. As such, topsoil should, as far as	Where possible topsoil has been windrowed, but due to limited space on site stockpiling of the topsoil at areas 1 and 2 is

	possible, not be stored in stockpiles.	preferred. Topsoil is systematically stripped as construction commences along the route and either windrowed or stockpiled at Stockpile areas 1 and 2.
4.3	Windrowed topsoil must be regarded as no-go areas.	Noted, during the site audit, no demarcation of the windrowed topsoil was in place, although no signs of trampling or disturbance were observed and these are regarded as no-go areas.
4.4	Windrowed topsoil must be monitored for invasive exotic vegetation growth. Contractors must remediate as and when required in consultation with the EO, RE and ECO.	No alien vegetation was observed on any of the topsoil stockpiles.
4.5	No plant, workforce or any construction related activities may be allowed onto the windrowed topsoil.	During the site audit, no demarcation of the windrowed topsoil was evident, although no signs of trampling or disturbance were observed.
4.6	All topsoil must be replaced during the rehabilitation phase to ensure the re-establishment of natural vegetation.	Noted, all rehabilitation efforts will commence on the completion of construction. Topsoil will be reused and backfilled where necessary.
4.7	Handling of the topsoil should be minimised and should therefore only be handled before construction (to be windrowed) and after construction (topsoil to be replaced).	Where possible topsoil has been windrowed, but due to limited space on site stockpiling of the topsoil at areas 1 and 2 is preferred. Topsoil is systematically stripped as construction commences along the route and either windrowed or stockpiled at Stockpile areas 1 and 2.
5.	**Oil and Chemicals**	
5.1	These substances must be confined to specific and secured areas within the contractor's camp, and in a way that does not pose a danger of pollution even during times of high rainfall.	Lockable storage containers are available on-site at the site camp in good condition for the storage of oils and chemicals, including cement bags and smaller machinery.
5.2	Drip trays (minimum of 10cm deep) must be placed under all machinery and vehicles. The surface area of the drip trays will be dependent on the vehicle and must be large enough to catch any hydrocarbons that may leak from the vehicle while standing. The	No large fuel storage takes place on site and no spills have occurred on site to date. At the time of audit, no stationary machinery or vehicles was present in the site camp, as all vehicles and machinery was being operated.

	depth of the drip tray must be determined considering the total amount / volume of oil in the vehicle. The drip tray must be able to contain the volume of oil in the vehicle.	
5.3	Any spills larger than 100ℓ should be reported to all local authorities. Spill kits must be available on site and in all vehicles that transport hydrocarbons for dispensing to other vehicles on the construction site. Spill kits must be made up of material/product that is in line with environmental best practice (sunsorb is a recommended product that is environmentally friendly).	No large fuel storage takes place on site and no spills have occurred on site to date. The necessary spill kits are located at the site camp.
5.4	All spilled hazardous substances must be contained in impermeable containers for removal to a General & Hazardous Waste Landfill site, (this includes contaminated soils, and drenched spill kit material).	No large fuel storage takes place on site and no spills have occurred on site to date. All soils and material containing bitumen which is not to be reused, must be removed to a General & Hazardous Waste Landfill site.
5.5	Vehicles to be serviced at the contractor laydown area and all refuelling to take place outside of the watercourses and the applicable variable buffer.	Noted, during the site audit no vehicle servicing took place.
6.	**Method Statements** The ECO will evaluate the method statement and ensure that it covers the handling of the following aspects: • Emergency spills procedures for the contamination of soils from spills and fire. • Handling & storage of oils and chemicals. • Cement and concrete batching, which includes the storage, washing & disposal of cement, packaging, tools and plant. • Diesel tanks and refuelling procedures. • Crew camps and construction laydown areas. • Workshop maintenance and cleaning of plant.	Method statements were available on file on site. The contractor submitted the following method statements to the ECO. • Bitumen Handling • Bituminous Material Storage • Concrete • Dust Control • Earthworks and Excavations • Fuel Storage and Spills • Integrated Waste Management • Management of Contaminated Water

		• Material Handling • Resurfacing Works • Site Clearing and Stockpiling • Site Establishment • Stormwater Management • Watercourses and Wetlands
7. 7.1	**Cement** It is suggested that ready-mix cement be used as far as possible to minimize the possible impact on the surrounding environment.	Only one location was noted where small scale batching of cement occurred during the audit. A pre-mix truck was also noted at this location delivering cement. Please ensure that all physical concrete remains are removed immediately after completion.
7.2	No contaminated water-runoff from any in-situ concrete works may be allowed. Waste concrete may not be dumped in or surrounding the watercourses and must be taken off site.	Only one location was noted where small scale batching of cement occurred during the audit. A pre-mix truck was also noted at this location. No cement runoff or remains were noted during the audit.
7.3	Concrete spilled outside of the demarcated area must be promptly removed and taken to a suitably licensed waste disposal facility.	No cement spills were noted during the audit. Only one location was noted where small scale cement batching was underway. The ECO previously requested that the contractor ensure all physical concrete remains are removed immediately after completion.
7.4	The mixing of concrete shall only be done at selected sites on mortar boards or similar structures to contain run-off into natural vegetation, soils and streams.	Only one location was noted where small scale batching of cement occurred on the ground during the audit. A pre-mix truck was also noted at this location delivering cement. Please ensure that all physical concrete remains are removed immediately after completion.
7.5	All empty containers must be stored in a dedicated area and later removed from the site for appropriate disposal at a Licensed Landfill site. All empty cement bags are to be picked up immediately	No empty cement bags were observed during the site audit.

