

**THE REPAIR AND UPGRADE OF THE EXISTING DEGRADED STORMWATER
INFRASTRUCTURE ALONG MAIN ROAD 269 AT KM 4.95 AND KM 5.67 AND
ALONG DIVISIONAL ROAD 1257 AT KM 1.47, HEMEL AND AARDE VALLEY,
BETWEEN SANDBAAI AND CALEDON**

DEA&DP Ref: 16/3/3/1/E4/5/1007/16

FORMAL ECO AUDIT REPORT

Prepared for:

Western Cape Government: Department of Infrastructure

Private Bag X9185

Cape Town

8000



**Western Cape
Government**

Prepared by:

Guillaume Nel Environmental Consultants

P.O. Box 2632

Paarl

7620

Tel: 021 870 1874

Fax: 021 870 1873

Cell: 076 453 8829 / 072 157 1321

E-Mail: divan@gnec.co.za / guillaume@gnec.co.za



29 November 2024



ABBREVIATIONS

DEA&DP	Department of Environmental Affairs and Development Planning
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
GNEC	Guillaume Nel Environmental Consulting
I&AP	Interested and Affected Parties
RE.....	Resident Engineer
WCDM.....	West Coast District Municipality

INTRODUCTION

This Formal ECO report is distributed to the DEA&DP, Overstrand Municipality and the Project Team on a monthly basis in order to ensure continuous improvement with regards to environmental related matters. The aim is furthermore, to increase the contractor's compliance rating in terms of the approved project EMP. This Formal report depicts the environmental findings during the site visit and may include corrective measures / actions which were taken by the contractor.

PROJECT DESCRIPTION

The Department of Transport and Public Works is applying to repair and upgrade two existing highly degraded storm water infrastructures (Culverts) at Km 4.95 and Km 5.67 along Main Road 269, Hemel & Aarde Valley, and one storm water infrastructure (Culvert) at Km 1.47, along Division Road 1257, also known as the Tesselaarsdal Road.

CLOSE OUT ON FINDINGS REQUIRED

	Finding	Close Out Recommendation
1	No findings	

GENERAL FINDINGS DURING SITE VISIT ON THE 27TH OF NOVEMBER 2024

Site documentation

The environmental file was available on site during the audit. The Environmental Authorisation (EA) was placed in the file together with the Environmental Management Programme (EMPr) as well as the induction register and audit reports. The method statements were also placed in the file and received by the ECO.

No-Go areas

All areas outside the approved development area are strict No-Go areas. Areas where construction will take place within watercourses must be demarcated, to limit the construction footprint within the watercourse. No construction machinery or work force is allowed in the No-Go areas.

Please ensure that no materials may enter watercourses. If any material enters the watercourse, it must be removed as soon as possible. Topsoil is also seen as a No-Go area as it is a very valuable resource for rehabilitation.

No unauthorised entry, stockpiling, dumping or storage of equipment or materials shall be allowed within the “no go” areas.

Compliance:

Most of the road has been fenced, the fencing is seen as the no go area.



Spoil areas

Please ensure that any proposed spoil areas (other than approved landfill sites) are scanned and approved by the RE and ECO prior to the commencement of spoiling. The scanning is to ensure that no environmental legislation is contravened with the spoiling of the material.

Compliance:

No spoil areas have been identified to date.

Topsoil

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 of vegetation of disturbed areas. All topsoil should be windrowed (preferred option) or stockpiled and be reinstated after construction. Please ensure that topsoil is not contaminated with construction material. If topsoil is to be stockpiled the stockpiles may not be higher than 2m, to prevent the crushing of seeds.

Compliance:

Most topsoil was placed back on site.

A small remaining topsoil stockpile was seen during the audit at the Satellite camp and should please be placed back on site.



Please inform the ECO prior to any further clearing.

Toilets

Please ensure that the construction site is equipped with a sufficient number of chemical toilets for the number of workers on site. At least 1 chemical toilet per 15 workers is required no more than 100m away from the construction activities. All chemical toilets have to be properly secured to prevent the toilet from falling over in windy conditions.

Compliance:

Toilets were found at a few locations and were secured and sufficient. Please ensure that all toilets are properly secured to prevent the toilets from falling over in windy conditions.



Bitumen handling area

A bitumen handling area must be identified prior to the commencement of bitumen usage. The area must be scanned by the ECO and approved by the RE and/or the ECO prior to establishment. The area must have an impermeable area for the bitumen handling area to ensure that no spills can infiltrate the soil.

The entire site must be monitored for any bitumen spillages and all bitumen spillages must be disposed of at a registered Hazardous Waste Landfill site or recycled. NO bitumen spillages/remains may be spoiled on site.

