RECTIFICATION APPLICATION FOR LAYER HOUSES ON THE FARM CHEZ NOUS NO 1775, KOPANONG MUNICIPAL AREA, FREE STATE PROVINCE

DRAFT BASIC ASSESSMENT REPORT

DEPARTMENTAL REFERENCE NUMBER

24G/40(ii)/25/10

MARCH 2026

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EXECUTIVE SUMMARY

This Basic Assessment Report (BAR) has been prepared in support of an application submitted in terms of Section 24G of the National Environmental Management Act, 1998 (Act 107 of 1998) ("NEMA") for the rectification of the unlawful commencement of a listed activity on Farm Chez Nous No 1775 in the Kopanong Municipality of the Free State.

The activity relates to the expansion of an existing layer poultry facility, which resulted in:

- An increase in the physical development footprint of the poultry production infrastructure; and
- An increase in production capacity to exceed 5 000 poultry birds.

The expansion triggered Listing Notice 1, Activity 40(ii) of the Environmental Impact Assessment Regulations, 2014 (as amended), pertaining to the expansion of facilities for the concentration of poultry exceeding 5 000 birds.

The expansion of the layer facility was undertaken within the context of an existing agricultural operation on the farm. At the time of implementation, the Applicant was not aware that increasing the poultry production capacity beyond 5 000 birds would trigger a listed activity in terms of the Environmental Impact Assessment Regulations, 2014 (as amended), requiring prior Environmental Authorisation. Once it was brought to the attention of the Applicant that the expansion may constitute a listed activity, steps were taken to regularise the matter through the submission of an application in terms of Section 24G of the National Environmental Management Act, 1998 (Act 107 of 1998). This application therefore seeks to rectify the unlawful commencement of the activity and to ensure that the facility operates in compliance with applicable environmental legislation going forward.

Site Context

The layer facility is located within an established agricultural farm setting characterised by existing farming infrastructure and historically transformed land. The Tierpoort River is situated >100 m to the east of the development footprint; however, the facility is located outside the riparian zone. No wetlands, drainage lines, or seepage areas occur within the development footprint.

According to the DFFE Screening Tool Report:

- The Agricultural Theme Sensitivity is predominantly Medium.
- The Aquatic Biodiversity Theme Sensitivity is Low.

- The Terrestrial Animal Species Theme Sensitivity is Medium (due to potential occurrence of certain species in the broader area).
- The Archaeological and Cultural Heritage Theme Sensitivity is Low.
- The Palaeontological Theme Sensitivity is Very High (regional classification).

The expansion was undertaken within an already disturbed operational footprint and did not result in the transformation of intact natural habitat.

Key Environmental Considerations

The assessment identified potential impacts associated with:

- Water use and stormwater management;
- Manure handling and runoff control;
- Poultry mortality management;
- General waste and domestic effluent management;
- Noise, lighting, and traffic;
- Biosecurity and disease control;
- Socio-economic considerations.

The facility requires ±6 000 litres of water per day (±2 160 m³ per annum), which can be accommodated within the farm's existing authorised abstraction from the Tierpoort River.

Mitigation measures have been developed and incorporated into the Environmental Management Programme (EMPr) to ensure that impacts remain localised and within acceptable limits. Corrective measures proposed as part of the Section 24G rectification include improved stormwater controls and the replacement of on-site incineration of mortalities with a controlled composting system.

Conclusion and Recommendation

The assessment concludes that the environmental impacts associated with the implemented expansion are not of a nature or magnitude that would constitute a fatal flaw. With the implementation of the prescribed mitigation measures and strict adherence to the EMPr, the impacts can be reduced to acceptable levels.

It is therefore recommended that Environmental Authorisation be granted in terms of Section 24G of NEMA, subject to appropriate conditions and ongoing compliance monitoring.

LIST OF ABBREVIATIONS

Act 36	Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947)
ADA	Animal Diseases Act, 1984 (Act No 35 of 1984)
APA	Animal Protection Act, 1962 (Act No 71 of 1962)
BA	Basic Assessment
BGIS	Biodiversity GIS
CARA	Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983)
CBA	Critical Biodiversity Area
CRR	Comments and Response Report
DARD	Department of Agriculture and Rural Development
DBAR	Draft Basic Assessment Report
DESTEA	Department of Economic, Small Business Development, Tourism and Environmental Affairs
DFFE	Department of Forestry, Fisheries and Environment
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIA Regulations	Environmental Impact Assessment Regulations, 2014 (as amended)
EMF	Environmental Management Framework
EMPr	Environmental Management Programme
ESA	Ecological Support Areas
FBAR	Final Basic Assessment Report
FSBP	Free State Biodiversity Plan
GNR	Government Notice
GPS	Global Positioning System
I&AP's	Interested and Affected Parties
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
KLM	Kopanong Local Municipality
L1	Layout Alternative 1
L2	Layout Alternative 2
LIA	Livestock Improvement Act, 1998 (Act No. 25 of 1998)
NDP	National Development Plan

NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:BA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NPAES	Nationals Protected Area Expansion Strategy
NRTA	National Road Traffic Act, 1996 (Act No. 93 of 1996)
NWA	National Water Act, 1998 (Act No. 36 of 1998)
OHSA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
PPP	Public Participation Process
PSDF	Free State Provincial Spatial Development Framework
S1	Site Alternative 1
S2	Site Alternative 2
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SIPS	Strategic Integrated Projects
SPCA	Society for the Prevention of Cruelty to Animals
T1	Technology Alternative 1
T2	Technology Alternative 2

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destea
department of
economic, small business development,
tourism and environmental affairs
FREE STATE PROVINCE

	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, 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.
2. This report format is current as of **09 August 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.
3. 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.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. 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.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent and **EAPASA registered** environmental assessment practitioner.
11. 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.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?	NO x

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

BACKGROUND INFORMATION

The owner of the farm Chez Nous No. 1775 historically operated a single layer house with a capacity of fewer than 5 000 chickens. This existing operation did not previously trigger any listed activities under the NEMA EIA Regulations. At that time the existing support buildings associated with the layer activities entailed a cement dam, various outbuildings, septic tank with French drain and a silo.

Figure 1: Satellite view of the existing buildings on the farm prior to expansion of the layer facility.

EXPANSION DEVELOPMENT

In July 2023, the Applicant expanded the existing building (±670 m²) and established a second layer house adjacent to the original structure on the property. The layer houses consists of brick buildings fitted with steel doors and corrugated metal roofs. The dimensions of each building are as follows (refer to Appendix A for the site layout plans):

- Length 70 m
- Width 13 m
- Height ±6 m

The expansion increased both the development footprint and the overall production output of the operation. The facility now consists of two fully constructed layer houses, each designed to accommodate 15 000 laying hens, providing a combined total capacity of 30 000 hens.

Both layer houses have been equipped with modern poultry-production technology, including automated systems for feeding, watering, manure management, and environmental/climate control to maintain optimal internal conditions for the hens. Although construction of both houses has been completed, only one house is currently operational, and therefore the facility presently accommodates 15 000 hens, with the second house to be populated once operational demands require it.

Additional supporting infrastructure was also installed as part of the expansion. Four JoJo water storage tanks — two 5 000-litre tanks per installation — were added along the southern side of the western ends of the two layer houses to support the facility's water supply needs. The existing on-site dam (50 000 Litre) was covered, and an additional covered dam (50 000 litre) was constructed in the north-western corner of the facility to ensure improved water management and protection from contamination. A lean-to was added where equipment can be washed.

Water for the facility is obtained from the Tierpoort River crossing through the property. The farm holds the required water rights (see Appendix J1 *(non-public document)*), and no additional abstraction equipment or supporting water-supply infrastructure was required to accommodate the activity. The layer facility requires ±3 000 litres of water per house per day to meet operational demands (±6 000 l/day when at full capacity).

The facility is equipped with five silos with a combined storage capacity of 48 tonnes. These silos are used to store chicken feed delivered to the site by an approved supplier (iTau). Feed is deposited directly into the silos and is then conveyed to the respective layer houses through the automated feeding system.

Access to the facility is provided via the existing farm road, and no new roads were required as part of the development. The facility currently receives ±3 vehicles per day. The facility continues to utilise the existing Eskom electricity connection; however, the Applicant is in the process of supplementing the power supply with solar power from panels being installed on the roofs of the layer houses. The facility also has a generator that is used in emergencies.

The entire operation has been fenced, and the development footprint (fenced area) is ±0.76 ha in total.

The development did not necessitate the construction of additional waste or effluent storage or treatment facilities, as the existing farm infrastructure and systems were adequate to manage the waste streams generated by the operation.

Eggs from the operational layer house are collected daily and conveyed into the built-in packing room, where they are sorted, packed, and prepared for distribution to clients.

Figure 2: Schematic representation of the development after expansion where the blue polygons indicate the layer houses and lean-to, the blue circles show the JoJo tanks and cement dams, and the brown circles indicate the feed silos. The yellow line indicates the fenceline of the facility.

Because the expansion:

- Θ increased the physical development footprint of the poultry production infrastructure; and
- Θ increased the production output to a capacity exceeding 5 000 poultry;

the activity constitutes an expansion of facilities for the concentration of poultry exceeding 5 000 birds, thereby triggering Listing Notice 1 Activity 40(ii) of the EIA Regulations, 2014 (as amended).

The expansion of the layer facility was undertaken within the context of an existing agricultural operation on the farm. At the time of implementation, the Applicant was not aware that increasing the poultry production capacity beyond 5 000 birds would trigger a listed activity in terms of the Environmental Impact Assessment Regulations, 2014 (as amended), requiring prior Environmental Authorisation.

Once it was brought to the attention of the Applicant that the expansion may constitute a listed activity, steps were taken to regularise the matter through the submission of an application in terms of Section 24G of the National Environmental Management Act, 1998 (Act 107 of 1998). This application therefore seeks to rectify the unlawful commencement of the activity and to ensure that the facility operates in compliance with applicable environmental legislation going forward.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327,325 and 324	Description of project activity
Example: ***GN 327 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.***	***A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river***
GNR 983 Listing Notice 1 of 2014 (as amended) – Activity 40 (ii): *The expansion and related operation of facilities for the concentration of poultry, excluding chicks younger than 20 days, where the capacity of the facility will be increased by more than 5 000 poultry per facility situated outside an urban area.*	The farm Chez Nous No. 1775 historically operated a single layer house with a capacity of fewer than 5 000 chickens. This existing operation did not previously trigger any listed activities under the EIA Regulations. In 2023, the Applicant expanded the existing building and established a second layer house on the property. The expansion increased both the development footprint and the overall production output of the facility. The facility now comprises two layer houses, each with a capacity of 15 000 hens, resulting in a combined total of 30 000 laying hens. Because the expansion: Θ increased the physical development footprint of the poultry production infrastructure; and Θ increased the production output to a capacity exceeding 5 000 poultry; the activity constitutes an expansion of facilities for the concentration of poultry exceeding 5 000 birds, thereby triggering Listing Notice 1 Activity 40(ii). The activity is therefore subject to a Basic Assessment process in terms of the EIA Regulations. As the activity commenced without prior environmental authorisation, the application is being processed as a Section 24(g) rectification application under NEMA.

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 as required by Appendix 1 (3)(h) of GN 326, Regulation 2014 as amended. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
SITE ALTERNATIVE 1 (S1) – EXPANSION OF EXISTING FACILITY Site Alternative 1 (S1) entails the expansion of the existing operational layer house within the established farmyard area on the property, including the construction of one additional layer house adjacent to the existing structure. The existing poultry facility is located within a historically transformed and actively utilised agricultural footprint that has already been cleared and developed for poultry production. The expansion therefore constitutes an intensification of an existing land use within a disturbed area, rather than the establishment of a new facility within an undeveloped portion of the farm. S1 was identified as the preferred alternative for the following reasons: Θ **Utilisation of an Already Transformed Footprint:** The development is confined to an existing farmyard area that has been cleared and operational for poultry production. No additional greenfield transformation was required, thereby minimising further loss of agricultural or natural land. Θ **Minimised Environmental Disturbance:** As the expansion occurs within a previously disturbed area, incremental environmental impacts are limited when compared to establishing a new facility elsewhere on the property. Vegetation	**CORNER A**	
	29˚27'54.00"S	25˚59'39.58"E
	CORNER B	
	29˚27'53.98"S	25˚59'43.20"E
	CORNER C	
	29˚27'56.79"S	25˚59'42.57"E
	CORNER D	
	29˚27'56.29"S	25˚59'39.08"E

clearance, soil disturbance, and habitat alteration are therefore significantly reduced. Θ **Infrastructure Optimisation:** The existing facility was already serviced by water supply, electricity, internal access roads, and waste management systems. The expansion could connect to and utilise this established infrastructure, avoiding the need for additional bulk services or extended reticulation networks. Θ **Use of Existing Support Facilities:** Employees utilised established ablution facilities, change rooms, kitchen areas, and other support infrastructure within the farmyard. Expansion at S1 allowed continued use of these facilities, eliminating the need for duplicative construction and associated environmental impacts. Θ **Operational Efficiency and Consolidation:** Maintaining operations within a single, consolidated production node enhances management oversight, reduces internal travel requirements, and improves logistical efficiency. Shared infrastructure, equipment, and personnel can be utilised more effectively. Θ **Enhanced Biosecurity Management:** Consolidating poultry operations within the existing controlled facility reduces the risk of disease transmission associated with site fragmentation. Biosecurity protocols can be managed more effectively within a single operational area. Θ **Reduced Capital and Long-Term Maintenance Costs:** By making use of existing infrastructure and support systems, the Applicant avoided unnecessary capital expenditure associated with establishing a separate operational site. Long-term operational and maintenance costs are similarly reduced. Θ **Alignment with Sustainable Development Principles:** S1 reflects the principle of infill and optimisation of existing developed areas, thereby limiting spatial expansion of the agricultural footprint and reducing cumulative environmental impacts.		

Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
<u>SITE ALTERNATIVE 2 (S2) – DEVELOPMENT WITHIN CULTIVATED AREA</u> Although S1 is the preferred alternative due to the reasons discussed above, it would theoretically have been possible for the Applicant to establish the layer facility within other open areas on the farm, such as the area identified as Site Alternative 2 (S2) in this report. S2 is currently cultivated under centre pivot irrigation.	**CORNER A**	
	29˚27'53.88"S	25˚59'30.96"E
	CORNER B	
	29˚27'53.39"S	25˚59'34.37"E
	CORNER C	
	29˚27'56.14"S	25˚59'34.71"E
	CORNER D	
	29˚27'56.51"S	25˚59'31.30"E

However, development of the layer facility at S2 would not have been environmentally or operationally preferable for the following reasons: Development at S2 would have entailed: Θ **Loss of High-Potential Agricultural Land:** Development at S2 would result in the permanent loss of actively cultivated land under centre pivot irrigation. The transformation of irrigated agricultural land would reduce productive capacity and compromise existing agricultural infrastructure. In contrast, S1 is located within an already transformed farmyard area, thereby minimising impacts on viable agricultural land and reducing the overall environmental footprint of the project. Θ **Construction of Two New Layer Houses:** Unlike S1, which involved the expansion of an existing operational facility and construction of only one additional structure, S2 would require the establishment of two entirely new layer houses to achieve the same production capacity. This would increase the total building footprint and construction-related impacts. Θ **Installation of New Bulk and Internal Services Infrastructure:** Development at S2 would require the establishment of new water supply pipelines, electrical connections, internal access roads, stormwater infrastructure, and possibly new waste management systems. This would: o Increase capital expenditure; o Expand the area of disturbance; o Result in additional trenching and soil compaction; and o Increase long-term maintenance requirements. Θ **Construction of Additional Support Infrastructure:** Employees of the existing facility currently utilise established ablution facilities, change rooms, and kitchen areas within the existing farmyard. Development at S2 would necessitate the construction of new support buildings and associated services, further increasing the development footprint and environmental disturbance. Θ **Biosecurity Risks:** Separation of poultry operations across different locations on the farm would increase movement between facilities, elevating the risk of disease transmission. Consolidation of operations within a single, existing operational node (S1) is preferable from a biosecurity management perspective. Θ **Operational Inefficiencies:** Locating the facility at S2 would result in fragmented operations, increasing travel time between facilities, duplication of management functions, and higher operational costs. Centralising production at the existing site (S1) allows for shared infrastructure, staff, monitoring systems, and security.		

Θ **Increased Construction-Phase Impacts:** A "greenfield" development would generate greater short-term impacts in terms of vegetation clearance, earthworks, dust generation, noise, and construction traffic when compared to expansion within an already disturbed footprint. Θ **Reduced Land-Use Optimisation:** S1 represents optimal infill development within an established agricultural production area. S2 would result in unnecessary spatial expansion of the farm's operational footprint, contrary to the principle of consolidating development within already transformed areas.		

CONCLUSION ON SITE ALTERNATIVES

While S2 is technically feasible from a spatial perspective, it would result in significantly greater disturbance of agricultural land, higher capital and operational costs, duplication of infrastructure, and increased biosecurity risks when compared to the expansion of the existing facility at S1.

Accordingly, Site Alternative 1 (S1) remains the most practical, economically viable, and environmentally responsible option for the development. The expansion of the existing operational facility:

- Θ Avoids unnecessary transformation of irrigation land;
- Θ Minimises additional environmental disturbance;
- Θ Optimises existing infrastructure and support facilities;
- Θ Enhances operational efficiency and biosecurity; and
- Θ Aligns with the principles of sustainable land use and responsible agricultural intensification.

Accordingly, S1 is supported as the preferred alternative for authorisation in terms of NEMA and the 2014 EIA Regulations (as amended).

Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
Not Applicable	Not Applicable	Not Applicable

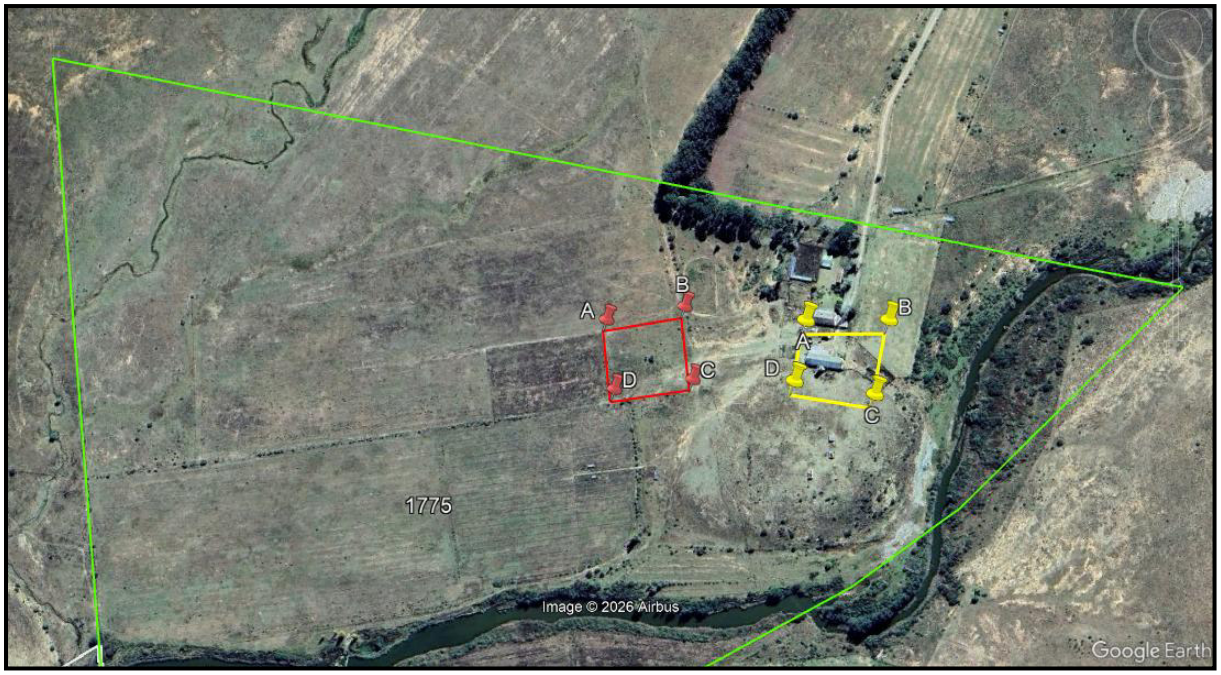

Figure 3: Satellite view of Site Alternative 1 (yellow polygon) in relation to Site Alternative 2 (red polygon), where the green polygon indicates the farm boundary (image obtained from Google Earth).

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
Alternative S1 (preferred)		
• Starting point of the activity	Not Applicable	Not Applicable
• Middle/Additional point of the activity	Not Applicable	Not Applicable
• End point of the activity	Not Applicable	Not Applicable
Alternative S2 (if any)		
• Starting point of the activity	Not Applicable	Not Applicable
• Middle/Additional point of the activity	Not Applicable	Not Applicable
• End point of the activity	Not Applicable	Not Applicable
Alternative S3 (if any)		
• Starting point of the activity	Not Applicable	Not Applicable
• Middle/Additional point of the activity	Not Applicable	Not Applicable
• End point of the activity	Not Applicable	Not Applicable

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.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

<table>
<tr><th colspan="3">Alternative 1 (preferred alternative)</th></tr>
<tr><th>Description</th><th>Lat (DDMMSS)</th><th>Long (DDMMSS)</th></tr>
<tr><td rowspan="10"><u>LAYOUT ALTERNATIVE 1 (L1) – EXISTING LAYOUT (AS CONSTRUCTED)</u>

Layout Alternative 1 (L1) represents the current configuration of the layer facility within the demarcated operational footprint.

General Arrangement

The layout consists of two parallel layer houses, each ±70 metres in length, positioned in a linear east–west orientation. The houses are spaced apart to allow for operational access, ventilation efficiency, and biosecurity management. The facility is compactly arranged to optimise workflow, infrastructure sharing, and movement efficiency within a consolidated operational node. Refer to Appendix A for the Site Layout Plans.

Functional and Environmental Advantages of L1

The existing layout demonstrates the following advantages:

Θ Operational Consolidation:
Both houses and support infrastructure are centrally located, minimising movement between production, storage, and processing areas.

Θ Shared Infrastructure:
Ablutions, water storage, and access routes are shared, reducing duplication of built structures and disturbance footprint.

