



BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:

NEAS Number:

Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014 as amended, promulgated in terms of the National Environmental Management Act, 1998(Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for. This report is current as of **1 OCTOBER 2022**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
2. 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.
3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
4. An incomplete report may be returned to the applicant for revision.
5. 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 rejection of the application as provided for in the regulations.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority **unless indicated otherwise by the Department**.
7. No faxed or e-mailed reports will be accepted **unless indicated otherwise by the Department**.
8. The report must be compiled by an independent environmental assessment practitioner (EAP). The EAP must satisfy conditions 11 below.
9. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 11.1 The Environmental Assessment Practitioner (EAP) must be registered in terms of S24H Regulations with the Registration Authority EAPASA as from 8 August 2022.
- 11.2. S24H (14) states that "only a person registered as an Environmental Assessment practitioner may perform tasks in connection with an application for an environmental authorisation contemplated in

- (a) Chapter 5 of the Act read with the Environmental Impact Assessment Regulations.
- (b) Section 24G of the Act
- (c) Chapter 5 of the National Environmental Management Waste Act 2008 (Act No 59 of 2008) read with the Environmental Impact Assessment Regulations

11.3. Tasks in regulation 14 may only be conducted by an EAP that is registered

11.4. Regulations 20 of S24H indicates the offences and penalties as indicated below:

“20. Offences and penalties

(1) A person is guilty of an offence if that person-

- (a) contravenes regulation 14 of the Regulations; or*
- (b) pretends to be a registered environmental assessment practitioner or registered candidate environmental assessment practitioner.*

(2) A person convicted of an offence in terms of subregulation (1) is liable to the penalties contemplated in section 49B(3) of the Act.”
Section 49B(3) of the Act states:

“A person convicted of an offence in terms of section 49A(1)(h), (l), (m), (n), (o) or (p) is liable to a fine or to imprisonment for a period not exceeding one year, or to both a fine and such imprisonment.”

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES	NO
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If YES, please complete form for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail

Activity description

Environmental Management Group is submitting an application for Environmental Authorization (EA) on behalf of Chargo Fuels (Pty) Ltd, (the applicant), for the above mentioned development. The proposed development is set to be located in the southern parts of Graaff Reinet. The proposed development falls within the jurisdiction of Dr. Beyers Naudé Local Municipality, which ranks as the third-largest local municipality in the country. The municipality itself operates under the governance of Sarah Baartman District Municipality, situated in the Eastern Cape region of South Africa. Please refer to figure 1 for the location of the proposed development.

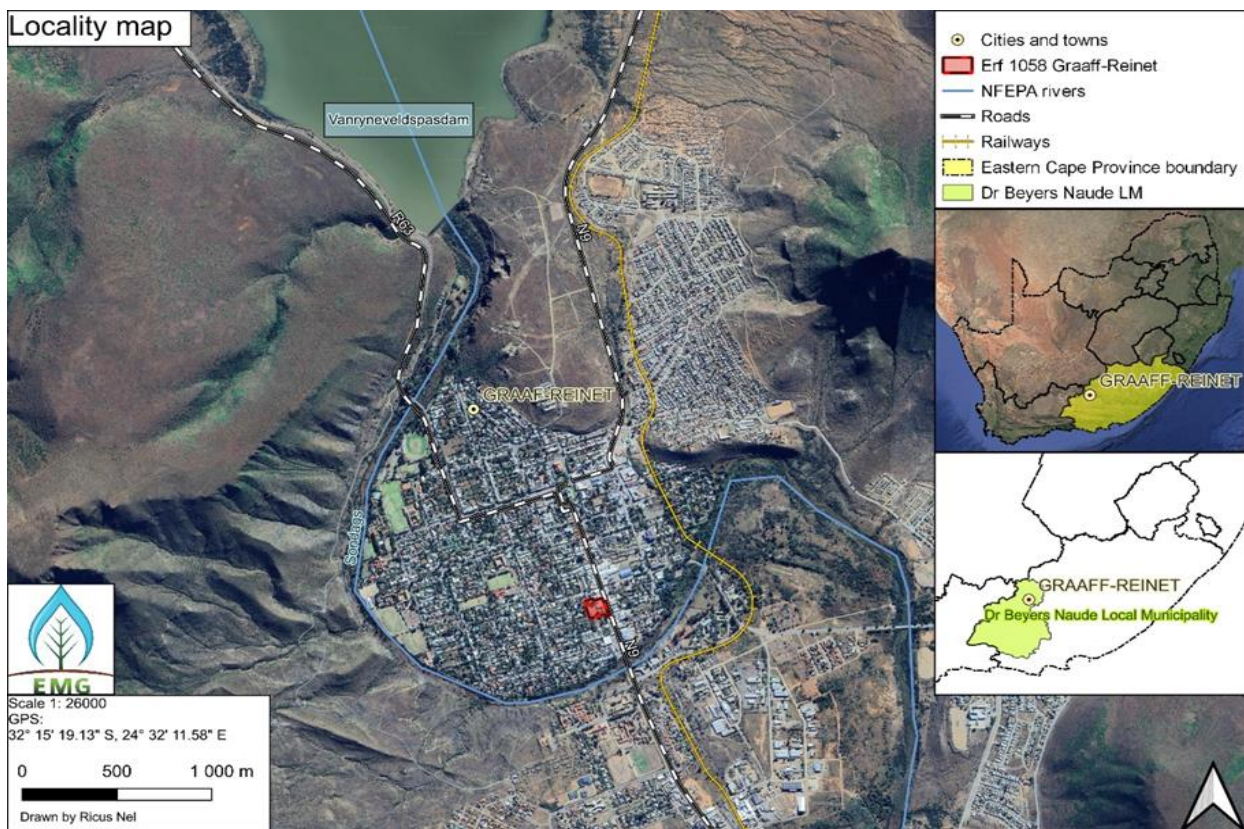


Figure 1: Locality map showing the location of the proposed development

The proposed development will be located on Erven 1058 Graaff-Reinet, in the southern parts of the town, across the N9 route from Middleburg. It holds a strategic location, positioned approximately 154 kilometres away from Cradock via the well-connected N9 and N10 routes.

The proposed development entails the demolition of an existing, non-operational fuel station within the site boundary. In its place, the applicant plans to construct a newly upgraded fuel station, complete with all the necessary accompanying infrastructure. This revitalization effort aims to breathe new life into the area, offering a modern and efficient facility to serve the needs of both locals and travellers passing through. By replacing the outdated infrastructure with a new fuel station, the proposed development will not only enhance the visual appeal of the site but also improve its functionality, providing a convenient and reliable fuelling option. The proposed fuel station development is also accompanied by the placement of an on-site fast food outlet and convenience store.

