COSMO CITY X55 FILLING STATION

PROPOSED FILLING STATION ON PART OF PORTION 2 OF THE FARM NIETGEDACHT 535-JQ CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

GAUT 002/21-22/E2994

DRAFT BASIC ASSESSMENT REPORT

DECEMBER 2021

COMPILED BY ENVIRONMENTAL ASSESSMENT PRACTITIONER

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FOR APPLICANT

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SECTION F: APPENDICES

LIST OF ABBREVIATIONS

AST	Aboveground Storage Tank
BAR	Basic Assessment Report
C-Plan	Conservation Plan
CARA	Conservation of Agricultural Resources Act 1983 (Act no 43 of 1983)
CoC	Chain of Custody
COJ	City of Johannesburg Metropolitan Municipality
DFFE	Department of Forestry, Fisheries & the Environment
DoE	Department of Energy
DWS	National Department of Water & Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association of South Africa
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
EMP/EMPr	Environmental Management Plan/Programme
GAPA	Gauteng Agricultural Potential Atlas
GAUTRANS	Gauteng Department of Roads and Transport
GDARD	Gauteng Department of Agriculture and Rural Development
GDRT	Gauteng Department of Roads and Transport
ha	Hectare(s)
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
m^3	Cubic metres
n/a	Not applicable
NEMA	National Environmental Management Act, 1998 (Act No 107 of 1998)
NEMBA	National Environmental Management Biodiversity Act, 2004 (Act No 10 of 2004)
NEMWA	National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)
NWA	National Water Act, 1998 (Act No 36 of 1998)
OHSA	Occupational Health & Safety Act, 1993 (Act Nr 181 of 1993)
PHRA-G	Provincial Heritage Resources Agency, Gauteng
SACNASP	South African Council for Natural Scientific Professions
SAHRA	South African Heritage Resources Agency
SANS	South African National Standards
SDF	Strategic Development Framework
UDB	Urban Development Boundary
UST	Underground Storage Tank
WULA	Water Use License Application

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.

2. This application form is current as of 8 December 2014. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.

3. **A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.**

4. **A draft Basic Assessment Report (1 hard copy and two CD's) must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.**

5. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.

6. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

7. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

8. An incomplete report may lead to an application for environmental authorisation being refused.

9. **Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation being refused.**

10. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation being refused.

11. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.

12. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

13. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the of the Environmental Affairs Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the of the Environmental Affairs Branch
Ground floor Diamond Building
11 Diagonal Street, Johannesburg

Administrative Unit telephone number: (011) 240 3377
Department central telephone number: (011) 240 2500

(For official use only)

NEAS Reference Number:	
File Reference Number:	GAUT 002/21-22/E2994
Application Number:	
Date Received:	

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

Not applicable

Is a closure plan applicable for this application and has it been included in this report? N/A

if not, state reasons for not including the closure plan.

Not applicable. Decommissioning of the filling station is not envisaged at this stage. Should it in future become necessary then the following will apply as confirmed in the Environmental Management Programme (EMPr) in Appendix H:

Under the heading "Post-Construction and Operational Phase"

DECOMMISSIONING
At this stage decommissioning is not foreseen in the near future. At the time it might become applicable, an Environmental Impact Assessment must be undertaken in terms of Listed Activity Nr. 31 (i) of R983 of the National Environmental Management Act, 1998 (Act No 107 of 1998), as amended; or else in compliance with the environmental legislation requirements applicable at that time.

Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity? YES

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person? YES, in Appendix E(2)

If no, state reasons for not attaching the list.

Not applicable

Have State Departments including the competent authority commented? Not yet

If no, why?

Awaiting comment – will include in Final Basic Assessment Report if received

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

Project title (must be the same name as per application form):

COSMO CITY X55 FILLING STATION
Proposed Filling Station on Part of Portion 2 of the Farm Nietgedacht 535-JQ

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development (within an approved township)	X	Other, specify	

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES	~~NO~~

If yes, describe the legislation and the Competent Authority administering such legislation

Land Use Approval
The site is currently in the process of being rezoned from Undetermined to Special for Public Garage. The application has been submitted to the Development Planning Department of City of Johannesburg Metropolitan Municipality for consideration. The Motivating Memorandum is provided in Appendix D(1).

Site & Retail License
The Applicant must obtain a Site and Retail License according to the Petroleum Products Site and Retail Licenses Regulations, 2006 of the Act, as amended in 2012 from the Department of Energy prior to construction of the filling station. Section 2A (1)(b) and (c) states that no one is allowed to hold or develop a site without there being a site license and no one is allowed to retail petroleum products without a retail license. This application can however only be made once the application for Environmental Authorisation (this application) has been approved.

If yes, have you applied for the authorisation(s)? Land Use Approval – Yes	Land Use Approval: APPLICATION SUBMITTED	Site & Retail License: NO YET POSSIBLE *(EA must first be obtained)*
If yes, have you received approval(s)? (attach in appropriate appendix)	Land Use Approval NOT YET	Site & Retail License: NOT YET APPLICABLE

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Legislation, policy or guideline	Description of Compliance	Administering Authority National & Provincial	Promulgation Date
National Environmental Management Act (107 of 1998)	Environmental Authorisation is required in terms of Government Notice R983; Listing Notice 1, Activity Nr 14; published 4 December 2014 and Listing Notice 3, Activity Nr 12.	Department of Forestry, Fisheries and the Environment, but designated authority has been given to the Gauteng Department of Agriculture and Rural Development.	1998
National Environmental Management: Waste Act (Act No. 59 of 2008) 2008	Authorisation is not required	Department of Environmental Affairs	2008
The Petroleum Products Amendment Act, 2003 (Nr 58 of 2003)	The Applicant must obtain a Site & Retail License and must ensure that the conditions are met. Section 2A (1)(c) states that no one is allowed to hold or develop a site without there being a site license, Section 2A (1)(b) states that no one is allowed to retail petroleum products without a retail license.	Department of Energy	2003
Mineral and Petroleum Resources Development Act (No 28 of 2002)	Authorisation is not required	Department of Mineral Resources	2002
National Environmental Management: Air Quality Act (Act No 39 of 2004)	An Air Emissions License is not required, because the total storage capacity will not exceed 500 cubic metres total storage capacity	Department of Environmental Affairs	2004
Hazardous Substances Act (Act No 15 0f 1973)	Authorisation is not required but must be considered.	Department of Health	1973
Occupational Health & Safety Act (Act Nr 181 of 1993)	The Applicant must have a Safety, Health & Environment (SHE) Plan in place.	Department of Labour	1993
National Heritage Resources Act (25 of 1999)	Comment or approval is required from SAHRA. A Heritage Impact Assessment was conducted – refer to Appendix D(5).	Department of Arts and Culture, care of the South African Heritage Resources Agency	1999
Conservation of Agricultural Resources Act (43 of 1983)	Authorisation is not required – the existing land use is "Undetermined" to be zoned as Special for Public Garage.	Department of Agriculture	1983

National Forests Act (No 84 of 1998) and Government Notice 1339 of 6 August 1976 (promulgated under the Forest Act (No 122 of 1984) for protected tree species), the removal, relocation or pruning of any protected plants	Authorisation is not required – no protected trees exist on site that requires a permit to be destroyed, cut or pruned.	Department of Agriculture	1998
Endangered and Rare Species of Fauna and Flora (AN 1643 February 1984)	Authorisation is not required	Department of Environmental Affairs	1984
National Water Act (Act 36 of 1998)	Not required – no listed activities are triggered	Department of Water and Sanitation	1998
DWS Groundwater Protocol	Mitigation measures are provided in the Environmental Management Plan in Appendix G to prevent impact on groundwater resources.	Department of Water and Sanitation	2003
The Gauteng Transport Infrastructure Amendment Act, 2003 (No. 6 Of 2003).	An "Access Approval In-Principle (AAIP)" document will be prepared and submitted to Gauteng Province Roads and Transport (Gautrans) to obtain the said approval.	Gauteng Province Roads and Transport (GAUTRANS)	2003
National Roads Act, 1998 (Act No 7 of 1998)	Not applicable – the relevant roads fall within the jurisdiction of Gauteng Province Roads and Transport	The South African National Roads Agency (SANRAL)	1998
South African National Standard (SANS) 10089 – The Petroleum Industry: SANS 10089-1:2008; Part 1: Storage and distribution of petroleum products in above-ground installations SANS 10089-2:2017; Part 2: Electrical and other installations in the distribution and marketing sector SANS 10089-3:2010; Part 3: The Installation, modification and decommissioning of underground storage tanks, pumps/dispensers	Must be integrated in the design and construction of the facility. Both above-ground and underground storage tanks must be of sufficient structural strength, approved material and be constructed based on sound engineering practices, to withstand normal operations and use. Monitoring must take place.	South African Bureau of Standards	 2008 2017 2010

and pipework at service stations and consumer installations SANS 1535: 2018 Steel tanks for the underground storage of hydrocarbons and oxygenated solvents			2018
Gauteng Province Environmental Management Framework (GPEMF), November 2014	Environmental constraints for the development site must be provided. The site is situated within Zone 1 of the GPEMF "Urban Development Zone". The proposed activity is however not on the list of activities which only requires registration in terms of the GPEMF	Gauteng Provincial Government	2015
Gauteng Spatial Development Framework, 2030 (GSDF)	The proposed land use rights and development conforms to the principles and vision of the GSDF 2030.	Gauteng Provincial Government	
The City of Johannesburg Integrated Development Plan (IDP), 2020/2021	Requires consideration	City of Johannesburg Metropolitan Municipality	2020/2021
The Spatial Planning and Land-Use Management Act, 2013 (Act Nr 16 of 2013) (SPLUMA).	An application for the zoning of the site is being submitted to the Department of Development Planning of the City of Johannesburg Metropolitan Municipality. Refer to Appendix D(1) for the Town Planning Motivating Memorandum.	City of Johannesburg Metropolitan Municipality	2013
City of Johannesburg Bylaws	For the purpose of a filling station, the CoJ bylaws potentially relevant to a filling station must be considered adhered to where applicable. It includes the following :- • Gas License Bylaws • Air Pollution Control Bylaws • Public Health Bylaws	City of Johannesburg Metropolitan Municipality	Dates from 2000, some undated

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.
The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

Consideration was given to the following (as described in more detail below):

- Landownership and applicant requirement
- Environmental sensitivity of the site
- Heritage importance of the site
- Support of the key stakeholders, the City of Johannesburg Metropolitan Municipality
- Findings of the Filling Station Feasibility Study - included in Appendix D(2)(a)

Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, energy, operational or other (provide details of "other")	**Description**
1	Proposal	The project involves the establishment of a filling station on approximately 0,5753 ha with containers with a combined storage capacity of 80 cubic metres or more but less than 500 cubic metres The buildings, pumps and ancillary and subservient uses can be placed on site, with sufficient space available for on-site turning and manoeuvring for vehicles and fuel tankers/trucks.
2	Alternative 1	
3	Alternative 2	
	Etc.	