Θ Efficient Ventilation Design:
Uniform east–west orientation with cooling pads on one end and fans on the opposite end supports effective airflow management.

Θ Optimised Biosecurity:
Single consolidated operational node reduces cross-contamination risks associated with spatial fragmentation.

Θ Minimised Development Footprint:
Buildings are positioned compactly within an already transformed farmyard area, limiting further land disturbance</td><td>CORNER A</td><td></td></tr>
<tr><td>29˚27’54.00”S</td><td>25˚59’39.58”E</td></tr>
<tr><td>CORNER B</td><td></td></tr>
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<tr><td>29˚27’56.29”S</td><td>25˚59’39.08”E</td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
</table>

Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
LAYOUT ALTERNATIVE 2 (L2) – DISPERSED OR RECONFIGURED LAYOUT (NOT CONSIDERED FEASIBLE) A possible alternative layout that could theoretically have been considered would involve: Θ Positioning the two chicken houses further apart within the property; Θ Rotating one or both houses to a different orientation (e.g., north–south alignment); Θ Separating processing, storage, and staff facilities into standalone buildings; Θ Locating feed silos and water infrastructure at central or detached points. However, such a layout was not considered feasible for the following reasons: Θ **Increased Development Footprint:** Dispersing structures would increase the overall area of disturbance, including additional hard surfaces, access roads, and service trenches. Θ **Duplication of Infrastructure:** Separate or widely spaced houses would require: o Additional water reticulation lines; o Extended electrical cabling; o Additional stormwater management infrastructure; o Possibly separate ablution or support facilities. Θ **Higher Construction and Operational Costs:** Greater distances between structures would increase material quantities, trenching requirements, and long-term maintenance costs. Θ **Reduced Operational Efficiency:** Fragmented layout would increase travel time between houses and processing areas, reducing workflow efficiency. Θ **Biosecurity Risks:** Increased movement between spatially separated facilities elevates the risk of disease transmission. Θ **Ventilation and Climate Control Constraints:** Altering orientation away from the existing east–west alignment may reduce ventilation efficiency and temperature control performance, particularly in the Free State climatic conditions. Θ **Greater Environmental Disturbance:** Expanded footprint would result in: o Increased soil compaction; o Greater vegetation clearance; o Larger stormwater runoff areas;	**CORNER A** 29˚27'54.00"S **CORNER B** 29˚27'53.98"S **CORNER C** 29˚27'56.79"S **CORNER D** 29˚27'56.29"S	 25˚59'39.58"E 25˚59'43.20"E 25˚59'42.57"E 25˚59'39.08"E

Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
○ Increased potential for erosion. Θ **Reduced Land-Use Optimisation:** The current compact configuration represents infill development within an already disturbed area. A dispersed layout would unnecessarily expand the operational node.		

CONCLUSION ON LAYOUT ALTERNATIVES

Layout Alternative 1 (Existing Layout) represents the most efficient, environmentally responsible, and operationally sound configuration. It:

Θ Consolidates infrastructure within a compact footprint;
Θ Optimises ventilation and production efficiency;
Θ Minimises additional land disturbance;
Θ Reduces infrastructure duplication; and
Θ Enhances biosecurity and management oversight.

Theoretical Layout Alternative 2 configurations would have resulted in increased environmental impacts, higher costs, operational inefficiencies, and unnecessary spatial expansion, and were therefore not considered feasible.

Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
Not applicable.	Not applicable.	Not applicable.

c) Technology alternatives

Alternative 1 (preferred alternative)

TECHNOLOGY ALTERNATIVE 1 (T1) – AUTOMATED COMMERCIAL POULTRY PRODUCTION SYSTEM (PREFERRED)

The layer facility has been developed using modern, industry-accepted automated poultry production technology suitable for commercial-scale egg production.

The system incorporates:

Θ Automated feed distribution from bulk silos;
Θ Pressurised nipple drinker lines to reduce water wastage;
Θ Automated egg collection and internal handling systems;
Θ Mechanised manure removal systems;
Θ Climate-controlled housing with evaporative cooling pads;
Θ High-efficiency mechanical ventilation systems; and
Θ Integrated water storage and reticulation systems.

These technologies collectively ensure controlled environmental conditions within the poultry houses, optimise feed and water efficiency, and support consistent production performance.

Advantages of Technology Alternative 1

The automated system offers:

- Reduced feed and water wastage;
- Lower litter moisture levels and improved manure management;
- Improved air quality through controlled ventilation;
- Reduced ammonia build-up;
- Lower risk of disease transmission due to limited human traffic;
- Enhanced biosecurity management;
- Improved animal welfare through stable temperature and airflow control;
- Higher production efficiency per unit of resource input.

From an environmental perspective, the system promotes efficient resource utilisation, controlled waste management, and reduced nuisance impacts such as odour and dust. Technology Alternative 1 therefore represents the current best available technology for commercial egg production at this scale.

Alternative 2

TECHNOLOGY ALTERNATIVE 2 (T2) – PREDOMINANTLY MANUAL POULTRY PRODUCTION SYSTEM (NOT CONSIDERED FEASIBLE)

A possible alternative technological approach would involve the use of predominantly manual labour across the production system. This would include:

- Manual feed distribution;
- Manual water management;
- Manual manure handling and removal;
- Manual egg collection and handling;
- Limited or non-mechanised environmental control (e.g. reliance on natural ventilation or basic fans).

While technically possible, such systems are generally associated with small-scale or subsistence poultry operations and are not considered suitable for intensive commercial production.

Reasons Technology Alternative 2 was not Considered Feasible

- **Increased Resource Inefficiency:**
  Manual systems typically result in higher levels of feed spillage, water wastage, and inconsistent resource application, increasing operational inputs and environmental burden.

- **Greater Risk of Litter Moisture and Odour Impacts:**
  Inconsistent manure removal and water spillage can increase litter moisture, contributing to elevated ammonia emissions and odour generation.

- **Reduced Environmental Control:**
  Reliance on limited or natural ventilation may not adequately regulate temperature extremes typical of the Free State climate, increasing risks of heat stress, reduced productivity, and higher mortality rates.

- **Increased Human Traffic and Biosecurity Risks:**
  Frequent manual intervention within poultry houses increases the risk of disease introduction and cross-contamination.

- **Higher Labour Intensity and Operational Costs:**
  A fully manual system would significantly increase labour requirements and long-term operational expenditure, reducing economic sustainability.

- **Reduced Production Efficiency and Consistency:**
  Manual processes introduce variability in feeding, watering, manure management, and environmental conditions, potentially affecting bird health and egg quality.

- **Cumulative Environmental Impacts:**
  Less efficient manure handling and environmental control may increase dust, odour, and waste-related impacts when compared to an automated system.

CONCLUSION ON TECHNOLOGY ALTERNATIVES

Although a predominantly manual production system (T2) is technically possible, it would not be environmentally or operationally preferable for a commercial-scale layer facility.

Such a system would likely result in:

- Increased resource consumption and wastage;
- Reduced environmental control;
- Higher biosecurity risks; and
- Lower overall production efficiency.

Technology Alternative 1 (Automated System) remains the most appropriate and environmentally responsible option, aligning with industry best practice and sustainable agricultural intensification principles.

Alternative 3

Not Applicable.

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)

Environmental alternatives such as alternative waste-handling systems, water sources, or manure management approaches were considered, but the selected systems already align with industry best practice and environmental compliance standards.

The existing project optimises:

- On-site manure reuse as an agricultural soil amendment,
- On-site sanitation treatment via septic tank and French drain,
- Modern low-spill water-use systems,
- Energy-efficient lighting and ventilation technologies.

No alternative environmental option was identified that would meaningfully reduce environmental impact beyond what has been implemented.

Alternative 2

Not Applicable.

Alternative 3

Not Applicable.

e) No-go alternative

The No-Go alternative, which assumes that the expansion does not take place, would avoid the incremental environmental impacts associated with construction and operation.

However, it would also:

- Prevent the creation of long-term employment opportunities,
- Reduce agricultural productivity and local food security,
- Limit economic benefits to the local community,
- Result in underutilisation of existing farm infrastructure, and
- Restrict the growth potential of the farming enterprise.

The No-Go alternative is therefore not preferred, as it does not support rural development, agricultural optimisation, or socio-economic improvement.

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

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	Size of the activity:
Alternative A1[1] (preferred activity alternative)	**±1 900 m²**
Alternative A2 (if any)	N/A
Alternative A3 (if any)	N/A

or, for linear activities:

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	N/A
Alternative A2 (if any)	N/A
Alternative A3 (if any)	N/A

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

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	**±7 620 m²**
Alternative A2 (if any)	**±7 800 m²**
Alternative A3 (if any)	N/A

4. SITE ACCESS

Does ready access to the site exist?	**YES X**
If NO, what is the distance over which a new access road will be built	**N/A**

[1] "Alternative A.." refer to activity, process, technology or other alternatives.

Describe the type of access road planned:

Not applicable as the existing farm road is used to access the facility. Refer to Appendix A for the Layout Route Plan.

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.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (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 map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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.

6. LAYOUT/ROUTE PLAN

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:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. 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 report**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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.

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	**YES X**		Please explain
The activity is considered permissible in terms of the existing land-use rights of the farm, as the property is already zoned and utilised for agricultural purposes, which inherently includes livestock production and related agricultural infrastructure. The farm has historically operated as an active agricultural unit, and the establishment of poultry houses for egg production is consistent with the lawful primary land use already in place. Poultry farming, including the housing of layer hens, is widely recognised as a legitimate agricultural activity and does not constitute a change in land use from the existing agricultural zoning category. The expansion from a small-scale layer house (previously accommodating fewer than 5 000 hens) to a larger commercial operation represents an intensification of an existing agricultural use, rather than the introduction of a new or incompatible land use. Importantly, the development was confined to areas that were already transformed and used for agricultural purposes, ensuring that no deviation from the authorised land-use rights occurred. Municipal land-use schemes typically permit a range of agricultural practices—including crop production, livestock farming, and associated infrastructure—under the general "Agriculture" zoning category. The layer facility therefore aligns fully with the intended purpose of the zoning, and no rezoning, special consent, or departure application is required to authorise the use of the land for poultry production.			

For these reasons, the activity is regarded as lawfully permitted in terms of the existing land-use rights of the property and is consistent with both the historical and current agricultural character of the farm.

2. Will the activity be in line with the following?

(a) Provincial Spatial Development Framework (PSDF)	**YES X**		Please explain

The activity is consistent with the vision, objectives, and spatial directives of the Free State Provincial Spatial Development Framework (PSDF). The PSDF recognises agriculture as a core economic sector within the province, particularly in rural districts, and explicitly encourages the intensification, optimisation, and expansion of agricultural production on land already designated and utilised for farming. The provincial framework supports initiatives that improve agricultural output, enhance food security, strengthen rural economies, and promote job creation—all of which are directly achieved through the development and operation of the expanded layer facility.

The activity takes place on existing agricultural land that has been historically used for livestock and farming operations. By utilising previously transformed land and existing access roads, infrastructure, and services, the development aligns with the PSDF's principle of avoiding unnecessary transformation of natural or high-value ecological land, and its emphasis on consolidating development within already-disturbed agricultural footprints.

Furthermore, the PSDF promotes agri-processing and agricultural value-chain enhancement as strategic provincial priorities. Egg production and associated supply-chain contributions—including local feed procurement, farm labour employment, and supply to regional markets—directly support these provincial economic objectives. The creation of local employment opportunities and the strengthening of rural livelihoods are specifically aligned with the PSDF's goals of rural development, poverty alleviation, and economic resilience.

In addition, the activity adheres to the spatial planning principles promoted by the PSDF, including:

- Θ Sustainable land use
- Θ Efficient use of existing agricultural resources
- Θ Promotion of rural economic nodes
- Θ Long-term food security

Given these considerations, the expansion of the layer facility is fully compatible with and supportive of the strategic directives of the Free State PSDF.

(b) Urban edge / Edge of Built environment for the area			**Not Applicable**

As the poultry layer facility was constructed within an established agricultural property, located well outside any urban edge, the activity does not fall within the planning zones to which the urban edge policy applies.

(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	**YES X**		Please explain

The establishment and expansion of the layer poultry facility is consistent with the strategic objectives of the Kopanong Local Municipality's Integrated Development Plan (IDP) and Spatial Development Framework (SDF).

The IDP identifies agriculture as a key economic driver within the predominantly rural municipal area and promotes initiatives that enhance agricultural production, strengthen rural livelihoods, create sustainable employment, and support local economic development. The existing layer facility forms part of this agricultural economy and reinforces the agricultural character of the property.

The activity:

- Θ Supports continued agricultural production and food security;
- Θ Contributes to local employment and income generation;
- Θ Strengthens the local agricultural value chain;
- Θ Utilises existing farm infrastructure efficiently; and
- Θ Does not place additional pressure on municipal bulk services.

The Kopanong SDF recognises agricultural land as a primary land use within the municipality. The activity constitutes an intensification of an existing farming operation and does not trigger any deviation from the SDF. The granting of authorisation would therefore not compromise the integrity of the municipality's approved planning framework.

(d) Approved Structure Plan of the Municipality		**Not Applicable**

Not applicable to this project.

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)		**Not Applicable**

Not applicable as this project does not intersect with EMF areas.

(f) Any other Plans (e.g. Guide Plan)		**Not Applicable**

Not applicable as this project.

3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	**YES X**		Please explain

Agriculture is identified in the IDP as an ongoing and priority economic sector within the municipality rather than a land use earmarked for future phased implementation. The layer poultry facility forms part of the established agricultural economy and aligns with the municipality's current development priorities.

The activity:

- Θ Does not rely on future municipal infrastructure rollout;
- Θ Does not depend on new bulk municipal service provision;
- Θ Does not precede any planned spatial restructuring initiatives; and
- Θ Supports existing IDP objectives relating to rural economic development and agricultural productivity.

As the activity occurs on agricultural land and makes use of existing infrastructure, it is considered consistent with the intended timeframe of the approved SDF and current IDP cycle. The development does not represent premature or misaligned land use in terms of municipal planning instruments.

4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	**YES X**		Please explain

The layer poultry facility serves an important economic and food production function within the Kopanong Local Municipality and the broader regional agricultural economy. Agriculture is a primary economic sector in the municipality, and activities that enhance agricultural productivity and rural employment are considered socially and economically important.

The facility contributes to:

- Θ Food security, through the production of eggs as an affordable and accessible protein source;
- Θ Local economic development, by supporting the agricultural value chain;
- Θ Employment creation and income generation, particularly in a predominantly rural area where formal employment opportunities are limited;
- Θ Rural economic resilience, through diversification and intensification of agricultural production.

Egg production forms part of the essential food supply system and remains a consistent societal need. The continued operation of the facility therefore contributes to stable food availability and local economic sustainability.

Furthermore, the activity is located on agricultural land and represents an intensification of an established farming enterprise rather than a change in land use character. It supports the municipality's strategic emphasis on strengthening agriculture as a key economic driver.

In this context, the activity addresses both economic and food security priorities and can reasonably be regarded as socially desirable within the rural municipal setting.

5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	**YES X**		Please explain

The necessary services are currently available and have adequate capacity to support the layer facility. The activity is located within an established farmyard that is already serviced by:

- Θ Existing water supply infrastructure;
- Θ Electrical connections;
- Θ Internal farm access roads; and
- Θ On-site waste management systems associated with agricultural operations.

The expansion was integrated into this existing service network and did not require the establishment of new municipal bulk infrastructure or the extension of external reticulation systems. The facility operates independently of municipal sewer systems and does not require additional municipal bulk service upgrades.

Water supply and storage infrastructure on the farm are sufficient to meet operational requirements. Electricity supply capacity is adequate for the operational demand of the facility. In addition, the Applicant is in the process of installing a solar power system, which will supplement the facility's electricity demand and reduce reliance on grid-supplied energy. This will enhance energy security and improve the overall sustainability of the operation.

Internal farm access roads are existing and remain adequate for operational traffic associated with the activity.

As the development constitutes an intensification of an existing agricultural activity within a serviced farmyard area, no additional municipal service capacity was required or created. Accordingly, adequate services were available at the time of establishment and remain sufficient for the current operational scale of the facility.

6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)		**Not applicable**

Not applicable as this project is not reliant on municipal infrastructure.

7. Is this project part of a national programme to address an issue of national concern or importance?	**NO X**	Please explain

The layer poultry facility is not part of a specific national government programme or state-led initiative. It is a privately owned and operated agricultural enterprise.

However, while not formally linked to a national programme, the activity contributes to broader national priorities relating to:

- Food security and agricultural production;
- Rural economic development;
- Employment creation; and
- Strengthening of local and regional food supply chains.

Egg production forms part of the essential food supply system in South Africa and supports national objectives aimed at improving food availability and affordability. The activity therefore indirectly supports national development priorities contained in frameworks such as the National Development Plan (NDP) and national agricultural policies, which recognise agriculture as a key contributor to economic growth and rural livelihoods.

Accordingly, although the project is not implemented under a specific national programme, it aligns with and supports national socio-economic and food security objectives.

8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	**YES X**	Please explain

Location-specific factors favour the continued operation of the layer poultry facility on the earmarked property.

The activity is situated on agricultural land within a predominantly rural farming area in the Kopanong Local Municipality. Surrounding land uses are agricultural in nature, and the facility forms part of an established farming enterprise. The activity is therefore compatible with the broader land use character of the area and does not introduce a conflicting or incompatible land use.

The facility is located within an already transformed farmyard footprint, where agricultural infrastructure is established. The expansion represents an intensification of an existing agricultural activity rather than the introduction of a new land use into an undeveloped or environmentally sensitive area.

Additional location factors supporting suitability include:

- Availability of existing service infrastructure (water, electricity, internal access roads);
- Adequate separation from sensitive land uses such as residential settlements;

- Θ Access via existing farm roads, limiting the need for new infrastructure;
- Θ Suitability of the site for agricultural production in terms of its rural setting and established operational footprint.

The site forms part of a functioning agricultural unit and is contextually appropriate for intensive poultry production. The location therefore supports the continued land use and does not give rise to land use conflict or incompatibility within the broader rural landscape.

Accordingly, location factors favour the land use at this place.

9. Is the development the best practicable environmental option for this land/site?	**YES X**		Please explain

The existing layer poultry facility and its expansion represent the best practicable environmental option for the site when considered in the context of available alternatives and the characteristics of the property.

The activity is located within an already transformed and operational farmyard area that has historically been utilised for agricultural production. The expansion constitutes an intensification of an existing agricultural land use rather than the transformation of undeveloped or environmentally sensitive land. This significantly limits additional disturbance and avoids unnecessary expansion into greenfield/cultivated areas elsewhere on the farm.

The development makes use of established infrastructure, including existing water supply systems, electricity connections, access roads, and support facilities. By utilising existing services, the activity avoids the need for new bulk infrastructure or extended service networks, thereby reducing additional environmental disturbance.

Furthermore, the facility operates using modern, resource-efficient poultry production technology, including automated feeding and watering systems, controlled ventilation, and water-efficient cooling systems. These measures minimise feed and water wastage, reduce litter moisture and associated odour impacts, and support improved environmental management when compared to less efficient systems.

Alternative site or layout configurations would have resulted in greater land disturbance, duplication of infrastructure, increased environmental footprint, and higher resource consumption. Similarly, alternative manual production systems would likely have resulted in reduced resource efficiency and greater environmental risk.

In the context of the site's agricultural zoning, existing disturbance, available infrastructure, and operational efficiency, the development represents the most practical and environmentally responsible option for this property.

Accordingly, the activity is considered to be the best practicable environmental option for the land.

10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	**YES X**		Please explain

The benefits of the layer poultry facility outweigh the potential negative environmental impacts, particularly where mitigation measures are implemented and adhered to in accordance with the Environmental Management Programme (EMPr) developed as part of the EIA process (see Appendix G).

The primary benefits of the activity include:

- Θ Ongoing food production and contribution to regional food security;
- Θ Direct and indirect employment opportunities;
- Θ Support to the local agricultural value chain;
- Θ Strengthening of the rural economy; and
- Θ Efficient utilisation of existing agricultural land and infrastructure.

The potential negative impacts associated with the facility are typical of intensive poultry production and may include:

- Θ Biosecurity risks;
- Θ Odour generation;
- Θ Noise from ventilation systems;
- Θ Dust and traffic during operational activities;
- Θ Manure and waste management risks;
- Θ Stormwater and water management concerns.

However, these impacts are site-specific, localised, and manageable through appropriate mitigation and operational controls. The EMPr prescribes measures relating to:

- Θ Proper manure handling, storage, and removal;
- Θ Odour and dust management;
- Θ Stormwater control and runoff prevention;
- Θ Waste management practices;
- Θ Maintenance of ventilation systems;
- Θ Ongoing monitoring and compliance procedures.

The facility is located within an agricultural area, which reduces land use conflict and sensitivity to agricultural operational impacts. Furthermore, the activity is confined to an already transformed footprint, limiting additional environmental disturbance.

Provided that the EMPr is implemented and monitored effectively, the identified impacts can be mitigated to acceptable levels. In this context, the socio-economic and agricultural benefits of the activity outweigh the manageable environmental impacts.

Accordingly, the development can be regarded as environmentally acceptable and socially desirable.

11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?		**NO X**	Please explain

The approval of the layer poultry facility will not set an undesirable precedent for similar activities within the local municipality.

The activity is located on agricultural land within a predominantly rural farming area and constitutes an intensification of an existing agricultural operation. Poultry production is a recognised agricultural land use and is compatible with the surrounding rural context. The development does not introduce a new or incompatible land use into the area.

Each application for agricultural intensification or similar development within the municipality would be assessed on its own merits, taking into consideration site-specific environmental sensitivities, infrastructure capacity, land use compatibility, and compliance with applicable planning instruments. Approval of this application would therefore not automatically create rights or expectations for similar developments elsewhere.

Furthermore:

- Θ The activity is confined to an already transformed farmyard footprint;
- Θ It utilises existing infrastructure;
- Θ It does not conflict with the SDF or IDP; and
- Θ It does not establish a new development node or urban expansion pattern.

As such, the development does not create a planning or environmental precedent that would undermine municipal spatial planning or environmental management objectives.

Accordingly, approval of the application would not result in undesirable cumulative precedent within the municipality.