Beyond the immediate benefits generated by the proposed development, significant potential to contribute to the key features of the surrounding area, particularly its infrastructure and services will be met. By amplifying the effectiveness of the existing infrastructure, the project will complement and augment the overall development in the region. Furthermore, it is envisioned that the development will have a positive impact on the adjacent communities. By providing improved infrastructure and essential services such as fuel accessibility. Additionally, the creation of both temporary and permanent job opportunities will bolster the local economy, supporting socio-economic growth and providing individuals in the vicinity with valuable employment prospects.

According to the architectural designs and site plans from the designers of the proposed development (**refer to Appendix C**), the proposed development will incorporate spaces such as:

- 🏠 Canopy covered forecourt with 10 vehicle refuelling bays,
- 🏠 Pump island (above-ground fuel pumps and hose dispensers),
- 🏠 Total belowground storage volume of approximately 120,000 litres of fuel,
- 🏠 Convenience store (including fast food outlet),
- 🏠 ATM,
- 🏠 Delivery parking areas,
- 🏠 Two access roads,
- 🏠 Landscaped area and,
- 🏠 Delivery bay (loading and unloading goods)

The proposed filling station design features a forecourt steel canopy and refuelling bays in the eastern portion of the site, providing a covered area for vehicles to park and refuel. In the western portion, a new tank farm will be constructed with five underground tanks and the necessary infrastructure. These tanks will store a total volume of approximately 120,000 litres of fuel, including diesel, 95 unleaded petrol, and 93 unleaded petrol. The layout plan, illustrated in **figure two (2)**, offers a conceptual overview of the filling station's arrangement, showcasing the exact locations of associated infrastructure and fuel monitoring systems within the site boundary. Meanwhile, the convenience stores and parking bays will be conveniently situated in the south-western part of the site boundary, allowing easy access flow for customers and other vehicles.

To ensure efficient refuelling operations, the underground tanks will be refilled through fillers located a short distance away. Fuel will then be transferred from the tanks to the above-ground pump islands using delivery pipes. This process can be facilitated by either suction pumps or submersible turbine pumps, ensuring a seamless and convenient fuel distribution system. Environmental precautions will also be taken to prevent soil and water pollution in the event of accidental spills/ leaks. The forecourt area will be constructed on top of a concrete containment slab, effectively containing any potential spills and preventing fuel from seeping into the ground. These measures prioritize the safety and

sustainability of the filling station, providing customers with a reliable and environmentally responsible refuelling experience.

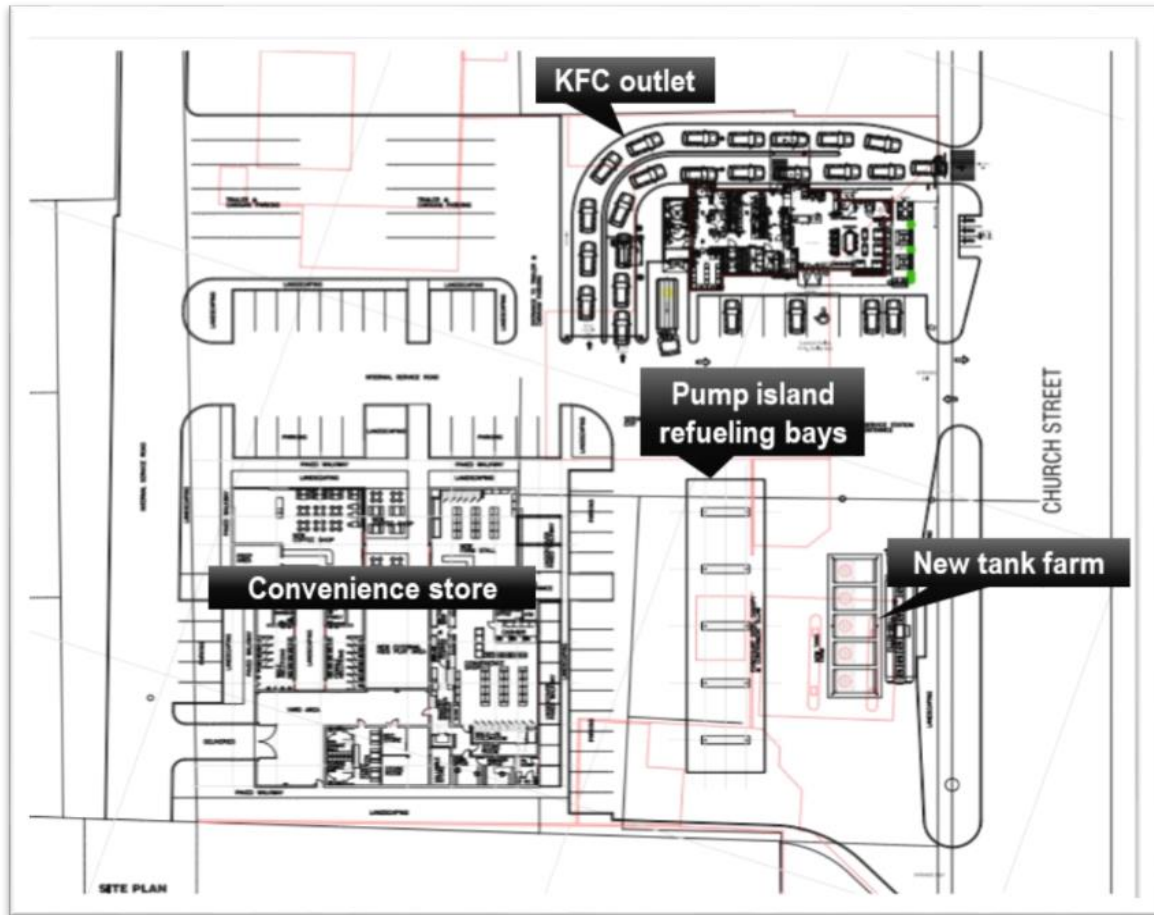


Figure 2: Indication of the arrangement of associated infrastructures and general layout plan

Sewer reticulation: In pursuit of sustainable development and compliance with regulations set by the competent authority, the applicant will work closely with the De Breyers Naude Local Municipality. A key aspect of this connection will involve responsibly managing the waste generated by the proposed development by working hand-in-hand with the municipality, the applicant aims to minimize the environmental impacts of the proposed development and promote the well-being of the local community. Based on the information provided to the Environmental Assessment Practitioner (EAP), the facility's sewage needs will be met by an existing connection with the local municipal infrastructure. This commitment to sustainable waste disposal reflects the applicant's dedication to ensuring a harmonious co-existence between the proposed development and its surroundings. Furthermore, any additional information related to the sewer reticulation will be thoughtfully incorporated into the Final BAR, further reinforcing the applicant's commitment to transparency and comprehensive assessment of the developments impact.