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

CONSIDERATION OF ALTERNATIVES

The Preferred Alternative for this site has been determined based on the following criteria:

LANDOWNERSHIP, LANDUSE AND FEASIBILITY

- The proposed filling station site is privately owned.
- The Applicant is also the registered owner of the land.
- The development of a filling station with associated facilities is considered by the Applicant as the preferred development for this site.
- The proposed development site is almost completely transformed and is currently a vacant site.
- The current zoning of the site is undetermined, however an application has been submitted for rezoning to a public garage.
- The proposed development area of approximately 0,5753 ha allows for enough space for the proposed activity to be developed in an economically viable manner.
- Visible and safe access is possible from Malibongwe Drive with a left in, left out access. (P103)(K29).
- The proposed site is strategically well located with good access from Malibongwe Drive.
- The Filling Station Feasibility Study (included in Appendix D(2)(a) concluded the following:

  Based on the traffic volumes and assumptions provided the proposed filling station is feasible, with an estimation that the proposed filling station will yield fuel sales in the order of 354,672 litres per month by 2025.

ENVIRONMENTAL SENSITIVITY

- Ecological Status – the site is altered by the development of roads and a taxi rank that reduced the natural habitat on site. Since it formed part of the previously authorised township. As can be seen from the Photographs in Appendix B, the site has been impacted on and that limited indigenous natural habitat is left.
- Watercourses – the site is not affected by any watercourse, neither is it situated within 500m from the edge of any wetland.
- Heritage – the site is severely affected by human interference with the establishment of roads and a taxi rank. No obvious cultural-heritage resources occur.
- There are subsequently no significant constraints or environmental impact in terms of the proposed filling station that cannot be mitigated to acceptable levels.

LAYOUT

- A conceptual layout for the filling station is provided in Appendix C(1). It allows for flexibility in terms of the final layout with respect to location of the different project components. The final layout will be negotiated with the fuel company who contracts with the applicant to operate the facility. The layout is not deemed to be a high impact issue, as long as it complies with design criteria listed in the EMPr in Appendix G.
- No environmental sensitivities for the site exist; therefore no Environmental Sensitivity Map for the site was compiled that should be integrated into the layout.

TECHNOLOGY

- The location, design and construction of the Aboveground Storage Tanks (ASTs) and the Underground Storage Tanks (USTs) will be guided by the relevant requirements in the industry and all the relevant SANS procedures. This is important since it is generally where the greatest potential for contamination (fuel leakages) or hazardous outcomes (fire, explosions, accidents, etc.) occur.
- Specifications for materials, design and methods for preventing and dealing with leaks are provided in the Environmental Management Programme included as Appendix G. This document is legally binding to the Applicant.
- The proposed filling station is under controlled conditions (in terms of SANS specifications and geotechnical constraints) not expected to have negative effects on the quality and quantity of the groundwater.

WATER & ENERGY SAVING TECHNOLOGIES

The Applicant is committed to the following recommended green approach:

- Green technologies to be incorporated in the design of the buildings, i.e.:
  - Proper insulation of the ceilings is required, because as much as 50% of heat losses in a building can be attributed to a lack of ceilings and ceiling insulation. This will significantly reduce heating and cooling expenses.
  - The architectural design should ensure that proper natural flow of air into and out of the buildings occur deliberately as ventilation.
  - Energy efficient heaters and air conditioners should be purchased.
  - Conservation of energy or the utilisation of renewable and sustainable energy technologies is encouraged. This includes solar panels that generate and store electricity in suitable battery packs, solar water heater(s), backed up with gas, as well as gas appliances.
  - Compact fluorescent lights lamps are recommended instead of ordinary bulbs for all light required for non-security purposes. Fluorescent lamps give five times the light and last up to 10 times as long as ordinary bulbs.
  - The convenience store should be encouraged to install gas appliances.
  - An energy saving switch should be fitted to the refrigerators.
  - Convection ovens should also be installed as they use less energy than conventional ovens and cooking time is substantially reduced.
  - Solar water heater(s) conserve energy and can be backed up with gas or electric geysers.
  - Installing a geyser blanket on geysers and hot water storage tanks will reduce the amount of heat lost by the geyser to cold air outside and thus conserves energy.
  - Hot water pipes should also be insulated to prevent heat loss.
  - The outdoor cooling units must be protected from the sun. They should therefore be placed on the southern sides of the buildings.

- The collection of stormwater from the roofs of the buildings for recycling should be encouraged.
- Construction waste should be sold for recycling purposes.
- Should a car wash be established, measures must be put in place to ensure that the grey water is recycled for suitable purposes.
- Recyclable waste management for the filling station should include the following during the operational phase:
  - An appropriate area where waste can be sorted and stored for collection must be identified.
  - The site must have a concrete surface and it must be under roof (for protection against rain, stormwater runoff and fire).
  - The site must be accessible for collection vehicles.
  - A dedicated worker must be trained in the recycling of waste (baling; compaction; breaking of glass, etc.) to ensure effective recycling of relevant material.
  - The recycling waste site must be regularly cleaned and disinfected.
  - It is proposed that the applicant set up of proper agreements (i.e. when; how often; etc.) with glass, plastic and can recycling companies.

NO GO ALTERNATIVE

The No Go Alternative is always an alternative that requires consideration. This will imply that the site is not developed for the purpose of a filling station and the current land use would be implemented.

This option is generally considered viable should the proposed development

- have a significant negative impact that cannot be adequately mitigated;
- have opposition from I&APs with due and reasonable justification;
- is non-compliant with certain legislative requirements of an organ of state.

The site has no conservation purpose and/or ecosystem functioning. The site has safe, visible and convenient access off Malibongwe Drive. No objection regarding the project has yet been received at the time this document was compiled. The project is planned in a legal and pro-active manner.

Given the above factors it is the opinion of the EAP that, if the No Go alternative is pursued:

- a good business and development opportunity would be missed
- the site would not be optimally developed
- no capital investment arising from the development would result.
- There would be no temporary or permanent employment opportunities created, with the associated economic and social upliftment and skills transfer, during the construction and operational phases of the development.

The proposal for a filling station is an obvious and reasonable choice for the site. To identify an alternative that is not acceptable to and/or required by the Applicant is not time and cost effective. For the purpose of this report, based on the consideration of potential alternatives as described above, only the following two alternatives are therefore assessed throughout the report where applicable:

- The Preferred Alternative as described in in the previous paragraphs.
- The No Go Alternative.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	Size of the activity:
Proposed activity ***(Total environmental (landscaping, parking, etc.) and the building footprint)***	0,5753 ha
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	Ha/ m^2

or, for linear activities:

	Length of the activity:
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Proposed activity	0,5753 ha
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	Ha/m^2

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	~~YES~~	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

The site is located alongside the northbound carriageway of Malibongwe Drive (R512/P103) and about 200m upstream of the intersection of this road with Road R114. Due to the presence of the wide median island along Malibongwe Drive (R512/P103) the proposed filling station would only intercept traffic traveling northbound along this road and therefore a left-in, left-out (LILO) access is proposed. This access is spaced approximately 220m upstream from the nearest intersection of Malibongwe Drive (R512/P103) and R114. For the implementation of the proposed access, road widening on the western side of Malibongwe Drive (R512/P103) would be required to accommodate the proposed left in, left out access geometry. Upstream of the access, it is proposed to implement a short dedicated left turning deceleration lane with a 60m straight and a 60m taper (according to Gautrans' standards). It is recommended that the entrance lane of the access should be implemented with a radius of 20m while the exit lane should have a radius of 16m. For the proposed access, AutoTURN swept path analyses were carried out for a standard fuel truck as the worst-case design vehicle.

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 1

Does ready access to the site exist, or is access directly from an existing road?	YES	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	YES	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated **0** Number of times

(only complete when applicable)

6. LAYOUT ~~OR ROUTE PLAN~~

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);

- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

The concept site layout is provided in Appendix C(1).

- This concept layout allows for flexibility in terms of the final layout with respect to location of the different project components. The final layout will be negotiated with the fuel company who contracts with the applicant to operate the facility. The final layout is not deemed to be a high impact issue, as long as it complies with criteria listed in Paragraph 3.1 in the EMPr provided as Appendix G.
- No environmental sensitivities for the site exist; therefore no Environmental Sensitivity Map for the site was compiled that should be integrated into the layout.

FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;
- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

Included as Appendices A(1) and A(2).

7. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix**.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

Photos of the site are included in Appendix B.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

A typical site layout with tank specifications for a filling station is provided in Appendix C(2). The final layout will be negotiated with the fuel company who contracts with the applicant to operate the facility. The final site layout must conform to the relevant specification of the *South African National Standard (SANS) 10089 – The Petroleum Industry*. The layout must include the following:

- Approved access (at least 'in principle' approved access;).
- Position of tanks and capacity of each.
- All project components.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal and alternative(s) (if necessary)

Instructions for completion of Section B for linear activities

1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
2) Indicate on a plan(s) the different environments identified
3) Complete Section B for each of the above areas identified
4) Attach to this form in a chronological order
5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route | "insert No. of duplicates" | times

Instructions for completion of Section B for location/route alternatives

1) For each location/route alternative identified the entire Section B needs to be completed
2) Each alterative location/route needs to be clearly indicated at the top of the next page
3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives | 0 | times | (complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