12. Will any person's rights be negatively affected by the proposed activity/ies?		**NO X**	Please explain

The existing layer poultry facility is located on privately owned agricultural land and does not infringe upon the property rights of neighbouring landowners or restrict lawful access to adjacent properties.

The activity is situated within a rural farming area where agricultural operations are the dominant land use. Poultry production is compatible with the surrounding agricultural context and does not introduce an incompatible or intrusive land use into the area.

Potential impacts typically associated with poultry operations, such as odour, noise, and traffic, are localised in nature and can be effectively managed through the implementation of mitigation measures prescribed in the Environmental Management Programme (EMPr). With these controls in place, the activity does not result in significant or unreasonable interference with neighbouring landowners' use and enjoyment of their properties.

The development does not involve:

- Displacement of communities;
- Restriction of public access;
- Loss of communal resources; or
- Infringement of lawful land rights.

In addition, the activity contributes positively to the socio-economic rights of employees and the local community through job creation and food production.

Provided that the EMPr is implemented and maintained, the activity does not result in unacceptable environmental degradation and therefore does not infringe upon the constitutional right to an environment that is not harmful to health or well-being.

Accordingly, no person's rights are considered to be negatively affected by the activity.

13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?		**NO X**	Please explain

The urban edge of the municipality is not applicable to this project.

14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?		**NO X**	Please explain

The layer poultry facility is a privately operated agricultural enterprise and is not formally linked to, or implemented as part of, any of the 17 Strategic Integrated Projects (SIPs) identified at national level.

15. What will the benefits be to society in general and to the local communities?	Please explain

The development and expansion of the layer facility provides a range of tangible benefits to the society in general, as well as specific advantages for the local communities in which it is situated.

At a broader societal level, the facility contributes directly to regional and national food security by ensuring a reliable supply of fresh, locally produced eggs—an affordable and essential source of protein. By increasing the production capacity from fewer than 5 000 hens to a combined potential of 30 000 hens, the operation strengthens the resilience of the agricultural supply chain and reduces dependency on more distant producers, thereby promoting local economic circulation and reducing transportation-related emissions.

The facility has created 14 employment opportunities, offering stable income to local residents and supporting livelihoods within the surrounding communities. The continued operation of the layer houses enhances job security for these employees and may generate additional employment as production scales. This direct contribution to local economic development is further supported by the facility's reliance on locally sourced feed, which stimulates secondary economic activity through procurement from suppliers within the region.

In addition to direct employment and local procurement, the operation provides significant agro-ecological benefits. Chicken manure generated on-site is applied to maize and other fields on the farm, improving soil fertility and reducing the need for synthetic fertilisers. This contributes to more sustainable crop production, supports higher yields, and enhances the long-term productivity of the agricultural land. These benefits extend beyond the farm by strengthening the area's overall agricultural output and contributing to food production systems in the region.

The facility also supplies eggs to local businesses, ensuring consistent product availability for retailers, hospitality establishments, and informal traders. This supports downstream economic activity, stabilises product prices, and benefits consumers through improved access to affordable, high-quality food products.

Finally, the development has been undertaken on an existing agricultural property, making efficient use of already-transformed land and existing services such as access roads, water supply, and electricity. This minimises environmental disturbance while maximising the agricultural value of the land—an outcome aligned with broader societal objectives relating to sustainable land use, rural development, and economic resilience.

16. Any other need and desirability considerations related to the proposed activity?	Please explain

The development and expansion of the layer facility is both necessary and desirable within the local and regional agricultural context. The existing poultry operation historically accommodated fewer than 5 000 laying hens, which limited production capacity and constrained the economic viability of the enterprise. In response to increasing market demand for locally produced eggs, the Applicant invested in the expansion of the existing poultry house and the construction of an additional layer house to enhance operational efficiency and strengthen the long-term sustainability of the farm.

The expanded facility supports improved food security in the region by increasing the supply of a high-protein staple product. The development contributes to the diversification and resilience of agricultural production in the area, ensuring a more stable and consistent egg supply to local markets, retailers, and consumers. Furthermore, the expansion of an existing agricultural activity, rather than the establishment of a new or greenfield development, is aligned with principles of resource efficiency and responsible land use. The project makes optimal use of existing farm infrastructure, access roads, water supply systems, and energy connections, thereby minimising additional environmental disturbance.

From a socioeconomic perspective, the enlarged facility enhances the farm's economic viability, supports employment opportunities, and contributes to the broader agricultural economy. The investment in improved technology—including automated feeding, watering, and climate control systems—further enhances animal welfare, production consistency, and biosecurity standards. The expansion therefore aligns with regional planning objectives that promote agricultural development, sustainable land use, and rural economic growth.

In this context, the development is regarded as both necessary to meet growing production demands and desirable to ensure continued economic, agricultural, and social benefits within the area.

17. How does the project fit into the National Development Plan for 2030?	Please explain

Although the layer poultry facility is a privately operated agricultural enterprise and not a state-led development initiative, it aligns with several key objectives of the National Development Plan (NDP) 2030.

1. Promoting an Inclusive Rural Economy (Chapter 6)

The NDP identifies agriculture as a critical sector for stimulating rural economic growth, creating employment, and strengthening food production systems. The layer facility contributes to these objectives by:

- Supporting agricultural productivity;
- Creating and sustaining employment opportunities in a rural area;
- Strengthening the agricultural value chain; and
- Enhancing local economic resilience.

2. Economy and Employment (Chapter 3)

The NDP emphasises the importance of labour-absorbing sectors, including agriculture, to address unemployment and poverty. The facility provides ongoing employment and contributes to economic activity within the Kopanong Local Municipality.

3. Food Security

The NDP recognises the importance of ensuring national food security and supporting domestic food production. Egg production contributes directly to the availability of affordable protein and supports stable food supply systems.

4. Environmental Sustainability and Efficient Resource Use (Chapter 5)

The facility utilises modern, resource-efficient poultry production technology and is in the process of installing a solar energy system to supplement electricity demand. These measures support improved resource efficiency and reduced environmental impact, in line with the NDP's sustainability objectives.

Conclusion

While the project is not formally part of an NDP implementation programme, it contributes to the Plan's strategic objectives relating to rural development, agricultural productivity, employment creation, food security, and sustainable resource use. Accordingly, the activity is consistent with and supportive of the broader vision of the National Development Plan 2030.

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

The objectives of Integrated Environmental Management (IEM), as set out in Section 23 of the National Environmental Management Act (NEMA), have been incorporated into the assessment of the existing layer poultry facility through the Basic Assessment (BA) process.

1. Promotion of Sustainable Development

The assessment integrates environmental, social, and economic considerations in evaluating the activity. The facility contributes to agricultural production, employment creation, and food security, while environmental impacts have been identified and mitigation measures proposed to ensure that impacts remain acceptable and manageable. The development occurs within an already transformed agricultural footprint, thereby limiting additional disturbance and supporting efficient land use.

2. Identification and Evaluation of Environmental Impacts

Potential impacts associated with the activity have been identified and assessed in terms of their nature, extent, duration, and significance. Where necessary, mitigation measures have been proposed to reduce

impacts to acceptable levels. An Environmental Management Programme (EMPr) has been developed to guide the management and monitoring of these impacts.

3. **Consideration of Alternatives**

In accordance with the EIA Regulations, alternatives have been considered, including:

- Site alternatives;
- Layout alternatives; and
- Technology alternatives.

The preferred options were identified based on environmental suitability, operational efficiency, and minimisation of additional land disturbance.

4. **Public Participation and Transparency**

This Draft Basic Assessment Report (DBAR) is being made available to stakeholders and interested and affected parties (I&APs) for review and comment as part of the Public Participation Process (PPP), undertaken in accordance with the EIA Regulations. All comments received during the PPP will be recorded in a Comments and Responses Report (CRR) and incorporated, where relevant, into the Final Basic Assessment Report (FBAR) to be submitted to the competent authority for decision-making. This process ensures transparency and informed participation in environmental decision-making.

5. **Informed Decision-Making**

The BA process provides the competent authority with sufficient information regarding the environmental, social, and economic implications of the activity to enable an informed decision, consistent with the objectives of Section 23 of NEMA.

Conclusion

Through the integrated assessment of impacts, consideration of alternatives, development of mitigation measures, and implementation of a public participation process, the objectives of Integrated Environmental Management as set out in Section 23 of NEMA are being appropriately applied in the assessment of the activity.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

The environmental management principles set out in Section 2 of the National Environmental Management Act (NEMA) have informed the assessment and management of the existing layer poultry facility through the Basic Assessment process.

1. **Sustainable Development (Section 2(3) and 2(4)(a))**

The assessment integrates environmental, social and economic considerations to ensure that development is sustainable. The activity contributes to food production, employment creation, and rural economic development, while environmental impacts have been identified and mitigation measures incorporated into the EMPr to ensure that impacts are avoided, minimised, or managed. The development occurs within an already transformed agricultural footprint, thereby limiting additional environmental disturbance and supporting responsible land use intensification.

2. **Pollution Prevention and Minimisation (Section 2(4)(a)(ii))**

Measures have been identified to prevent and minimise pollution and environmental degradation, including:

- Proper manure handling and storage practices;
- Stormwater management to prevent contaminated runoff;

- Θ Odour and dust management measures;
- Θ Maintenance of ventilation systems; and
- Θ Implementation of operational best practices.

These measures are formalised within the EMPr to ensure ongoing compliance.

3. **Precautionary Approach (Section 2(4)(a)(vii))**

The potential environmental impacts of the activity have been assessed, and mitigation measures have been proposed even where impacts are localised or of low significance. This reflects the precautionary principle, ensuring that environmental risks are proactively managed.

4. **Integrated Environmental Management and Consideration of Alternatives (Section 2(4)(a)(i))**

Alternatives relating to site, layout, and technology were considered to determine the most environmentally appropriate option. The preferred alternative minimises land disturbance and makes use of existing infrastructure.

5. **Public Participation and Transparency (Section 2(4)(f))**

The Draft Basic Assessment Report is being made available for public review in accordance with the EIA Regulations. Interested and affected parties and stakeholders are provided with an opportunity to comment, and all comments will be recorded and addressed in the FBAR. This ensures transparency and informed decision-making.

6. **Duty of Care (Section 28 of NEMA, read with Section 2 principles)**

The Applicant has a duty of care to prevent pollution and environmental degradation. The implementation of the EMPr, monitoring measures, and operational controls ensures that environmental impacts are appropriately managed.

7. **Environmental Justice (Section 2(4)(c))**

The activity does not result in disproportionate environmental impacts on vulnerable communities. The facility is located within a rural agricultural area, and potential impacts are localised and manageable. The activity contributes positively through employment creation and food production.

Conclusion

The principles of environmental management contained in Section 2 of NEMA have been applied through the integrated assessment of impacts, consideration of alternatives, development of mitigation measures, and implementation of a transparent public participation process. The activity is therefore considered consistent with the foundational environmental management principles of NEMA.

11. 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	Applicability to the project	Administering authority	Date
National Environmental Management Act, 1998 (Act No 107 of 1998) and the EIA Regulations, 2014 (as amended) (NEMA)	The expansion of the existing layer poultry facility triggers Listing Notice 1, Activity 40 of the NEMA EIA Regulations, which relates to the expansion and/or development of facilities for the concentration of poultry above the prescribed thresholds. The activity is therefore subject to a Basic Assessment process in terms of the EIA Regulations. As the activity commenced without prior environmental authorisation, the application is being processed as a Section 24G rectification application under NEMA.	Department of Small Business Development, Tourism and Environmental Affairs – Free State (DESTEA)	This application for rectification in terms of Section 24(g) of NEMA was submitted to DESTEA-FS on 10 December 2025. This draft Basic Assessment Report (BAR) has been prepared in accordance with the requirements of Section 24G of NEMA and the 2014 EIA Regulations (as amended). The final BAR will be submitted to DESTEA as the competent authority. The purpose of the BAR is to assess the environmental impacts of the activity as implemented, to evaluate the acceptability of the development, and to enable the competent authority to make an informed decision regarding the granting of Environmental Authorisation, subject to appropriate conditions.
National Water Act, 1998 (Act No 36 of 1998)	The Act regulates the protection, use, development, conservation, management and control of water resources. The operation of the poultry facility involves water abstraction, storage, and the management of stormwater to prevent pollution of water resources. The Applicant must ensure that no water uses occur without lawful authorisation and that measures are implemented to prevent contamination of surface and groundwater resources.	Department of Water and Sanitation (DWS)	The farm has a water use authorisation to extract water from the river for agricultural purposes.
Animal Protection Act, 1962 (Act No 71 of 1962) (APA)	This Act promotes the humane treatment of animals and prohibits cruelty. The operation	Society for the Prevention of Cruelty to Animals (SPCA)	The SPCA will be informed of the project and requested to comment during the public

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
	of the layer facility must ensure appropriate housing, feeding, handling and care of poultry in accordance with animal welfare standards.		participation phase of the project.
Livestock Improvement Act, 1998 (Act No 25 of 1998) (LIA)	The Act regulates the breeding, identification and improvement of livestock in South Africa. The facility must comply with applicable provisions relating to the management and breeding of poultry where relevant.	Department of Agriculture and Rural Development – Free State (DARD)	The DARD will be informed of the project and requested to comment during the public participation phase of the project.
Animal Diseases Act, 1984 (Act No 35 of 1984) (ADA)	This Act provides for the control of animal diseases and parasites. The facility must implement appropriate biosecurity measures, monitoring, and disease control practices to prevent the outbreak and spread of notifiable animal diseases.	Department of Agriculture and Rural Development – Free State (DARD)	
Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947) (Act 36)	The Act regulates the registration, sale and use of animal feeds, agricultural remedies and stock remedies. Feed used at the facility must comply with regulatory standards, and any veterinary or agricultural remedies must be registered and used in accordance with prescribed requirements.	Department of Agriculture and Rural Development – Free State (DARD)	
Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) (CARA)	This Act promotes the conservation of soil, water resources and vegetation. The Applicant must implement appropriate soil conservation and stormwater management measures to prevent erosion, runoff, and land degradation associated with the operation of the facility.	Department of Agriculture and Rural Development – Free State (DARD)	
Occupational Health and Safety Act, 1993 (Act No 85 of 1993) (as amended) (OHSA)	The Act provides for the health and safety of employees in the workplace. The Applicant must ensure that working conditions within the poultry houses and associated facilities comply with occupational health and	Department of Employment and Labour.	The Department of Employment and Labour will be informed of the project and requested to comment during the public participation phase of the project.

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
	safety standards, including ventilation, hygiene, handling of equipment, and safe storage of materials.		

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	**YES X**
If YES, what estimated quantity will be produced per month?	A <u>total</u> of ±28 m³ construction waste was produced.

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

During the construction phase, solid waste generation was primarily associated with building activities related to the expansion of the layer facility. The main waste stream consisted of construction rubble, including excess soil, broken bricks, concrete offcuts, and other inert materials. This rubble was appropriately managed on-site and utilised as filling material within the base of the new building, thereby reducing the need for imported fill and minimising waste disposal volumes.

Additional general construction waste, such as packaging materials, plastic sheeting, paper, and miscellaneous non-recyclable refuse, was temporarily stored in designated waste receptacles and subsequently transported to the Bloemfontein southern landfill site for lawful disposal. All waste handling activities were conducted in accordance with acceptable construction waste management practices to avoid pollution and maintain a clean and orderly work area.

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

The non-recyclable refuse was temporarily stored in designated waste receptacles and subsequently transported to the Bloemfontein southern landfill site for lawful disposal.

Will the activity produce solid waste during its operational phase?	**YES X**
If YES, what estimated quantity will be produced per month?	± 2 m³

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

During the operational phase, the facility generates a variety of general and organic waste streams typical of commercial poultry production. Non-biodegradable general waste—such as plastic packaging, paper, and cardboard—is collected in designated refuse bins and periodically transported to the Bloemfontein southern landfill site for lawful disposal.

Organic waste consists primarily of occasional poultry mortalities and broken or rejected eggs. Presently, mortalities are of low intensity (±10 birds/month) are managed through on-site incineration in a dedicated burn bin, ensuring hygienic and biosecure disposal to prevent the spread of disease. Broken eggs are collected, frozen, and sold to a registered client for further processing, thereby reducing organic waste volumes and supporting beneficial reuse.

In addition, chicken manure generated within the poultry houses is collected once a week and applied to the landowner's crop fields as an organic soil enhancer. This practice improves soil fertility, supports sustainable crop production, and reduces reliance on synthetic fertilisers. All waste-handling and disposal practices are undertaken in accordance with applicable hygiene, biosecurity, and environmental management standards.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

The Bloemfontein Southern Landfill Site is used to dispose the above wastes at.

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

Not applicable as the facility does not generate waste that cannot be fed into a municipal waste stream.

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 NEM:WA? [ ] NO [X]
If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility? [ ] NO [X]
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. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	[ ]	NO [X]
If YES, what estimated quantity will be produced per month?		N/A
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES [X]	[ ]

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.

Sewerage Handling

The facility is equipped with two flush toilets for employee use. Sewerage generated at the facility consists primarily of domestic effluent, including blackwater from the toilets and greywater from handwashing basins and showers, amounting to approximately 7 m³ per month.

All wastewater is directed to the existing on-site septic tank system, which has historically serviced the farmstead and provides adequate capacity to accommodate the current effluent volumes. Within the septic tank, primary treatment occurs through the settling of solids and anaerobic digestion. The partially treated effluent is then conveyed to an operational French drain, where it is dispersed into the subsurface soil environment for further natural filtration and biological breakdown in accordance with standard rural sanitation practices.

The system ensures that all domestic effluent is treated and disposed of on site, with no discharge to municipal sewer infrastructure or surface water resources. Regular inspection and maintenance of the septic tank and French drain are undertaken to ensure continued functionality and compliance with environmental and health standards.

Wash Water Management

At present, wash water generated during the cleaning of layer houses prior to restocking is allowed to drain onto the surrounding veld. Although the volumes are intermittent (± 2 000 l) and associated only with the cleaning cycles (every 18 months), this practice presents a potential risk of nutrient enrichment of soils and contamination of surface or shallow groundwater resources due to the presence of organic matter, manure residues, and cleaning agents. To improve environmental management on site, the following measures are proposed.

Proposed Wash Water Management System

It is proposed that all wash water generated during house cleaning be directed to a purpose-designed settling pond for controlled management and subsequent beneficial reuse.

1. Collection and Containment

- Floor gradients and/or drainage channels will be installed or improved to direct wash water towards a designated collection point.
- Wash water will be conveyed to a lined or appropriately compacted settling pond designed to prevent uncontrolled seepage.
- The pond will be sized (±3 m³) to accommodate the anticipated wash water volumes generated per cleaning cycle as well as the stormwater from the manure stockpile area.

2. Primary Treatment (Settlement)

- The settling pond will allow suspended solids and organic matter to settle.
- Sludge accumulated within the pond will be periodically removed and incorporated into the existing manure management system for appropriate disposal or beneficial use.

3. Beneficial Reuse through Land Application

- The clarified effluent will be applied to designated agricultural land on the farm as nutrient-rich irrigation water.
- Application rates will be controlled to:
  - Prevent surface runoff,
  - Avoid ponding,
  - Prevent over-saturation of soils,
  - Minimise the risk of nutrient leaching.

- Θ A setback distance of at least 120 m will be maintained from the Tierpoort River and farm borehole, in accordance with best agricultural practice.

Environmental Benefits of the Proposed System

The proposed system will:

- Θ Prevent uncontrolled discharge of wash water into the surrounding veld;
- Θ Reduce the risk of surface water and groundwater contamination;
- Θ Enable recovery and beneficial use of nutrients;
- Θ Improve overall compliance with the principles of the National Water Act and NEMA;
- Θ Formalise wash water management within the EMPr.

The proposed settling pond and land application system forms part of normal agricultural effluent management and does not constitute a listed waste management activity in terms of the National Environmental Management: Waste Act. The effluent will be beneficially reused on site and will not be disposed of at an external facility.

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

If YES, provide the particulars of the facility:

Facility name:	N/A		
Contact person:	N/A		
Postal address:	N/A		
Postal code:	N/A		
Telephone:	N/A	**Cell:**	N/A
E-mail:	N/A	**Fax:**	N/A

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

To ensure optimal reuse of wastewater generated during the periodic (18 months) washing of layer houses, the facility will implement a controlled collection, settlement, and beneficial reuse system.

All wash water will be directed via floor gradients and/or drainage channels to a designated settling pond constructed for this purpose. The settling pond will allow suspended solids and organic matter to settle, thereby reducing the pollutant load of the liquid fraction. Accumulated sludge will be periodically removed and incorporated into the existing manure management system for appropriate reuse or disposal.

Following settlement, the clarified effluent will be reused through controlled application onto designated agricultural land on the farm. This approach enables the recovery of nutrients contained in the wash water and reduces reliance on synthetic fertilisers. Application rates will be carefully managed to prevent runoff, ponding, soil saturation, and nutrient leaching. Appropriate buffer distances (>120 m) from watercourses and boreholes will be maintained.

The system ensures that wastewater is reused beneficially within the agricultural operation, prevents uncontrolled discharge into the surrounding environment, and promotes water conservation and nutrient recycling in line with sustainable farming practices.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions and dust associated with construction phase activities? If YES, is it controlled by any legislation of any sphere of government? If YES, the applicant must 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:	NO X

N/A

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?	NO X

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise? If YES, is it controlled by any legislation of any sphere of government?	NO X

Describe the noise in terms of type and level:

The layer activity does not generate excessive noise that is foreign to the receiving environment.

13. 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 X**	~~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:	**±180 000 litres (when at full capacity)**
Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs? If YES, please provide proof that the application has been submitted to the Department of Water Affairs.	**YES X**

The farm Ches Nous 1775 holds a valid Water Use Authorisation permitting the abstraction of water from the Tierpoort River up to a maximum volume of 67 200 m³ per annum.

The layer facility requires ±6 000 litres of water per day (when at full capacity) for poultry drinking, cleaning, and associated operational activities. This equates to ±180 000 litres per month and ±2 160 000 litres per annum (2 160 m³/year). The facility's annual water requirement therefore represents a small proportion of the

authorised abstraction volume and can be accommodated within the limits of the existing water use authorisation. Refer to Appendix J1 for a copy of the Water Use Certificate of the farm *(note this is a non-public document and will only be supplied to DESTEA)*.