	to ensure that cement dust is not blown away.	
7.6	Empty cement bags are to be stored in a weather and scavenger proof bin, in order to prevent leaching and groundwater contamination.	No empty cement bags were observed during the site audit.
7.7	The visible remains of concrete, either solid, or from washings, shall be physically removed immediately and disposed of as waste to a Licensed Landfill site.	No visible remains of concrete were noted during the audit. The ECO previously requested the contractor to remove all concrete remains from next to the side drains which has been done.
7.8	Washing of the remains into the ground is unacceptable.	No remains of concrete were observed during the site audit, nor any washing into the ground.
7.9	No mixed concrete may be deposited outside of the designated construction footprint.	No cement was utilized outside of the construction footprint area which includes the entire roadway.
7.10	A batter/dagga board mixing trays and impermeable sumps should be provided, onto which any mixed concrete can be deposited whilst it awaits placing.	A wheelbarrow was utilized during the site audit for the concrete whilst it awaited placing at one location.
8. 8.1	**Dangerous and Toxic Materials** Materials such as fuel, oil, paint, herbicide and insecticides must be sealed and stored in bermed areas or under lock and key, as appropriate, in well-ventilated areas.	A bunded area with 110% storage capacity has been constructed for the bitumen tank on site. The contractor confirmed the empty tanks are temporally stored on-site and will be used at another site. A bunded area was also constructed and provided for the empty bitumen bins/containers. At the time of audit, it was noted that an additional bitumen tank was in place and was being utilized at the time of audit. The additional storage tank is located outside of the bunding area. Additional bunding for this tank must be provided, or alternatively this tank should be placed within the existing bunding area.
8.2	Storage facilities should be bunded, roofed, secure, rain, wind and tamper-proof.	Oils and chemicals are stored at the site camp area in suitable shipping containers. No large-scale fuel storage occurs on site. A

		bunded area with a 110% storage capacity has been built for the bitumen tanker.
8.3	Storage areas shall display the required safety signs depicting “no smoking”, “No Naked lights” and “Danger” containers shall be clearly marked to indicate contents as well as safety requirements.	Safety signage is in place on the bitumen tanks on site, as well as on the refueling truck within the site camp.
8.4	Sufficient care must be taken when handling these materials to prevent pollution. Training on the handling of dangerous and toxic materials must be conducted for all staff prior to the commencement of construction. In the case of pollution of any surface or groundwater, the Regional Representative of the Department of Water and Sanitation (DWS) must be informed immediately.	Staff training on health and safety as well as environmental aspects is provided to all employees by the contractor. Proof of these inductions are in place within the environmental file on site.
9. 9.1	**Bulk Storage of Fuels and Oils** Bulk fuel storage tanks on the site shall be on an impervious surface that is bunded and able to contain at least 110% of the volume of the tanks.	No bulk fuel storage tanks were observed on-site during the audit
9.2	Bulk fuel storage tanks shall be located in a portion of the construction camp where they do not pose a high risk in terms of water pollution.	No bulk fuel storage tanks were observed on-site during the audit
9.3	Bulk fuel storage tanks shall be placed so that they are out of the way of traffic, so that the risk of the tanks being ruptured or damaged by vehicles is minimised.	No bulk fuel storage tanks were observed on-site during the audit
9.4	Bulk fuel storage should be covered during the rainy season.	No bulk fuel storage tanks were observed on-site during the audit
10. 10.1	**Use of Dangerous and Toxic Materials** The contractor shall keep the necessary materials and equipment on-site to deal with spills/fires of the materials present should they occur.	Firefighting equipment and an oil spill kit are readily available on-site at the site camp. No spills have been recorded or reported on-site.

10.2	The contractor shall set up a procedure for dealing with spills/fires, which will include notifying the ECO and the relevant authorities prior to commencing construction. These procedures must be developed in consultation and approval by the appointed EO. All staff should receive some form of fire training.	An corrective action reporting system is in place which details all incidents on site as well as the corrective actions undertaken. No large spills nor fires have occurred on site as confirmed per the ECO reporting.
10.3	Fire buckets and hoses shall be in good working order and easily accessible on site.	Firefighting equipment and an oil spill kit are readily available on-site at the site camp.
11. 11.1	**Contractors Camp Site and Crew Camps** The Contractor shall, in conjunction with the EO, designate the restricted eating area for eating during normal working hours. Two refuse bins with lids must be provided and cleaned on a daily basis. The bins are to be secure, wind, weather and scavenger proof. Designated areas for smoking must be provided.	Noted, the site camp has been established and is in good and clean condition, all eating to occur within the site camp. Bins have been provided along the route and within the site camp. No litter was observed along the route during the site audit.
11.2	No fires are to be lit outside of a facility designed to contain fires. The adequacy and positioning of these structures must be determined in consultation with the EO and ECO.	No evidence of fires was observed during the site audit.
11.3	No animals, domestic or otherwise are allowed on the premises. The feeding, or leaving of food, for stray or other animals in the area is strictly prohibited.	No evidence of domestic animals was observed during the site audit.
11.4	Litter (even if originating outside the camp) and concrete bags etc. must be picked up and put into suitably closed bins. The contractor shall provide labourers to clean up the contractor's camp and construction site on a daily basis. These areas shall then be inspected by the contractor or his/her ESO to ensure compliance with this requirement. Rubble and litter must be removed every two weeks or more often as the need arises and be disposed of at a registered landfill site as designated by the Beaufort West Local Municipality's solid waste removal department.	Bins have been provided along the route and within the site camp. No litter was observed during the site audit.