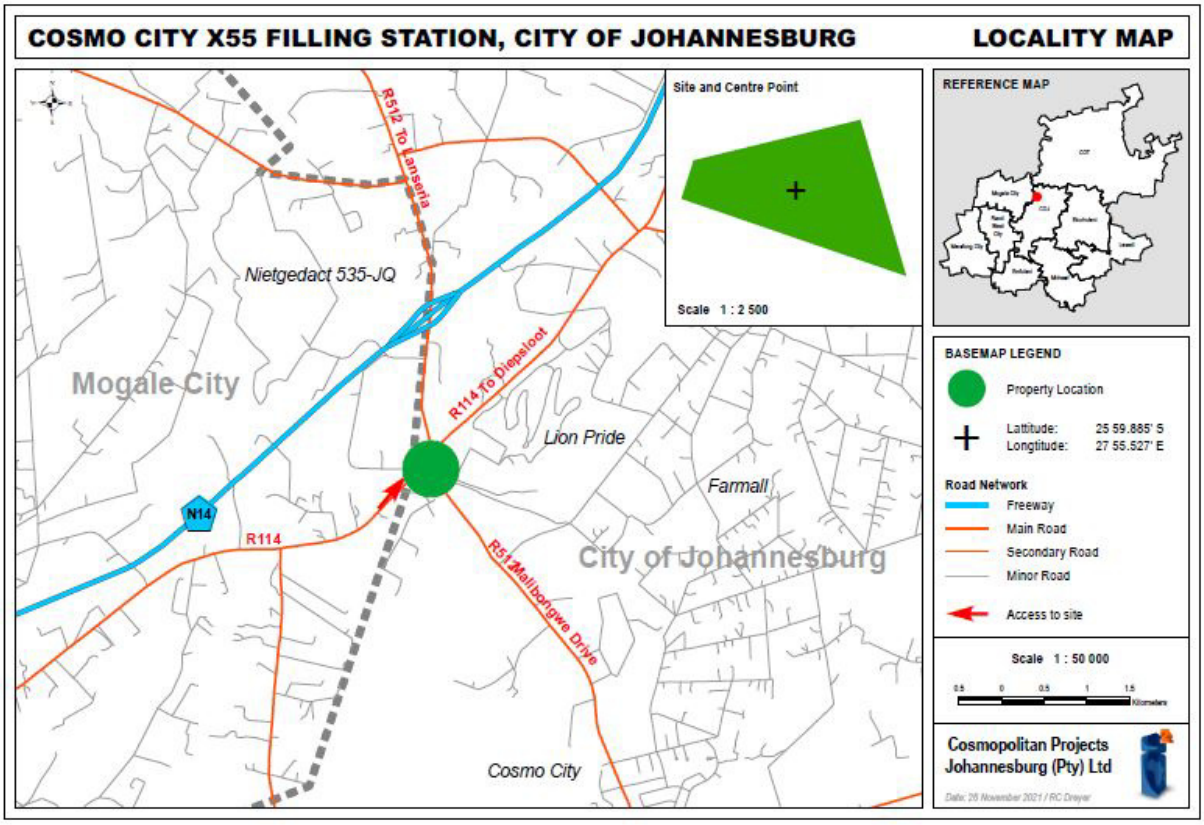
- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

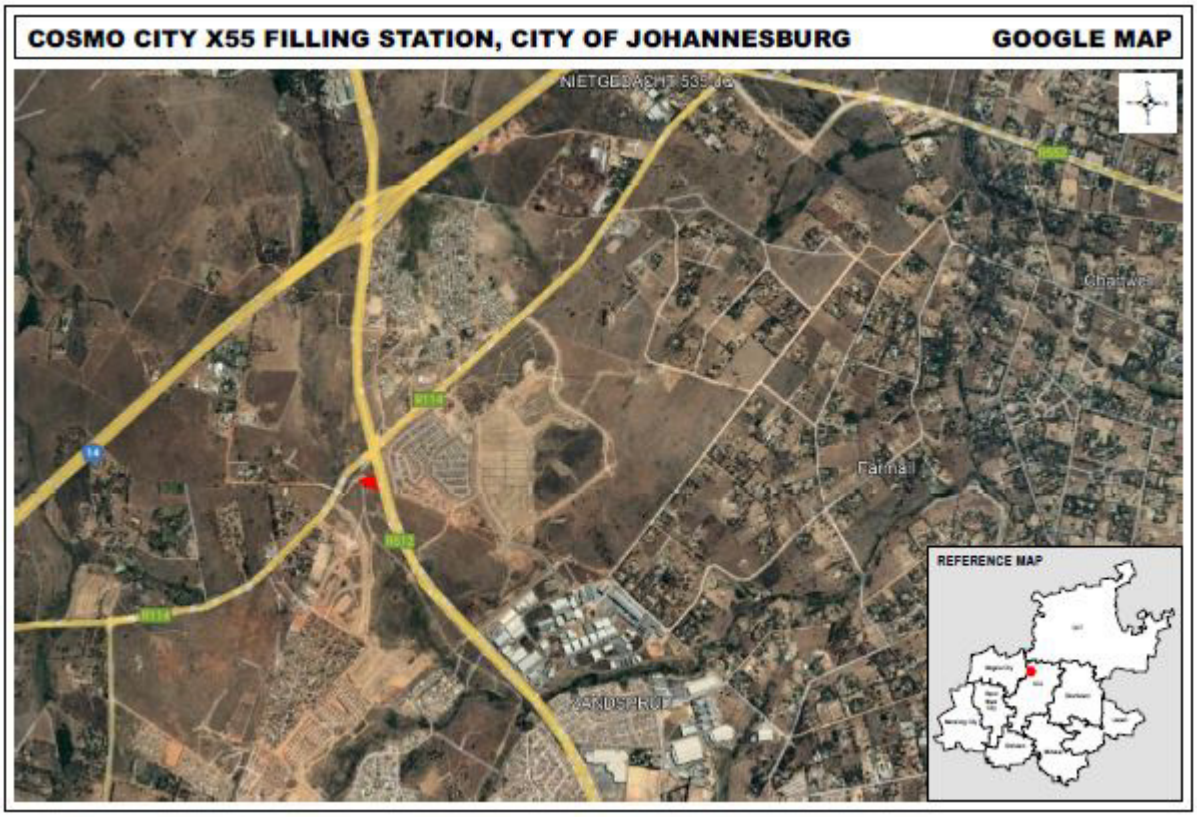
Section B - Section of Route | | (complete only when appropriate for above)

Section B – Location/route Alternative No. | | (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description: (Including Physical Address and Farm name, portion etc.)	The site is situated on the corner of the Malibongwe Drive (R512/P103) and Road R114. The property description is Part of Portion 2 of the Farm Nietgedacht 535-JQ. It falls within the jurisdiction of City of Johannesburg Metropolitan Municipality, Gauteng Province.


COSMO CITY X55 FILLING STATION, CITY OF JOHANNESBURG
LOCALITY MAP
R512 To Lanseria
Nietgedact 535-JQ
Mogale City
R114 To Diepsloot
Lion Pride
Farmall
N14
R114
City of Johannesburg
R51 Mallborgwe Drive
Cosmo City
Site and Centre Point
Scale 1 : 2 500
REFERENCE MAP
BASEMAP LEGEND
Property Location
Latitude: 25 59.885' S
Longitude: 27 55.527' E
Road Network
Freeway
Main Road
Secondary Road
Minor Road
Access to site
Scale 1 : 50 000
Cosmopolitan Projects
Johannesburg (Pty) Ltd


COSMO CITY X55 FILLING STATION, CITY OF JOHANNESBURG
GOOGLE MAP
NIETGEDACHT 535-JQ
Chamdor
Farmall
REFERENCE MAP

2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative (preferred):	**Latitude (S):**	**Longitude (E):**
	25° 59' 53.12"	27° 55' 31.60"

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
Starting point of the activity	°	°
Middle point of the activity	°	°
End point of the activity	°	°

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached ☐

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL	T	O	J	Q	0	0	0	0	0	0	0	0	0	5	3	5	0	0	0	0	0
ALT. 1																					
ALT. 2																					
etc.																					

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	~~1:50 – 1:20~~	~~1:20 – 1:15~~	~~1:15 – 1:10~~	~~1:10 – 1:7,5~~	~~1:7,5 – 1:5~~	~~Steeper than 1:5~~

4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill/ridge~~	~~Valley~~	Plain	~~Undulating plain/low hills~~	~~River front~~

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)	~~YES~~	NO
Dolomite, sinkhole or doline areas	~~YES~~	NO
Seasonally wet soils (often close to water bodies)	~~YES~~	NO
Unstable rocky slopes or steep slopes with loose soil	~~YES~~	NO
Dispersive soils (soils that dissolve in water)	~~YES~~	NO
Soils with high clay content (clay fraction more than 40%)	~~YES~~	NO
Any other unstable soil or geological feature	~~YES~~	NO
An area sensitive to erosion	~~YES~~	NO

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

The approval of the original township application that was submitted for the residential development, it is implied that any obvious potential geotechnical constraints had been addressed to the satisfaction of the Municipality. Moore Spence Jones (Pty) Ltd conducted a Phase 1 Geotechnical Investigation for the Proposed Lion Park area. In terms of this investigation, the majority of the site falls within Site Class C-C1 and modified foundation construction will be required. The site is currently in the process of being zoned from *Undetermined* to *Special for Public Garage*.

b) are any caves located on the site(s) | ~~YES~~ | NO

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	Longitude (E):
°	°

c) are any caves located within a 300m radius of the site(s) | ~~YES~~ | NO

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	Longitude (E):
°	°

d) are any sinkholes located within a 300m radius of the site(s) | ~~YES~~ | NO

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	Longitude (E):
°	°

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?	~~YES~~	NO

Please note: The Department may request specialist input/studies in respect of the above.

7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

~~Natural veld - good condition % =~~	~~Natural veld with scattered aliens % =~~	(Disturbed) Natural veld with heavy alien infestation 100%	~~Veld dominated by alien species Appr 50%~~	~~Landscaped (vegetation)~~
~~Sport field % =~~	~~Cultivated land % =~~	~~Paved surface (hard landscaping) %~~	~~Building or other structure %~~	~~Bare soil %~~

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site	~~YES~~	NO

If YES, specify and explain:

Not applicable

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.	~~YES~~	NO

If YES, specify and explain:

Not applicable

Are there any special or sensitive habitats or other natural features present on the site?	~~YES~~	NO

If YES, specify and explain:

Not applicable

Was a specialist consulted to assist with completing this section	~~YES~~	NO

If yes complete specialist details

Name of the specialist:			
Qualification(s) of the specialist:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Are any further specialist studies recommended by the specialist?	~~YES~~	NO
If YES, specify:		
If YES, is such a report(s) attached?	~~YES~~	NO

If YES list the specialist reports attached below

Not applicable – the site forms part of the previously authorised Cosmo City Extensions. Construction of engineering services has commenced on the other extensions for residential development. The photographs in Appendix B effectively illustrate the current state of the site.

Signature of specialist: Not applicable Date: Not applicable

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

According to the DFFE Screening Tool report and the GDARD C-Plan Map, 12% of the site falls within an Ecological Support Area (ESA). Refer to Appendix A(3)(a) for GDARD C-Plan Map.

Note however that the site forms part of the previously authorised Cosmo City Extensions. Construction of engineering services has commenced. The site is almost completely devoid of natural habitat and is disturbed by alien vegetation, with the area being used for roads and a taxi rank. It is bordered by Malibongwe Drive/K29 and the R114. The photographs in Appendix B effectively illustrate the current state of the site which is poor. The extent of the site is 0,5753ha and the total surface within the ESA is approximately 700m^2, with none of the 700m^2 being indigenous vegetation as a result of the area being completely disturbed, therefore Listing Notice 3 is not triggered.