14. ENERGY EFFICIENCY

Describe the design measures, if any, which have been taken to ensure that the activity is energy efficient: & Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

The facility has implemented a range of measures to ensure efficient, reliable, and sustainable use of energy while reducing dependence on grid-supplied electricity. These measures are designed to maintain operational continuity, minimise energy wastage, and support long-term environmental and economic sustainability.

1. Integration of Renewable Energy (Solar Power)

   A solar power system is being installed to supplement the facility's electricity demand. This renewable energy source will:
   - Θ Reduce reliance on Eskom-generated power,
   - Θ Lower operational carbon emissions,
   - Θ Provide enhanced energy security during load-shedding or grid disturbances, and
   - Θ Reduce long-term operational costs.

2. Use of Backup Generator for Operational Continuity

   A dedicated generator is available to supply power during outages, ensuring that critical systems—such as climate control, ventilation, and automated feeding—remain operational. This measure mitigates risks associated with power interruptions, including heat stress and production losses.

3. Regular Maintenance of Electrical Infrastructure

   Routine (monthly) inspection and servicing of electrical systems, including wiring, equipment, and the generator, ensures optimal performance and reduces energy losses. Preventative maintenance minimises breakdowns, enhances efficiency, and extends the lifespan of electrical infrastructure.

4. Energy-Efficient Equipment and Systems

   The facility utilises modern, energy-efficient technologies, including:
   - Θ Automated ventilation systems with optimised power consumption,
   - Θ Low-energy lighting within poultry houses,
   - Θ Efficient motors for feeding and conveyor systems,
   - Θ Climate control design that reduces cooling loads.

   These systems collectively lower overall energy demand.

5. Operational Energy Management

   Energy consumption is monitored and managed to identify improvement opportunities. Staff are trained to operate equipment efficiently, and unnecessary energy use—such as leaving lights or pumps running when not required—is actively avoided.

6. Natural Ventilation Optimization

   The design of the poultry houses promotes natural airflow where possible, reducing dependence on mechanical ventilation and cooling systems. The integration of evaporative cooling with recycled water further supports energy-efficient climate control.

7. Phased Reduction of Grid Dependency

   As solar capacity increases, the facility intends to progressively shift operational loads to renewable energy, reducing long-term reliance on Eskom power and enhancing resilience to national energy instability.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. 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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A): N/A

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

3. Has a specialist been consulted to assist with the completion of this section? NO X

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Free State Province
District Municipality	Xhariep District Municipality
Local Municipality	Kopanong Local Municipality
Ward Number(s)	7
Farm name and number	Chez Nous No 1775
Portion number	0
SG Code	F00300000000177500000

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:	Agriculture

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required? [redacted] **NO X**

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

FLAT X	~~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~~

Alternative S2 (if any):

FLAT X	~~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~~

Alternative S3 (if any): - Not Applicable

~~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~~

2. LOCATION IN LANDSCAPE

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

Site Alternative 1

2.1 Ridgeline	[redacted]	2.4 Closed valley	[redacted]	2.7 Undulating plain / low hills	[redacted]
2.2 Plateau		2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain		**2.6 Plain**	X	2.9 Seafront	
2.10 At sea					

Site Alternative 2

2.1 Ridgeline	[redacted]	2.4 Closed valley	[redacted]	2.7 Undulating plain / low hills	[redacted]
2.2 Plateau		2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain		**2.6 Plain**	X	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?

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

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).

SITE ALTERNATIVE 1 – PRE-COMMENCEMENT

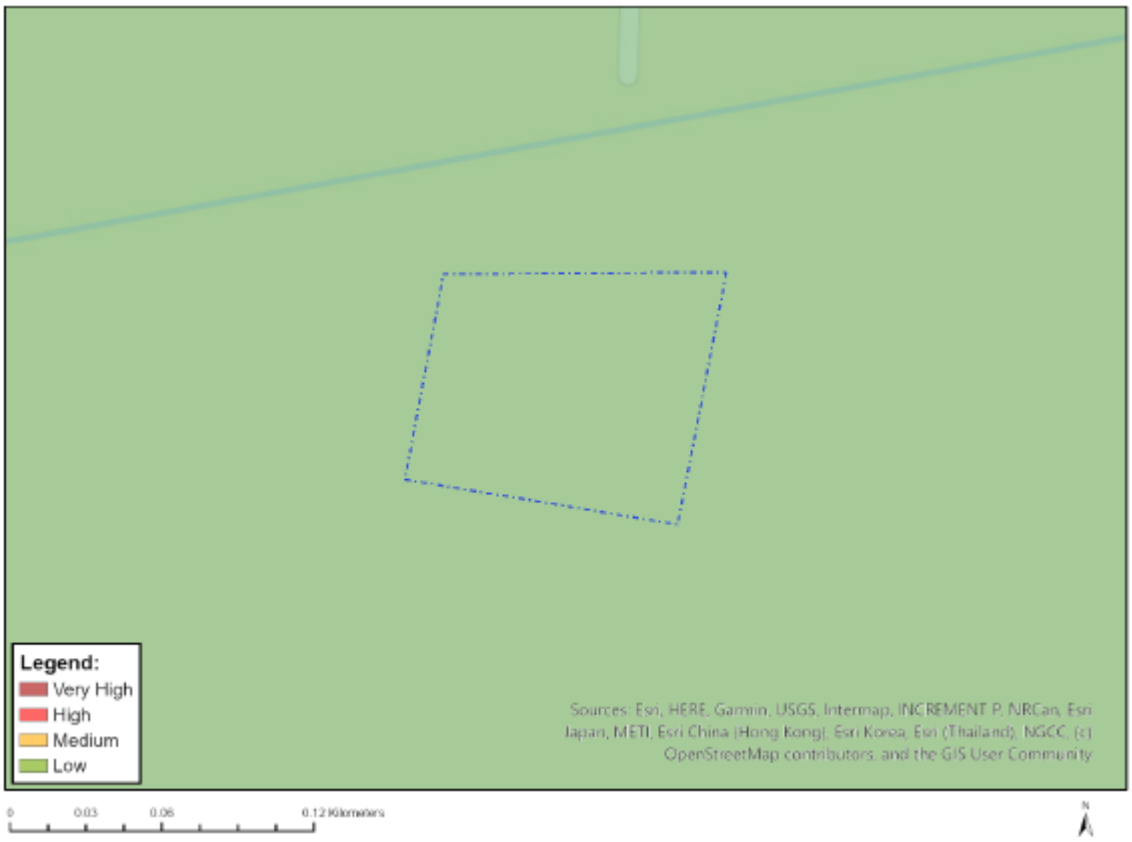
~~Natural veld - good condition~~[E]	~~Natural veld with scattered aliens~~[E]	~~Natural veld with heavy alien infestation~~[E]	**VELD DOMINATED BY ALIEN SPECIES[E] X**	~~Gardens~~
~~Sport field~~	~~Cultivated land~~	~~Paved surface~~	~~Building or other structure~~	~~Bare soil~~
Prior to the construction of the expanded layer house, the area surrounding the existing poultry infrastructure consisted of disturbed agricultural veld. Much of the original indigenous vegetation had either been removed historically or was kept intentionally short for operational and safety purposes associated with farmyard activities. As a result, the groundcover largely resembled a general farmyard environment, characterised by compacted and repeatedly disturbed soils around outbuildings and service areas. Such disturbance created conditions conducive to the germination of common alien and ruderal (pioneer) plant species, which typically establish in areas where natural vegetation has been compromised. No intact or representative natural habitat remained within the footprint area prior to construction.				

SITE ALTERNATIVE 1 – POST-COMMENCEMENT

~~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 X**
Following construction, the groundcover within the fenced area of the facility primarily consists of bare, compacted soil associated with vehicle movement, operational activities, and general farm traffic. Vegetation is limited, and the area does not support intact natural veld. After rainfall events, pioneer and alien plant species typically germinate in patches across the disturbed soil surface. These opportunistic species persist only temporarily, as they are routinely removed or controlled as part of the facility's maintenance and vegetation-management practices. As a result, the post-construction groundcover reflects a highly disturbed, managed farmyard environment rather than natural vegetation.				

According to the DFFE Screening Report the Plant Species theme sensitivity of the study area Low as shown in the following figure.



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

Figure 4: Plant Species theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

SITE ALTERNATIVE 2

~~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 X**	~~Paved surface~~	~~Building or other structure~~	~~Bare soil~~
Site Alternative 2 is located within a cultivated agricultural field that is intensively cultivated under centre pivot irrigation. Indigenous vegetation has been removed and replaced with crop production, and the area represents a fully transformed agricultural system rather than a natural or semi-natural veld condition.				

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. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

SITE ALTERNATIVE 1

Perennial River	**YES X**	
Non-Perennial River	**YES X**	
Permanent Wetland		**NO X**
Seasonal Wetland		**NO X**
Artificial Wetland		**NO X**
Estuarine / Lagoonal wetland		**NO X**

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

The Tierpoort River is situated >100 m to the east of the development area and flows in a southerly direction, curving around the site along its eastern and southern boundaries. The river channel is well-defined and bordered by riparian vegetation, indicating the extent of the active riparian zone.

A tributary of the Tierpoort River is further located to the north-west (±600 m) of the facility footprint. This tributary drains towards the main river channel and forms part of the broader Tierpoort River catchment. The development footprint is therefore positioned between the main river channel to the east/south and the tributary to the north-west, although it remains outside the immediate riparian areas of both watercourses.

Refer to the following figure.

SITE ALTERNATIVE 2

Perennial River:	**YES X**	
Non-Perennial River:	**YES X**	

Permanent Wetland		NO X	
Seasonal Wetland		NO X	
Artificial Wetland		NO X	
Estuarine / Lagoonal wetland		NO X	

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

Had the layer facility been established at Site S2, the Tierpoort River would have been located ±320 m to the east of the development area, while a tributary of the Tierpoort River would have passed ±420 m to the north-west of the facility.

Figure 5: Satellite view of Site Alternative 1 (yellow polygon), and Site Alternative 2 (red polygon), in relation to the Tierpoort River and the tributary of the Tierpoort River. The green polygon indicates the farm boundary (image obtained from Google Earth).

6. 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:

SITE ALTERNATIVE 1

NATURAL AREA **X**	**DAM OR RESERVOIR** **X**	~~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 X**
~~Retail commercial & warehousing~~	~~Old age home~~	**RIVER – Tierpoort River X**
~~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)~~

NATURAL AREA

The layer facility is located within an established agricultural farm setting characterised by existing farming infrastructure and cultivated lands. The development forms part of the broader agricultural activities on the property and is situated within a transformed rural landscape.

Natural areas do occur within 500 m of the facility. However, these are outside the development footprint and remain intact. The expansion of the layer facility was confined to previously disturbed or operational areas within the farm and did not result in direct transformation of the identified natural areas.

DAM / RESERVOIR

The layer facility is located within 500 m of the existing cement dam on the farm, which form part of the established agricultural water management infrastructure. In addition, a 50 000 ℓ dam was constructed in the north-western corner of the site to enhance on-site water storage capacity and improve operational water management. The additional dam forms part of the facility's water balancing measures and is integrated into the existing farm water management system.

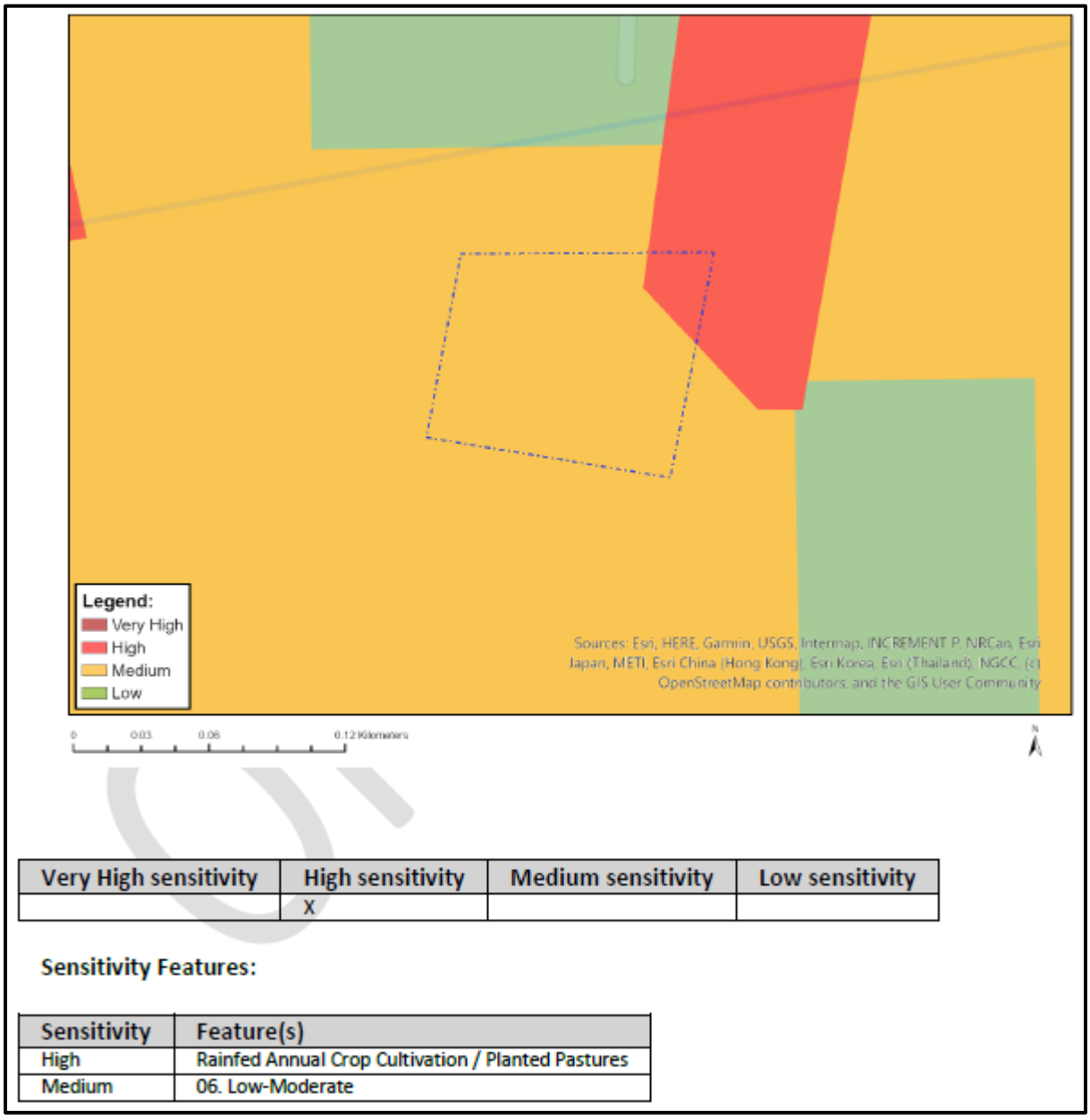
AGRICULTURE

As mentioned earlier, the layer facility is located within an established agricultural farm setting characterised by existing farming infrastructure and cultivated lands.

According to the DFFE Screening Tool Report ("Screening Report"), the Agricultural Theme Sensitivity for Site Alternative 1 (S1) is predominantly classified as Medium sensitivity, as illustrated in the figure below. The Screening

Report further indicates that a small portion of the north-eastern corner of the study area falls within an area classified as High sensitivity, identified as Rainfed Annual Crop Cultivation / Planted Pastures.

The development of the layer facility constituted an expansion of the existing operational footprint and did not result in the loss or transformation of rainfed annual crop areas or planted pastures.



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Rainfed Annual Crop Cultivation / Planted Pastures
Medium	06. Low-Moderate

Figure 6: Agricultural theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

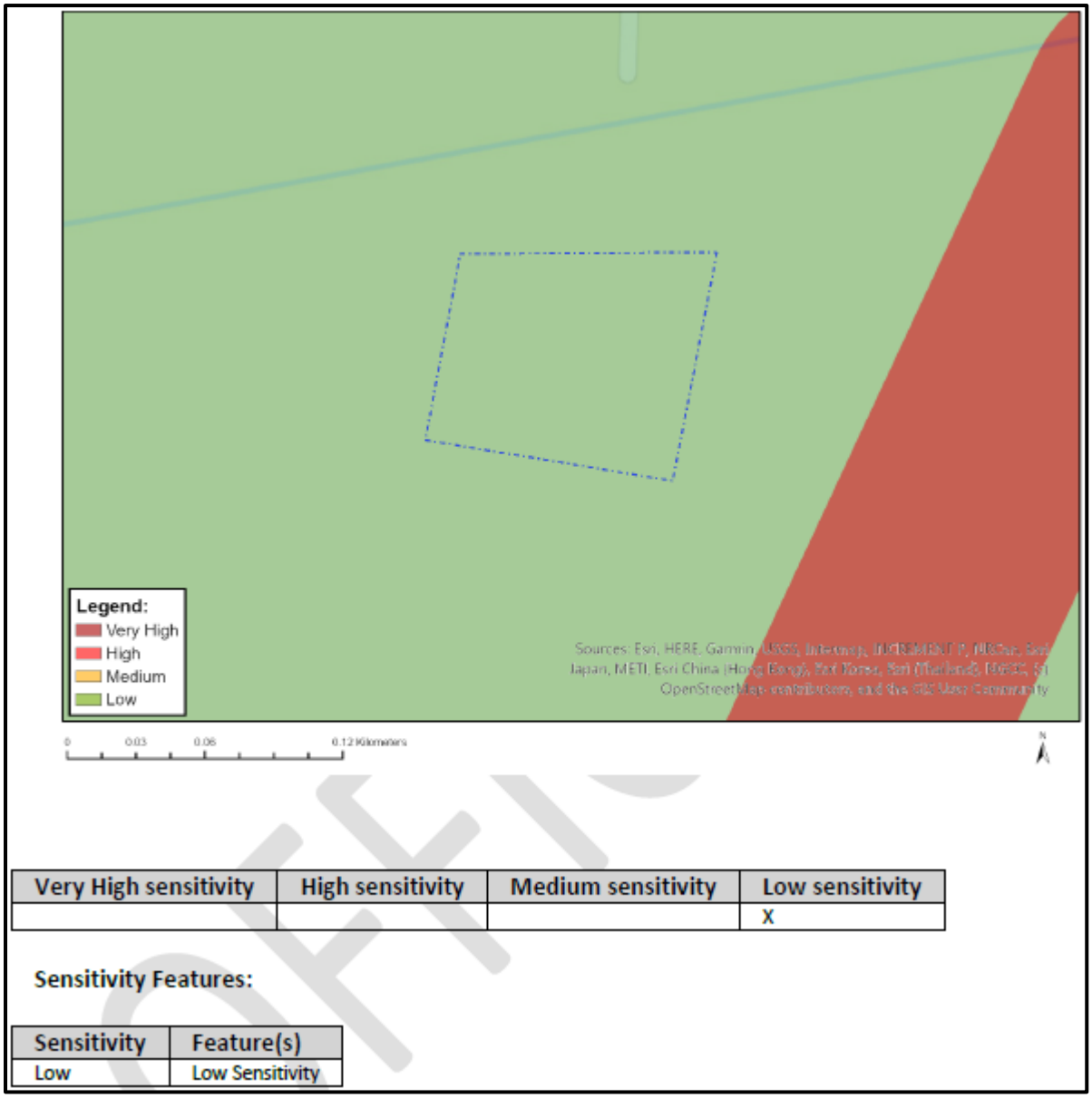
RIVER

As noted above, the Tierpoort River is located >100 m to the east of the development area. The river flows in a southerly direction, curving along the eastern and southern boundaries of the site. The channel is well-defined and bordered by riparian vegetation, which delineates the extent of the active riparian zone (refer to Figure 4).

The development footprint is situated outside the riparian zone of the Tierpoort River. No wetlands, drainage lines, or seepage areas were identified within the development footprint during site observations.

According to the DFFE Screening Tool Report, the Aquatic Biodiversity Theme Sensitivity for the site is classified as Low (following figure).

Subject to the implementation of the stormwater management measures outlined in Section D (*3. Stormwater Management*) of this report and incorporated into the EMPr, runoff from the facility is not anticipated to result in adverse impacts on the Tierpoort River.



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

Figure 7: Aquatic Biodiversity theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

SITE ALTERNATIVE 2

NATURAL AREA X	DAM OR RESERVOIR X	~~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** **X**
~~Retail commercial & warehousing~~	~~Old age home~~	**RIVER – TIERPOORT RIVER, AND STREAM – TRIBUTARY OF THE TIERPOORT RIVER** **X**
~~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:

Not Applicable.

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:

Not Applicable.

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:

Not Applicable.

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

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

According to the DFFE Screening Tool, the development footprint (S1) falls within the Free State Highveld Grasslands NPAES Focus Area, as identified in the National Protected Area Expansion Strategy (NPAES). This focus area has been delineated at a national level to guide the expansion of South Africa's protected area network in order to improve ecosystem representation, ecological connectivity, and long-term biodiversity conservation within the Highveld grassland biome.