Compliance:

The contractor was busy removing the old bitumen static tanker on the stockpile area, thank you for that.



Fuel storage

If fuel is to be stored on site, the bowser and or tank will be maintained by the fuel supplier and/or Contractor and is to be kept clean and leak free. The bowser is to be kept on site with a drip tray at all times or banded to 110% if it is a large tank. Please ensure that drip trays are used during the refuelling of construction plant and placed underneath compressors, generators and stationary machinery.

Compliance:

Please ensure that all stationary vehicles and machinery are parked on the impermeable area at all times. If they are not parked on the impermeable area must a drip tray be placed underneath them.

Dust/mud

Dust suppression needs to be monitored and applied at disturbed areas where construction activities are currently active. Please ensure that roads under traffic must please be regularly cleaned to ensure that construction related sand/mud does not cause a danger to traffic.

Compliance:

The road was clean during the audit.



Cement

Small- and large-scale cement batching must be done on mortarboards and/or on plastic sheeting that serves an impermeable surface to prevent cement water from infiltrating the soil. Please ensure that mortarboards and plastic sheeting is properly positioned to prevent any surface runoff. No cement batching may be done directly on the soil as cement water is highly alkaline and may change the pH of the soil causing decreased soil fertility. Mostly ready-mix concrete would preferably be used on site. The entire site must be monitored for any concrete spillages, all spillages must be disposed of at a registered Waste Landfill site. No concrete spillages/remains may be spoiled on site.

No washing of concrete truck chutes is allowed on site without the proper bunded sump area.

Compliance:

Batching was not active during the audit.

Litter

All construction litter must be placed within a litter structure or bins. The litter structures must be properly enclosed to prevent any litter from blowing around on site. Please monitor the soil around the enclosure for any excessive cement water potentially flowing into the surrounding natural vegetation. Please ensure that a sufficient number of bins is provided at the closures.

Please ensure that empty cement bags are removed to the site camp on the day they were used.

Please ensure that regular chicken parades are done on site to remove litter from the road reserve.

Compliance:

A small amount of construction litter was seen at the Camphill stockpile area, it is unsure if this is of the contractor or the construction team on the Camphill bridge.



Rubble

The contractor was advised to stockpile their rubble to be removed from site in a secure location to minimize the spread thereof. Any bitumen products/milled asphalt are hazardous waste and must be disposed at a registered Hazardous waste facility or reused in the road. Concrete rubble may be disposed at a general waste facility. Please ensure that rubble is stockpiled in a secure location and removed regularly.

Compliance:

No rubble was seen on site.

Erosion and sedimentation control

Silt traps have to be utilized during all dewatering activities or works within watercourses to prevent siltation of watercourses. Silt traps either have to partially filter the suspended solids or allow settlement in a manageable location. Please ensure that silt traps are being used during dewatering activities and that silt traps are used during the works within watercourses.

Compliance:

No dewatering was done during the audit.

Please ensure that sediment traps are used during dewatering and during works within watercourse if water is present.

PROGRESS

The road was progressing well. The contractor was almost completed with the project and the last snags were on going.



MAJOR AREAS OF CONCERN

No major areas of concern were found during the audit.

Compiled by:

Nica Kotze

for GNEC

PRINCIPLES OF THE EMP WHICH WERE AUDITED

The EMP was compiled using the following concepts and implementation requirements so that the higher principles of sustainable development are realised: The EMP can therefore be seen as a flexible and responsive document.

- 🌿 Continuous improvement. The project proponent (or implementing organisation) must be committed to review and to continually improve environmental management, with the objective of improving overall environmental performance.
- 🌿 Broad level of commitment. A broad level of commitment will be required from all levels of management as well as the workforce in order for the development and implementation of this EMP to be successful and effective.
- 🌿 Flexible and responsive. The implementation of the EMP must be responsive to new and changing circumstances, i.e. rapid short-term responses to problems or incidents. The EMP is a dynamic “living” document and thus regular planned review and revision of the EMP must be carried out.
- 🌿 Integration across operations. This EMP is integrated across existing line functions and operational units such as health, safety, and environmental departments in a company/project. This is done to change the redundant mindset of seeing environmental management as a single domain unit.
- 🌿 Legislation. It is understood that any development project during its construction phase is a dynamic activity within a dynamic environment. The Developer, Engineer, Contractor, and sub-contractor must therefore be aware that certain activities conducted during construction may require further licensing or environmental approval, e.g. river or stream diversions, bulk fuel storage, waste disposal, etc. The Contractor must consult the RE, EO and ECO on a regular basis in this regard