8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	~~2. River, stream, wetland~~	~~3. Nature conservation area~~	~~4. Public open space~~	~~5. Koppie or ridge~~
~~6. Dam or reservoir~~	~~7. Agriculture~~	~~8. Low density residential~~	~~9. Medium to high density residential~~	~~10. Informal residential~~
~~11. Old age home~~	~~12. Retail~~	~~13. Offices~~	~~14. Commercial & warehousing~~	~~15. Light industrial~~
~~16. Heavy industrial[AN]~~	~~17. Hospitality facility~~	~~18. Church~~	19. Education facilities	~~20. Sport facilities~~
~~21. Golf course/polo fields~~	~~22. Airport[N]~~	~~23. Train station or shunting yard[N]~~	~~24. Railway line[N]~~	25. Major road (4 lanes or more)[N]
~~26. Sewage treatment plant[A]~~	~~27. Landfill or waste treatment site[A]~~	~~28. Historical building~~	~~29. Graveyard~~	~~30. Archeological site~~
~~31. Open cast mine~~	~~32. Underground mine~~	~~33.Spoil heap or slimes dam[A]~~	~~34. Small Holdings~~	35. Vacant land but approved medium to high density residential townships
~~Other land uses (describe):~~				

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

NORTH

1	1	1	25, 1	35
1	1	1	25, 35	35
1	1		25, 35	35
19	1	1	25, 35	35
19	1	1	25, 1	35, 1

WEST EAST

SOUTH

Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "A" and with an "N" respectively.

Have specialist reports been attached	YES	~~NO~~
If yes indicate the type of reports below		
Appendix D(5) Heritage Impact Assessment		

9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The migration of the population towards the cities has resulted in the population explosion and the growth poses a challenge for the provision of sustainable services, including housing directly and indirectly affects job opportunities for a sustainable living for the economically active groups between the ages of 35 and 39 years.

Interventions sought to improve the status quo are as follows:

- Investment promotion and facilitation to attract entrepreneurs;
- Promote broad based economic transformation and entrepreneurial activity;
- Fight poverty and unemployment; and
- Job creation, and
- Promote labour absorption for the future of the city.

From the above information, the City of Johannesburg Metropolitan Municipality (CoJ) needs an economic generator to create jobs, alleviate poverty and to secure a healthy environment. The development of the filling station should partly realize these objectives amongst other needs.

Authorizing the establishment of a filling station with a retail component will assist towards job creation for the working age group and will result in subsequent stimulation of the economy within the CoJ.

The CoJ needs an economic generator to create jobs, alleviate poverty and to secure a healthy environment. The development of the filling station and retail outlets should partly realize these objectives amongst other needs facing the CoJ. Authorizing the establishment of a filling station with a retail component will assist towards job creation for the working age group within the CoJ.

Indirectly, jobs are created in industries that provide goods, materials and services. An additional number of goods used in construction will for example be required from business and industries related to the relevant construction sector.

Work opportunities will be provided during both the construction and operational phases of the project development. It is recommended that work force be recruited from the local communities, ensuring general upliftment of the local communities.

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	~~YES~~	NO

If YES, explain:

Not applicable

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

Key findings of the assessment include:

- The study area has been disturbed by previous excavations and the surrounding taxi and road developments;
- Sections of the study area is levelled, cleared and significantly altered by the aforementioned activities while other areas are marked by dense grass cover that could result in some cultural resources (e.g., graves or other cultural material) not detected during the field survey;
- This limitation can be successfully mitigated with the implementation of a chance find procedure;
- The study area is of insignificant paleontological sensitivity and no heritage features (archaeological, built environment or graves) of significance was recorded during the survey

Will any building or structure older than 60 years be affected in any way?	~~YES~~	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	~~YES~~	NO

If yes, please attached the comments from SAHRA in the appropriate Appendix.

Comment from SAHRA will be included in the Final BAR if received.

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

1. The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

The process followed is summarised as follows:

Due to the COVID-19 pandemic, as per instructions from the Department of Environmental Affairs, timeframes approach of advertising had been amended. Refer to the Public Participation Plan in Appendix E(1). Approval was requested from GDARD but no response was received after 37 days. It was concluded that the Department has no objections to the proposed plan.

The process followed in the Public Participation Process undertaken for this project involves in short the following:

Initial Advertising Process

- Three laminated A2 site notification had been placed on site on 29 September 2021. A 37-day advertising period for registration as a stakeholder was stated on the notice.
- An advertisement was placed in the Citizen Newspaper on 29 September 2021 for a 37-day commenting period.
- A list of Interested & Affected Parties (I&APs) had been compiled and is included as Appendix E(2) of the Basic Assessment Report.

Communication of the Draft Basic Assessment Report

- All the stakeholders on the Register of IAPs have now been notified of the availability of the Draft BAR for comment.
- A 37-day commenting period is applicable.

Final Basic Assessment Report

All communication received on the Draft BAR will be included in the Final BAR to be submitted to GDARD for their consideration for Environmental Authorisation.

Notification of Environmental Authorisation

All registered stakeholders will be informed of the decision of the Gauteng Department of Agriculture and Rural Development (GDARD) as soon as Environmental Authorisation had been received. All stakeholders will also be notified of the relevant appeal procedure.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?	YES	~~NO~~
If yes, has any comments been received from the local authority?	YES	~~NO~~

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

EISD Applications, Mr Geli Mabunda (dated 30 September 2021)

- Mr Geli Mabunda requested a hard copy of the Draft BAR.

Response from EAP:

Once the Draft Basic Assessment Report has been submitted to GDARD it will be made available to all I&APs.

Office of the Ward Councillor, Cllr Sbusiso Mthembu (dated 30 September 2021)

- Letter of support attached to email.

Response from EAP:

Support was acknowledged.

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

Not applicable as comments had been received.
Comment on the Draft BAR will be included in the Final Bar.

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least **thirty (30) calendar days** before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	YES	~~NO~~

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

ESKOM, Intherin Chetty (dated 30 September 2021)

- Notification was forwarded to Bongi Buthelezi to investigate.

Response from EAP:

No additional information or communication was received to date.

DWS, Ms Lillian Siwelane (dated 1 October 2021)

- Ms Lillian Siwelane requested a copy of the Draft BAR for review.

Response from EAP:

Once the Draft Basic Assessment Report has been submitted to GDARD it will be made available to all I&APs.

GPDRT, Mr Itumeleng Morosele (dated 4 October 2021)

- Mr Morosele of the Directorate Transport Infrastructure Planning confirmed that the Gauteng Strategic Road Network namely, provincial roads **K52** and **K29**, are possibly affected by the proposed development. As a result, an application for a change in land use (rezoning, subdivision, consent use, etc.) must be lodged with the Gauteng Department of Roads and Transport in terms of the Gauteng Transport Infrastructure Act (Act 8 of 2001) for evaluation.

Response from EAP:

The comments have been acknowledged and the Applicant has been informed accordingly.

Rand Water, Me Lindiwe Gamede (dated 5 October 2021)

- Me Gamede indicated that Rand Water services are "Not Affected".

Response from EAP

The notification had been acknowledged and the Applicant has been informed.

PHRA-G, Ms Tebogo Molokomme (dated 28 October 2021)

- Ms Tebogo indicated that a heritage impact study with public participation process needs to be conducted.
- A hard copy of the report is requested.

Response from EAP

The PPP will be concluded by 5 November 2021 and the Heritage Impact Study Report will be submitted once the comments have been included.

SANRAL, Ms Ria Barkhuizen (dated 12 November 2021)

- She attached an application form that need to be populated by the Applicant. She further highlighted that the section number of the road need to be included.

Response from EAP

The comments have been acknowledged and the Applicant has been informed accordingly. The road does however fall under the jurisdiction of GAUTRANS.

If "NO" briefly explain why no comments have been received

Not applicable as comments had been received.
Comment on the Draft BAR will be included in the Final Bar.

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – Written notices issued as required in terms of the regulations

Appendix 3 – Proof of newspaper advertisements

Appendix 4 –Communications to and from interested and affected parties

Appendix 5 – Minutes of any public and/or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA Report

Appendix 9 – Copy of the register of I&APs

For the purpose of this application, the Public Participation information is provided as follows:

Appendix E: Public Participation Information

Appendix E(1) Public Participation Plan Request for Approval from GDARD
Appendix E(2) Register of Interested & Affected Parties
Appendix E(3) First Phase Notification Letter and Proof of Distribution
Appendix E(4) Onsite Notice and Proof of Placement
Appendix E(5) Newspaper Advertisement and Proof of Placement
Appendix E(6) Written Communication with I&APs resulting from Initial Advertising
Appendix E(7) Proof of Distribution of Draft BAR (Will be included in the Final BAR)
Appendix E(8) Written Communication with I&APs on Draft BAR (Will be included in the Final BAR)
Appendix E(9) Comments and Responses Report

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal and alternative(s) (if necessary)

Instructions for completion of Section D for alternatives

1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
4) Each alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives	0	times	(complete only when appropriate)

Section D Alternative No.	"insert alternative number"	(complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	~~NO~~

If yes, what estimated quantity will be produced per month?

Approximately 20m^3

How will the construction solid waste be disposed of (describe)?

All solid waste generated during the construction process (including packets, plastic, rubble, cut plant material, waste metals, etc.) will be placed in bulk waste collection area in the contractors camp. The waste will be cleared regularly by a recognised waste contractor. Litter collection bins will be provided within the Contractors camp at convenient intervals and will be regularly cleared. Separation of waste and recycling of paper, glass, etc. must be encouraged. Burning or burying of waste will NOT be allowed. Un-utilised construction material will be removed once construction has ended, e.g. crushed stone may not be left or randomly strewn around the site. The rocks and earth excavated from the site where the Underground Storage Tanks will be located will be packed around the UST's if regarded as suitable by the Geotechnical Engineer for the project.

Where will the construction solid waste be disposed of (describe)?

Where the type of material is unsuitable to be packed around the UST's, the waste will be disposed of at the closest registered municipal landfill site.
Suitable trained/registered contractors will remove the hazardous waste to a landfill site registered to accept hazardous waste. Record of collection and delivery must be maintained during the construction period.

Will the activity produce solid waste during its operational phase?

YES	~~NO~~

If yes, what estimated quantity will be produced per month?

m^3

Not yet calculated but it would be of insignificant volumes

How will the solid waste be disposed of (describe)?

Different types of waste will be generated by the filling station. The disposal methods include:

- Domestic type waste (general waste category) - General waste will be collected by the municipality and disposed of at a registered municipal land fill site'
- Hazardous materials that require disposal will be collected and stored on site in a bunded area from where it will be removed by an appropriate hazardous waste contractor for disposal at an approved recycling depot or registered hazardous landfill site. Record of waste collection and disposal (Chain of Custody (CoC) documentation) must be kept on site.

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?	~~YES~~	Not yet

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

This will be included in the Services Agreement between the Municipality and the Applicant.