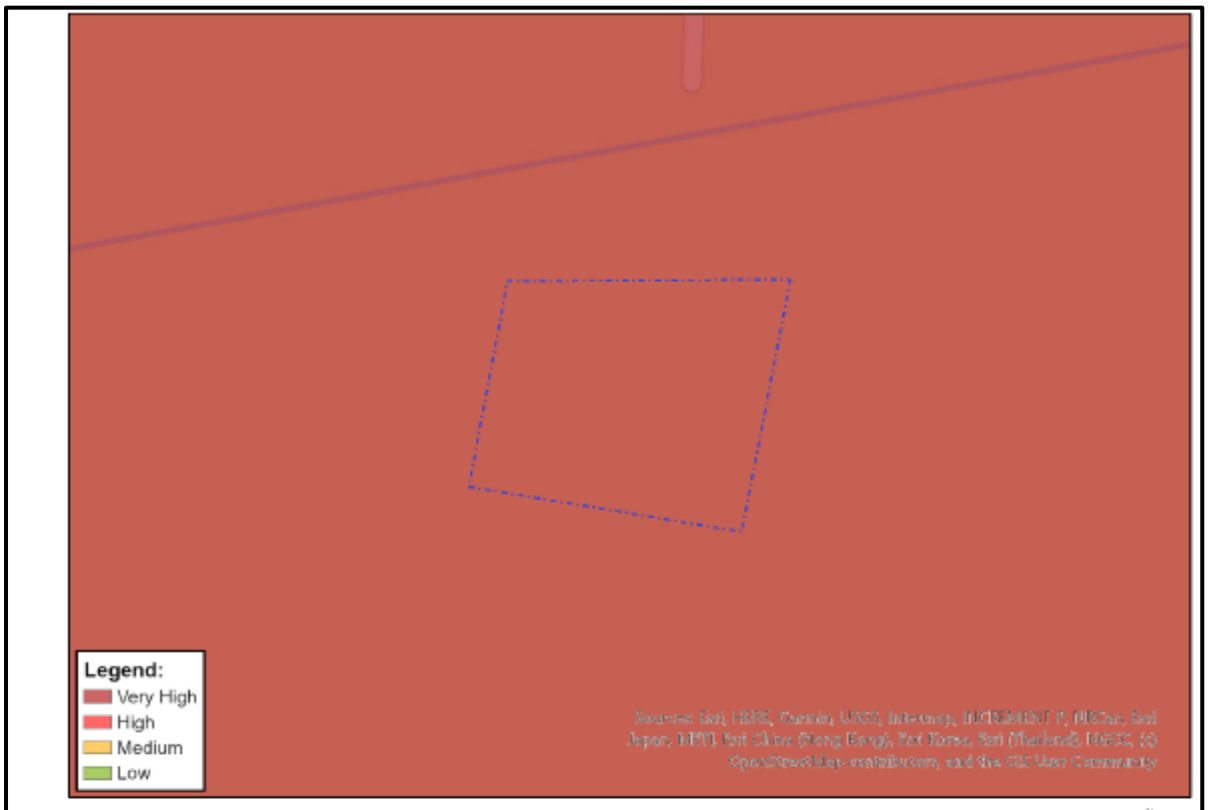
As illustrated in the following image obtained from the SANBI BGIS Map Viewer: National Protected Areas, the development footprint is located just inside the mapped boundary of the Free State Highveld Grasslands NPAES Focus Area. The site occurs along the periphery of the broader focus area rather than within its core or more contiguous sections.

As mentioned earlier, the development of the layer facility entailed the expansion of the existing operational layer house within the established farmyard area on the property, including the construction of one additional layer house adjacent to the existing structure. The existing poultry facility is situated within a historically transformed and actively utilised agricultural footprint that has already been cleared and developed for poultry production. The expansion therefore represents an intensification of an established land use within a previously

disturbed farmyard area, rather than the establishment of new infrastructure within an undeveloped or natural portion of the property

While the property falls within a mapped NPAES focus area, it is important to note that NPAES areas are strategic biodiversity planning tools and do not confer formal protected area status or automatic statutory protection. Their purpose is to guide future conservation expansion initiatives at a national scale. In this case, the development footprint is confined to an already transformed and operational agricultural area and does not result in the loss of intact natural Highveld grassland within the broader landscape.

Given the disturbed nature of the site (S1) and the location of the expansion within an existing farmyard footprint, the development is not expected to materially compromise the ecological functioning, connectivity, or conservation objectives associated with the Free State Highveld Grasslands NPAES Focus Area, subject to the implementation of appropriate environmental management and mitigation measures.



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	National Protected Area Expansion Strategy (NPAES)

Figure 8: Terrestrial Biodiversity theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

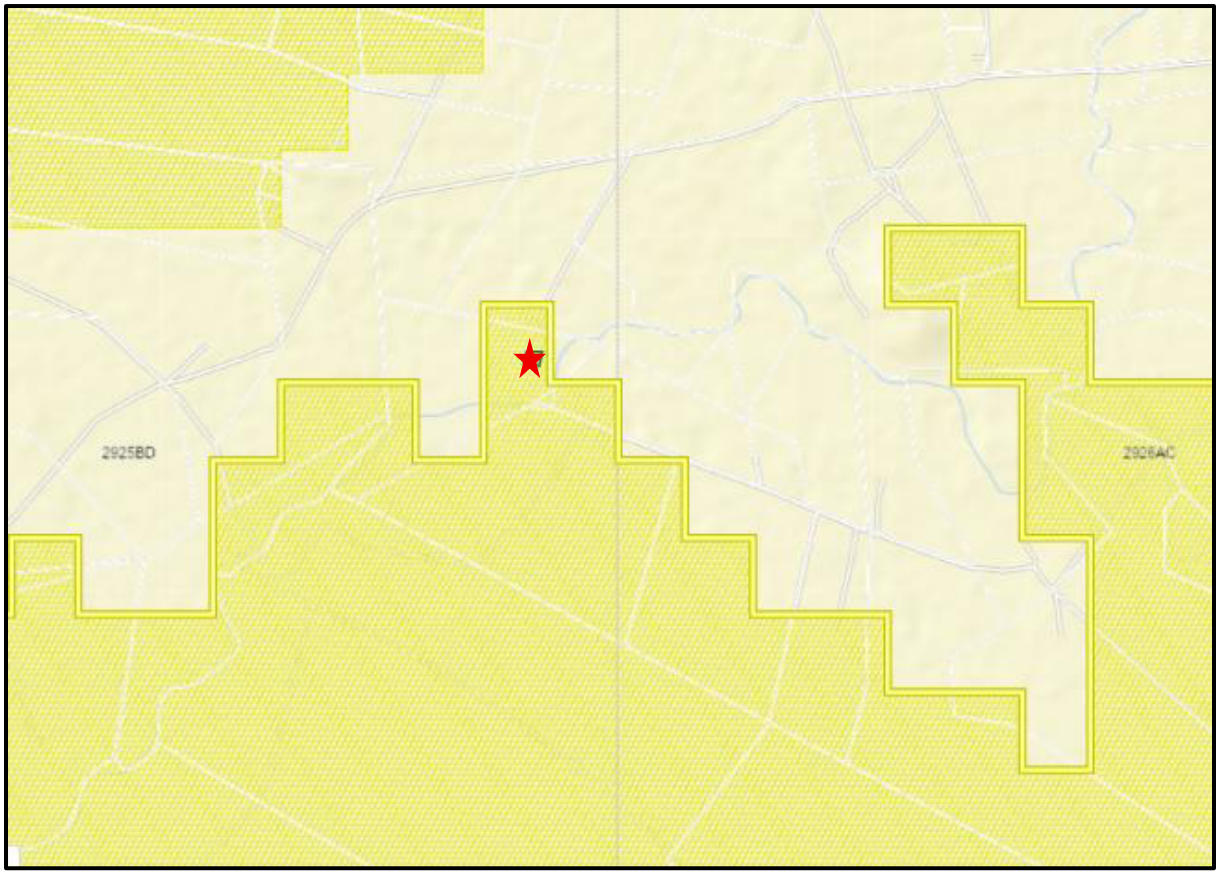


Figure 9: SANBI BGIS Map Viewer: National Protected Areas, where the red star indicates the layer facility and the yellow shaded area shows the Free State Highveld Grasslands NPAES focus area (image obtained from SANBI).

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

SITE ALTERNATIVE 1 & 2

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 paleontological sites, on or close (within 20m) to the site? If YES, explain:		NO X
Not applicable.		

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

Not applicable.

Will any building or structure older than 60 years be affected in any way?		NO X

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?		NO X

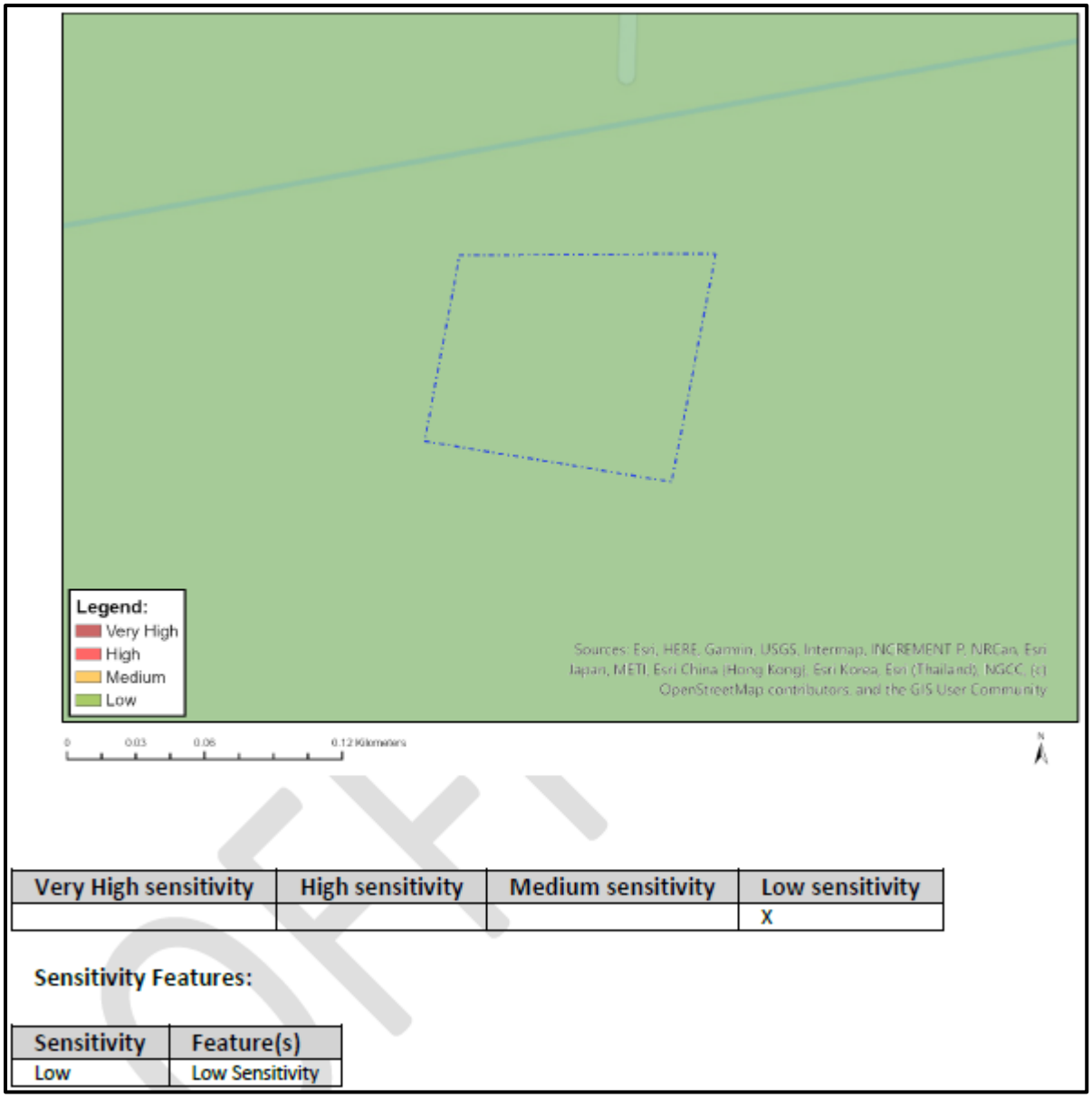
If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

According to the DFFE Screening Report, the Archaeological and Cultural Heritage theme sensitivity of the study area is classified as Low. The Palaeontological theme sensitivity, however, is classified as Very High.

The expansion of the layer facility was undertaken within an already transformed agricultural footprint associated with existing farm infrastructure. The development area is situated on a natural stone bank, and construction did not require deep foundations or excavation into underlying geological strata. The site was stabilised and the layer houses were constructed directly on the exposed rock surface.

As a result, subsurface disturbance was minimal and no excavation of intact bedrock occurred during the construction phase. Given the disturbed nature of the footprint, the shallow construction methodology, and the absence of bedrock penetration, it is considered highly unlikely that intact palaeontological resources or fossil-bearing strata were impacted within the development area. No fossil material was observed during the site inspection.

As a precautionary measure, a Chance Find Procedure for heritage and palaeontological resources is included in the EMPr to ensure that any potential discoveries are appropriately managed in accordance with the National Heritage Resources Act (Act 25 of 1999).

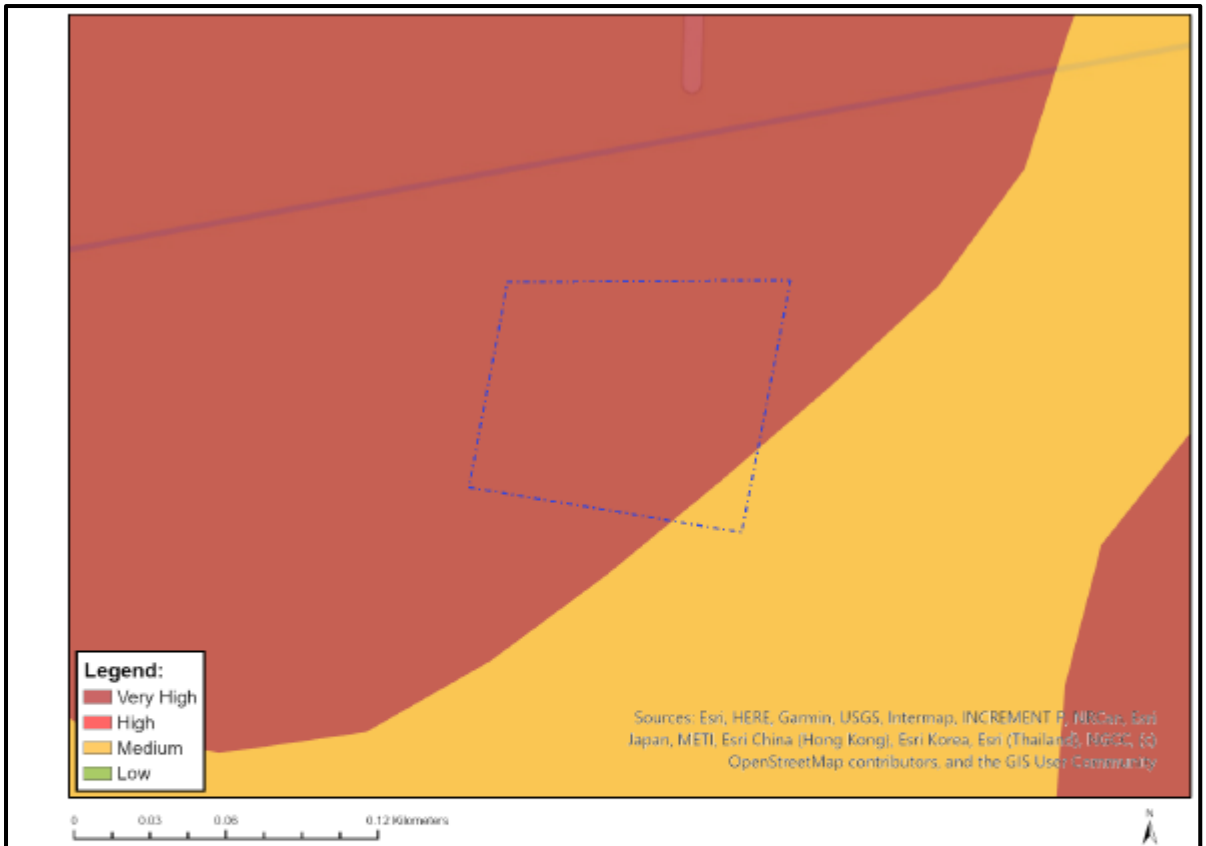


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

Figure 10: Archaeological and Cultural theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity
Very High	Features with a Very High paleontological sensitivity

Figure 11: Palaeontology theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

SITE ALTERNATIVE 1 & 2

The developed facility is located in Ward 7 of the Kopanong Local Municipality (KLM), within the Xhariep District of the Free State Province. Kopanong is a predominantly rural municipality characterised by dispersed

settlements, nine small towns, and an economy strongly influenced by agriculture and related services. KLM has the largest surface area of the three local municipalities in the Xhariep district, covering 15 190 km^2.

Level of unemployment:

The municipality experiences relatively high levels of unemployment, consistent with broader rural trends in the Free State Province. Economic opportunities are limited and largely concentrated in agriculture, government services, wholesale and retail trade, and community services. Employment is often seasonal and dependent on agricultural cycles, resulting in economic vulnerability among households.

According to StatsSA, of the 15 529 people who are economically active (employed or unemployed but looking for work), 27% are unemployed. Of the 8 095 economically active youth (15 – 34 years) in the area, 33.6% are unemployed.

Given these prevailing socio-economic conditions, agricultural enterprises and agri-processing activities play an important role in sustaining local employment and supporting household incomes within the municipality.

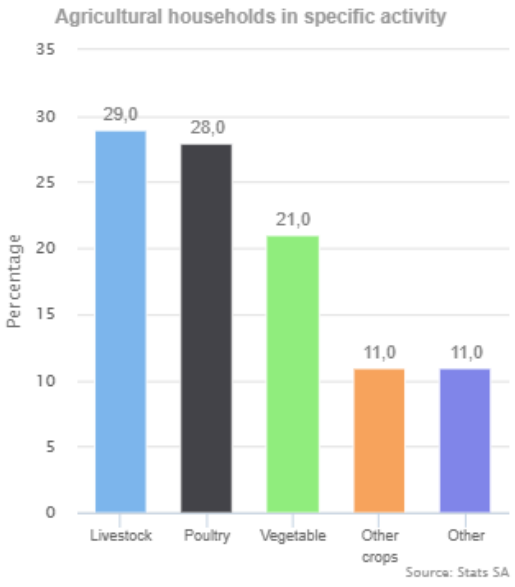
Economic profile of local municipality:

KLM's economy is relatively small and rural in character. The dominant sectors include:

- Agriculture, forestry and fishing, which forms the backbone of the local economy;
- Wholesale and retail trade, including accommodation and food services;
- General government and community services.

The agricultural sector remains a key driver of economic activity and comparative advantage within the municipality. Farming activities and associated operations contribute to both direct employment and secondary economic spin-offs in transport, trade, and services.

The following chart (obtained from StatsSA) shows the percentage agricultural households in a specific activity in the KLM. Note that the second highest type of activity within the KLM is poultry production.



Agricultural households	
Type of specific activity	Number
Livestock production	1,555
Poultry production	1,470
Vegetable production	1,113
Production of other crops	578
Other	568

Figure 12: Chart (left pane) and data set (right pane) showing the agricultural households in a specific activity in the KLM (image obtained from StatsSA).

The developed poultry facility forms part of this established agricultural economic base and represents an intensification of an existing farming enterprise within the local economy.

Level of education:

The municipality reflects generally modest levels of educational attainment, typical of rural areas. While there has been improvement in matric completion rates over time, a significant portion of the adult population has education levels below Grade 12, and relatively few residents possess tertiary qualifications.

According to Census 2011, Kopanong Local Municipality has a total population of 49 171 people, of whom 71,5% are black African, 18,2% are coloured, and 9.4% are white. The other population groups make up the remaining 0,9%. Of those aged 20 years and older, 6.7% have completed primary school, 33.3% have some secondary education, 20.7% have completed matric, and 6.4% have some form of higher education, while 13.4% of those aged 20 years and older have no form of schooling (StatsSA).

This skills profile reinforces the importance of agricultural and semi-skilled employment opportunities within the local economy, as these sectors provide accessible employment for individuals with varying levels of formal education.

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	**±R 4 000 000.00**	
What is the expected yearly income that will be generated by or as a result of the activity?	**±R 17 000 000.00**	
Will the activity contribute to service infrastructure?		**NO X**
Is the activity a public amenity?		**NO X**
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	**7**	
What is the expected value of the employment opportunities during the development and construction phase?	**±R 500 000.00**	
What percentage of this will accrue to previously disadvantaged individuals?	**93%**	
How many permanent new employment opportunities will be created during the operational phase of the activity?	**7** **A total of 14 employees work at the facility (7 from construction phase and 7 new employees).**	
What is the expected current value of the employment opportunities during the first 10 years?	**±R 10 000 000.00**	

What percentage of this will accrue to previously disadvantaged individuals?	**93%**

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

SITE ALTERNATIVE 1 & 2

Systematic Biodiversity Planning Category				**If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan**
~~Critical Biodiversity Area (CBA)~~	**Ecological Support Area (ESA) X**	~~Other Natural Area (ONA)~~	~~No Natural Area Remaining (NNR)~~	See following discussion.

According to the SANBI BGIS Map Viewer of the Free State Biodiversity Plan, the broader property falls within an area classified as Ecological Support Area 2 (ESA2). ESA2 areas are identified at a provincial biodiversity planning level as landscapes that contribute to maintaining ecological processes, connectivity and ecosystem functioning, but which are generally more tolerant of compatible land uses than Critical Biodiversity Areas (CBAs) or ESA1 areas.

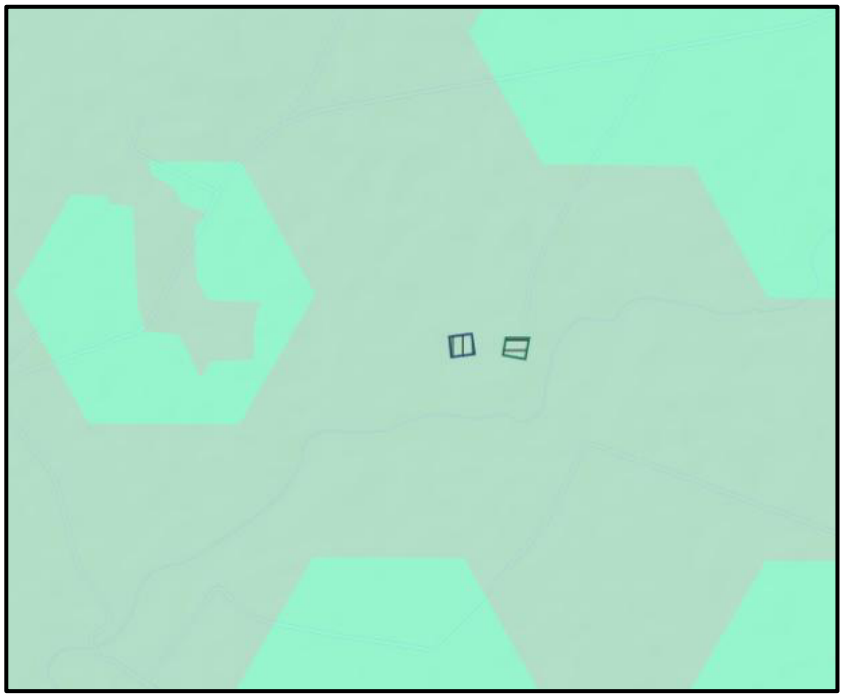


Figure 13: SANBI BGIS Map Viewer: 2015 Free State BSP showing both S1 & S2 (striped polygons) within an area classified as an ESA2 (image obtained from SANBI).

However, it is noted that the DFFE Screening Tool does not identify the development footprint as falling within a Critical Biodiversity Area (CBA) or Ecological Support Area (ESA). The Screening Tool mapping therefore does not assign a specific CBA or ESA sensitivity category to the site.

This difference may arise due to:

- Differences in dataset versions or updates;
- Scale of mapping and refinement between provincial biodiversity plans and the national Screening Tool layer;
- Refinement of biodiversity priorities since the original provincial biodiversity plan was compiled.

Site-Specific Context

Notwithstanding the ESA2 classification reflected on the SANBI BGIS layer, the following site-specific factors are relevant:

- The developed footprint (Site Alternative 1) is confined to an established and historically transformed farmyard area.
- The area has long been cleared and utilised for poultry production.
- The development constituted an expansion of an existing facility rather than transformation of intact natural grassland.
- The footprint does not occur within a mapped CBA according to either dataset.
- The DFFE Screening Tool does not flag the site as a CBA or ESA requiring elevated biodiversity sensitivity consideration.

While the broader property is indicated as ESA2 on the SANBI BGIS Free State Biodiversity Plan, the actual development footprint is located within a transformed agricultural farmyard area and is not identified as a CBA or ESA on the DFFE Screening Tool. The expansion therefore does not result in the loss of intact biodiversity priority areas, nor does it compromise identified ecological corridors or core conservation areas.

Given the disturbed nature of the footprint and the absence of CBA or ESA classification on the Screening Tool, the development is not considered to have materially undermined provincial biodiversity planning objectives.

b) Indicate and describe the habitat condition on site

SITE ALTERNATIVE 1

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	0%	The habitat within the development footprint is considered fully transformed and of very low ecological integrity. Historically, the area formed part of the broader Highveld grassland landscape; however, long-term agricultural utilisation and establishment of poultry infrastructure resulted in complete modification of the original habitat. The site functions as an operational farmyard environment rather than natural or semi-natural veld.
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100%	

Structural Habitat Characteristics

The footprint is characterised by:

- Existing poultry buildings and associated infrastructure;
- Compacted and levelled soils;
- Frequent vehicle movement and operational disturbance;
- Cleared and maintained surfaces for biosecurity and operational purposes;
- Absence of indigenous grassland structure (no intact grass layer, forb diversity, or natural species composition).

No natural microhabitats (e.g. rock outcrops, undisturbed soil profiles, wetland features, or mature indigenous shrub/grass assemblages) occur within the footprint. The structural complexity typically associated with functional Highveld grassland habitat is absent.

Ecological Functioning

Ecological processes within the footprint have been substantially altered. The site no longer supports:

- Natural fire regimes;
- Intact soil structure or seed banks;
- Functional trophic interactions typical of natural grassland;
- Meaningful habitat connectivity for grassland-dependent species.

The highly compacted soils and continuous disturbance limit ecological recovery potential without active rehabilitation. The site therefore does not contribute meaningfully to biodiversity conservation objectives at a local scale.

Faunal Habitat Potential

Due to the absence of intact vegetation and habitat structure, the footprint provides very limited habitat value for indigenous fauna. Occasional use by common, disturbance-tolerant species (e.g. generalist birds, rodents, or invertebrates) may occur; however, the area does not provide suitable habitat for sensitive, habitat-specific, or conservation-dependent species. The site does not function as breeding, foraging, or refuge habitat for species of conservation concern.

The DFFE Screening Tool Report classifies the Terrestrial Animal Species Theme Sensitivity of the broader area as Medium (following image), primarily due to the potential occurrence of *Neotis ludwigii* (Ludwig's Bustard) and *Hydrictis maculicollis* (Spotted-necked Otter). However, the absence of intact natural habitat within the development footprint, together with the transformed agricultural context of the site, indicates that the footprint itself does not provide suitable habitat for these species. No evidence of their presence was observed during site inspection.

Landscape Context

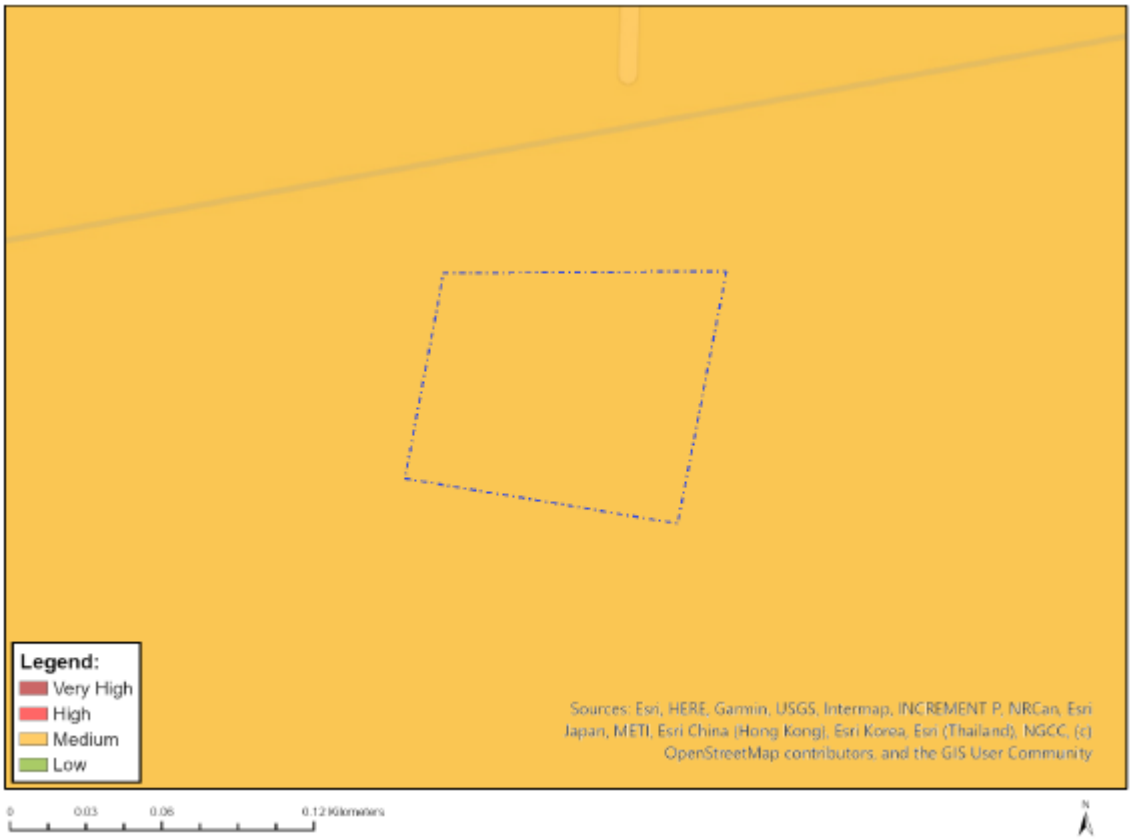
Importantly, the development is confined to an established farmyard footprint and does not extend into adjacent natural or semi-natural areas. As such:

- No additional habitat fragmentation was introduced beyond what already existed.
- The expansion did not result in the loss of intact grassland habitat.
- Broader ecological processes within the surrounding landscape remain intact outside the transformed footprint.

Overall Habitat Condition Rating

Based on the above, the habitat condition of the development footprint is assessed as:

- **Very Poor / Fully Transformed**, with negligible ecological sensitivity at a site-specific scale.



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Aves-Neotis ludwigii
Medium	Mammalia-Hydrictis maculicollis

Figure 14: Animal Species theme sensitivity according to the DFFE Screening Report (image obtained from DFFE Screening Tool Report).

SITE ALTERNATIVE 2

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	0%	Site Alternative 2 (S2) is located within an area presently used for centre pivot. The site no longer supports intact natural Highveld grassland, as the original indigenous vegetation has been removed.
Near Natural (includes areas with low to moderate level	0%	

of alien invasive plants)		
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100%	

Structural Habitat Characteristics

The vegetation at S2 consists of agricultural crops.

Ecological Functioning

The ecological functioning of S2 is considered impaired due to transformation. The cultivation activities have:

- Altered soil structure and composition;
- Reduced indigenous seed banks;
- Disrupted natural fire and grazing regimes; and
- Removed natural grass cover.

While some ecological processes (e.g. surface water infiltration, primary productivity, limited faunal use) are occurring due to vegetative cover, the area does not function as intact, representative grassland habitat.

Faunal Habitat Potential

Compared to S1, S2 provides slightly greater habitat opportunity due to the presence of plant cover. However, the habitat is suitable primarily for:

- Common, disturbance-tolerant fauna;
- Generalist bird species;
- Small mammals and invertebrates adapted to cultivated areas.

The site is unlikely to support habitat-specific or conservation-dependent grassland species due to the absence of intact species composition and structural diversity. No sensitive or unique habitat features were identified within the area.

Landscape Context

S2 forms part of a broader agricultural matrix and reflects a landscape that has been historically modified for farming purposes. Development at S2 would have resulted in the loss of high-potential agricultural land.

Overall Habitat Condition Rating

Based on field characteristics and land use, the habitat condition of Site Alternative 2 is assessed as:

- **Highly Modified to Transformed**, with low ecological sensitivity, as the site is actively cultivated under centre pivot irrigation and no longer supports intact or semi-natural indigenous vegetation.

c) Complete the table to indicate:

(i) the type of vegetation, including its ecosystem status, present on the site; and

(ii) whether an aquatic ecosystem is present on site.

SITE ALTERNATIVE 1 & 2

Terrestrial Ecosystems		Aquatic Ecosystems					
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	~~Critical~~ ~~Endangered~~ ~~Vulnerable~~ **Least Threatened X**	Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)		Estuary		Coastline	
			NO X		**NO X**		**NO X**

According to the National List of Threatened Terrestrial Ecosystems (NEMBA, Section 52), the vegetation type occurring in the broader area is classified as Xhariep Karroid Grassland (Gh 3), which is listed as Least Threatened. This indicates that, at a national scale, the ecosystem has not yet reached thresholds associated with elevated conservation risk categories.

It is further noted that the development footprint is fully transformed (S1) or comprises cultivated fields (S2) and therefore does not represent intact or functional examples of Xhariep Karroid Grassland. The expansion (S1) did not result in the loss of natural remnant vegetation of this ecosystem type.

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

SITE ALTERNATIVE 1 & 2

The property falls within the Xhariep Karroid Grassland (Gh 3) vegetation type, as mapped by the National Vegetation Map of South Africa. In terms of the National List of Threatened Terrestrial Ecosystems (NEMBA, Section 52), this vegetation type is classified as Least Threatened.

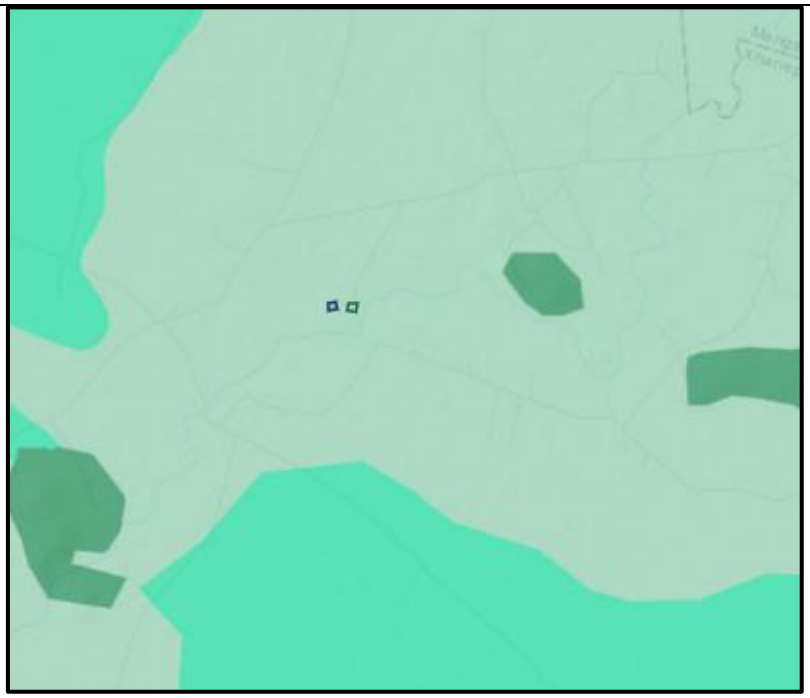


Figure 15: SANBI BGIS Map Viewer: 2015 Free State BSP showing both S1 & S2 (striped polygons) within the Xhariep Karroid Grassland (light green shading) (image obtained from SANBI).

Xhariep Karroid Grassland is typically characterised by semi-arid grassland interspersed with karroid shrub elements, occurring on flat to gently undulating plains within the central Free State.

Site-Specific Vegetation Condition

- Site Alternative 1 (S1) is located within an established agricultural farmyard and is fully transformed.
- Site Alternative 2 (S2) comprises cultivated fields (centre pivots).

The vegetation within both areas does not represent intact or reference-condition Xhariep Karroid Grassland. No remnant patches of natural, undisturbed grassland were identified within the S1 footprint.

Aquatic Ecosystems

No aquatic ecosystems occur within the development footprint. The Tierpoort River is located to the east of the facility and flows southwards around the broader farm area, while a tributary occurs to the north-west. The development footprint is situated outside the riparian zones of these watercourses. No wetlands, drainage lines, or seepage areas were identified within the footprint area.

Biodiversity Features

Based on available spatial biodiversity data and site observations:

- The development footprint (S1) is not mapped as a Critical Biodiversity Area (CBA) or Ecological Support Area (ESA) on the DFFE Screening Tool.
- The broader property falls within the Free State Highveld Grasslands NPAES Focus Area, as identified through the DFFE Screening Tool.
- No threatened plant species, species of conservation concern, or special habitat features were identified within the development footprint during site assessment.

Conclusion

In summary, while the broader region falls within the Xhariep Karroid Grassland vegetation type, the development footprint itself is highly transformed and does not contain intact natural vegetation, aquatic ecosystems, or identified biodiversity features of conservation concern.

Also refer to the photo report attached as Appendix B.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	The project was advertised in the Bloemnuus.	
Date published	The applicable edition of the Bloemnuus appeared on 05 March 2026.	
Site notice position	**Latitude**	**Longitude**
Entrance to Site	29˚27'16.10" S	26˚00'02.70" S
Tom's Place Filling Station and Store	29˚24'44.40" S	26˚08'03.50" S
Date placed	06 March 2026	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

As agreed with the Competent Authority (DESTEA) the public was informed of this application by means of an advertisement in the Bloemnuus, and on-site notices that were placed at conspicuous places.

A notification letter inviting comments on the DBAR over a 30-days commenting period (ending 15 April 2026) will be send to the neighbouring landowners, stakeholders (organs of state & non-state organs), and any other I&AP that may be interested in the project. The comments received on the DBAR will be incorporated into the final Basic Assessment Report (FBAR) to be submitted to the DESTEA for consideration.

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 326

This DBAR containing all the facts in respect of this application will be available to the DESTEA, stakeholders (organs of state & non-state organs), surrounding landowners and potential I&AP's for perusal and commenting over a 30-days commenting period. The DBAR will be available on the Greenmined publicly accessible website. I&AP's and stakeholders will be invited to contact the EAP should additional information be required or alternative methods of communication required.

The comments received on the DBAR will be incorporated into the FBAR to be submitted for departmental consideration.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 326

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr Zandre Campher	Society for the Prevention of Cruelty to Animals (SPCA)	Non-public information. Available upon request.
Cllr. MJ Moitse	Ward Councillor (Ward 7)	Non-public information. Available upon request.
Bachrust Dairy (Pty) Ltd Mr Neil Smook	Surrounding Landowner: Θ Chez Nous A No 2448 Θ Portion 1, 3, and 4 of farm Little Go No 2560 Θ Remainder and Portion 1 of farm Arcadia No 2546 Θ Klein Begin No 2503 Θ Vaalbank	Non-public information. Available upon request.
Imre-An Besigheids Trust Mr J du Plessis	Surrounding Landowner: Θ Lion's Hill No 1776 Θ Lion's Hill No 2598	Non-public information. Available upon request.

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
As agreed with DESTEA the comments received on the DBAR will be incorporated into the FBAR to be submitted to the Department for decision making.	

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	e-mail	Postal address
Department of Agriculture and Rural Development – Free State (DARD)	Mr T Mabilo	Non-public information. Available upon request.		
Department of Economic Development, Tourism and Environmental Affairs (DESTEA)	Mr Arnold Mathibe	Non-public information. Available upon request.		
Department of Employment and Labour.	Me N Douwjack	Non-public information. Available upon request.		
Department of Community Safety, Roads and Transport	Dr M Tshabalala	Non-public information. Available upon request.		
Department of Water and Sanitation (DWS)	Me Z Xokozela Mr TP Ntili	Non-public information. Available upon request.		
Eskom	Mr G van Schalkwyk Me T Mugwedi	Non-public information. Available upon request.		
Kopanong Local Municipality	Mr C Mokomela	Non-public information. Available upon request.		
South African Heritage Resources Agency (SAHRA)	SAHRIS website	Non-public information. Available upon request.		
Xhariep District Municipality	Me L Moletsane	Non-public information. Available upon request.		

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) 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.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

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. 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

In addition to the table below, reference should be made to Appendix F, which contains the detailed Impact Assessment Statement outlining the methodology applied and the basis for the determination of impact significance.

a) SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
DESIGN, PLANNING AND CONSTRUCTION PHASE			
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	**DIRECT IMPACTS**		The planning, design and construction phase of the layer facility expansion was completed prior to submission of this Section 24G Rectification Application. The additional layer house and associated supporting infrastructure have already been constructed and the development footprint has been established. As a result, mitigation measures typically applicable to the planning, design and construction phase — such as controls relating to vegetation clearance, earthworks management, construction waste handling, erosion control during site preparation, dust suppression, and construction-related noise management — cannot be retroactively implemented. Given that the construction phase has been concluded and no ongoing construction activities are taking place, additional mitigation measures for this phase are not applicable. The focus of environmental management moving forward is therefore directed at operational-phase mitigation and ongoing compliance measures to ensure that potential impacts associated with the functioning of the facility are appropriately managed.
	Θ Disturbance and compaction of soil within the existing farmyard footprint.	Low-Medium	
	Θ Temporary increase in dust generation due to earthworks and vehicle movement.	Low-Medium	
	Θ Generation of construction waste including rubble, packaging and scrap material.	Low-Medium	
	Θ Temporary noise from construction machinery and delivery vehicles.	Low-Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
	INDIRECT IMPACTS		
	Θ Temporary increase in local traffic associated with delivery of materials.	Low-Medium	
	Θ Potential risk of soil or groundwater contamination if construction materials are mismanaged.	Low	
	Θ Short-term visual intrusion during construction activities.	Low-Medium	
	CUMULATIVE IMPACTS		
	Θ Incremental expansion of agricultural infrastructure within the existing operational node **(Positive Impact)**	Medium-High (+)	
	Θ Minor cumulative dust and noise contributions within the rural landscape.	Low	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
OPERATIONAL PHASE			
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	**DIRECT IMPACTS**		
	Θ Increased water demand associated with poultry production.	Medium	**1. <u>WATER USE</u>** The facility has adopted a range of measures to ensure responsible and efficient use of water resources throughout its operations. These measures include both technological and operational interventions designed to minimise water consumption, reduce wastage, and promote sustainable agricultural production. Θ **Automated Low-Spill Drinking Systems:** The poultry houses are fitted with nipple drinking lines, which deliver water directly to the hens and significantly reduce spillage compared to open-trough systems. Automated flow control ensures water is supplied only when required. Θ **Evaporative Cooling System With Water Recycling:** Each layer house is equipped with water-coolers (wet screens) at the ventilation intakes. These systems draw air through wetted pads to cool the interior of the building. Importantly, the water used in the cooling system is continuously recycled, recirculated through the system, and topped up only to replace evaporative loss. This design substantially reduces the volume of water required for climate control. Θ **Leak Detection and Preventative Maintenance**: All pipes, valves, drinker lines, and cooling-system components are inspected regularly (at least weekly) for leaks or malfunction. Preventative maintenance schedules ensure early identification and repair of any issues, preventing unnecessary water loss.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Controlled Cleaning Practices:** The poultry houses are sanitised only once every 18 months, which reduces the frequency of high-volume water use. During cleaning, high-pressure, low-volume equipment is used to further limit water consumption. Θ **Balanced Supply Through Storage Tanks:** A series of JoJo storage tanks stabilise daily water use and reduce direct abstraction spikes from the river. Stored water is allocated as needed, allowing better control over consumption and preventing over-abstraction. Θ **Improved Soil Moisture Retention Through Manure Application:** The use of poultry manure on adjacent crop fields enhances soil organic matter and structure, improving moisture retention and reducing long-term irrigation demand on the agricultural lands.
	Θ Generation of manure requiring management and disposal or reuse.	Medium	**2. <u>MANURE MANAGEMENT</u>** The following mitigation measures are implemented to manage manure generated from the layer houses and to reduce potential impacts related to odour, nutrient runoff, groundwater contamination, and nuisance effects: Θ **Automated Manure Removal System:** Each layer house is fitted with an automated manure belt removal system. The system routinely removes manure from within the houses, preventing prolonged accumulation and reducing ammonia build-up and associated odour generation. Θ **Designated Collection Area and Frequent Removal:** Manure is conveyed to a designated collection area located on the eastern side of the layer houses. The
	Θ Potential odour emissions from poultry houses and manure storage areas.	Low-Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			material is collected and removed on a weekly basis (every 5 to 6 days). The limited storage duration reduces the potential for anaerobic decomposition, odour emissions, pest attraction, and nutrient leaching. Θ **Off-Site Beneficial Use as Fertiliser:** Manure generated on-site is transported to agricultural fields on the farm and the landowner's property for use as organic fertiliser. No long-term on-site disposal or burial of manure takes place. Θ **Application at Agronomic Rates:** Manure application is undertaken in accordance with crop nutrient requirements to prevent over-application of nitrogen and phosphorus. Application volumes are aligned with soil and crop needs to reduce the risk of nutrient runoff and groundwater contamination. Θ **Appropriate Timing of Land Application:** Land application is avoided during periods of heavy rainfall or when soils are waterlogged. This reduces the likelihood of surface runoff and nutrient transport to adjacent watercourses. Θ **Infrastructure Inspection and Maintenance:** The manure removal system, collection areas, and transport processes are subject to routine (weekly) inspection to ensure proper functioning and to prevent spillage. **<u>The following additional mitigation measures are proposed for the development:</u>** **3. <u>STORMWATER MANAGEMENT</u>** **Stormwater Control Measures to ensure Protection of the Tierpoort River and the Surrounding Environment against Potential Contamination:**

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ A clean and dirty water separation system must be implemented at the manure stockpile area to prevent clean stormwater from entering the stockpile footprint. Θ An upslope cut-off drain or diversion berm must be constructed to intercept and divert uncontaminated stormwater around the manure stockpile area to a stable discharge point. Θ A downslope containment berm must be constructed along the lower boundary of the stockpile area to prevent runoff from flowing toward the Tierpoort River. Θ All runoff originating within the manure stockpile and loading area (dirty water) must be directed to a purpose-designed settling pond or equivalent containment structure to allow sedimentation of suspended solids and reduce nutrient transport prior to reuse or controlled discharge. Θ The settling/containment structure must be appropriately sized for the contributing catchment area and designed with adequate freeboard, erosion protection, and a controlled outlet to prevent overtopping and uncontrolled discharge. Θ Where required based on soil permeability and groundwater risk, the settling pond and/or manure stockpile pad must be lined (e.g., compacted clay or geomembrane) to reduce seepage of nutrient-rich water. Θ A setback distance of at least 120 m must be maintained from the Tierpoort River and farm borehole, in accordance with best agricultural practice. Θ The manure stockpile area must be established on a compacted, stable surface graded to drain toward the dirty-water collection system, preventing uncontrolled runoff pathways. Θ Vegetated buffer areas between the manure stockpile area and the Tierpoort River must be maintained and protected to enhance filtration and reduce runoff velocity. Θ Stormwater infrastructure (diversion drains, berms, and settling pond) must be inspected regularly and after significant rainfall events to ensure structural integrity

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			and functional performance. Accumulated sediment within the settling pond must be removed as required to maintain capacity. Θ No discharge of untreated runoff from the manure stockpile area to the Tierpoort River or associated drainage lines may occur. Θ Records of manure removal and land application areas must be maintained for monitoring and compliance purposes.
	Θ Operational noise from ventilation fans, generator and loading activities.	Low	**4. <u>NOISE MANAGEMENT</u>** The following mitigation measures are implemented to manage noise at the layer facility, and to reduce potential impacts on nearby receptors. The nearest residential receptor is located ±55 m from the facility (farm employee accommodation). No other sensitive receptors are situated in close proximity to the operational area. Θ **Ventilation Fan Operation and Maintenance:** The layer houses are fitted with mechanical ventilation fans necessary for environmental control within the houses. The fans are maintained in proper working condition to prevent abnormal noise associated with mechanical failure, imbalance, or wear. Routine (monthly) inspection and maintenance are undertaken to ensure continued efficient and consistent operation. Θ **Standby Generator Enclosure:** The standby generator is located within a designated enclosed room, which provides acoustic attenuation during operation. The enclosure is maintained in good condition. Θ **Restricted Generator Operation:** The generator operates only during power outages or scheduled maintenance testing. Where practicable, maintenance testing is undertaken during daylight hours.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Daytime Loading Activities:** Loading and offloading of eggs, feed, hens, and associated materials occur during daylight hours only. No routine night-time loading activities are undertaken. Θ **Vehicle and Equipment Maintenance:** Vehicles and equipment associated with loading and transport are maintained in good working condition, including exhaust and silencing systems, to prevent excessive noise emissions. Θ **Minimisation of Vehicle Idling:** Unnecessary idling of delivery and collection vehicles within the facility yard is avoided to reduce cumulative noise levels. **<u>The following additional mitigation measures are proposed for the development:</u>** Θ **Complaint Monitoring:** Any noise-related complaints, should they arise, must be recorded and investigated, and corrective measures implemented where required.
	Θ Generation of general operational waste (feed bags, packaging, mortalities).	Low-Medium	**5. <u>WASTE MANAGEMENT</u>** The following mitigation measures are implemented to manage general and organic waste (excluding manure) generated during the operational phase of the layer facility, and to reduce potential impacts related to pollution, vermin attraction, and disease transmission. Θ **Separation of Waste Streams:** General non-biodegradable waste and organic waste are separated at source to ensure appropriate handling, storage, and disposal practices.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Management of General Waste:** Non-biodegradable waste, including plastic packaging, paper, and cardboard, is collected in designated refuse bins located within the operational area. Waste is stored temporarily in a controlled manner to prevent littering and wind dispersion. General waste is periodically (weekly or as needed) transported to the Bloemfontein landfill site for disposal at a lawful waste management facility. Θ **Management of Poultry Mortalities:** Handling of mortalities is undertaken in accordance with biosecurity protocols to prevent contamination of operational areas and to limit attraction of scavengers or vermin. Poultry mortalities are currently disposed of through on-site incineration using a dedicated burn bin. This BAR and associated EMPr propose that incineration be discontinued and replaced with a controlled on-site composting system for the management of routine mortalities, as outlined in the mitigation measures contained herein. Θ **Management of Broken or Rejected Eggs:** Broken or rejected eggs are collected separately, frozen, and sold to a registered client for further processing. This practice reduces organic waste volumes and promotes beneficial reuse. Θ **Prevention of Litter and Vermin Attraction:** Waste storage areas are maintained in a clean and orderly condition. Refuse containers remain covered to prevent access by vermin and to minimise odour generation. Θ **Routine Collection and Housekeeping:** Waste is removed from operational areas at regular (weekly or as needed) intervals to prevent accumulation. Good housekeeping practices are maintained throughout the facility.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Sewerage Management:** Domestic effluent generated from employee ablution facilities is directed to the existing on-site septic tank system. The system provides primary treatment through settlement of solids and anaerobic digestion. Partially treated effluent from the septic tank is conveyed to an operational French drain system, where it is dispersed into the subsurface soil environment for further natural filtration and biological breakdown. No domestic effluent is discharged to drainage lines, or surface water resources. The septic tank system has historically serviced the farmstead and has adequate capacity to accommodate the current effluent volumes. The septic tank and French drain are subject to regular (monthly) inspection and maintenance to ensure continued functionality and to prevent overflow, seepage, or system failure. **<u>The following additional mitigation measures are proposed for the development:</u>** Θ **Handling of Poultry Mortalities:** The following mitigation measures are proposed for the management of poultry mortalities through a controlled on-site composting system, in replacement of incineration. The measures are intended to manage biosecurity risks, odour generation, vermin attraction, leachate formation, and potential soil or water contamination. Routine mortalities (low-volume / ad hoc) arising under normal operational conditions must be managed as follows: o Chicken mortalities must be identified and removed immediately from the facility. The source of these deaths must immediately be investigated.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			○ Workers must receive training on the effective handling of sick and dead animals. ○ Mortality management must comply with relevant provisions of the National Environmental Management: Waste Act, the Animal Diseases Act, and any directives issued by the competent authority. ○ **Dedicated Composting Area:** A designated mortality composting area must be established outside of drainage lines and the riparian buffer of the Tierpoort River. The site must be located on stable, well-drained ground and outside of flood-prone areas. ○ **Setback From Water Resources:** The composting area must be positioned at an appropriate setback (>120 m) from the Tierpoort River and any dams to prevent nutrient migration or leachate contamination. ○ **Engineered Composting Base:** The composting system must be established on a compacted, low-permeability surface (e.g., compacted clay layer or concrete slab) to minimise seepage of leachate into the soil profile. ○ **Leachate Control**: The composting area must be graded to prevent runoff and, where necessary, include containment measures to prevent leachate from leaving the composting footprint. ○ **Carbon Source Incorporation**: Carcasses must be layered with an adequate carbon source (e.g., dry litter, straw, or wood chips) to ensure appropriate carbon-to-nitrogen ratios and to promote aerobic decomposition.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			○ **Complete Carcass Coverage:** Carcasses must be fully covered with carbon material to prevent odour generation and access by scavengers. ○ **Aerobic Composting Management:** Compost piles must be managed to maintain aerobic conditions and appropriate internal temperatures to ensure effective pathogen reduction. ○ **Vermin and Scavenger Control:** The composting area must be fenced or otherwise secured to prevent access by domestic animals, wildlife, and vermin. ○ **Odour Monitoring:** The composting system must be monitored for odour generation, and corrective action taken where necessary (e.g., additional carbon material or re-covering). ○ **Compost Maturation and Reuse:** Composted material must be allowed to mature fully before being applied to agricultural land. Mature compost may be incorporated into fields in accordance with nutrient management principles. ○ **Record Keeping**: Records of routine mortalities and composting volumes must be maintained for monitoring and compliance purposes. ○ In the event of unusual mortality events or disease outbreaks the mitigation measures listed in the EMPr must be adhered to. Θ **Record Keeping:** Records of waste removal and disposal must be maintained for monitoring and compliance purposes.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Monitoring and Corrective Actions:** Any indication of sewerage system malfunction (e.g., odour, pooling, slow drainage) must trigger immediate inspection and corrective action to prevent environmental contamination. Θ **Proposed Wash Water Management System:** It is proposed that all wash water generated during house cleaning be directed to the settling pond (refer to stormwater control measures above) for controlled management and subsequent beneficial reuse. **1. Collection and Containment** o Floor gradients and/or drainage channels must be installed or improved to direct wash water towards a designated collection point. o Wash water must be conveyed to a lined or appropriately compacted settling pond designed to prevent uncontrolled seepage. **2. 3. Beneficial Reuse through Land Application** o The clarified effluent can be applied to designated agricultural land on the farm as nutrient-rich irrigation water. o Application rates must be controlled to: • Prevent surface runoff, • Avoid ponding, • Prevent over-saturation of soils, • Minimise the risk of nutrient leaching.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
	Θ Risk to poultry health during power outages if ventilation fails.	Low	**6. <u>ENERGY SECURITY AND VENTILATION MANAGEMENT</u>** The following mitigation measures are implemented to manage the risk to poultry health associated with potential power outages, specifically in relation to ventilation system failure within the layer houses. Θ **Provision of Standby Generator:** The facility is equipped with a standby generator to supply emergency power in the event of electricity supply interruptions. The generator provides backup power to critical systems, including ventilation and essential operational equipment. Θ **Routine Generator Testing and Maintenance:** The standby generator is subject to routine inspection, testing, and maintenance to ensure operational readiness. Scheduled testing is undertaken to verify functionality and fuel availability. Θ **Installation of Solar Power System:** The Applicant is in the process of installing a solar power system to supplement grid electricity supply. The integration of solar energy is intended to enhance energy security and reduce reliance on grid power, thereby reducing the likelihood and severity of ventilation interruptions during power outages. Θ **Monitoring of Environmental Conditions:** Temperature and airflow within the layer houses are monitored to detect deviations from acceptable operating ranges. Appropriate corrective action is implemented where required. Operational staff are trained to respond to power failures, including prompt activation of the standby generator and monitoring of ventilation performance during outage conditions.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
	Θ Job creation and improved employment stability **(Positive Impact).**	Medium-High (+)	Positive Impact – No Mitigation Needed.
	INDIRECT IMPACTS	**INDIRECT IMPACTS**	**INDIRECT IMPACTS**
	Θ Potential attraction of pests such as rodents, flies and scavenger birds.	Low	Refer to *5. Waste Management* above.
	Θ Risk of soil or groundwater contamination if manure or wastewater is mismanaged.	Low	Refer to: *2. Manure Management;* *3. Stormwater Management;* *5. Waste Management*.
	Θ Increased local traffic associated with feed delivery and egg distribution.	Medium	**7. <u>TRAFFIC MANAGEMENT</u>** The following mitigation measures are implemented to manage increased local traffic associated with the facility. Θ **Daytime Scheduling of Deliveries and Collections:** Feed deliveries, egg collection, and other transport-related activities are scheduled during daylight hours to reduce safety risks and minimise disturbance. Θ **Use of Designated Access Routes:** All delivery and collection vehicles utilise established access roads to and from the facility. No informal access routes are permitted.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Driver Conduct Requirements:** Drivers accessing the facility are required to adhere to safe driving practices, including compliance with speed limits on farm roads and surrounding public roads. Θ **Vehicle Roadworthiness:** Transport vehicles servicing the facility are required to be roadworthy and maintained in good working condition to prevent excessive noise, emissions, or fluid leaks. Θ **Dust Management on Access Road (Where Required):** Should increased traffic result in noticeable dust generation on the gravel access road, appropriate dust suppression measures must be implemented where necessary.
	Θ Potential spread of alien invasive plant species in denuded areas.	Low	**8. <u>GROUNDCOVER AND VEGETATION MANAGEMENT</u>** To maintain a safe, clean, and operationally efficient environment around the poultry houses, management has implemented several groundcover management measures. **Regular Vegetation Control** Θ Routine removal of pioneer and alien invasive plant species through mechanical clearing and hand-pulling. Θ Periodic slashing or mowing of regrowth to maintain low vegetation height and prevent fuel build-up for fire risk. **Invasive Plant Species Management** Θ Identification and removal of alien invasive plant species in accordance with the Alien and Invasive Species Regulations (NEM:BA).

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Prevention of Excessive Vegetation Encroachment Θ Maintaining vegetation-free zones immediately adjacent to the poultry houses to reduce fire risk, pests, and potential disease vectors. Θ Ensuring pathways, working surfaces, and service areas remain clear of dense vegetation. **Soil Stabilisation Measures** Θ Monitoring compacted areas for signs of erosion and implementing stabilisation measures where needed (e.g., contouring, light compaction, or gravel placement in high-traffic areas). **Operational Hygiene and Biosecurity** Θ Ensuring that vegetation control forms part of the facility's broader biosecurity plan, contributing to disease prevention and improved flock health.
	Θ Night-time lighting effects, if unmanaged.	Low	**9. <u>LIGHTING MANAGEMENT</u>** The following mitigation measures are implemented to manage potential visual and ecological impacts associated with night-time lighting at the facility. Θ **Minimal Use of External Lighting:** Outdoor lighting is limited to areas where illumination is required for safety and essential operational activities. No unnecessary lighting is installed within the facility. Lights are switched off when not required, and no floodlighting or high-mast lighting is utilised on site.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Directional and Shielded Fixtures:** All external lighting is fitted with downward-facing, shielded luminaires designed to prevent horizontal light spill and to minimise sky glow beyond the immediate operational footprint. Θ **Controlled Light Intensity:** Lighting intensity is maintained at the lowest level practicable to ensure adequate visibility while limiting glare and excessive illumination. Θ **Use of Energy-Efficient Lighting:** Energy-efficient bulbs are utilised to reduce overall light output and energy consumption. Θ **Maintenance of Poultry House Dark Period:** Internal lighting within the poultry houses is managed to maintain appropriate dark periods during night-time hours in accordance with poultry husbandry requirements. This ensures that birds are able to rest undisturbed.
	Θ Potential spread of disease if hygiene and biosecurity measures are not maintained.	Low	**10. <u>BIOSECURITY MANAGEMENT</u>** The following mitigation measures are implemented to manage biosecurity risks at the layer facility. Θ **Perimeter Fencing and Controlled Access:** The facility is enclosed by perimeter fencing to restrict unauthorised access. Entry to the layer houses and operational areas is controlled to limit potential disease introduction.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Single Layer Facility on Farm:** Only one layer facility operates on the farm. The absence of multiple poultry units reduces the risk of inter-house disease transmission within the property. Θ **Employee Training:** Employees receive annual training on biosecurity protocols, including cross-contamination prevention, hygiene practices, and disease awareness. Proof of training registers must be filed for auditing purposes. Θ **Footbaths and Sanitation Measures:** Footbaths and sanitation stations are provided at designated entry points to poultry houses. These are maintained and replenished to ensure effectiveness in reducing pathogen transfer. Θ **Personal Hygiene and Protective Clothing:** Personnel entering poultry houses utilise appropriate protective clothing and footwear dedicated to the facility to minimise cross-contamination risks. Θ **Visitor Control:** Visitor access to poultry houses is restricted and subject to biosecurity controls where entry is required. Θ **Cleaning and Disinfection Protocols:** Cleaning and disinfection procedures are implemented in accordance with poultry management standards to maintain hygienic conditions within the houses and associated operational areas. Θ **Control of Vectors and Pests:** Measures are implemented to control rodents, wild birds, and other potential disease vectors within the facility (refer to *5. Waste Management*).

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Mortality Management:** Poultry mortalities are managed in a controlled and hygienic manner to prevent disease spread and environmental contamination (refer to *5. Waste Management*). Θ **Monitoring and Record Keeping:** Records of health monitoring, mortality rates, veterinary visits, and biosecurity incidents are maintained for management and compliance purposes.
	Θ Strengthening of local agricultural value chains (feed, transport, egg supply) **(Positive Impact)**.	Medium-High (+)	Positive Impact – No Mitigation Needed.
	CUMULATIVE IMPACTS	**CUMULATIVE IMPACTS**	**CUMULATIVE IMPACTS**
	Θ Cumulative odour and traffic impacts in combination with other agricultural activities in the area.	Medium	Refer to: *2. Manure Management;* *5. Waste Management;* *7. Traffic Management.*
	Θ Incremental pressure on local water resources.	Medium	Refer to: *1. Water Use;* *3. Stormwater Management;* *5. Waste Management.*

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
	Θ Contribution to local food security **(Positive Impact)**.	Medium-High (+)	Positive Impact – No Mitigation Needed.
	Θ Increased productivity and economic activity **(Positive Impact)**.	Medium-High (+)	Positive Impact – No Mitigation Needed.
DECOMMISSIONING PHASE			
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	**DIRECT IMPACTS**	**DIRECT IMPACTS**	**DIRECT IMPACTS**
	Θ Temporary disturbance of soil during dismantling of structures.	Low-Medium	**1. <u>SOIL DISTURBANCE AND DEMOLITION WASTE MANAGEMENT</u>** The following mitigation measures must be implemented during the decommissioning phase to manage temporary soil disturbance and the generation of demolition waste, and to prevent secondary impacts such as erosion, dust generation, and pollution. Θ **Demarcation of Work Areas:** Areas to be disturbed during demolition activities must be clearly demarcated prior to commencement of works. Disturbance must be limited to the minimum area required for safe decommissioning. Θ **Erosion and Stormwater Control:** Appropriate erosion control measures (e.g., berms, silt fencing, diversion drains) must be implemented to prevent sediment-laden runoff from leaving the site during demolition activities.
	Θ Generation of demolition waste.	Low-Medium	
	Θ Noise and dust associated with removal activities.	Low-Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Dust Suppression:** Dust generated during demolition and soil disturbance must be controlled through appropriate measures such as dampening of surfaces or controlled demolition techniques, particularly during dry and windy conditions. Θ **Restriction of Working Hours:** Demolition activities must be restricted to daylight hours to minimise noise disturbance to nearby receptors. All demolition machinery and equipment must be maintained in good working order, including silencers and exhaust systems, to prevent excessive noise emissions. Θ **Segregation of Demolition Waste:** Demolition waste must be separated into general waste, recyclable materials (e.g., scrap metal), and hazardous waste (if any) to facilitate appropriate disposal or recycling. Θ **Disposal at Licensed Facilities:** All demolition waste must be transported to appropriately licensed waste disposal or recycling facilities. No unlawful dumping or on-site burial of waste is permitted. Proof of safe disposal must be filed for auditing purposes. Θ **Hazardous Material Handling (If Applicable):** Any hazardous materials identified during demolition (e.g., fuel residues, oils, if present) must be handled and disposed of in accordance with applicable waste management legislation. Proof of safe disposal must be filed for auditing purposes. Θ **Removal of Infrastructure and Hard Surfaces:** Foundations, concrete slabs, and underground infrastructure (if any) must be removed where feasible, unless otherwise agreed for beneficial reuse. Remaining subsurface structures must not pose a contamination or safety risk.

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
			Θ **Rehabilitation of Disturbed Areas:** Upon completion of demolition, disturbed areas must be re-profiled to match surrounding land contours, topsoil replaced, and the area stabilised to prevent erosion. Θ **Re-vegetation:** Disturbed areas must be re-vegetated with appropriate indigenous grass species suitable for the local area to promote soil stabilisation and ecological recovery. Θ **Site Clean-Up:** The site must be cleared of all construction rubble, waste materials, and temporary infrastructure prior to final closure. Θ **Monitoring of Rehabilitation Success:** Rehabilitated areas must be monitored to ensure vegetation establishment and soil stability. Corrective measures must be implemented where erosion or poor vegetation establishment is observed.
	INDIRECT IMPACTS		
	Θ Temporary increase in heavy vehicle movement during removal of infrastructure.	Low-Medium	Refer to: *7. Traffic Management.*

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (CURRENT STATUS)	PROPOSED MITIGATION
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)			
	CUMULATIVE IMPACTS		
	Θ Loss of employment opportunities.	High	2. **SOCIO-ECONOMIC (EMPLOYMENT) MITIGATION** The following mitigation measures must be implemented to manage potential socio-economic impacts associated with the loss of employment during the decommissioning phase: Θ **Advance Notice of Closure:** Employees must be informed of the intended decommissioning and closure timeframe in advance to allow reasonable opportunity for financial planning and alternative employment arrangements. Θ **Compliance With Labour Legislation:** Any retrenchment or termination processes must be undertaken in accordance with applicable labour legislation, including fair consultation procedures and statutory notice periods. Θ **Phased Decommissioning Where Practicable:** Where feasible, decommissioning activities may be phased to avoid abrupt termination of all employment at once. Θ **Temporary Employment During Decommissioning:** Affected employees may be prioritised for temporary employment opportunities associated with decommissioning, demolition, site clean-up, and rehabilitation activities, where skills and safety requirements permit.
	Θ Reduction of operational impacts post-closure **(Positive Impact)**.	Medium (+)	Positive Impact – No Mitigation Needed.

b) SITE ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (PRE-MITIGATION)	PROPOSED MITIGATION
SITE ALTERNATIVE 2			
DESIGN, PLANNING AND CONSTRUCTION PHASE			
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Site Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Clearance of agricultural crops from cultivated land.	Low-Medium	
	Θ Greater earthworks associated with establishment of new infrastructure.	Medium	
	Θ Generation of construction waste.	Low-Medium	
	INDIRECT IMPACTS		
	Θ Potential spread of alien invasive species in disturbed areas.	Low-Medium	
	Θ Increased dust and noise relative to S1.	Medium	
	Θ Installation of new bulk services infrastructure.	Medium	
	CUMULATIVE IMPACTS		
	Θ Expansion of agricultural footprint into previously undeveloped area.	Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (PRE-MITIGATION)	PROPOSED MITIGATION
SITE ALTERNATIVE 2			
	Θ Greater cumulative landscape transformation compared to S1.	Medium	
OPERATIONAL PHASE			
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Site Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Permanent loss of high-potential agricultural land.	Medium	
	Θ Increased water demand associated with poultry production.	Medium	
	Θ Generation of manure requiring management and disposal or reuse.	Medium	
	Θ Potential odour emissions from poultry houses and manure storage areas.	Medium	
	Θ Operational noise from ventilation fans, generator and loading activities.	Low-Medium	
	Θ Generation of general operational waste (feed bags, packaging, mortalities).	Medium	
	Θ Risk to poultry health during power outages if ventilation fails	Low-Medium	
	Θ Job creation and improved employment stability **(Positive Impact).**	Medium-High (+)	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (PRE-MITIGATION)	PROPOSED MITIGATION
SITE ALTERNATIVE 2			
	INDIRECT IMPACTS		
	Θ Potential attraction of pests such as rodents, flies and scavenger birds.	Medium	
	Θ Risk of soil or groundwater contamination if manure or wastewater is mismanaged.	Medium-High	
	Θ Increased local traffic associated with feed delivery and egg distribution.	Medium	
	Θ Potential spread of alien invasive plant species in denuded areas.	Medium	
	Θ Night-time lighting effects, if unmanaged	Medium	
	Θ Potential spread of disease if hygiene and biosecurity measures are not maintained.	Medium	
	Θ Fragmentation of operations leading to increased internal traffic.	Medium	
	Θ Potential increased biosecurity risks due to spatial separation.	Medium-High	
	CUMULATIVE IMPACTS		
	Θ Cumulative odour and traffic impacts in combination with other agricultural activities in the area.	Medium-High	
	Θ Incremental pressure on local water resources.	Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE (PRE-MITIGATION)	PROPOSED MITIGATION
SITE ALTERNATIVE 2			
DECOMMISSIONING PHASE			
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**	**DIRECT IMPACTS**	Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Site Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Temporary disturbance of soil during dismantling of structures.	Low-Medium	
	Θ Generation of demolition waste.	Low-Medium	
	Θ Noise and dust associated with removal activities.	Low-Medium	
	INDIRECT IMPACTS	**INDIRECT IMPACTS**	
	Θ Temporary increase in heavy vehicle movement during removal of infrastructure.	Low-Medium	
	CUMULATIVE IMPACTS	**CUMULATIVE IMPACTS**	
	Θ Loss of employment opportunities.	High	
	Θ Reduction of operational impacts post-closure (Positive Impact)	Medium (+)	

c) LAYOUT ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
LAYOUT ALTERNATIVE 2			
DESIGN, PLANNING AND CONSTRUCTION PHASE			
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Layout Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Increased area of disturbance due to dispersed structures.	Medium	
	Θ Additional trenching for extended service infrastructure.	Medium	
	INDIRECT IMPACTS		
	Θ Higher soil compaction from extended access routes.	Medium	
	Θ Greater vegetation clearance.	Medium	
	CUMULATIVE IMPACTS		
	Θ Expanded operational footprint beyond consolidated node.	Medium	
OPERATIONAL PHASE			
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Layout Alternative 2 remains a theoretical alternative and does
	Θ Increased internal travel between separated buildings.	Medium	
	Θ Greater surface runoff from expanded hard surfaces.	Medium	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
LAYOUT ALTERNATIVE 2			
	INDIRECT IMPACTS		not require construction, operational or decommissioning mitigation measures.
	Θ Higher biosecurity risk due to movement between dispersed structures.	Medium	
	CUMULATIVE IMPACTS		
	Θ Greater long-term disturbance footprint.	Medium	
DECOMMISSIONING PHASE			
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Layout Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Removal of multiple dispersed infrastructure elements.	Medium	
	INDIRECT IMPACTS		
	Θ Increased rehabilitation area.	Medium	

d) TECHNOLOGY ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
TECHNOLOGY ALTERNATIVE 2 (MANUAL SYSTEM)			
DESIGN, PLANNING AND CONSTRUCTION PHASE			
Predominantly manual poultry production system with limited utilisation.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Technology Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Reduced infrastructure complexity but increased manual handling areas.	Medium-High	
	INDIRECT IMPACTS		
	Θ Potential need for additional labour facilities.	Medium-High	
OPERATIONAL PHASE			
Predominantly manual poultry production system with limited mechanization.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Technology Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Increased water and feed wastage.	Medium-High	
	Θ Greater risk of litter moisture and odour build-up.	Medium-High	
	Θ Higher manual waste handling requirements.	Medium-High	
	INDIRECT IMPACTS		
	Θ Increased human traffic within poultry houses.	Medium	
	Θ Higher potential disease transmission risk.	Medium-High	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
TECHNOLOGY ALTERNATIVE 2 (MANUAL SYSTEM)			
	CUMULATIVE IMPACTS		
	Θ Potential increase in nuisance impacts relative to automated system.	Medium-High	
DECOMMISSIONING PHASE			
Predominantly manual poultry production system with limited mechanization.	**DIRECT IMPACTS**		Given that NEMA Section 24G provides for rectification of an unlawfully commenced activity, mitigation measures are only applicable to the implemented alternatives (S1, L1, and T1). Technology Alternative 2 remains a theoretical alternative and does not require construction, operational or decommissioning mitigation measures.
	Θ Removal of smaller-scale infrastructure **(Positive Impact)**.	Low (+)	

e) NO-GO ALTERNATIVE

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
NO-GO ALTERNATIVE			
No expansion of the existing layer facility.	**DIRECT IMPACTS**		The No-Go alternative represents the scenario in which the unauthorised expansion of the layer facility does not remain operational. In the context of a NEMA Section 24G application, this would entail cessation of the expanded activities and potential decommissioning and rehabilitation. As the No-Go alternative does not constitute an operational activity, no mitigation measures are proposed. The No-Go option is assessed for comparative
	Θ Continuation of existing smaller-scale poultry operation only.	High	
	INDIRECT IMPACTS		
	Θ Foregone opportunity to utilise existing infrastructure optimally.	Medium-High	

ACTIVITY	IMPACT SUMMARY	SIGNIFICANCE	PROPOSED MITIGATION
NO-GO ALTERNATIVE			
	Θ Reduced economic activity and employment generation.	High	purposes to evaluate environmental outcomes relative to the implemented development.
	CUMULATIVE IMPACTS	**CUMULATIVE IMPACTS**	
	Θ No incremental agricultural intensification.	Medium-High	

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

2. 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.

a) SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
DESIGN, PLANNING AND CONSTRUCTION PHASE					
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	**DIRECT IMPACTS**				
	Θ Disturbance and compaction of soil within the existing farmyard footprint.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Temporary increase in dust generation due to earthworks and vehicle movement.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Generation of construction waste including rubble, packaging and scrap material.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Temporary noise from construction machinery and delivery vehicles.	Negative	1 – 3 Months	Definite	Low-Medium
	INDIRECT IMPACTS				
	Θ Temporary increase in local traffic associated with delivery of materials.	Negative	1 – 3 Months	Definite	Low-Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
	Θ Potential risk of soil or groundwater contamination if construction materials are mismanaged.	Negative	1 – 3 Months	Unlikely	Low
	Θ Short-term visual intrusion during construction activities.	Negative	1 – 3 Months	Definite	Low-Medium
	CUMULATIVE IMPACTS				
	Θ Incremental expansion of agricultural infrastructure within the existing operational node **(Positive Impact)**	Positive	1 – 3 Months	Definite	Medium-High (+)
	Θ Minor cumulative dust and noise contributions within the rural landscape.	Negative	1 – 3 Months	Definite	Low
OPERATIONAL PHASE					
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses	**DIRECT IMPACTS**				
	Θ Increased water demand associated with poultry production.	Negative	>15 Years	Definite	Medium
	Θ Generation of manure requiring management and disposal or reuse.	Negative	>15 Years	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	Θ Potential odour emissions from poultry houses and manure storage areas.	Negative	>15 Years	Possible	Low
	Θ Operational noise from ventilation fans, generator and loading activities.	Negative	>15 Years	Possible	Low
	Θ Generation of general operational waste (feed bags, packaging, mortalities).	Negative	>15 Years	Definite	Low-Medium
	Θ Risk to poultry health during power outages if ventilation fails.	Negative	>15 Years	Possible	Low
	Θ Job creation and improved employment stability **(Positive Impact).**	Positive	>15 Years	Definite	Medium-High (+)
	INDIRECT IMPACTS				
	Θ Potential attraction of pests such as rodents, flies and scavenger birds.	Negative	>15 Years	Possible	Low
	Θ Risk of soil or groundwater contamination if manure or wastewater is mismanaged.	Negative	>15 Years	Possible	Low
	Θ Increased local traffic associated with feed delivery and egg distribution.	Negative	>15 Years	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
	Θ Potential spread of alien invasive plant species in denuded areas.	Negative	>15 Years	Possible	Low
	Θ Night-time lighting effects, if unmanaged.	Negative	>15 Years	Possible	Low
	Θ Potential spread of disease if hygiene and biosecurity measures are not maintained.	Negative	>15 Years	Possible	Low
	Θ Strengthening of local agricultural value chains (feed, transport, egg supply) **(Positive Impact)**.	Positive	>15 Years	Definite	Medium-High (+)
	CUMULATIVE IMPACTS				
	Θ Cumulative odour and traffic impacts in combination with other agricultural activities in the area.	Negative	>15 Years	Possible	Medium
	Θ Incremental pressure on local water resources.	Negative	>15 Years	Possible	Medium
	Θ Contribution to local food security **(Positive Impact)**.	Positive	>15 Years	Definite	Medium-High (+)
	Θ Increased productivity and economic activity **(Positive Impact)**.	Positive	>15 Years	Definite	Medium-High (+)

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
DECOMMISSIONING PHASE					
Expansion of the existing layer facility within the established farmyard footprint (±0.76 ha). Compact east-west aligned layout of two parallel layer houses within a consolidated footprint. Use of automated feeding, watering, ventilation, manure removal and egg collection systems.	**DIRECT IMPACTS**				
	Θ Temporary disturbance of soil during dismantling of structures.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Generation of demolition waste.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Noise and dust associated with removal activities.	Negative	1 – 3 Months	Possible	Low-Medium
	INDIRECT IMPACTS				
	Θ Temporary increase in heavy vehicle movement during removal of infrastructure.	Negative	1 – 3 Months	Definite	Low-Medium
	CUMULATIVE IMPACTS				
	Θ Loss of employment opportunities.	Negative	1 – 3 Months	Definite	High

ACTIVITY	IMPACT SUMMARY	TYPE OF IMPACT	DURATION (COMPLETED)	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 1 (PREFERRED ALTERNATIVE) & LAYOUT ALTERNATIVE 1 (EXISTING LAYOUT) & TECHNOLOGY ALTERNATIVE 1 (AUTOMATED SYSTEM)					
	Θ Reduction of operational impacts post-closure **(Positive Impact)**.	Positive	1 – 3 Months	Definite	Medium (+)

b) SITE ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 2					
DESIGN, PLANNING AND CONSTRUCTION PHASE					
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**				
	Θ Clearance of agricultural crop from cultivated land.	Negative	3 – 12 Months	Definite	Low-Medium
	Θ Greater earthworks associated with establishment of new infrastructure.	Negative	3 – 12 Months	Definite	Medium
	Θ Generation of construction waste.	Negative	3 – 12 Months	Definite	Low-Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 2					
	INDIRECT IMPACTS				
	Θ Potential spread of alien invasive species in disturbed areas.	Negative	3 – 12 Months	Possible	Low
	Θ Increased dust and noise relative to S1.	Negative	3 – 12 Months	Definite	Medium
	Θ Installation of new bulk services infrastructure.	Negative	3 – 12 Months	Definite	Medium
	CUMULATIVE IMPACTS				
	Θ Expansion of agricultural footprint into previously undeveloped area.	Negative	3 – 12 Months	Definite	Medium
	Θ Greater cumulative landscape transformation compared to S1.	Negative	3 – 12 Months	Definite	Medium
OPERATIONAL PHASE					
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**				
	Θ Permanent loss of high-potential agricultural land.	Negative	>15 Years	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 2					
	Θ Increased water demand associated with poultry production.	Negative	>15 Years	Definite	Medium
	Θ Generation of manure requiring management and disposal or reuse.	Negative	>15 Years	Definite	Medium
	Θ Potential odour emissions from poultry houses and manure storage areas.	Negative	>15 Years	Possible	Low
	Θ Operational noise from ventilation fans, generator and loading activities.	Negative	>15 Years	Possible	Low
	Θ Generation of general operational waste (feed bags, packaging, mortalities).	Negative	>15 Years	Definite	Low-Medium
	Θ Risk to poultry health during power outages if ventilation fails	Negative	>15 Years	Possible	Low
	Θ Job creation and improved employment stability **(Positive Impact).**	Positive	>15 Years	Definite	Medium-High (+)
	INDIRECT IMPACTS				
	Θ Potential attraction of pests such as rodents, flies and scavenger birds.	Negative	>15 Years	Possible	Low
	Θ Risk of soil or groundwater contamination if manure or wastewater is mismanaged.	Negative	>15 Years	Possible	Low

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
	SITE ALTERNATIVE 2				
	Θ Increased local traffic associated with feed delivery and egg distribution.	Negative	>15 Years	Definite	Medium
	Θ Potential spread of alien invasive plant species in denuded areas.	Negative	>15 Years	Possible	Low
	Θ Night-time lighting effects, if unmanaged	Negative	>15 Years	Possible	Low
	Θ Potential spread of disease if hygiene and biosecurity measures are not maintained.	Negative	>15 Years	Possible	Low
	Θ Fragmentation of operations leading to increased internal traffic.	Negative	>15 Years	Definite	Medium
	Θ Potential increased biosecurity risks due to spatial separation.	Negative	>15 Years	Possible	Low-Medium
	CUMULATIVE IMPACTS				
	Θ Cumulative odour and traffic impacts in combination with other agricultural activities in the area.	Negative	>15 Years	Possible	Medium
	Θ Incremental pressure on local water resources.	Negative	>15 Years	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE (POST-MITIGATION)
SITE ALTERNATIVE 2					
DECOMMISSIONING PHASE					
Development of two new layer houses on cultivated land.	**DIRECT IMPACTS**				
	Θ Temporary disturbance of soil during dismantling of structures.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Generation of demolition waste.	Negative	1 – 3 Months	Definite	Low-Medium
	Θ Noise and dust associated with removal activities.	Negative	1 – 3 Months	Possible	Low-Medium
	INDIRECT IMPACTS				
	Θ Temporary increase in heavy vehicle movement during removal of infrastructure.	Negative	1 – 3 Months	Definite	Low-Medium
	CUMULATIVE IMPACTS				
	Θ Loss of employment opportunities.	Negative	1 – 3 Months	Definite	High
	Θ Reduction of operational impacts post-closure (Positive Impact)	Positive	1 – 3 Months	Definite	Medium (+)

c) LAYOUT ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
LAYOUT ALTERNATIVE 2					
DESIGN, PLANNING AND CONSTRUCTION PHASE					
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**				
	Θ Increased area of disturbance due to dispersed structures.	Negative	3 – 12 Months	Definite	Medium
	Θ Additional trenching for extended service infrastructure.	Negative	3 – 12 Months	Definite	Medium
	INDIRECT IMPACTS				
	Θ Higher soil compaction from extended access routes.	Negative	3 – 12 Months	Definite	Medium
	Θ Greater vegetation clearance.	Negative	3 – 12 Months	Definite	Medium
	CUMULATIVE IMPACTS				
	Θ Expanded operational footprint beyond consolidated node.	Negative	3 – 12 Months	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
LAYOUT ALTERNATIVE 2					
OPERATIONAL PHASE					
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**				
	Θ Increased internal travel between separated buildings.	Negative	>15 Years	Definite	Medium
	Θ Greater surface runoff from expanded hard surfaces.	Negative	>15 Years	Definite	Medium
	INDIRECT IMPACTS				
	Θ Higher biosecurity risk due to movement between dispersed structures.	Negative	>15 Years	Definite	Medium
	CUMULATIVE IMPACTS				
	Θ Greater long-term disturbance footprint.	Negative	>15 Years	Definite	Medium

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
LAYOUT ALTERNATIVE 2					
DECOMMISSIONING PHASE					
Dispersed or reconfigured layout with spatially separated poultry houses and support infrastructure.	**DIRECT IMPACTS**				
	Θ Removal of multiple dispersed infrastructure elements.	Negative	3 – 6 Months	Definite	Medium
	INDIRECT IMPACTS				
	Θ Increased rehabilitation area.	Negative	3 – 6 Months	Definite	Medium

d) TECHNOLOGY ALTERNATIVE 2

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
TECHNOLOGY ALTERNATIVE 2					
DESIGN, PLANNING AND CONSTRUCTION PHASE					
Predominantly manual poultry production system with limited mechanisation.	**DIRECT IMPACTS**				
	Θ Reduced infrastructure complexity but increased manual handling areas.	Negative	1 – 3 Months	Definite	Medium-High
	INDIRECT IMPACTS				
	Θ Potential need for additional labour facilities.	Negative	1 – 3 Months	Possible	Medium-High
OPERATIONAL PHASE					
Predominantly manual poultry production system with limited mechanization.	**DIRECT IMPACTS**				
	Θ Increased water and feed wastage.	Negative	>15 Years	Definite	Medium-High
	Θ Greater risk of litter moisture and odour build-up.	Negative	>15 Years	Definite	Medium-High

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
TECHNOLOGY ALTERNATIVE 2					
	Θ Higher manual waste handling requirements.	Negative	>15 Years	Definite	Medium-High
	INDIRECT IMPACTS				
	Θ Increased human traffic within poultry houses.	Negative	>15 Years	Definite	Medium
	Θ Higher potential disease transmission risk.	Negative	>15 Years	Definite	Medium-High
	CUMULATIVE IMPACTS				
	Θ Potential increase in nuisance impacts relative to automated system.	Negative	>15 Years	Definite	Medium-High
DECOMMISSIONING PHASE					
Predominantly manual poultry production system with limited mechanization.	**DIRECT IMPACTS**				
	Θ Removal of smaller-scale infrastructure **(Positive Impact).**	Positive	1 – 2 Months	Definite	Low (+)

e) NO-GO ALTERNATIVE

ACTIVITY	IMPACT SUMMARY	TYPE OF ACTIVITY	DURATION	LIKELIHOOD	SIGNIFICANCE
NO-GO ALTERNATIVE					
No expansion of the existing layer facility.	**DIRECT IMPACTS**				
	Θ Continuation of existing smaller-scale poultry operation only.	Negative	Indefinite	Definite	High
	INDIRECT IMPACTS				
	Θ Foregone opportunity to utilise existing infrastructure optimally.	Negative	Indefinite	Definite	Medium-High
	Θ Reduced economic activity and employment generation.	Negative	Indefinite	Definite	High
	CUMULATIVE IMPACTS				
	Θ No incremental agricultural intensification.	Negative	Indefinite	Definite	Medium-High

SECTION E. RECOMMENDATION 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 X

EAP CONCLUSION AND RECOMMENDATION

Based on the findings of this Basic Assessment, it is the opinion of the Environmental Assessment Practitioner (EAP) that the environmental impacts associated with the unauthorised expansion of the layer facility on Farm Chez Nous No 1775 are localised and can be effectively mitigated through the implementation of the management and mitigation measures contained in this report and incorporated into the Environmental Management Programme (EMPr).

The activity is situated within an established agricultural setting and was implemented within a previously transformed footprint. No fatal flaws were identified during the assessment process. Potential impacts relating to stormwater management, manure handling, mortality management, waste management, noise, traffic, lighting, biosecurity, and water use can be reduced to acceptable levels through adherence to the prescribed mitigation measures and ongoing operational controls.

The proposed corrective measures, including improved stormwater management and the replacement of on-site incineration with a controlled mortality composting system, further reduce potential environmental risks and strengthen regulatory compliance.

It is therefore recommended that Environmental Authorisation be granted in terms of Section 24G of the National Environmental Management Act, 1998 (Act 107 of 1998), subject to appropriate conditions and strict implementation of the approved EMPr.

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.

It is recommended that Environmental Authorisation be granted for the rectification of the activity, subject to strict compliance with the mitigation measures and management actions contained in Section D of this Basic Assessment Report and as incorporated into the Environmental Management Programme (EMPr).

It is further recommended that the EMPr be made binding and form part of the conditions of authorisation. Compliance with all applicable environmental legislation, including but not limited to the National Environmental Management Act, 1998 (Act 107 of 1998), the National Environmental Management: Waste Act, 2008 (Act 59 of 2008), the National Water Act, 1998 (Act 36 of 1998), and the National Heritage Resources Act, 1999 (Act 25 of 1999), must be maintained throughout the operational phase of the facility.

Is an EMPr attached?	YES X

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Christine Fouché

_____

NAME OF EAP

_____ _____

SIGNATURE OF EAP DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

- A1: Locality Map
- A2: Site Layout Plan 1 – Farm Boundaries
- A3: Site Layout Plan 2 – Site Alternative 1
- A4: Sensitivity Map

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference) – N/A

Appendix E: Public Participation

- E1: Proof of Newspaper Advertisement & Site Notices
- E2: Proof of Public Participation *(to be included in FBAR)*
- E3: I&AP Comments and Response Report *(to be included in FBAR)*
- E4: Authorities and Organs of State Comments and Response Report *(to be included in FBAR)*
- E5: List of Registered I&AP's (*to be included in FBAR)*
- E6: Minutes of Meetings (*(to be included in FBAR if applicable)*

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest – N/A

Appendix J: Additional Information

- J1 – Water Use Authorisation *(Non-public Document)*