11.5	Accommodation for members of the workforce will not be permitted on site unless authorisation has been given in terms of the Environmental Authorisation issued for the site.	Noted, no accommodation facilities were observed during the site audit.
11.6	Dedicated wash areas must be situated away from surface water sources.	Noted, no specific washing areas were observed during the site audit, but all maintenance and washing of equipment occur within the bounds of the site camp, located away from the watercourse and stormwater drains.
11.7	The contractor's camp shall be monitored for dust fallout and dust suppression applied as required. This may include the laying of gravel; the use of grey water can be considered as an option if the required permits have been acquired.	No dust fallout has been noted during the site audit nor have been reported at the site camp.
11.8	The contractor's camp, offices and storage facilities shall be located within the site boundaries. If this is not feasible an alternative should be designated in consultation with the ECO.	The site camp was created outside of the works area, given the lack of space for these within the road reserve. The site camp was established on a readily disturbed portion of agricultural land and permissions were sought from the landowners and the ECO.
11.9	The contractor shall provide labourers to clean up the contractor's camp and construction site on a daily basis. These areas shall then be inspected by the contractor or his/her ESO to ensure compliance with this requirement.	The site camp is in an acceptable condition.
11.10	The contractor shall be responsible for cleaning the contractor's camp and construction site of all structures, equipment, residual litter and building materials at the end of the construction period and, the topsoil restored in areas where landscaping is to take place.	The site is in a good and clean condition throughout. Topsoil for rehabilitation will be restored upon completion of the works.
12.	**Ablution Facilities**	
12.1	The contractor will be responsible for providing all sanitary arrangements for his and the sub-contractors team. It is proposed that that **one toilet for 15** people will be established on site.	Chemical toilets have been provided by the contractor that can move with the construction team. A chemical toilet is also in place within the site camp.

12.2	Sanitary arrangements shall be to the satisfaction of the ECO and the local authority. The contractor shall keep the toilets in a clean, neat and hygienic condition. The contractor shall supply toilet paper at all toilets at all times. Toilet paper dispensers shall be provided in all toilets.	Chemical toilets are in good condition.
12.3	Toilets provided by the contractor must be easily accessible and a maximum of 150m from the works area to ensure they are utilised. All toilets will be located within the contractor's camp. Should toilets be needed elsewhere, their location must first be approved by the ER, ECO.	Chemical toilets have been provided by the contractor that can move with the construction team. A chemical toilet is also in place within the site camp.
12.4	Toilets out on site must be secured to the ground and have a sufficient locking mechanism operational at all times.	The auditor is unsure whether the toilets were secured to the ground.
13. 13.1	**Dust** Potable water may not be used as a means of dust suppression, alternative measures must be sourced. The use of 'grey' water must be investigated as an alternative. The contractor will be responsible to source this water and obtain the required approvals. Dust mitigation measures to include the use of chemical dust suppressants, such as Lignosulphonates; and the use of soil stabilisers such as straw for large open ground areas.	At the time of audit, the wind was excessive and the movement of trucks along the eastern (more clay) section was seen to generate excessive dust. The contractor, however, was undertaking dust suppression along this stretch and two water trucks, as well as a water cart and tractor was observed watering the road surface in this area during the audit. Significant mitigation measures are thus being implemented although it is not possible to completely prevent the generation of dust for the time being.
13.2	The construction camp shall be treated with dust suppression during dry and windy conditions to control dust fallout. Dust production must be controlled by regular dust suppression of roads and works area, should the need arise. (NB: Concrete dust is toxic and damages soil properties. Therefore dust suppression	No dust is generated at the site camp area nor the stockpile areas and thus no additional measures are required. The contractor, however, was undertaking dust suppression along the eastern section of the works areas and two water trucks, as

	to prevent dust spread must not be done where concrete dust has fallen or it will infiltrate into the soil. Concrete bags must not be allowed to blow around the site and spread cement dust.)	well as a water cart and tractor was observed watering the road surface in this area during the audit. Significant mitigation measures are thus being implemented although it is not possible to completely prevent the generation of dust for the time being. observed during the audit.
13.3	At the end of construction, the site camp must be fully rehabilitated by removing the temporary surface and ripping the area to loosen the soil.	All rehabilitation will commence after the completion of works.
13.4	All vehicles transporting material that can be blown off (e.g. soil, rubble etc.) must be covered with a tarpaulin, and speed limits of 20 km/h must be adhered to.	Only trucks carrying aggregates were noted during the audit which cannot be blown away.
14.	**Noise**	
14.1	Work hours during the construction phase shall be strictly enforced unless permission is given (07H00 – 18H00). Permission shall not be granted without consultation with the local industries and businesses by the EO. No work to be done on Sundays. The EO must inform the residents of houses and businesses adjacent to the development in writing 24 hours prior to any planned activities that will be unusually noisy or any other activities that could reasonably have an impact on the adjacent sites. These activities could include, but are not limited to use of pneumatic jack-hammers and compressors etc. No noise louder than 70dB from the ambient noise level.	All construction activities have been restricted to working hours.
14.2	Noise reduction is essential and Contractors shall endeavour to limit unnecessary noise, especially loud talking, shouting or whistling, radios, sirens or hooters, motor revving, etc. The use of silent compressors is a specific requirement. All machinery to be muffled where possible.	Noted, no noise complaints have been received, machinery is working in optimal condition.