Note: If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	YES	~~NO~~

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Sealed used engine oil containers will be used for collection / delivery to an approved recycling depot/ waste site. The classification of the hazardous waste associated with the filling stations falls under the NEMWA definition in Schedule 3, Category A, Hazardous Waste, Number 12 "Oil wastes and wastes of liquid fuels (a) waste hydraulic oils; (b) waste engine, gear and lubricating oils; (c) waste insulating and heat transmission oils; (d) oil/water separator contents; (e) wastes of liquid fuels; (f) hazardous portion of other oil wastes)". The temporary storage of relative small volumes of oil-based waste in appropriate containers falls well below the storage volume threshold of 35m^3 of hazardous waste at any one time; therefore authorization is not required in terms of the Waste Act and does not require authorisation in terms of NEMA or NEMWA.

Is the activity that is being applied for a solid waste handling or treatment facility?	~~YES~~	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

Recyclable waste management for the filling station should include the following during the operational phase:

- An appropriate area where waste can be sorted and stored for collection must be identified;
- The site must have a concrete surface and it must be under roof (for protection against rain, stormwater runoff and fire).
- The site must be accessible for collection vehicles.
- A dedicated worker must be trained in the recycling of waste (baling; compaction; breaking of glass, etc.) to ensure effective recycling of relevant material.
- The recycling waste site must be regularly cleaned and disinfected.
- It is proposed that the Applicant contact the relevant recycling companies for collection of relevant waste (water, cans, plastics, etc.) and set up of proper agreements (i.e. when; how often; etc.).

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	~~NO~~
If yes, what estimated quantity will be produced per month?	m^3 Undetermined - Stormwater volumes are dependent on the rainfall volumes	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?	~~YES~~	Not yet
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	~~NO~~
If yes, what estimated quantity will be produced per month?	m^3 Undetermined - Stormwater volumes are dependent on the rainfall volumes	

If yes describe the nature of the effluent and how it will be disposed.

Stormwater management proposed (exact details will be confirmed by the consulting engineers during the design phase of the project):

The stormwater will drain towards the north-western corner of the site. An attenuation structure will be provided with the pre- and post-development runoff as set out in the submitted OSR. The attenuated stormwater runoff will discharge into remainder Portion 2, flowing naturally towards the R114 Old Pretoria Road where it will drain into the existing stormwater field inlets located next to the road.

The construction of a cut off drain system along the filling station canopy area draining contaminated water into an oil separator before discharging into the sewer network, preventing contamination of the natural stormwater runoff.

The stormwater runoff from the canopy will be conveyed into the natural stormwater runoff system through downpipes.

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?	~~YES~~	NO

If yes, provide the particulars of the facility:

Facility name:	Not applicable		
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

The water supply will be linked to the municipal network. Based on the water usage by similar filling stations it is estimated that the usage of water will be probably not exceed 150 kilolitres per month.

This usage could in future be minimised with careful and resourceful planning and use of water as well as recycling wherever possible. Several innovative new technologies are available for this, including recycling of grey water and storm water capture and use for washing and non-drinking purposes.

Collection of stormwater from the building roofs in storage tanks should take place.

Stormwater runoff from the filling station will be handled as described in the previous paragraph.

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	YES Limited volumes from ablution facilities	~~NO~~
If yes, what estimated quantity will be produced per month?	Not determined m^3	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	~~YES~~	NO

Note that the site is in the process of being zoned for the purpose of a Public Garage, which indicates the potential for the required capacity within the municipality. The details will be confirmed in the Services Agreement between the developer and the municipality during the design phase of the project.

Will the activity produce any effluent that will be treated and/or disposed of on site?	~~YES~~	NO

If yes describe how it will be treated and disposed off.

Not applicable. The applicant will be required to appoint a registered consulting engineer to design and supervise the installation of a sewer pipe from the closest municipal bulk sewer supply. The engineers must communicate with the CoJ. If it is not possible, then a conservancy tank could be considered. All design drawings must be according to the specifications of and approved by the CoJ prior to construction.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	~~NO~~
If yes, is it controlled by any legislation of any sphere of government?	~~YES~~	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

The project does not trigger Section 21 of the National Environmental Management: Air Quality Act 2004 (Act 39 of 2004) (NEM:AQA): Category 2, Subcategory 2.4:

> *''Storage of Petroleum Products'' applicable to petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas. All permanent immobile liquid storage tanks larger than 1 000 cubic metres cumulative tank capacity at a site are applicable.'*

Considering the extent of this project involving a combined storage capacity of less than 500 cubic metres, it is confirmed that the proposed filling station will not significantly contribute to air pollution and health concerns in the macro area. A detailed Air Quality Study would therefore not be required. An Atmospheric Emissions License does not have to be obtained from the municipality.

The major sources of air pollution associated with the proposed filling station will be the exhaust fumes produced by fuel from motor vehicles and trucks as well as the emissions from the tank vent pipes. These vapour emissions could be hazardous to human health. These emissions could potentially occur during the filling of the UST's and AGT''s from the breather pipes, minor spillages and during the dispensing of fuel.

Legal requirements as prescribed by the Department of Labour should be implemented.

Measures to minimise vapour emissions include the following:

- Providing and utilizing appropriate protective gear and clothing
- Continuous awareness training of personnel and for road tanker drivers delivering fuel to site must take place.
- Development of site-specific protocols with regards to delivery and use of products and use of the relevant SANS procedures. This is necessary to minimise the possibility of a spill or leak occurring, with associated vapour emissions
- The careful location and elevation of the vent pipes to allow for the maximum dispersion of vapour.
- Tank filler valves must be installed to release smaller quantities of vapour in the atmosphere preventing detrimental health effect.
- Stage 1 Vapor Recovery (from delivery vehicle to tank as well as tank to delivery vehicle) must be installed.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal	~~Directly from water board~~	~~groundwater~~	~~river, stream, dam or lake~~	~~other~~	~~the activity will not use water~~

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate
the volume that will be extracted per month:

~~Liters~~
Not applicable

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs?	~~YES~~	NO

If yes, list the permits required

Not applicable – municipal water will be supplied.

If yes, have you applied for the water use permit(s)?	~~YES~~	No yet applicable
If yes, have you received approval(s)? (attached in appropriate appendix)	~~YES~~	NO

In terms of Section 19 (1) of the National Water Act, Act No 36 of 1998 the following is applicable:

- No watercourse exists on site or in relative close proximity to the site; therefore the filling station facility will not require Water Use Authorisation in terms of Section 21 (c) *impeding or diverting the flow of water in a watercourse* or Section 21 (i) *altering the bed, banks, course or characteristics of a watercourse.*
- Contaminated storm water runoff will be drained into an oil separator before discharging into the sewer network, preventing contamination of the natural stormwater runoff.

The Department of Water & Sanitation could require that this activity be registered in terms of Section 21(f) *discharging waste or water containing waste into a water resource through a pipeline, canal, sewer outfall or other conduit*. This will be confirmed by the engineers at the time that the design is finalised.

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

The township is located in an Eskom area of supply and will be supplied from the existing Eskom-owned Cosmo City 88/11kV substation.

Eskom has an existing overhead 11kV feeder line routed across/adjacent to the proposed township. They also plan to construct a 132kV overhead line across the proposed township. This will form part of the Lulamisa-Dalkeith future overhead line.

An allowance of 200kVA will be sufficient for the proposed development, and it is likely that bulk supply can be made available from the existing 11kV overhead line across/adjacent the property. This however will need to be confirmed by Eskom once the application has been submitted."

If power supply is not available, where will power be sourced from?

Not applicable – awaiting feedback after submission.

4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The EMPr in Appendix G contains the following requirement in terms of "Green Technologies" to be incorporated in the design of the buildings, i.e.:

- The architectural design should ensure that proper natural flow of air into and out of the buildings occur deliberately as ventilation.
- The design of the development must optimize the use of natural light in all components through the correct positioning and sizing of the windows; thereby saving the need to install additional lighting and associated ling-term energy use.
- Proper insulation of the ceilings is required, because as much as 50% of heat losses in a building can be attributed to a lack of ceilings and ceiling insulation. This will significantly reduce heating and cooling expenses.
- Lighting –
    - LED bulbs (a light source that is created by a Light Emitting Diode) are recommend instead of ordinary bulbs for all light required for non-security purposes. LEDs, use more than 75% less energy and last 25 times longer than incandescent lighting.
    - Day and night sensors will ensure lights do not stay on unnecessarily.
- Cooking and refrigeration –
    - An energy saving switch should be fitted to the refrigerators.
    - Convection ovens should also be installed as they use less energy than conventional ovens and cooking time is substantially reduced.
- Water heaters/ geyzers -
    - Installing a geyser blanket on geysers and hot water storage tanks will reduce the amount of heat lost by the geyser to cold air outside and thus conserves energy.
    - Hot water pipes should also be insulated to prevent heat loss.
- Air Conditioners
    - Energy efficient heaters and air conditioners should be used.
    - The outdoor cooling units must be protected from the sun. They should therefore be placed on the southern side of the buildings.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any

- Power Supply
    - Conservation of energy or the utilisation of renewable and sustainable energy technologies is encouraged. This includes solar panels that generate and store electricity in suitable battery packs, solar water heater(s), backed up with gas, as well as gas appliances.
    - Generators should be available as back-up to municipal supply.

- Cooking and Refrigeration
    - The convenience store should be encouraged to install gas appliances.
    - The storage of gas must conform to the stipulations laid out in the OHSA.

- Water Heaters / Geysers
    - Solar water heater(s) conserve energy and can be backed up with gas or electric geysers

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i).

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

No issues have yet been raised, since the Draft BAR is now distributed for comment.

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)
(A full response must be provided in the Comments and Response Report that must be attached to this report):

Any comment received from the I&APs and response thereto will be included and addressed in the Final BAR and EMPr after sufficient communication has taken place regarding comment received.

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

EVALUATION METHOD FOLLOWED

The nature and extent of expected negative impacts are described directly under the heading for each impact. Below this description for each impact, a table has been designed to facilitate evaluation of the expected negative impact in terms of significance (intensity), duration, probability and significance after mitigation.

The numerical values used for "Impact Severity" (significance / intensity) relates to the potential severity of the proposed project on the specific environmental component without any mitigation and is being evaluated and rated on a scale from 0 to 4 where the following values apply:

0 = no impact; 1= low impact; 2 = medium impact; 3 = significant impact; 4 = severe impact

- The duration of the expected negative impact is supplied as either "temporary" - 0-3 years (generally during construction) or "permanent"
- The probability that the expected negative impact would occur if not mitigated is rated as "low", "medium" or "high"
- The negative impacts are also evaluated in terms of the effectiveness with which it could be mitigated:

  Severity of Impact 'before mitigation' and 'after mitigation" is rated on a scale from 0 to 4, with a severe impact after mitigation receiving a rating of 4 (and can therefore influence the viability of the project) and no impact after mitigation receiving a rating of 0.