Water: The applicant plans to obtain its water supply for the proposed development in connection to the existing water distribution network through the local municipality of Graaff-Reinet. Based on the current understanding, it is anticipated that the De Breyers Naude Local Municipality will have an adequate water supply to meet the needs of the proposed development.

The proposed development will encompass comprehensive infrastructure provisions to ensure seamless connectivity and functionality. With this commitment, the development aims to create a well-integrated and harmonious environment, delivering convenience and satisfaction to its future residents and stakeholders.

2. FEASIBLE AND REASONABLE ALTERNATIVES

“**alternatives**”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe 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 in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether 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. 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.

Paragraphs 3 – 13 below should be completed for each alternative.

3. 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 degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection. List alternative sites if applicable.

Alternative:

Alternative S1¹ (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Latitude (S):

Longitude (E):

32	15'20.5"	24°	32'11.25"
0	'	0	'
0	'	0	'

***The activity is not linear in nature

Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S2 (if any)

Latitude (S):

Longitude (E):

0	'	0	'
0	'	0	'
0	'	0	'

¹ “Alternative S..” refer to site alternatives.

- Starting point of the activity
- Middle point of the activity
- End point of the activity

o	'	o	'
o	'	o	'
o	'	o	'

Alternative S3 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

o	'	o	'
o	'	o	'
o	'	o	'

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

- Alternative A1² (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Size of the activity:

9108m ³
N/A
m ²

or, for linear activities:

Alternative:

- Alternative A1 (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Length of the activity:

m
m
m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

- Alternative A1 (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Size of the site/servitude:

9108m ³
N/A
m ²

5. SITE ACCESS

Does ready access to the site exist?

YES	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

The proposed development is located on Erven 1058 Graaff-Reinet, in the southern parts of the town, directly adjacent to the N9 road and Church Street, less than 100 meters after N9 and R63 join together inside the CBD. Please see the locality map (Appendix A).

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

6. SITE OR ROUTE PLAN

² "Alternative A.." refer to activity, process, technology or other alternatives.

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

7. SITE PHOTOGRAPHS

Colour photographs from the centre 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 Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

Please see Appendix B

8. FACILITY ILLUSTRATION

Please see Appendix C

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C 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.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

Unknown at this stage.

What is the expected yearly income that will be generated by or as a result of the activity?

Unknown at this stage.

Will the activity contribute to service infrastructure?

YES	NO
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Is the activity a public amenity?

YES	NO
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How many new employment opportunities will be created in the development phase of the activity?

Likely more than 60.

What is the expected value of the employment opportunities during the development phase?

Likely more than R1 500 000

What percentage of this will accrue to previously disadvantaged individuals?

Unknown at this stage.

How many permanent new employment opportunities will be created during the operational phase of the activity?

>40 individuals

What is the expected current value of the employment opportunities during the first 10 years?

Likely more than R2 400 000 if assumed a basic salary of R5000pm

What percentage of this will accrue to previously disadvantaged individuals?

Unknown at this stage.

9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The proposed fuel station development, accompanied by associated infrastructure and a KFC outlet, emerges as a valuable asset in response to both community needs and convenience. Positioned strategically in close proximity to the Pick 'n Pay store, just a short distance of less than 200 m away, the chosen site's advantageous location remains evident. It capitalizes on its high visibility, optimal traffic flow, and accessible access road from the N9 direction of Middelburg. Moreover, this project stands to rejuvenate an existing non-functional fuel station, reinvigorating the site to offer increased fuelling options and services.

This endeavour aims to fulfil a crucial demand, catering to local residents, passing travellers, and commercial ventures within the area. The inclusion of additional gasoline dispenser bays and tanks anticipates the growing demand for fuel services, while the integration of a KFC outlet further enriches the community experience. Fast food establishments like KFC resonate widely, appealing to diverse demographics. This unique combination of a fuel station and a well-known fast food outlet creates a destination that offers refuelling convenience alongside appetizing dining options.

Moreover, the presence of a recognized brand like KFC carries the potential to attract more foot traffic, positively impacting local socio-economic dynamics. Increased customer flow can reverberate throughout the area, benefiting neighbouring businesses like the Pick 'n Pay store, several lodges and cottages and the local butchery and creating job opportunities across various roles. In essence, this holistic project balances community preferences, economic growth, and employment prospects. By merging fuelling necessities with popular dining choices, it fosters a multifaceted solution that harmonizes with local aspirations and preferences.

Indicate any benefits that the activity will have for society in general:

The proposed filling station and KFC outlet in the Graaff Reinet area holds significant benefits for the community and the region as a whole. Here are some additional advantages that such a project can bring:

Enhanced convenience: The introduction of a fuel station and KFC outlet in Graaff-Reinet would provide increased convenience for both local residents and visitors. It would save them time and effort by offering easy access to fuel, food and other essential items in one location. This eliminates the need for lengthy trips to neighbouring towns, providing a more convenient and efficient experience for the community

Improved local economy: The establishment of a fuel station and KFC outlet would generate economic opportunities in the area. It would create direct employment through job openings at the facilities, contributing to the local job market. Additionally, it can stimulate indirect economic benefits by attracting more visitors to the area who may spend money at other local businesses, supporting the overall economic growth of Graaff Reinet.

Increased tourism potential: Graaff Reinet is known for its rich history, cultural heritage, and natural beauty. The addition of a fuel station and KFC outlet can enhance the town's appeal as a tourist destination. Visitors traveling through the area would have access to necessary amenities, allowing them to refuel, grab a meal, and explore the local attractions with ease. This can lead to an increase in tourism revenue, benefiting local businesses and encouraging further development of tourism-related infrastructure.

Community gathering spot: Fuel stations often serve as gathering points for the community, providing a space for people to meet, socialize, and connect. With the inclusion of a KFC outlet, the proposed development could become a popular meeting spot for locals, promoting a sense of community and fostering social interactions. It can serve as a hub where people come together, strengthening the social fabric of Graaff Reinet.

Safety and security: Having a fuel station within the town can contribute to the safety and security of the area. It ensures that residents and travellers have access to fuel at all times, reducing the risk of running out of fuel in remote areas. This is especially important for emergency services, ensuring their ability to respond swiftly and efficiently when needed. In summary, the introduction of a fuel station and KFC outlet in the Graaff Reinet area would provide enhanced convenience, boost the local economy, increase tourism potential, promote community engagement, and contribute to safety and security. These benefits, along with the advantages mentioned earlier, make the proposed development a valuable addition to the community, meeting the needs of residents and visitors alike.