15.	**Hydrology**	
15.1	All work must be done during the dry season and consideration has not been given to any temporary water diversions.	This contract includes the section of Protea Road from the R302 intersection in the west up to the Hercules Pilaar Road intersection in the east. None of the larger culverts as outlined in the EA dated 12 June 2020 forms part of the current contract. No work has commenced within the watercourses yet.
15.2	Limit vehicle / machinery activity within the freshwater resources to what is absolutely essential.	No work has commenced within the watercourses yet.
15.3	Excavated materials should not be contaminated, and it should be stored in the minimum surface area.	No work has commenced within the watercourses yet.
15.4	Ensure sediment control devices are in place prior to the start of excavation activities.	No work has commenced within the watercourses yet.
15.5	Maintain sediment/erosion control devices to minimise risk of sedimentation of the downstream areas.	No work has commenced within the watercourses yet.
15.6	During the installation of the gabions, no personnel may traverse the watercourses unnecessarily.	No work has commenced within the watercourses yet.
15.7	Increased run-off during construction must be managed using berm, storm water retention facility and other suitable structures as required to ensure flow velocities are reduced; this must be done in consultation with the Resident engineer as well as the ECO. The Contractor shall take reasonable measures to control the erosive effects of storm water runoff.	Additional velocities are being formally managed although the road has not yet been surfaced. Current works are within the road reserve, including the upgrade of some of the culverts. Side drains are being constructed as part of the road upgrade.
15.8	In the event of pollution caused as a result of construction activities, the contractor, according to section 20 of the National Water Act, 1998 (Act No. 36 of 1998) shall be responsible for all costs incurred by organisations called to assist in pollution control and/or to clean	No work has commenced within the watercourses yet.

	up polluted areas and water courses.	
15.9	The contractor shall ensure that excessive quantities of sand, silt and silt-laden water do not enter the stormwater system.	Some sand material was noted to have entered the stormwater side drains which is difficult to prevent at this stage given the nature of the works and the new stormwater infrastructure being developed. The contractor is required to take note and remediate where possible.
15.10	Stabilisation of the banks and side slopes are required, by employing techniques, such as: • Resloping of banks to a maximum of a 1:3 slope; • Revegetation of re-profiled slopes; • Temporary stabilisation of slopes using geotextiles; and • Installation of gabions and reno-mattresses.	This will form part of the rehabilitation which is to commence once the construction works have been completed.
16. 16.1	**Fires** Fire training and equipment to be nearby to put fires out. The Contractor shall ensure that there is appropriate fire-fighting equipment available on site at all times.	The appropriate fire-fighting equipment is located at the site camp in good condition.
16.2	Fires must be within designated areas and must be in small scale. Absolutely no burning of waste is permitted.	No evidence of fires was observed during the site audit.
16.3	Fires will only be allowed in facilities especially constructed for this purpose within fenced Contractor's camps. Wood and/or charcoal are the only fuels permitted to be used for fires. The contractor must provide sufficient wood (fuel) for this purpose. Fires in the designated areas must be small in scale so as to prevent excessive smoke being released into the atmosphere. Heavy smoke may not be released into the air.	No evidence of fires was observed during the site audit.
16.4	No felling of trees or wood collection is allowed from private or public property.	No felling of trees or wood collection have been done.

16.5	The Contractor shall ensure that there is appropriate fire-fighting equipment available on-site at all times.	The appropriate fire-fighting equipment is located at the site camp.
17. 17.1	**Erosion and Sedimentation** To reduce the loss of material by erosion, the contractor shall ensure that disturbance on site is kept to a minimum. The disturbance especially includes the movement of heavy vehicles. These areas must be cordoned off so that vehicles or construction personnel cannot gain access to these areas.	No erosion was observed during the site audit. The construction footprint includes the roadway servitude which is readily demarcated with farmers fencing along the entire road width. All areas outside the construction footprint need to be clearly seen as no go areas.
17.2	The contractor shall be responsible for rehabilitating all eroded areas in such a way that the erosion potential is minimised after construction has been completed. These areas are to be filled with mulch or funnels constructed to route the water. All disturbed areas that will not be rehabilitated within the construction phase, must be mulched to encourage vegetation re-growth. Mulch used must be free from alien seed.	Rehabilitation of the disturbed areas will be conducted in line with the approved Rehabilitation Report once construction activities have been completed.
17.3	In the case of strong wind and/or rain all stockpile material must be covered with a tarpaulin in order to prevent erosion.	It is deemed impractical to cover all stockpiles during construction under strong winds and rain. The stockpiles are monitored and maintained. Those stockpiled at the stockpile areas were in good condition at the time of audit.
18. 18.1	**Fauna** All construction workers must be informed that the intentional killing of any animal is not permitted as faunal species are a benefit to society. Poaching is illegal and it must be a condition of employment that any employee caught poaching will be dismissed. Employees must be trained on how to deal with fauna species as intentional killing will not be tolerated. In the case of a problem animal e.g. a large snake a specialist must be called in to safely relocate the animal if the EO or ECO is not able to.	The workers have been informed of such and no reports on killings or poaching were provided to the ECO.