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

PLANNING & DESIGN PHASE

IMPACT DESCRIPTION: DIRECT IMPACT	PROPOSED MITIGATION (DETAIL SUPPLIED IN EMPr)
Poor design will result in structural failures and subsequent leaks with resultant negative environmental impact	• Ensure compliance with industry standards. • Provide for a 10000 x 5000 x 200 thick reinforced concrete spillage containment slab adjacent to the extended filler manholes laid to fall to a catch pit connected to an oil/grease separator that discharges into the existing sewer line; • Compliance with SANS 10089-3, 1999: The installation of underground storage tanks, pumps/dispensers and pipe work at service stations and consumer installations; • Compliance with SANS 10089-1:2008; Part 1: Storage and distribution of petroleum products in above-ground installations

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Poor design- structural failures	4	Local	Temporary / Permanent	high	1

Risk of the impact and mitigation not being implemented: The proposed mitigation is specified in the EMPr which is legally binding to the Applicant once approved as part of the conditions of the Environmental Authorisation. The risk of the impact not being mitigated is low.

IMPACT DESCRIPTION: INDIRECT IMPACT	PROPOSED MITIGATION (DETAIL SUPPLIED IN EMPr)
Disregard of legislation requirements could result in negative environmental impact and costly non-compliance actions by authorities.	Ensure compliance with relevant legislation and legal standards.

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Disregard of legislative requirement	3	Local	Permanent	high	1

Risk of the impact and mitigation not being implemented: The proposed mitigation is specified in the EMPr which is legally binding to the Applicant once approved as part of the conditions of the Environmental Authorisation. The risk of the impact not being mitigated is low.

SUMMARY OF IMPACT ASSESSMENT DURING THE PLANNING AND DESIGN PHASE

Impact Description	Impact Severity Degree (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Poor design- structural failures	4	Local	Temporary / Permanent	high	1
Disregard of legislative requirement	3	Local	Permanent	high	1

CONSTRUCTION PHASE

IMPACT DESCRIPTION: DIRECT IMPACT	PROPOSED MITIGATION (DETAIL SUPPLIED IN EMPr)
Impact on natural environment – should be considered in context that site is devoid of any natural habitat	Prevent impact of construction activities to extend on to adjacent land – demarcated and fenced construction camp; strict control of labourers.
Impact on cultural heritage environment – should be considered in context that no obvious heritage resources of significance had been identified on the site	• PHRA-G must immediately be alerted in case evidence of artefacts, paleontological fossils, additional graves or other heritage resources are discovered during the course of the development. • All development activities must be halted and PHRA-G would probably require that an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) be appointed to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from PHRA-G to conduct the mitigation measures.

Increased risk for leaks of underground storage tanks as a result of poor construction methods can result in significant pollution.	• The installation of the ASTs and USTs must take place in accordance with industry standards.
	• To ensure the system is installed as required by the regulatory authorities, on-site works must be supervised at all times by an experienced person.
	• It is essential that any protective coating applied to the tanks and pipework is not damaged during installation. The coating must be inspected during and after installation and any damage must be repaired immediately and before the excavation is filled in again.
	• Records must be kept of how the UST system was built for future reference during site construction work and the decommissioning or removal of the equipment. These records must include technical drawings of the installation showing the location and orientation of the tanks and pipework, their dimensions and the materials used. It is recommended that
	  ○ all records are dated and maintained during the life of the UST;
	  ○ the records are kept on-site for future reference (for example, in the event of a leak or spillage) in a place from where they can be retrieved quickly.

Increased risk for spillages – associated with construction activities, maintenance and repair of vehicles, etc.	Strict measures must be implemented: • Emergency incident reporting and remedial measures must be in place • Adequate oil containment precautions must be taken. • A bio-remediation contractor must be appointed to rehabilitate large oil spills. The regional officer of the Department of Water & Sanitation will advise in this regard. • Small oil spills must be cleaned immediately with an oil spill kit. • On-site storage of petroleum products must be limited. • Proper maintenance procedures for vehicles and equipment must be followed. • Servicing of vehicles may only take place in designated areas. • Drip trays should be used during the servicing of vehicles. The content thereof must be disposed in accordance with relevant hazardous material disposal requirement. • Measures to contain accidental spills must be readily available on site (spill kits). • All hazardous substance spills must be reported to the Contractor and the ECO, recorded and investigated.

Increased risk for soil, groundwater and surface water pollution result mostly from poor waste management.	Waste management measures are provided in the EMPR in terms of: • General household waste (i.e. strict control over labourers; no burning or burying of waste; provision of dustbin and garbage bags; regular removal preferably by municipal waste removal; etc) • Construction waste (i.e. stringent daily clean-up and either disposal at registered waste site or preferably sold for recycling purposes) • Sewage waste (labourers to be provided with proper ablution facilities- either municipal or chemical toilets provided and serviced by a reputable outside company; no effluent to be dumped on adjacent land) • Hazardous waste (i.e. oil contaminated waste to be moved to registered hazardous waste landfill site; adequate storage and labelling of hazardous materials on site). Stormwater should not be discharged into the working areas and it should be ensured that stormwater leaving the footprint of the proposed development areas is not contaminated by any substance, whether that substance is solid, liquid, vapour or any combination thereof.
Increased risk for erosion – this should be considered in context with the fact that the topography is flat and that sheet drainage towards the north-east occurs.	Management measures provided in the EMPR include • All vehicle movement must be along the existing lines or tracks. • Construction during the dry months of the year should be considered in order to overcome the problems caused by excessive moisture. • Stormwater run-off from the filling station must be directed to catch-pits with sand and oil and grease separators prior to re-use or release in the stormwater drains on site. • All storm water runoff must be managed efficiently so as to avoid storm water damage and erosion to adjacent properties. • Storm water control measures should be implemented especially around stockpiled soil, excavated areas, trenches etc. to avoid the export of soil into the watercourse.
Community impact is evident in noise as a result of construction activities; risk of safety during excavations; dust created by construction vehicles; etc.	Management measures provided in the EMPr include • Noise (restricted working hours; control of labourers (communication, music and broadcasts); construction vehicles to be fitted with noise reduction measures) • Safety (all excavated areas to be clearly marked with barrier tape, fencing of construction area) • Dust pollution (regular watering of construction site)

Risk of the impact and mitigation not being implemented: The proposed mitigation is specified in the EMPr which is legally binding to the Applicant once approved as part of the conditions of the Environmental Authorisation. The risk of the impact not being mitigated is low.

IMPACT DESCRIPTION: INDIRECT IMPACT	PROPOSED MITIGATION (DETAIL SUPPLIED IN EMPr)
Congestion of traffic can take place as a result of construction vehicles entering and leaving the construction site during peak hours.	The Contractor must provide for traffic control measures during peak hours when relevant.
Alien infestation onto adjacent land can occur. The land is already significantly impacted upon as a result of human interference and alien vegetation infestation.	Alien vegetation shall be managed in terms of the Regulation GNR.1048 of 25 May 1984 (as amended) issued in terms of the Conservation of Agricultural Resources Act, Act 43 of 1983. The Contractor shall prevent the occurrence, establishment, growth, multiplication, propagation, regeneration and spreading of such plants onto adjacent land as a result of construction activities.
Community impact – an increased risk of crime can result from in increased working force in the area	Strict measures ion terms of control of labourers must be implemented: • Transport to and from the construction site must be provided. • Only guarding personnel to be accommodate overnight. • Labourers should at all time by supervised.

Impact Description	Impact Severity Degree (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Congestion of traffic	2	Local	Temporary	high	1
Alien infestation	2	Local	Permanent	high	1

Risk of the impact if mitigation is not implemented: The proposed mitigation is specified in the EMPr which is legally binding to the Applicant once approved as part of the conditions of the Environmental Authorisation. The risk of the impact not being mitigated is low.

SUMMARY OF IMPACT ASSESSMENT DURING THE CONSTRUCTION PHASE

DIRECT IMPACT

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Natural Impact	1	Local	Temporary	medium	0
Cultural Heritage	1	Local	Temporary	medium	0
Risk for leaks	4	Local	Temporary	high	1
Risk for spillages	3	Local	Temporary	high	1
Risk for ground & surface water pollution	3	Local	Temporary	high	1
Risk for erosion	2	Local	Temporary	high	0
Community impact	1	Local	Temporary	medium	0

INDIRECT IMPACT

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Congestion of traffic	2	Local	Temporary	high	1
Alien infestation	2	Local	Permanent	high	1

OPERATIONAL PHASE

IMPACT DESCRIPTION: DIRECT IMPACT	PROPOSED MITIGATION (DETAIL SUPPLIED IN EMPR)
Leaks could occur with resultant pollution of groundwater. This would typically be the result of structural failure.	• Prevent impact rather than manage impact. • Provide measures for emergency reporting and remedy • Follow acceptable maintenance and operational practises to ensure consistent, effective and safe performance of the infrastructure • As part of routine maintenance, the Applicant must undertake regular engineering inspections of the tanks, tank valves and pumps to ensure that there are no leaks. • Leak detection facilities must be installed and monitored on an ongoing basis • Pressure tests should be conducted regularly on fuel tanks to ensure that there are no leakages. • The written record that was compiled during the installation of the UST system that includes the technical drawings of the installation showing the location and orientation of the tanks and pipework, their dimensions and the materials used (refer to the heading • "CONSTRUCTION OF THE UNDERGROUND STORAGE TANKS ") must be kept on-site for reference in the event of a leak or spillage in a place from where it can be retrieved quickly.