In summary, the introduction of a fuel station and KFC outlet in the Graaff Reinet area would provide enhanced convenience, boost the local economy, increase tourism potential, promote community engagement, and contribute to safety and security. These benefits, along with the advantages mentioned earlier, make the proposed development a valuable addition to the community, meeting the needs of residents and visitors alike.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The proposed filling station and KFC outlet in the Graaff Reinet area would bring about a range of notable benefits that directly impact the local community.

Employment opportunities: The proposed development would create job opportunities, both directly and indirectly. The filling station and KFC outlet would require staff to operate and manage the facilities, providing employment for local residents. Additionally, the development would generate a ripple effect by stimulating the local economy. It would create opportunities for suppliers, maintenance services, and other businesses, leading to further job creation and economic growth in the area.

Crime prevention: The establishment of a well-lit and well-maintained filling station can contribute to crime prevention and overall safety in the community. These types of developments often incorporate security measures such as surveillance cameras, adequate lighting, and regular staff presence, which can help deter criminal activities. This, in turn, promotes a sense of security among residents, making the area more liveable and desirable.

Local economic benefits: The filling station and KFC outlet would have positive economic effects on the local community. By offering additional services and amenities, it would encourage local residents and visitors to spend their money within the community, supporting local businesses. This increased economic activity can lead to higher revenue for local shops, restaurants, and other establishments, ultimately contributing to the overall prosperity and growth of the area.

Improved standard of living: The presence of a filling station and KFC outlet in the community enhances the standard of living for local residents. It provides access to essential services, such as fuel, convenience items, and food options, right within their neighborhood. This convenience saves time and effort for residents who would otherwise need to travel to access these basic services. The improved accessibility of such amenities enhances the overall quality of life in the community.

Fulfilling basic service needs: The filling station and KFC outlet would address the basic service needs of the local community. Fuel is a necessity for transportation, and having a nearby filling station ensures that residents have access to reliable fuel supplies. The addition of a KFC outlet would provide a convenient food option for residents, offering them a variety of meals without having to travel long distances. These basic services cater to the daily needs of the community, providing convenience and improving the overall well-being of residents.

In conclusion, the proposed filling station and KFC development in the Graaff Reinet area would bring employment opportunities, contribute to crime prevention, provide local economic benefits, enhance the standard of living, and fulfill the basic service needs of the community. These factors combined make the project highly valuable for the local residents, positively impacting their lives and fostering a stronger, more vibrant community.

10. 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, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:
Constitution of the Republic of South Africa (1996)	Constitution of the Republic of South Africa	1996
National Environmental Management Act (Act 107 of 1998) (NEMA)	The Department of Economic Development, Environmental Affairs and Tourism	2014
National Environmental Management: Biodiversity Act (10 of 2004).(NEM:BA)	The Department of Economic Development, Environmental Affairs and Tourism	2004
National Water Act (Act No. 36 of 1998)	Department of Water and Sanitation (DWS)	1998
Environmental Impact Assessment Regulations (GN R.327, R. 325 & 324) of 07 April 2017.	National Department of Environmental Affairs (DEA)	2014
Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	Department of Labour	1993
The National Heritage Resources Act, 1999 (Act No. 25 of 1999)	South African Heritage Resources Agency (SAHRA).	1999
Environment Conservation Act , 1989 (Act 73 of 1989) and amendments	Department of Agriculture, Rural development and Land and Environmental Affairs	1989
Promotion of Access to Information Act, 2000 (Act 2 of 2000) and amendment.	Department of Justice and Constitutional Development	2000
Petroleum Products Act, 1977 (Act No.120 of 1977) and amendments.	Department of Mineral Resources and Energy	1977
Spatial Development Framework for the De Breyers Naude Local Municipality	De Breyer Naude Local Municipality	9 March 2021
Integrated Development Plan for the De Breyers Naude Local Municipality	De Breyers Naude Local Municipality	10 August 2011

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

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

YES	NO
<15m³	

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

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

Waste from the development site will be collected by waste trucks on a weekly basis and disposed of at the nearest registered landfill site.

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

Construction waste will be disposed at the nearest registered landfill site.

Will the activity produce solid waste during its operational phase?

YES NO

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

~11.5m³

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

It will be disposed of into the Municipal system.

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

Not Applicable.

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, then 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.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES NO

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

11(b) Liquid effluent

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?

m³

Will the activity produce any effluent that will be treated and/or disposed of on site?

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.

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:			
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:

During the construction phase, the developer will use water sparingly and only when necessary. If any other recommendations arise during the public participation process the final BAR will be updated.

11(c) 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 air emissions that will be generated by the fuel station and the KFC outlet will not require an Air Emissions License as per NEM: AQA (Act No.39 of 2004). However, the relevant impacts of these odours have been assessed during the Impact Assessment section (**Section D**) and it was identified that the developer should put focus on the higher risk by implementing and monitoring excessive air pollutants and thus resulting into normal level of air emissions related to the proposed development will be generated and produced.

11(d) Generation of noise

Will the activity generate noise?

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 noise in terms of type and level:

The movement and the mobility of construction trucks, machinery and other related construction activities will generate noise on-site and in the surrounding CBD of Graaff-Reinet. However, it is expected to have minimal noise impact with noise levels remaining within the normal range throughout the construction phase. Even in the operational phase, normal levels of noise pollution will be generated the proposed development.

12. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

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

litres	
YES	NO

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

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

The construction process will predominantly utilize self-powered equipment and machinery, minimizing the need for additional electricity, while energy-efficient technology will be implemented according to a schedule, ensuring judicious use of energy resources. However, the applicant is committed to search and investigate more solutions and opportunities to increase the sustainability of the proposed development.

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

No other alternative energy sources are considered. If any such alternatives arise, the Final BAR and EMPr will be updated.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

- For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):

A

- Paragraphs 1 - 6 below must be completed for each alternative.

- Has a specialist been consulted to assist with the completion of this section?

YES	NO
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If YES, please complete form for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

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
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Alternative S2 (if any):

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
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Alternative S3 (if any):

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
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2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline

2.4 Closed valley

2.5 Open valley

2.6 Plain

X

2.7 Undulating plain / low hills

2.8 Dune

2.9 Seafront

2.10 At sea

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

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

Natural veld — good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an “E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn’t have the necessary expertise.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area

Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

The proposed development promises to be a significant boon for the local community in several ways. It will generate a substantial number of job opportunities, catering to both temporary and permanent positions. This infusion of employment opportunities will not only alleviate unemployment concerns but also contribute to enhancing the overall livelihoods of the local residents. Moreover, the development will introduce a diverse array of fuel station options for both the locals and the travellers passing through church street. This accessibility to various fuel stations will undoubtedly bolster the town's economic prospects, fostering growth and development.