20. 20.1	**Visual Impact** Shade cloth must be utilised to conceal and minimise the visual impact of contractor camps, lay down and storage areas.	The site camp is not situated in an area which is visible from any of the surrounding roads and adjacent to an existing industrial building. The site is fenced off for safety and security purposes with no visual impact, therefore shade cloth is not required around the site camp.
20.2	Rubble and litter must be removed every two weeks or more often as the need arises and be disposed of at a registered landfill site as designated by the Drakenstein and/or Stellenbosch Municipalities, Solid Waste removal department.	Bins have been provided along the route and within the site camp. A litter and waste structure are in place within the contractors camp constructed from temporary fencing. Proof of disposal slips have been requested by the ECO which is yet to be provided.
21. 21.1	**Soil** Topsoil must be stripped from all areas that are to be utilized during the construction period and where permanent structures and access is required. These areas will include comprising the permanent works, pipeline trenches, stockpiles, access roads, construction camps and lay down areas.	Topsoil is being stripped as construction progresses. The topsoil has been windrowed and stockpiled in the designated stockpile areas.
21.2	Topsoil must be deemed to be the top layer of soil containing organic material, nutrients and plant grass seed. For this reason, it is an extremely valuable resource for the rehabilitation and vegetation of disturbed areas. At the beginning of the construction phase, topsoil removed for vegetation clearance must be stripped to a minimum depth of 300 mm and windrowed.	Topsoil is being stripped as construction progresses. The topsoil has been windrowed and stockpiled in the designated stockpile areas. Topsoil will be used as road sections are rehabilitated.
21.3	All topsoil must be removed and stockpiled on the site. However, the use of topsoil for rehabilitation contaminated by the seed of alien vegetation must not be permitted unless a programme to germinate the seed and eradicate the seedlings is drawn up and approved, or some other mitigatory feature is found. This must be approved by the ECO.	Topsoil is being stripped as construction progresses. The topsoil has been windrowed and stockpiled in the designated stockpile areas. Topsoil will be used as road sections are rehabilitated.

21.4	Single handling is recommended. Stockpiles must not be higher than 2m to avoid compaction.	The ECO has requested that the height of the topsoil stockpile located at stockpile area 2 be lowered which has been conducted by the contractor at the time of audit.
21.5	Dust suppression is necessary for stockpiles older than a month – with either water or a biodegradable chemical binding agent.	A water truck is available for adequate dust suppression.
21.6	Backfill will require contouring to ensure that it blends in with the surrounding environment.	Backfill will occur after the completion of work.

CONCLUSION

Based on the information obtained and a site visit conducted on the 5th of December 2024, the applicant has sufficiently complied with the conditions of the Environmental Authorisation and EMPr. Furthermore, the EMP is considered adequate and effective to manage and mitigate the activities.

No specific contradictions between the EA and EMP were noted.

This external audit report did not identify any significant non-compliance with the conditions of the Environmental Authorisation.

The outcome of this audit has not found insufficient mitigation of environmental impacts associated with the undertaking of the listed activities, nor has it found insufficient levels of compliance with the Environmental Authorisation. As such a public participation process in terms of Regulation 34(5) will not be undertaken.

In compliance with regulation 34(6) the holder of the EA must within 7 days of the date of submission of an environmental audit report to the competent authority, notify all potential and registered interested and affected parties of the submission of that report, and make such report immediately available –

(a) to anyone on request; and
(b) on a publicly accessible website, where the holder has such a website.

Compiled by:

Renier Kapp
for KAPPEC

ANNEXURE A – SITE PHOTOGRAPHS

Notice board at the intersection of Klipheuwel Road (R304) and Protea Road.

At the western end of Protea Road where stormwater culverts are installed adjacent to the road shoulder.

At the western end of Protea Road where stormwater culverts are installed adjacent to the road shoulder

At the western end of Protea Road where stormwater culverts are installed adjacent to the road shoulder

Newly upgraded stormwater culvert.

Stormwater side drains being installed.

 Stormwater side drains being installed.	 Stormwater side drains being installed.
 Current condition of Protea Road where aggregate is offloaded in place for the resurfacing.	 Current condition of Protea Road where aggregate is offloaded in place for the resurfacing.
 Current condition of Protea Road where aggregate is offloaded in place for the resurfacing.	 Stormwater side drains being installed.

Newly installed stormwater pipeline outlet.

Excavations underway for the installation of side drains.

Stormwater side drains being installed.

Condition of Protea Road as seen towards the east.

Completed cuttings along the Protea Road as seen towards the east.

Completed cuttings along the Protea Road as seen towards the east.

	
Water tanker available for dust suppression along the route.	Stormwater side drains being installed.
	
Stormwater side drains being installed.	Stormwater side drains being installed.
	
Condition of Protea Road as seen towards the west.	Upgraded stormwater pipelines outlet.

Condition of Protea Road where trucks are tipping agregate in rows for halfwith construction.

Condition of Protea Road as seen towards the west.

Excavated side drain channels and trucks delivering agregate as seen towards the west.

Excavated side drain channels and trucks delivering agregate as seen towards the east.

Traffic control station along the construction route.

Material for road preparation being offloaded.

Water tanker for dust suppression along the route.

The condition of Protea Road along the Joostenberg Primary School.

Curbmix cement pallets offloaded near the the Joostenberg Primary School.

Upgraded stormwater pipeline inlets near the the Joostenberg Primary School.

Trees along the road which have been carefully trimmed to allow the movement of trucks.

Trees along the road which have been carefully trimmed to allow the movement of trucks.

 Condition of Protea Road as seen towards the east.	 Upgraded stormwater pipeline outlets with new wingwalks at the outlet.
 A tractor and water cart along the route for dust mitigation.	 Dust generation from the truck movement.
 Windrowed topsoil on top of the road shoulder.	 Windrowed topsoil on top of the road shoulder.

Shaping of the road and embankments underway.

The cutting and shaping of Protea Road towards the east of the contract as seen towards the eat.

Cement mixing and handling adjacent the stormwater culvert.

Premix cement adjacent the stormwater culvert.

The cutting of Protea Road as seen towards the west.

Windrowed topsoil adjacent the newly cleared section of Protea Road.

Notice of excavations and construction in progress.

Traffic control station along the construction route.

Water tanker for dust suppression along the route.

Road treated with water for dust suppression.

Stormwater pipeline being reconstructed.

Partially completed road surface along the eastern end at the start of the contract.

Partially completed road surface along the eastern end at the start of the contract.

One lane traffic currently open along the completed road surface.

Excavating side drain channels.

Excavating side drain channels.

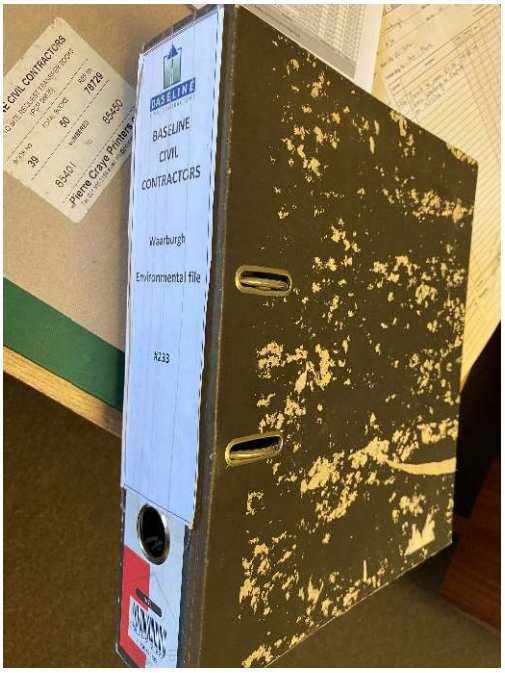
Newly surfaced road.

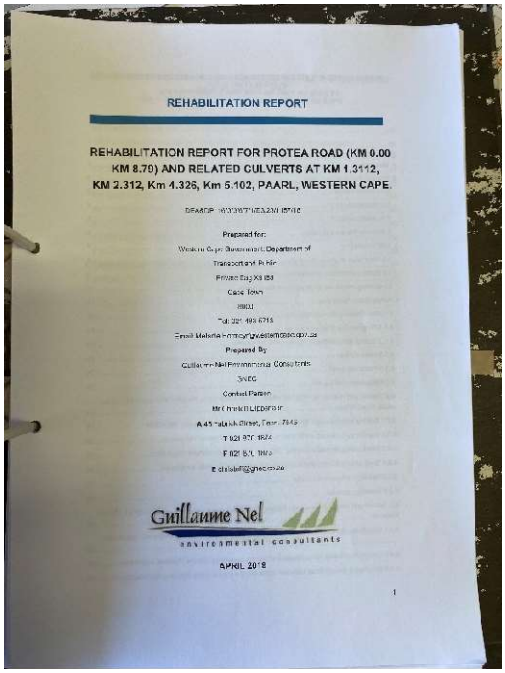
Notice board at the intersection of Hercules Pilaar Road and Protea Road at the start of the contract.

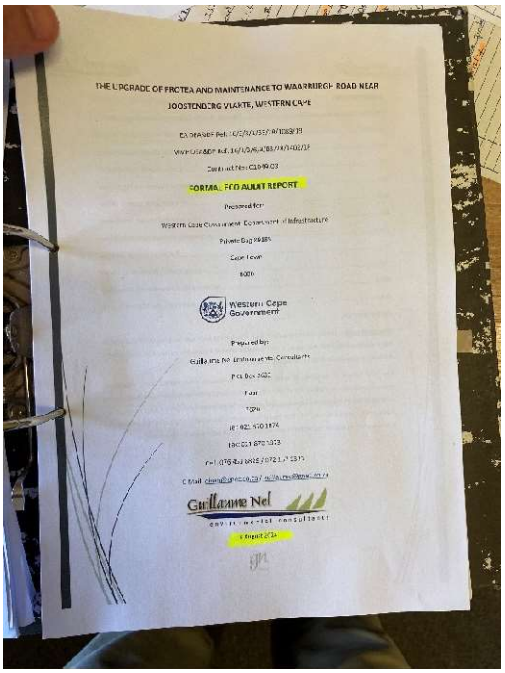
Notice of construction board at the start of the contract.

Traffic control station with bin in place.

Environmental File at the Site Offices






THE UPGRADE OF PROTEA AND MAINTENANCE TO WAARBURGH ROAD NEAR
JOOSTENDERG VLAKTE, WESTERN CAPE

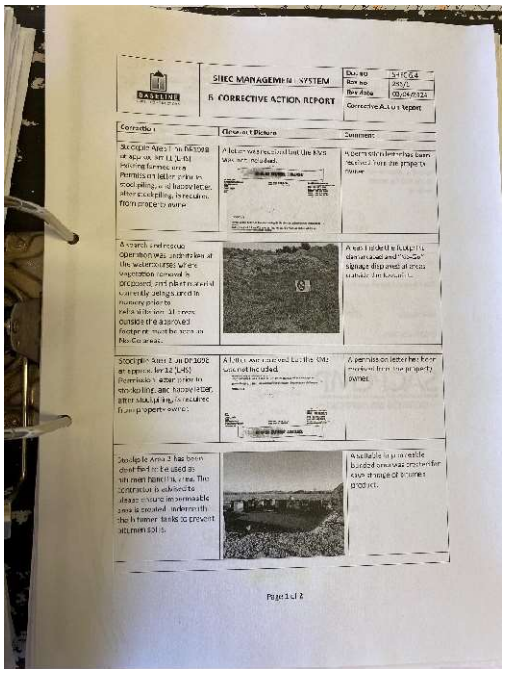
FORMAL - FEO AUDIT REPORT

Prepared for:

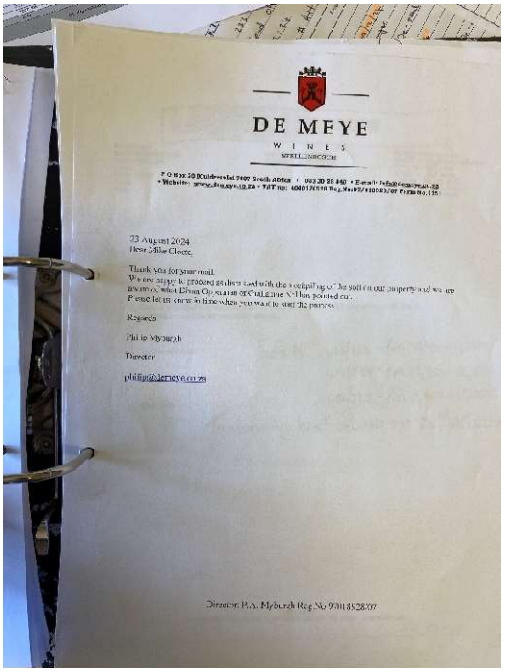
Western Cape Government

Prepared by:

Guillaume Nel


SHEC MANAGEMENT SYSTEM

E CORRECTIVE ACTION REPORT

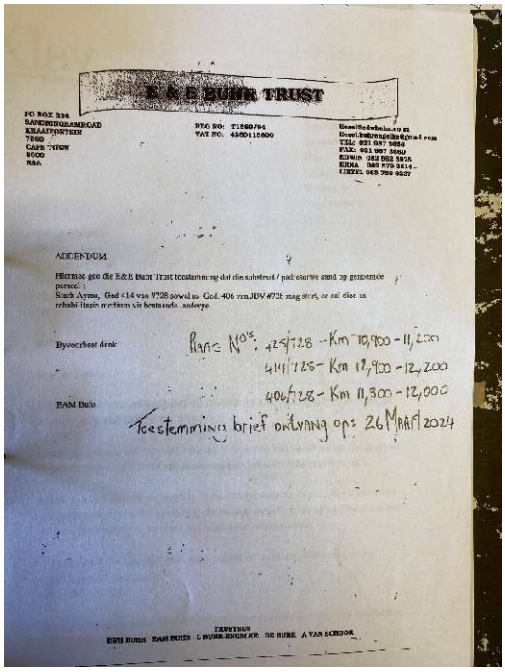

DE MEYE

WINES

23 August 2024

Dear Mike Cleary

Director: P.A. Myburgh Reg No 9301185087


E & E BURR TRUST

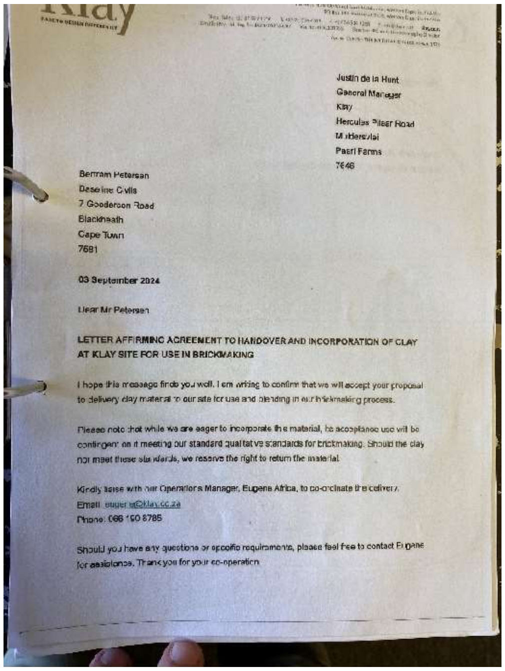
ADDENDUM

Byvoorbeeld derde

Plaas No's: 125/128 - Km 10,900 - 11,200
414/128 - Km 12,900 - 12,200
406/128 - Km 11,300 - 12,000

BAM Data

Toestemming brief ontvang op: 26 MAART 2024



Justin de la Hunt
General Manager
Klay
Hercules Pillar Road
Muldersvlei
Paarl Farms
7646

Bertram Petersen
Deseline Civils
7 Gooderson Road
Blackheath
Cape Town
7581

03 September 2024

Dear Mr Petersen

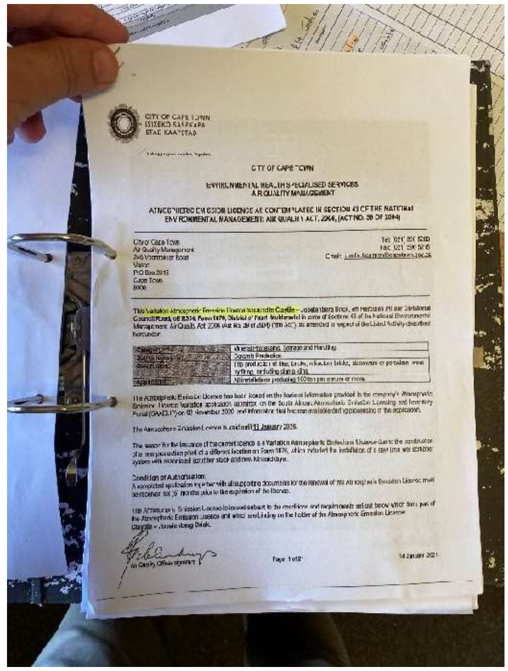
LETTER AFFIRMING AGREEMENT TO HANDOVER AND INCORPORATION OF CLAY AT KLAY SITE FOR USE IN BRICKMAKING

I hope this message finds you well. I am writing to confirm that we will accept your proposal to delivery clay material to our site for use and blending in our brickmaking process.

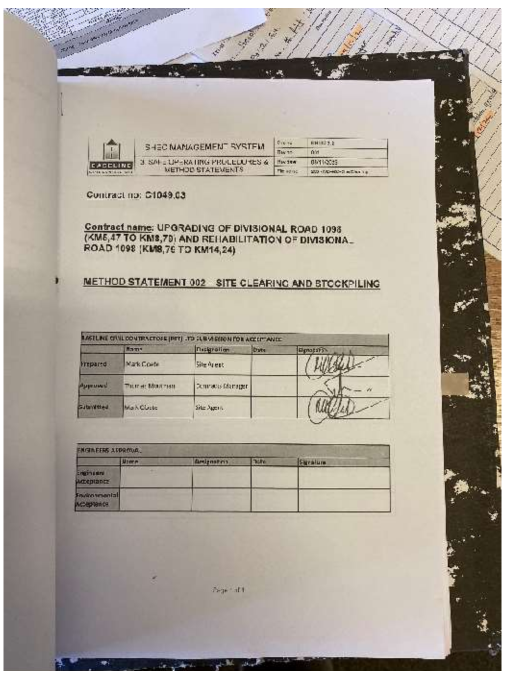
Please note that while we are eager to incorporate the material, its acceptance and use will be contingent on it meeting our standard quality standards for brickmaking. Should the clay not meet these standards, we reserve the right to return the material.

Kindly liaise with our Operations Manager, Eugene Africa, to co-ordinate the delivery.

Should you have any questions or specific requirements, please feel free to contact Eugene for assistance. Thank you for your co-operation.



CITY OF CAPE TOWN
ENVIRONMENTAL HEALTH SPECIALISED SERVICES
AIR QUALITY MANAGEMENT
ATMOSPHERIC EMISSION LICENSE AS CONTEMPLATED IN SECTION 43 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004, (ACT NO. 39 OF 2004)

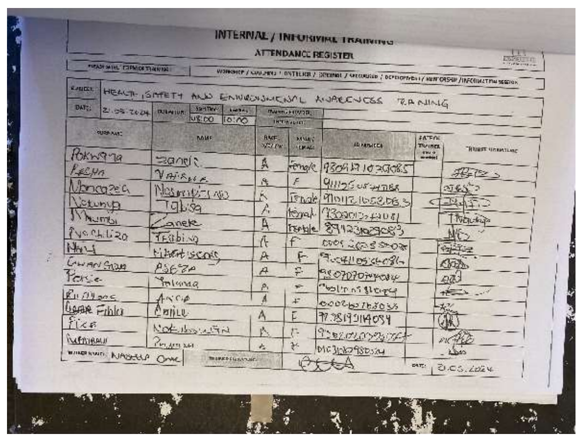


SHEQ MANAGEMENT SYSTEM
3. SHE OPERATING PROCEDURES & METHOD STATEMENTS

Contract no: C1049.03

Contract name: UPGRADING OF DIVISIONAL ROAD 1098 (KM6,47 TO KM8,79) AND REHABILITATION OF DIVISIONAL ROAD 1098 (KM8,76 TO KM14,24)

METHOD STATEMENT 002 – SITE CLEARING AND STOCKPILING



INTERNAL / INFORMAL TRAINING
ATTENDANCE REGISTER

HEALTH, SAFETY AND ENVIRONMENTAL AWARENESS TRAINING