	• Any incidents resulting from the filling station structures and/or operation that could have a detrimental impact on the environment must immediately be investigated and rectification measures must be implemented and monitored accordingly. • Measures such as spill kits to contain spills must at all times be available on site. • All incidents must be reported to the Department of Water and Sanitation within 24 hours of the occurrence who will advise on emergency procedures to follow.
Spillages could occur with increased risk for groundwater pollution. This could typically happen during the transfer of petroleum product from road tanker to the storage tanks	• Prevent impact rather than manage impact. • Provide measures for emergency reporting and remedy • Provide onsite remediation measures (i.e. spill kits) • Follow acceptable maintenance and operational practises to ensure consistent, effective and safe performance of the infrastructure • Train forecourt staff on implementation of spillage containment emergency plan, including the usage of spill containment kit; • Install an emergency shut-off valve when the tanks overfills; and • The tank farm area must be unhindered and free from general traffic.
Risk for ground water pollution generally a result of poor stormwater management (and also leaks and spills referred to above)	• Stormwater run-off from the filling station must be directed to catch-pits with sand and oil and grease separators prior to re-use or release in the stormwater drains on site. • Waste water areas must be lined by an impermeable material in order to prevent infiltration and contamination of the soils and groundwater within the area. • Mitigation measures for leaks and spill supplied in above table are also relevant
The storage, handling and transport of fuel is potentially dangerous to humans and properties due to the risk of fire and explosions.	Strict fire management measures must be implemented: • An Emergency Response and Spill Contingency Plan must be in place and regularly updated and communicated with all personnel. • "No smoking" signs must be placed in visible areas on site. • No fires may be made for the burning of vegetation and waste. • No open fires are to be made on site – cooking facilities must be provided to personnel and labourers. • In case of a fire, the local fire department must immediately be contacted. • The adjacent land users must be informed and/or involved in case of any fire. • It must be ensured that the basic fire-fighting equipment is supplied to the site office, kitchen areas, workshop areas and stores. • Welding gas cutting or cutting of metal will only be allowed inside the working/demarcated areas and with appropriate fire-fighting equipment at hand.
NOISE IMPACT Noise impact would result from petroleum trucks, vehicles braking and accelerating; staff of filling station could be disruptive; music and radio broadcast and to a lesser degree, equipment such as air compressors, air conditioning and refrigeration units. The current movement of vehicles at the busy intersection of two main roads in an area with a predominantly light industrial land use character already result in a constant noise source. Impact is not expected to be significant.	• Provide management rules for personnel. • Provide restriction on music and broadcasting over the microphone
Health and Safety is an issue that Requires serious consideration since	• The Applicant must at all times ensure at all times that the filling station and operation thereof complies with the requirements for health and

negligence can result in serious bodily harm and injury and even death. Vapour emissions produced by fuel could be hazardous to human health. These emissions could potentially occur during the filling of UST's from the breather pipes, minor spillages and during the dispensing of fuel.	safety as prescribed in the Occupational Health and Safety Act, No 181 of 1993, as amended. • The Applicant must ensure compliance with all the conditions of the Department of the EMM. Personnel must at all times where protective clothing during instances when they can be affected by fuel hazardous materials and odours i.e. when omissions occur during the filling of UST's, during spills, etc. • Safety signs must be placed in visible areas all over the site. • A complete First Aid Kit must be readily available on site and regularly serviced. • Personnel must be trained in health and safety awareness and management of emergency situations. • Measures to minimise vapour emissions include the following: o Providing and utilizing appropriate protective gear and clothing o Continuous awareness training of personnel and for road tanker drivers delivering fuel to site o Development of site specific protocols with regards to delivery and use of products and use of the relevant SANS procedures. This is to minimise the possibility of a spill or leak occurring, with associated vapour emissions o The careful location and elevation of the vent pipes to allow for the maximum dispersion of vapour. o Tank filler valves must be installed to release smaller quantities of vapour in the atmosphere preventing detrimental health effect. o Stage 1 Vapor Recovery (from delivery vehicle to tank as well as tank to delivery vehicle) must be installed

Risk of the impact if mitigation is not implemented: The proposed mitigation is specified in the EMPr which is legally binding to the Applicant once approved as part of the conditions of the Environmental Authorisation. The risk of the impact not being mitigated is low.

SUMMARY OF IMPACT ASSESSMENT DURING THE OPERATIONAL PHASE

Impact Description	Impact Severity Degree (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Leaks	3	Local	Permanent	high	1
Spillages	3	Local	Temporary	high	1
Risk for groundwater pollution	3	Local	Temporary	high	1
Fire Risk	4	Local	Permanent	high	1
Noise Impact	2	Local	Permanent	high	0
Health and Safety	4	Local	Permanent	high	1
Impact on other filling stations	3	Local	Temporary-Permanent	high	3

NO GO ALTERNATIVE

PLANNING & DESIGN PHASE

IMPACT DESCRIPTION: DIRECT IMPACT	PROPOSED MITIGATION
The need to improve the socio-economic conditions of the EMM communities will remain inscribed in the Integrated Development Plans of the EMM but not implemented through initiatives such as the proposed filling station. The economic boost for the macro area in terms of job creation and general upliftment will not realise.	Provide a modern, safe and convenient facility as proposed with this application.
The Applicant will not benefit financially.	Provide a modern, safe and convenient facility as proposed with this application.
The Applicant will not contribute to the municipal infrastructure.	Provide a modern, safe and convenient facility as proposed with this application.

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

Appendix G	**Project Team Reports**
	Appendix D(1) Town Planning Motivating Memorandum
	Appendix D(2)(a) Filling Station Feasibility Study
	Appendix D(3)(a) Outline Scheme Report – Roads & Stormwater
	Appendix D(3)(b) Outline Scheme Report – Water & Sanitation
	Appendix D(5) Heritage Impact Assessment

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

The EAP is confident that no additional studies and/or professional input should be required. The opinion is offered that sufficient relevant information is provided to enable informed and responsible decision-making by GDARD.

3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Decommissioning of the filling station is not envisaged at this stage. Should it in future become necessary then the following will apply as confirmed in the Environmental Management Plan in Appendix G:

Under the heading "Post-Construction and Operational Phase"

DECOMMISSIONING

At this stage decommissioning is not foreseen in the near future. At the time it might become applicable, decommissioning must take place as follows:

- In compliance with the relevant environmental legislative requirements in terms of the National Environmental Management Act, 1998 (Act No 107 of 1998) applicable at that time.
- It should be done strictly according to all relevant standards, including SANS 10089-3: *The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.*

4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

The following potential cumulative impacts were identified and assessed for the proposed filling station:

TRAFFIC IMPACT

Due the expected increased use of the facility by the public during peak hours, cumulative traffic congestion and potential accidents could occur at the exit/entrance points. Impact would be continuous in the long term if not mitigated.

Mitigation:

- *All requirement of the traffic engineers in terms of roads upgrade and management must be implemented.*
- *Temporary signs and traffic control measures should be implemented during the construction phase.*
- *Permanent signage and traffic control measures must be implemented and maintained during the operational phase of the project.*

The cumulative traffic impact can be mitigated to acceptable levels enabling free traffic and pedestrian flow without causing accidents with the implementation of the mitigation measures provided.

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Proposal

LANDOWNERSHIP, LANDUSE AND FEASIBILITY

- The proposed filling station site is privately owned.
- The Applicant is also the registered owner of the land.
- The development of a filling station with associated facilities is considered by the Applicant as the preferred development for this site.
- The proposed development site is almost completely transformed and is currently a vacant site.
- The current zoning of the site is undetermined, however an application has been submitted for zoning as public garage.
- The proposed development area of approximately 0,5753 ha allows for enough space for the proposed activity to be developed in an economically viable manner.
- Visible and safe access is possible from Malibongwe Drive (P103)(K29) with a left in, left out access. Refer to comments under discussion of alternatives.
- The proposed site is strategically well located with good access from Malibongwe Drive.
- The Filling Station Feasibility Study (included in Appendix D(2)(a)) concluded the following:
    - Based on the traffic volumes and assumptions provided the proposed filling station is feasible, with an estimation that the proposed filling station will yield fuel sales in the order of 354,672 litres per month by 2025.

ENVIRONMENTAL SENSITIVITY

- Ecological Status – the site is altered by the development of roads and a taxi rank that reduced the natural habitat on site. Since it formed part of the previously authorised township. As can be seen from the Photographs in Appendix B, the site has been impacted on and that limited indigenous natural habitat is left.
- Watercourses – the site is not affected by any watercourse, neither is it situated within 500m from the edge of any wetland.
- Heritage – the site is severely affected by human interference with the establishment of roads and a taxi rank. No obvious cultural-heritage resources occur.
- There are subsequently no significant constraints or environmental impact in terms of the proposed filling station that cannot be mitigated to acceptable levels.

LAYOUT

- A conceptual layout for the filling station is provided in Appendix C(2). It allows for flexibility in terms of the final layout with respect to location of the different project components. The final layout will be negotiated with the fuel company who contracts with the applicant to operate the facility. The layout is not deemed to be a high impact issue, as long as it complies with design criteria listed in the EMPr in Appendix G.
- No environmental sensitivities for the site exist; therefore no Environmental Sensitivity Map for the site was compiled that should be integrated into the layout.

TECHNOLOGY

- The location, design and construction of the Aboveground Storage Tanks (ASTs) and the Underground Storage Tanks (USTs) will be guided by the relevant requirements in the industry and all the relevant SANS procedures. This is important since it is generally where the greatest potential for contamination (fuel leakages) or hazardous outcomes (fire, explosions, accidents, etc.) occur.
- Specifications for materials, design and methods for preventing and dealing with leaks are provided in the EMPr included as Appendix G. This document is legally binding to the Applicant.
- The proposed filling station is under controlled conditions (in terms of SANS specifications and geotechnical constraints) not expected to have negative effects on the quality and quantity of the groundwater.

WATER & ENERGY SAVING TECHNOLOGIES

The Applicant is committed to the following recommended green approach:

- Green technologies to be incorporated in the design of the buildings, i.e.
  - Proper insulation of the ceilings is required, because as much as 50% of heat losses in a building can be attributed to a lack of ceilings and ceiling insulation. This will significantly reduce heating and cooling expenses.
  - The architectural design should ensure that proper natural flow of air into and out of the buildings occur deliberately as ventilation.
  - Energy efficient heaters and air conditioners should be purchased.
  - Conservation of energy or the utilisation of renewable and sustainable energy technologies is encouraged. This includes solar panels that generate and store electricity in suitable battery packs, solar water heater(s), backed up with gas, as well as gas appliances.
  - Compact fluorescent lights lamps are recommended instead of ordinary bulbs for all light required for non-security purposes. Fluorescent lamps give five times the light and last up to 10 times as long as ordinary bulbs.
  - The convenience store should be encouraged to install gas appliances.
  - An energy saving switch should be fitted to the refrigerators.
  - Convection ovens should also be installed as they use less energy than conventional ovens and cooking time is substantially reduced.
  - Solar water heater(s) conserve energy and can be backed up with gas or electric geysers.
  - Installing a geyser blanket on geysers and hot water storage tanks will reduce the amount of heat lost by the geyser to cold air outside and thus conserves energy.
  - Hot water pipes should also be insulated to prevent heat loss.
  - The outdoor cooling units must be protected from the sun. They should therefore be placed on the southern sides of the buildings.
- The collection of stormwater from the roofs of the buildings for recycling should be encouraged.
- Construction waste should be sold for recycling purposes.
- Should a car wash be established, measures must be put in place to ensure that the grey water is recycled for suitable purposes.
- Recyclable waste management for the filling station should include the following during the operational phase:
  - An appropriate area where waste can be sorted and stored for collection must be identified.
  - The site must have a concrete surface and it must be under roof (for protection against rain, stormwater runoff and fire).
  - The site must be accessible for collection vehicles.
  - A dedicated worker must be trained in the recycling of waste (baling; compaction; breaking of glass, etc.) to ensure effective recycling of relevant material.
  - The recycling waste site must be regularly cleaned and disinfected.
  - It is proposed that the applicant set up of proper agreements (i.e. when; how often; etc.) with glass, plastic and can recycling companies.