However, it's worth noting that the increased convenience and economic vitality may lead to heightened traffic congestion in the area. This is particularly relevant as another garage is already located on the same street as the proposed development. Therefore, careful consideration and planning will be essential to manage and mitigate potential traffic issues effectively. In summary, while the proposed development holds the promise of numerous benefits for the community, it should be accompanied by a well-thought-out traffic management strategy to ensure the smooth functioning of church street for all stakeholders involved.

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally 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
Uncertain	

If YES, explain:

[Redacted]

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

The proposed development is situated in one of the South Africa's oldest towns, Graaff Reinet, known for its rich historical heritage, the proposed development encompasses approximately 238 Grade II declared heritage sites within a 170 ha area. Portions A and B of Erf 1058 have experienced significant degradation, primarily due to prior commercial developments. The geological composition comprises moderately significant yet heavily disturbed residual soils (Quaternary alluvium), which may overlay paleontologically important Adelaide Subgroup strata, such as the Waterford Formation (Pm). This geological context, though on relatively flat terrain, likely contains fossils from the Cistecephalus AZ.

In terms of palaeontology, it is recommended that the development proceed, provided that any construction-related excavations that could potentially expose or remove intact sedimentary rock are regularly monitored by a professional palaeontologist. The prehistoric archaeological footprint is well-documented within the vicinity of Cradock, Janesville, and Pearston. However, due to the nature of the current commercial development and the previous degradation of surface deposits, the proposed development footprint is not considered archaeologically vulnerable.

Except for the house located in Portion B of the footprint, the commercial buildings on Portions A and B are not deemed historically significant and are not older than 60 years. These commercial buildings on Erf 1058 hold a site rating of Generally Protected C (Significance: low / Mitigation: destruction), while the house holds a site rating of Generally Protected A (Mitigation before destruction). Any plans to modify or demolish a historical structure potentially older than 60 years necessitate a permit from the South African Heritage Resources Agency (SAHRA). Such a destruction permit will be granted only after a Phase 1 Impact Assessment has been conducted by a qualified heritage specialist to the satisfaction of SAHRA.

Will any building or structure older than 60 years be affected in any way?
 Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO
YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;?
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in sub-regulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental

- authorisation;
- (iii) the nature and location of the activity to which the application relates;
- (iv) where further information on the application or activity can be obtained; and
- (iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation 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, ratepayers associations and traditional authorities where appropriate. 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 inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

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 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

List of stakeholders and authorities (interested and affected parties)				
Department/Organization	Contact person	Email address	Address	Contact number
Sarah Baartman District Municipality Municipal Manager	Ms Unathi Daniels	npeterson@sbdm.co.za	32 Govan Mbeki Avenue, Port Elizabeth, Eastern Cape	041 508 7111
Sarah Baartman District Municipality Executive Mayor	Mr Deon de Vos	ddevos@sbdm.co.za	32 Govan Mbeki Avenue, Port Elizabeth, Eastern Cape	041 508 7111
Head of Department: Economic Affairs Eastern Cape	Ms M Mama	Mickeymama@gmail.com	Indwe House, 2nd and 3rd Floors, Bisho, Eastern Cape	043 605 7004 0780037598
HOD: Rural and Agrarian Development Eastern Cape	Ms Siphokazi Ndundane	Siphokazi.Ndundane@drdar.gov.za	Dukumbana Building, 10th Floor, Independence Avenue, Bisho, Eastern Cape	72 802 1673
Head of Communications Eastern Cape	MS Soga Phiwe	PhiwokuhleS@ecdhs.gov.za	Steve Tshwete Building, 31 / 33 Phillip Frame Road, Chiselhurst, East London Eastern Cape	Head of Communications Eastern Cape
HOD Social Development :Eastern Cape	Mr. Mchemba Mzimkhulu	Mzimkhulu.Mchemba@ecdsd.gov.za	Office of the MEC for Social Development, Dukumbana Building, 1 st Floor, Independent Avenue, Bisho, Eastern Cape	043 605 5012 082 444 4245
Dr Beyer Naude Local Municipality – Municipal Manager	EM Rankwana	mmoffice@bnlm.gov.za	Church square, Graaff Reinet, Eastern Cape	049 807 5778

Head of Department: Roads and Public Works Eastern Cape	Mr. Thandolweth u Manda	Thandolwethu.Manda@ecdpw.go.za	Tyamzashe Buidling, Room 2188, Civic Square, Phalo Avenue, Bisho, Eastern Cape	040 639 4331
De Breyers Naude Local Municipality	Mr. Ewald Loock	mayorsec@bnlm.gov.za	Church Square Graaff Reinet, Eastern Cape	049 807 5700
Leopard Valley Guest House	Dave	dave@leopardsvalley.co.za	79 Bourke str, Graaff Reinet, Eastern Cape	076 617 9215
Engen	Mr. Blighnaut	gemgarage@gmail.com	101 – 105 Church street, Graaff Reine, Eastern Cape	049 892 2222
Marino Slagtery	Mr. P Else	Marinoslagtery1@gmail.com	108 Church Street, Graaff- Reinet, Eastern Cape	049 892 5612

List of authorities from whom comments have been received:

This is a draft Basic Assessment report; comments will be included and incorporated in the final Basic Assessment report after the 30-day Public Participation Process (PPP) has been completed.

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) 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):

Yes, some comments have been received from some of the interested and affected parties, but they will be completed when the 30 days Public Participation Process have ended.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended, 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.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

Please refer to [Appendix E](#)

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):





















Please refer to [Appendix E](#)
















2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES










*** Refer to [Appendix G](#) for a detailed Impact assessment report***

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
Flora and Fauna			
Invasive plant species	Direct impact	Low	<ul style="list-style-type: none"> Stockpiles need to be eradicated from all vegetation on a three-monthly basis. Disturbance related activities may not exceed the authorised development boundary. The appointed ECO should liaise with the contractor and developer and compile an alien invasive species management plan if required. Exotics may not be allowed to proliferate within the development area. All invasive species within 30 m of the development area need to be managed in accordance to sustainable management practices.
	Indirect impacts	Low	
	Cumulative impacts:	Low	

Activity	Impact Summary	Significance	Proposed mitigation
Habitat loss	Direct impact:	Low	 Removal of indigenous vegetation should be kept to a minimum.  Disturbance related activities must be restricted to the authorised development site.  Vehicle movement should strictly be kept on designated dirt roads.  No off roading or reckless driving should be allowed.  Post-construction open areas should be rehabilitated and revegetated with indigenous vegetation.  No harvesting of plant material should be allowed.  No illicit fires may be allowed during construction.  A fire management plan should be drafted and kept on site for all phases of the development.  No disturbance related activity may encroach near the watercourse situated on the site's western boundary.  Littering should be prohibited.  No burning of any material is allowed on site.
	Indirect impact:	Low	
	Cumulative impacts:	Low	
Heritage			
Artefacts and Fossils	Direct impacts	Low	 A relevant specialist should be consulted if any significant artefacts or fossils are identified during the construction phase  If any potential artefacts or fossils are discovered, halt construction in that specific area and notify relevant authorities  Necessary permits must be applied for with SAHRA if any material of interest is found.  Ensure that all construction personnel are educated and trained about the importance of preserving archaeological and paleontological resources  By incorporating these mitigative points into the construction process, the impact on artefacts and fossils can be significantly reduced, allowing for the preservation of our cultural and natural heritage.  In the unlikely event of accidental archaeological exposure, all excavations should stop immediately.  No loose chance finds such as stone age artefacts (arrow heads, stone flake blades etc.) may be collected.  The on-site environmental representative should consult the appointed ECO regarding any such discoveries.  All construction debris/ waste should be removed from site and may not be deposited in on-site excavated waste pits.
	Indirect impacts	Low	
	Cumulative impacts	Low	

Water resources			
Surface and groundwater quality	Direct impact	Medium	<p> All hazardous chemicals used during the construction of the development must be stored on an impermeable layer.</p>
	Indirect impacts	Low	<p> Require the installation of high-quality fuel storage systems and spill containment structures to minimize the risk of leaks and spills during the construction</p>
	Cumulative impacts	Low	<p> A storm water management plan should be implemented to avoid the increased runoff from eroding soils.</p>
			<p> Soil erosion prevention should be implemented.</p> <p> All spillages on bare ground must be removed correctly with the contaminated soils and disposed of using a sub-contractor.</p> <p> All above petroleum storage tanks need to be banded with an area that can store 110% of the tank's capacity.</p> <p> Oil spill kits must be readily available to clean and properly dispose of contaminated soils or areas.</p> <p> Conduct periodic inspections of fuel storage tanks, pipelines, and dispensing equipment at the fuel station to identify any potential leaks</p> <p> By incorporating these mitigative points into the construction phase, the risk of ground and surface water contamination from fuel/oil spillages can be significantly reduced, ensuring the overall environmental safety of the development.</p>
Aesthetics			
Visual impact	Direct impacts	Low	<p> This not only mitigates visual impacts but also provides privacy and noise reduction for neighbouring residents.</p>
	Indirect impacts	Low	<p> Revegetation and rehabilitation of open spaces after construction.</p> <p> Maintain the environment's innate serenity by consistently upholding cleanliness and preservation</p>
	Cumulative impacts	Low	<p> Construction debris may not pile up on site and should be removed regularly.</p> <p> The proposed development, located within the CBD and along the N8 road, which experiences heavy traffic flow with mobile trucks, vehicles, and pedestrians crossing, has the potential for a negative visual impact on the surrounding community due to these factors.</p> <p> Construction should occur as quickly as possible to improve the aesthetic value.</p>

Air Quality			
Air quality	Direct impacts	Low	<ul style="list-style-type: none">  No open fires during construction phase.  The fuel station must ensure that no gases are excessively emitted.
	Indirect impacts	Low	<ul style="list-style-type: none">  Use low-emission equipment and energy-efficient appliances to minimize outdoor air pollution.  Plant greenery and create a buffer zone to help absorb pollutants and improve local air quality
	Cumulative impacts	Low	<ul style="list-style-type: none">  Fire prevention should be taken very seriously as it could lead to the combustion of fuel tanks.  All operational activities should strictly be concentrated on the proposed site.  Rehabilitation of all open spaces after construction.  A complaints register needs to remain on site in which all complaints raised by the general public is to be filed.  Maintain the environment's innate serenity by consistently upholding cleanliness and preservation

3. CLIMATE CHANGE ASSESSMENT

Climate change issues must be considered as part of the EIA process Please consider the Climate Change guideline. EAP must determine:

- a) The potential impact of climate change on society and the economy, whether the impact is negative or positive, considering that society needs to be at the centre of the proposed development;
- b) The potential alternatives of the proposed development, alternatives that will have less impact on climate change (environment and generation of waste included), the society and economy;
- c) whether, and to what extent, the proposed development will result in the release of greenhouse gas (GHG) emissions;
- d) whether the proposed development is necessary to achieve long term decarbonisation goals;
- e) the impact of the development on social, economic, natural and built environment that are crucial for climate change, adaptation and resilience;
- f) the projected impact of climate change on proposed development; and surrounding environment, and implications for the development.
- g) Explanation of how the impacts is likely to be exacerbated or minimised as result of climate change and what measures are likely to be implemented to accommodate and manage (adapt to) the anticipated worst scenario where applicable
- h) whether, and to what extent, the impacts identified in (a) -(g) can be mitigated.

a) **Changing consumer preferences and behaviour:** Climate change can influence consumer attitudes and behaviours, leading to shifts in preferences for transportation and food choices. As society becomes more environmentally conscious, there may be a positive impact on the fuel station if it offers alternative fuel options, such as electric vehicle charging stations. On the other hand, there might be a negative impact on the KFC outlet if consumers increasingly favour plant-based or locally sourced food options due to climate concerns. This could affect the demand and profitability of the KFC outlet and its contribution to the local economy.

Extreme weather events disruption: The increasing frequency and intensity of extreme weather events, such as hurricanes, floods, or heavy storms, due to climate change can disrupt the operations of both the fuel station and the KFC outlet. Negative impacts may include temporary closures, infrastructure damage, and supply chain disruptions. Alternatively, proactive adaptation measures such as resilient construction and disaster preparedness plans could be seen as positive impacts, enhancing the development's ability to weather climate-related challenges and maintain consistent service to the community.

Economic resilience and job creation: Incorporating climate-resilient features in the design and operation of the fuel station and KFC outlet, such as renewable energy systems or efficient waste management practices, could have positive economic impacts. These measures might attract environmentally conscious consumers and contribute to job creation through the installation and maintenance of sustainable technologies. Additionally, the adoption of such practices could enhance the reputation of the development, potentially attracting more customers and contributing positively to the local economy.

- b) **Enhanced sustainable Infrastructure and design:** One alternative approach is to prioritize sustainable infrastructure and design within the predefined site boundary. This could involve implementing cutting-edge energy-efficient technologies at the fuel station, such as solar panels for power generation and rainwater harvesting systems for water conservation. Similarly, the KFC outlet could focus on utilizing locally sourced and organic ingredients, as well as adopting energy-efficient kitchen equipment. By doing so, the proposed development would contribute to reduced greenhouse gas emissions (GHG), lowered energy consumption, and minimized waste production, while aligning with the local society's demand for eco-friendly practices.

Multi-modal transportation integration: Another alternative entails promoting multi-modal transportation solutions to reduce carbon emissions and ease traffic congestion. The fuel station could incorporate electric vehicle charging stations alongside traditional fuel pumps, incentivizing the use of electric vehicles and alternative modes of transportation. Simultaneously, the KFC outlet could collaborate with local authorities to improve pedestrian and cycling infrastructure, encouraging patrons to choose sustainable commuting options. This approach would help address environmental concerns, support climate change mitigation, and enhance community well-being, all while maintaining the proposed development's core functions.

- c) **Fuel station operations:** The operation of the fuel station, particularly traditional fuel pumps, will lead to direct emissions of GHGs such as carbon dioxide and methane. The combustion of gasoline and diesel fuels by vehicles refuelling at the station will contribute to these emissions. The extent of emissions depends on factors such as fuel types, vehicle efficiency, and customer behaviour.

Energy consumption: The energy requirements of both the KFC outlet and the fuel station, including lighting, heating, and cooling systems, may result in indirect GHG emissions. If the energy sources are predominantly fossil-fuel-based, the emissions will be higher. Implementing energy-efficient practices and renewable energy sources can mitigate these emissions to some extent.

Supply chain impact: GHG emissions may also arise from the supply chain, particularly for the KFC outlet. The transportation of ingredients, packaging materials, and other supplies to the outlet can contribute to emissions. Selecting local suppliers and optimizing distribution methods can help reduce these emissions.

- d) **Transportation transition:** The presence of the fuel station, especially if it incorporates electric vehicle charging infrastructure, can play a role in supporting the transition to low-carbon transportation options. By offering convenient charging facilities for electric vehicles, the development can encourage the adoption of cleaner transportation methods, contributing to reduced emissions from the transportation sector over the long term.

Renewable energy integration: The KFC outlet and fuel station have the potential to integrate renewable energy sources, such as solar panels, into their operations. By generating a portion of their energy needs from renewable sources, the development can contribute to decarbonisation efforts by reducing reliance on fossil fuels for electricity, thus aligning with long-term sustainability goals.

Community hub for change: The proposed development can serve as a community hub for promoting sustainable practices and awareness. It can educate customers about energy-efficient driving, encourage plant-based food options, and showcase renewable energy technologies. Such initiatives can contribute to shaping consumer behaviour, fostering a culture of decarbonisation, and influencing long-term shifts towards sustainable living.

- e) **Built environment and resilience:** The development's design can influence the built environment's resilience to climate-related challenges. By incorporating flood-resistant structures, elevated platforms, and robust infrastructure, the fuel station and KFC outlet can minimize susceptibility to extreme weather events, contributing to the area's overall adaptive capacity and long-term viability.

Economic opportunities and local employment: The establishment of the fuel station and KFC outlet can create economic opportunities through local employment and business partnerships. By offering job opportunities and supporting local suppliers as mentioned above in the report, the development enhances community resilience by providing a stable economic foundation, particularly in times of climatic uncertainty.

Environmental awareness and education: The development can serve as an educational platform to raise awareness about climate change and environmental practices. By engaging customers and the community through informational displays, workshops, and sustainable initiatives, the fuel station and KFC outlet can foster a culture of environmental consciousness, contributing to adaptive behaviours and improved resilience in the face of changing climate conditions.

- f) **Increased frequency of extreme weather events:** Climate change projections indicate a heightened frequency of extreme weather events, such as storms and flooding. This poses a risk to the infrastructure and operations of the fuel station and KFC outlet. To mitigate these risks, the development should incorporate resilient design features, such as elevated structures and effective drainage systems, to ensure continuity of service even during adverse weather conditions.

Changing customer behaviour: As climate change awareness grows, consumer preferences and behaviours may shift towards more sustainable choices. This could impact the demand for the products and services offered by the fuel station and KFC outlet. To address this, the development should remain adaptable, considering options like offering plant-based menu items, providing electric vehicle charging stations, and promoting sustainable practices to align with evolving customer expectations.

Regulatory changes and compliance: Anticipated regulatory changes aimed at reducing carbon emissions and promoting sustainability could affect the operation and licensing of the fuel station and KFC outlet. The development needs to stay informed about evolving climate-related regulations and adapt its practices to ensure compliance. Embracing eco-friendly technologies and practices proactively can position the development favourably and prevent potential disruptions due to changing regulatory landscapes.

- g) **Exacerbation - extreme weather events:** Climate change could amplify the frequency and intensity of extreme weather events, exacerbating the risk of flooding and structural damage to the fuel station and KFC outlet. To minimize this impact, the development could implement elevated platforms and flood-resistant construction. Additionally, investing in advanced weather monitoring systems and establishing emergency response plans would allow for timely closure and reopening during adverse conditions, ensuring safety and reducing potential revenue loss.

Minimization - energy efficiency measures: As climate change drives energy demand fluctuations, efficient energy consumption becomes crucial. The development can incorporate energy-saving technologies, such as LED lighting, smart thermostats, and high-efficiency appliances for the KFC outlet. For the fuel station, investing in renewable energy

sources like solar panels can mitigate energy cost volatility and reduce reliance on fossil fuels, thereby minimizing the impact of fluctuating energy prices due to climate-related factors.

Adapting to worst-case scenario - comprehensive risk assessment: In the event of a worst-case climate scenario, such as prolonged power outages due to extreme weather, the development should have robust contingency plans. This might involve installing backup power systems, like generators, to ensure continued operation of essential services. Additionally, establishing partnerships with nearby businesses to share resources during emergencies could enhance resilience and reduce the impact of potential disruptions.

Exacerbation – shifting consumer preferences: Climate change-aware consumers may demand more sustainable and locally sourced products. Failure to meet these preferences could lead to decreased patronage of the KFC outlet. To counteract this, the development could conduct market research and adapt its menu offerings to include eco-friendly and plant-based options. This proactive approach would align with changing consumer behaviours and maintain customer engagement.

Minimization - collaboration with local community: By collaborating with local community groups, environmental organizations, and government agencies, the development can enhance its positive impact and resilience. Partnerships can lead to joint initiatives such as community gardens, climate awareness workshops, and waste reduction campaigns, minimizing the potential negative effects of changing preferences and fostering a supportive and loyal customer base.

- h) **Impact mitigation through sustainable design:** The impacts related to greenhouse gas emissions from fuel station operations and energy consumption can be mitigated through sustainable design strategies. By incorporating energy-efficient technologies, such as LED lighting and efficient HVAC systems, and integrating renewable energy sources like solar panels, the development can significantly reduce its carbon footprint. Additionally, implementing eco-friendly construction materials and techniques for both the fuel station and KFC outlet can further minimize their environmental impact.

Transportation alternatives for emission reduction: To mitigate emissions from the fuel station's operations, the development can prioritize alternative transportation solutions. Installing electric vehicle charging stations alongside conventional fuel pumps encourages the use of electric vehicles, reducing tailpipe emissions. Promoting public transportation options, carpooling incentives, and bike-sharing programs can further contribute to emissions reduction and align with the community's sustainable transportation needs.

Waste reduction and recycling initiatives: Mitigating the impact of waste generation from the KFC outlet can be achieved through waste reduction and recycling initiatives. Implementing comprehensive waste management practices, such as segregating and recycling packaging materials, composting organic waste, and minimizing single-use plastics, can significantly reduce waste sent to landfills. Collaborating with waste management partners and local recycling programs can enhance the effectiveness of these efforts.







4. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity 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.

Based on the information provided by the client, the proposed fuel station and associated infrastructure, including the construction of a KFC outlet, are subject to assessment for their environmental impacts during the planning and design phase, construction phase, and operational phase.

Planning and design phase: During this phase, the focus is on office work and site surveys to design the layout plan, prepare the draft basic assessment report (BAR), and conduct specialist studies. The goal is to obtain necessary environmental authorizations (EA) for the proposed development. Key impacts to consider during this phase may include land transformation due to the demolition of the existing non-operational fuel station within the site boundary.

The construction phase is likely to have several environmental impacts, such as:

-  Impact on fauna and loss of floral species due to clearing of vegetation.
-  Loss of habitat for the animal diversity in the area.
-  Visual impact associated with the construction of roads and infrastructure.
-  Increased levels of dust during construction activities.
-  Surface water and groundwater quality
-  Socio-economic impacts, including a potential increase in petty crime associated with casual labour.

While these impacts are identified, it is noted that they might be outweighed by the impacts expected during the operational phase of the development.

The operational phase involves the utilization of the fuel station, associated infrastructure, and KFC outlet, including access roads. However, it is mentioned that the operational phase impacts are expected to be more significant than the construction phase impacts.

It is the opinion of Environmental Management Group (PTY) Ltd that the proposed development has no sensitive environmental impacts or fatal environmental flaws that would warrant the refusal of Environmental Authorization. The recommendation is that the proposed development should be permitted and allowed, as the overall social impact is expected to be positive.

It is important to note that environmental assessments are crucial to understand the potential impacts of any proposed development on the environment and surrounding communities. Stakeholders, including local authorities, environmental organizations, and concerned local citizens, should have access to the detailed findings of the environmental assessment to ensure transparency and informed decision-making. Additionally, the environmental management program report (EMPr) has been attached and is in place to mitigate and manage any identified adverse impacts during all phases of the proposed development.

Alternative A (preferred alternative)

Not Applicable

No-go alternative (compulsory)

In the proposed approach, the 'No-Go' option represents a conservative stance aimed at maintaining the current state of the environment, ensuring no additional impacts beyond the existing conditions. This assessment is based on the current state of the area and acknowledges that no further actions will be taken if the Competent Authority (CA) rejects the application. Consequently, the site will remain in its degraded and unfavourable operational state, without any improvements or efforts to mitigate potential environmental impacts.

It is essential to clarify that the 'No-Go' option does not involve considering or implementing any alternative actions or strategies. While it avoids the risk of further environmental harm, it also foregoes the opportunity for potential positive

changes or improvements that might be achieved through other feasible approaches. Hence, the 'No-Go' alternative is not considered the best viable option for the property.

SECTION E. RECOMMENDATIONS OF 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)?

YES	NO
YES	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F (**Attached**)

If “NO”, indicate the aspects that should be assessed further as part of a Scoping and EIA process 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:

- Ensure that all conditions outlined in the Environmental Management Program Report (EMPr) and any site-specific conditions specified by relevant government departments are met and documented for audit purposes
- Avoid placing any part of the filling station on barren surfaces and utilize concrete slabs as impermeable surfaces to prevent fuel contamination.
- Implement proper storm-water management infrastructure, including capture drains, to prevent contaminated water from leaving the site.
- Develop a comprehensive plan for recycling and proper disposal of contaminated water in conjunction with the storm-water management plan.
- Restrict construction activities to the authorized site boundaries to prevent encroachment into environmentally sensitive areas.
- Implement all mitigation measures and recommendations specified in specialist reports related to the project.
- Implement a quarterly exotic plant species and weed management program to control and prevent the proliferation of invasive vegetation.
- Design and construct the facility and associated infrastructure to manage effluent and fuel spillages on-site to prevent surface and groundwater contamination.
- Minimize vegetation clearance to the minimum required for access and construction activities, preserving as much natural vegetation as possible.
- Remove and store topsoil separately for later use in site rehabilitation, ensuring soil quality is preserved.
- Prohibit hunting, gathering, and trapping of wild fauna by construction workers to protect local wildlife populations and ecosystems.
- No part of the filling station area (filling pumps, convenient store and fuel tanks) may occur on barren surfaces and require concrete slabs as impermeable surfaces.
- In terms of palaeontology it is recommended that development can proceed, provided that construction-related excavations which may expose or remove intact sedimentary rock, should preferably be monitored by a professional palaeontologist on a regular basis when such excavations are open.
- In terms of the Geohydrologist, it is recommended that the proposed development conditions must be adhered to and are as follows:
 - One (1) upstream monitoring borehole must be selected and monitored on a bi-annual (6 month) interval
 - Hydro-Carbons
 - Minor and Major Elements
 - One (1) downstream monitoring borehole must be selected and monitored on a bi-annual (6 month) interval

- Hydro-Carbons
- Minor and Major Elements

At least four (4) shallow boreholes must be drilled around the underground tanks and monitored on a 3 monthly interval for hydrocarbons:

- GRO C₆₋₁₀
- TPH C₁₀₋₂₈
- TPH C₂₈₋₄₀



No part of the filling station area (filling pumps, convenient store and fuel tanks) may occur on barren surfaces and require concrete slabs as impermeable surfaces.



Proper storm water management infrastructure must be implemented (capture drains) to prevent contaminated water from leaving the site. Together with the storm water management proper recycling (separation tanks) and disposal of contaminated water needs to occur.



All conditions as stated in the EMPr as well as site specific conditions as stated by the various Departments must be conducted and auditable.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