Alternative 2

No-Go (compulsory)

This option is generally considered viable should the proposed development

- have a significant negative impact that cannot be adequately mitigated;
- have opposition from I&APs with due and reasonable justification;
- is non-compliant with certain legislative requirements of an organ of state.

The site has no conservation purpose and/or ecosystem functioning. The site has safe, visible and convenient access off Malibongwe Drive. No objection regarding the project has yet been received at the time this document was compiled. The project is planned in a legal and pro-active manner.

Given the above factors it is the opinion of the EAP that, if the No Go alternative is pursued:

- a good business and development opportunity would be missed
- the site would not be optimally developed
- no capital investment arising from the development would result.
- There would be no temporary or permanent employment opportunities created, with the associated economic and social upliftment and skills transfer, during the construction and operational phases of the development.

The proposal for a filling station is an obvious and reasonable choice for the site.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

Key impacts generally associated with environmental impact resulting from filling stations during one or more phases of project development are:

- Risk of Surface and Groundwater Pollution: Spillages and leaks & poor waste management
- Traffic Impact: Congestion during peak hours
- Community Impact: construction - safety and crime risk; operational phase – noise, health (vapours), etc.
- Potential Impact on natural habitat – should be considered in context that the site has a low conservation value and is devoid of any natural habitat
- Potential impact on cultural heritage resources – it should be considered in context with the fact that no heritage resources of significance had been identified.
- Risk of erosion – it should be considered in contest with the fact that the site is relatively flat and that sheet drainage occurs in a north-easterly direction towards the Crocodile River approximately
- Potential sales losses of other filling stations in the macro area

Find below summary tables of the impact assessment.

SUMMARY OF IMPACT ASSESSMENT DURING THE PLANNING AND DESIGN PHASE

Impact Description	Impact Severity Degree (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Poor design- structural failures	4	Local	Temporary / Permanent	high	1
Disregard of legislative requirement	3	Local	Permanent	high	1

SUMMARY OF IMPACT ASSESSMENT DURING THE CONSTRUCTION PHASE

DIRECT IMPACT

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Natural Impact	1	Local	Temporary	medium	0
Cultural Heritage	1	Local	Temporary	medium	0
Risk for leaks	4	Local	Temporary	high	1
Risk for spillages	3	Local	Temporary	high	1
Risk for ground & surface water pollution	3	Local	Temporary	high	1
Risk for erosion	2	Local	Temporary	high	0
Community impact	1	Local	Temporary	medium	0

INDIRECT IMPACT

Impact Description	Impact Severity before mitigation (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Congestion of traffic	2	Local	Temporary	high	1
Alien infestation	2	Local	Permanent	high	1

SUMMARY OF IMPACT ASSESSMENT DURING THE OPERATIONAL PHASE

Impact Description	Impact Severity Degree (0 - 4)	Extent Local / Regional / National	Duration Temporary / Permanent	Probability *Probability it would occur if not mitigated: low / medium / high*	Severity of Impact After Mitigation
Leaks	3	Local	Permanent	high	1
Spillages	3	Local	Temporary	high	1
Risk for groundwater pollution	3	Local	Temporary	high	1
Fire Risk	4	Local	Permanent	high	1
Noise Impact	2	Local	Permanent	high	0
Health and Safety	4	Local	Permanent	high	1
Impact on other filling stations	1	Local	Temporary-Permanent	high	1

For alternative:

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

The impact assessment and all the mitigation measures provided in the report are a result from direct relevant experience of the EAP; as well as input obtained from the specialists and the project team members. The environmental specialists confirmed their support for the project with the implementation of the relevant mitigation measures and specifications as proposed.

From the impact assessment tables it is clear that the expected negative impact associated with the project could be mitigated to acceptable levels with the implementation of the EMPr.

No obvious environmental constraints for this site exist. It is not in conflict with surrounding land use and will therefore not impact negatively on the sense of place.

The macro area is expanding rapidly which is associated with an increase in traffic and the growing need for infrastructure and services that include filling stations.

The proposed new filling station will provide a modern, safe and convenient facility to visitors along this route.

The establishment of a filling station in that area specifically will stimulate current businesses and provide a service to the inhabitants of the area.

The CoJ needs an economic generator to create jobs, alleviate poverty and to secure a healthy environment. The development of the filling station should partly realize these objectives amongst other needs facing the CoJ. Authorizing the establishment of a filling station will assist towards job creation for the working age group within the CoJ.

Indirectly, jobs are created in industries that provide goods, materials and services. An additional number of goods used in construction will for example be required from business and industries related to the relevant construction sector.

Work opportunities will be provided during both the construction and operational phases of the project development. It is recommended that work force be recruited from the local communities, ensuring general upliftment of the local communities.

7. SPATIAL DEVELOPMENT TOOLS

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

The Department of Rural Development and Land Reform compiled the "Guidelines for the Development of Municipal Spatial Development Frameworks." According to these guidelines a Spatial Development Framework is a tool to achieve the desired spatial form of a municipality. In terms of this project the following spatial tools and concepts achieved the required objectives.

The project site is situated within the urban edge on land where properties in the macro area have already been subdivided to supply in the growing need for residential and industrial development of the municipality. This limits inefficient low-density development, no urban sprawl will occur and densification will take place. Redevelopment is particularly appropriate in this study area with low density development conveniently located in relation to development corridors and major distributor roads. Redevelopment at higher densities around open spaces not only increases overall densities, but also provides more people with access to them.

The project is situated along a busy corridor/growth area at the intersection of the Malibongwe Drive and Road R114.

8. RECOMMENDATION OF THE PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).	YES	~~NO~~

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

Not applicable

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

It is recommended that the Environmental Authorisation be granted for the proposed Cosmo City Ext 55 Filling Station (Proposed Filling Station on Part of Portion 2 of the Farm Nietgedacht 535 - JQ).

This Environmental Authorisation should be issued with the following conditions:

- The implementation of the EMPr as included in Appendix G must take place.
- The Applicant must ensure that the conditions of the relevant authorisations in terms of the following acts are adhered to:
    - The conditions of the CoJ in terms of the approval of the rezoning application must be adhered to.
    - The Site and Retail License according to the Petroleum Products Site and Retail Licenses Regulations, 2006 of the Act, as amended in 2012 to be obtained from the Department of Energy.

9. THE NEEDS AND DESIRABILITY OF THE PROPOSED DEVELOPMENT

(as per notice 792 of 2012, or the updated version of this guideline)

NEED

Is there a need for such development?

- The macro area is expanding rapidly which is associated with an increase in traffic and the growing need for infrastructure and services that include filling stations.
- It will accommodate the need for a filling station in the macro area – as confirmed in the Feasibility Study compiled by Dhubecon Consulting Engineers, included in Appendix D(2)(a).

How will the development benefit the local, regional and national community?

- The proposed new filling station will provide a modern, safe and convenient facility to visitors along this route.
- Indirectly, jobs are created in industries that provide goods, materials and services. An additional amount of goods used in construction will for example be required from business and industries related to the relevant construction sector.
- The establishment of a filling station in that area specifically will stimulate current businesses and provide a service to the inhabitants of the area.
- Work opportunities will be provided during both the construction and operational phases of the project development.
- It is recommended that work force be recruited from the local communities, ensuring general upliftment of the local communities.

DESIRABILITY

Is the development desirable in relation to its location on the property and in the area?

- It will accommodate the need for a filling station resulting from the rapidly increasing development (businesses, retail and residential) in the macro area.
- No obvious environmental constraints for this site exist.
- Safe and convenient access with good visibility is possible off Malibongwe Drive.

Is the development desirable in relation to service to the area?

- It will provide an improved convenience to the general public without any prejudice.
- The proposed filling station is not in conflict with surrounding land use and will therefore not impact negatively on the sense of place.

In summary: *The land use of the site as proposed will ensure spatial efficiency and integration of land uses. It will ensure optimization of existing resources and infrastructure as it is a new investment into an established area which, to most extent, is adequately provided with bulk municipal services and roads infrastructure.*

10. THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED

(CONSIDER WHEN THE ACTIVTY IS EXPECTED TO BE CONCLUDED)

It is requested that the authorization be valid for a period of 10 years during which construction must be finalized and the facility be in operation.

11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) (must include post construction monitoring requirements and when these will be concluded.)

If the EAP answers "Yes" to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached as Appendix G	YES

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):
It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*
Appendix B: Photographs
Appendix C: Facility illustration(s)
Appendix D: Route position information
Appendix E: Public participation information
Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information
Appendix G: Specialist reports
Appendix H: EMPr
Appendix I: Other information

The following appendices have for the purpose of this application been attached:

SECTION F: APPENDICES

Appendix A: Site Maps

- Appendix A(1) Locality Map
- Appendix A(2) Locality Map (Google Earth Image)
- Appendix A(3) Environmental Sensitivity
  - (a) Map according to GDARD C-Plan
  - (b) DFFE Screening Tool Report
- Appendix A(4) Property Position Information (Included in electronic version of report)
  - (a) KML Files Google Earth
  - (b) WGS84 Shape Files

Appendix B: Photographs

Appendix C: Facility Illustration(s)

- Appendix C(1) Concept Site Layout
- Appendix C(2) Access Arrangement & Layout of Filling Station

Appendix D: Project Team Reports

- Appendix D(1) Town Planning Motivating Memorandum
- Appendix D(2) Roads and Traffic
  - (a) Filling Station Feasibility Study
  - (b) Traffic Statement
- Appendix D(3) Engineering Services
  - (a) Outline Scheme Report for Provision of Municipal Services - Roads & Stormwater
  - (b) Outline Scheme Report for Provision of Municipal Services - Water & Sanitation)
- Appendix D(4) Clearance Letter from ESKOM
- Appendix D(5) Heritage Impact Assessment

Appendix E: Public Participation Information

- Appendix E(1) Public Participation Plan Request for Approval from GDARD
- Appendix E(2) Register of Interested & Affected Parties
- Appendix E(3) First Phase Notification Letter and Proof of Distribution
- Appendix E(4) Onsite Notice and Proof of Placement
- Appendix E(5) Newspaper Advertisement and Proof of Placement
- Appendix E(6) Written Communication with I&APs resulting from Initial Advertising
- Appendix E(7) Proof of Distribution of Draft BAR *(Will be included in the Final BAR)*
- Appendix E(8) Written Communication with I&APs on Draft BAR *(Will be included in the Final BAR)*
- Appendix E(9) Comments and Responses Report

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix F(1) Water Use License (03/A21B/CI/2981)
Appendix F(2) General Authorisation

Appendix G: Environmental Management Programme

Appendix H: Additional Information

Appendix H(1) GDARD Previous Approvals
(a) Original EA (GAUT 002/09-10/N0586)
(b) Amendment 1 (GAUT 006/15-16/E0172)
(c) Amendment 2 (GAUT 006/18-19/E0068)
Appendix H(2) Ronel Dreyer CV Updated December 2021

CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed.