Identified impacts and risks for each alternative:

Proposed Layout Alternative 1 AND Proposed Layout Alternative 2 Please note that while both proposed layout alternatives have the same identified impacts the ratings and measure of mitigation may differ	<u>Impacts that may result from the Development Phase (Planning, Design and Construction):</u> 1) Higher intensity agriculture and increased hardened surfaces within the agricultural landscape. 2) Potential impacts on the CVB wetland through increased sedimentation, altered surface water flow patterns, and impaired water quality resulting from vegetation clearance, soil disturbance, compaction, creation of hardened surfaces, and contaminated runoff during construction activities. 3) Employment opportunities during the construction phase- The development has led, and the proposed expansion will lead, to temporary employment opportunities during construction. 4) Waste generation from construction activities – general construction waste. 5) A degree of dust would have been generated during construction of the existing development and will be generated during the construction of the proposed expansion. 6) A degree of noise would have been generated during construction of the existing development and will be generated during the construction of the proposed expansion. 7) Possible increase in visual intrusion within the agricultural landscape. <u>Impacts that may result from the Operational phase:</u> 8) Intensified use of access roads. 9) Potential impacts on the CVB wetland due to impaired water quality and altered hydrological regime resulting from contaminated stormwater runoff and increased impervious surfaces reducing infiltration and increasing overland flow. 10) Waste generation from operational phase. 11) Infectious mortalities may occur during the operational phase. 12) Odour generated from chicken pens. 13) Employment opportunities from expanded onsite agricultural operations. 14) Noise and dust generated from operational activities on site. 15) Possible increase in visual intrusion within the agricultural landscape. <u>Impacts that may result from the decommissioning and closure phase:</u> No decommissioning-related impacts have been identified, as it is not anticipated that the development will be decommissioned should it proceed.
No-Go Alternative	<u>The 'No-Go' option, where the development of the new onsite poultry rearing facility is not pursued, was evaluated and the following potential impacts identified:</u> 1) Loss of economic opportunities - No new jobs will be created, limiting employment opportunities for the local community. 2) Reduces increase in food supply: The local or regional poultry supply may not expand as anticipated, potentially affecting food availability and price stability. 3) Underutilization of Land: Land designated for the facility may remain unproductive. 4) Reduced support for local suppliers: Suppliers and service providers who would have benefited from increased demand for materials, feed, and other resources will miss out on these economic opportunities.

Impacts associated with Design and Construction Phase

Impacts on geographical and physical aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Higher intensity agriculture and increased hardened surfaces within the agricultural landscape**	**Higher intensity agriculture and increased hardened surfaces within the agricultural landscape**
Extent and duration of impact:	**Local; medium term**	**Local; medium term**
Probability of occurrence:	**Definite**	**Definite**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**	**Unlikely**
Cumulative impact prior to mitigation:	**Higher intensity agriculture, increased runoff and potential erosion and sedimentation**	**Higher intensity agriculture, increased runoff and potential erosion and sedimentation**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**	**MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Prevent unnecessary exposure of bare ground (vulnerable to erosion) by minimising the area to be cleared around each unit and clearing land areas in phases as required for construction.** - **Establish pastureland and boundary landscaping as soon as possible after clearing.** - **Colours on panels of units to be natural colours.**	**Already Implemented:** - **Minimized development footprint compared to Layout 1** **To be implemented:** - **Prevent unnecessary exposure of bare ground (vulnerable to erosion) by minimising the area to be cleared around each unit and clearing land areas in phases as required for construction.** - **Establish pastureland and boundary landscaping as soon as possible after clearing.** - **Colours on panels of units to be natural colours.**

Cumulative impact post mitigation:	**Slight increase in site runoff and potential erosion. Screening vegetation may be higher than the surrounding vegetation, however units will be less noticeable.**	**Slight increase in site runoff and potential erosion. Screening vegetation may be higher than the surrounding vegetation, however units will be less noticeable.**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW-MEDIUM (-ve)**	**LOW (-ve)**

Impact on biological aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Potential impacts on the CVB wetland through increased sedimentation, altered surface water flow patterns, and impaired water quality resulting from vegetation clearance, soil disturbance, compaction, creation of hardened surfaces, and contaminated runoff during construction activities.**	**Potential impacts on the CVB wetland through increased sedimentation, altered surface water flow patterns, and impaired water quality resulting from vegetation clearance, soil disturbance, compaction, creation of hardened surfaces, and contaminated runoff during construction activities.**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Not likely**	**Not likely**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Not likely**	**Not likely**
Cumulative impact prior to mitigation:	**Water quality of nearby watercourses (>32m) potentially affected (localised)**	**Water quality of nearby watercourses (>32m) potentially affected (localised)**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Likely**	**Likely**
Proposed mitigation:	- **The CVB wetland and buffer area should be demarcated as a No-Go area for the development.** - **No polluted stormwater should discharge into the CVB wetland during both the construction and operational phase of the development. Stormwater**	**Already Implemented:** - **Development footprint set-back from the freshwater system compared to layout 1** **To be implemented:** - **The CVB wetland and buffer area should be demarcated as a No-Go area for the development.**

	management must ensure that no runoff or treated wastewater (WW), which will impair the water quality and lead to increased sedimentation, may enter the onsite wetland. - Bunded, impervious areas must be designated by an ECO for temporary toilets, stockpiles, vehicle parking / servicing areas, and for pouring / mixing of concrete / cement, paint, and chemicals (as applicable). These areas should be more than 32 m away from any delineated watercourse. Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. - Inspect all facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. - Construction/maintenance vehicles should be regularly serviced. - Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces. - Drip trays must be utilised at all fuel dispensing areas, as applicable. - Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the watercourse and its	- No polluted stormwater should discharge into the CVB wetland during both the construction and operational phase of the development. Stormwater management must ensure that no runoff or treated wastewater (WW), which will impair the water quality and lead to increased sedimentation, may enter the onsite wetland. - Bunded, impervious areas must be designated by an ECO for temporary toilets, stockpiles, vehicle parking / servicing areas, and for pouring / mixing of concrete / cement, paint, and chemicals (as applicable). These areas should be more than 32 m away from any delineated watercourse. Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. - Inspect all facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. - Construction/maintenance vehicles should be regularly serviced. - Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces. - Drip trays must be utilised at all fuel dispensing areas, as applicable.

	associated buffer area and should only occur on bunded areas with a water/oil/grease separator. - Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site. - Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO / EAP outside of the no-go areas. Surplus or waste concrete must be sent back to the supplier who will dispose of it. - Construct temporary bunds around areas where cement is to be cast in situ. - Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go areas is strictly prohibited. - Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site. - Clear and remove any rubble or litter that may have been accidentally deposited into the watercourse and associated buffer area as a result of construction activities and dispose of at an appropriate registered facility. - Undertake construction related activities during the dry season	- Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the watercourse and its associated buffer area and should only occur on bunded areas with a water/oil/grease separator. - Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site. - Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO / EAP outside of the no-go areas. Surplus or waste concrete must be sent back to the supplier who will dispose of it. - Construct temporary bunds around areas where cement is to be cast in situ. - Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go areas is strictly prohibited. - Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site. - Clear and remove any rubble or litter that may have been accidentally deposited into the watercourse and associated buffer area as a result of

	when flow within the watercourse is at its lowest. - Implement appropriate erosion control measures in susceptible areas, such as using geotextiles, brush packing, straw bales, mulch, sandbags, and silt fences or traps to prevent sediment runoff.	construction activities and dispose of at an appropriate registered facility. - Undertake construction related activities during the dry season when flow within the watercourse is at its lowest. - Implement appropriate erosion control measures in susceptible areas, such as using geotextiles, brush packing, straw bales, mulch, sandbags, and silt fences or traps to prevent sediment runoff.
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**VERY LOW (-ve)**

Impacts on socio-economic aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Employment opportunities during the construction phase – The proposed expansion will lead to temporary employment opportunities during construction.**	**Employment opportunities during the construction phase – The proposed expansion will lead to temporary employment opportunities during construction.**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Highly probable**	**Highly probable**
Degree to which the impact can be reversed:	**Not required**	**Not required**
Degree to which the impact may cause irreplaceable loss of resources:	**Not likely**	**Not likely**
Cumulative impact prior to mitigation:	**Job creation amongst low-income families**	**Job creation amongst low-income families**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (+ve)**	**MEDIUM (+ve)**
Degree to which the impact can be mitigated:	**Not required**	**Not required**
Proposed mitigation:	**Not required**	**Not required**
Cumulative impact post mitigation:	**Social upliftment in local community**	**Social upliftment in local community**

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (+ve)**	**MEDIUM (+ve)**

Waste impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Waste generation from construction activities – general construction waste.**	**Waste generation from construction activities – general construction waste.**
Extent and duration of impact:	**Local short term (during construction phase)**	**Local short term (during construction phase)**
Probability of occurrence:	**Probable**	**Probable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Less space at landfill due to increased disposal**	**Less space at landfill due to increased disposal**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Minimise new materials brought on site.** - **Reuse existing materials where possible.** - **No burning of waste on site** - **Maximise recycling of waste from construction activities.** - **Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.** - **Provide an adequate number of bins on site and encourage**	- **Minimise new materials brought on site.** - **Reuse existing materials where possible.** - **No burning of waste on site** - **Maximise recycling of waste from construction activities.** - **Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.** - **Provide an adequate number of bins on site and encourage**

	construction personnel to dispose of their waste responsibly. - **Waste generated by construction personnel must be removed from the development area and disposed of at a registered waste disposal facility on a weekly basis.** - **Prohibit the dumping of excavated material, building materials or removed vegetation within the watercourses or their associated buffer areas. Spoil material must be appropriately disposed of at a registered waste disposal facility.**	**construction personnel to dispose of their waste responsibly.** - **Waste generated by construction personnel must be removed from the development area and disposed of at a registered waste disposal facility on a weekly basis.** - **Prohibit the dumping of excavated material, building materials or removed vegetation within the watercourses or their associated buffer areas. Spoil material must be appropriately disposed of at a registered waste disposal facility.**
Cumulative impact post mitigation:	**Recyclable materials used on site and less disposal off site**	**Recyclable materials used on site and less disposal off site**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Dust impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**A degree of dust will be generated during construction of the proposed expansion.**	**A degree of dust will be generated during construction of the proposed expansion.**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Probable**	**Probable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Nuisance to surrounding land users during the construction phase**	**Nuisance to surrounding land users during the construction phase**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Minimise area to be cleared around each unit to prevent unnecessary exposure of bare ground.** - **Clear land areas in phases as required for construction purpose to minimize unnecessary exposure of bare ground.** - **Establish planted pastures between units.** - **Establish boundary landscaping.** - **Shield dust blowing onto roads and adjacent land users.** - **Dissipate dust with water if needed.** - **A suitable speed limit (20-40km/h) must be enforced on all access roads.** - **Development on large farm limited to no direct receptors.**	**Already Implemented:** - **Minimized development footprint compared to Layout 1** **To be implemented:** - **Minimise area to be cleared around each unit to prevent unnecessary exposure of bare ground.** - **Clear land areas in phases as required for construction purpose to minimize unnecessary exposure of bare ground.** - **Establish planted pastures between units.** - **Establish boundary landscaping.** - **Shield dust blowing onto roads and adjacent land users.** - **Dissipate dust with water if needed.** - **A suitable speed limit (20-40km/h) must be enforced on all access roads.** - **Development on large farm limited to no direct receptors.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**VERY LOW (-ve)**	**VERY LOW (-ve)**

Impacts on cultural-historical aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**None anticipated as confirmed by HWC**	**None anticipated as confirmed by HWC**
Extent and duration of impact:		
Probability of occurrence:		
Degree to which the impact can be reversed:		
Degree to which the impact may cause irreplaceable loss of resources:		

Cumulative impact prior to mitigation:		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)		
Degree to which the impact can be mitigated:		
Proposed mitigation:		
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)		

Noise impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**A degree of noise will be generated during the construction of the proposed expansion.**	**A degree of noise will be generated during the construction of the proposed expansion.**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Probable**	**Probable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Nuisance on land users in the immediate vicinity during the construction phase**	**Nuisance on land users in the immediate vicinity during the construction phase**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Restrict working hours to weekdays and half day Saturday. No work on Sundays and public holidays (except vital tasks).** - **Awareness on site of workers to keep noise levels down outside of working hours.** - **All transport vehicles and machinery/equipment used**	- **Restrict working hours to weekdays and half day Saturday. No work on Sundays and public holidays (except vital tasks).** - **Awareness on site of workers to keep noise levels down outside of working hours.** - **All transport vehicles and machinery/equipment used**

	onsite must be regularly maintained and kept in good working order to prevent excessive noise. - **Development on large farm limited to no direct receptors.**	**onsite must be regularly maintained and kept in good working order to prevent excessive noise.** - **Development on large farm limited to no direct receptors.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**VERY LOW (-ve)**	**VERY LOW (-ve)**

Visual impacts / Sense of Place:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Possible increase in visual intrusion within the agricultural landscape**	**Possible increase in visual intrusion within the agricultural landscape**
Extent and duration of impact:	**Local; long term (extends into operational phase)**	**Local; long term (extends into operational phase)**
Probability of occurrence:	**Definite**	**Definite**
Degree to which the impact can be reversed:	**Low**	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**	**Unlikely**
Cumulative impact prior to mitigation:	**Units visible from internal farm roads.**	**Units visible from internal farm roads.**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**	**LOW-MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Minimise area to be cleared around each unit to prevent cleared areas being noticeable.** - **Clear land areas in phases as required for construction purposes to prevent unnecessary exposure of large portions of bare ground.** - **Plant trees for visual absorption in the landscape.** - **The development will take place on a large farm with**	**Already Implemented:** - **Minimized development footprint compared to Layout 1** **To be implemented:** - **Minimise area to be cleared around each unit to prevent cleared areas being noticeable.** - **Clear land areas in phases as required for construction purposes to prevent unnecessary exposure of large portions of bare ground.**

	limited to no direct receptors.	- **Plant trees for visual absorption in the landscape.** - **The development will take place on a large farm with limited to no direct receptors.**
Cumulative impact post mitigation:	**Potential visual intrusion for land users that make use of the farm's internal access roads.**	**Potential visual intrusion for land users that make use of the farm's internal access roads.**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW-MEDIUM (-ve)**	**LOW (-ve)**

Impacts associated with the Operational Phase

Impacts on geographical and physical aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Intensified use of access roads**	**Intensified use of access roads**
Extent and duration of impact:	**Local; long term**	**Local; long term**
Probability of occurrence:	**Definite**	**Definite**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**	**Unlikely**
Cumulative impact prior to mitigation:	**Road degradation and erosion**	**Road degradation and erosion**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Maintain all onsite roads in a good condition.** - **Regularly monitor roads for damage or erosion.** - **Should damage or erosion be noted it must be addressed immediately.**	- **Maintain all onsite roads in a good condition.** - **Regularly monitor roads for damage or erosion.** - **Should damage or erosion be noted it must be addressed immediately.**
Cumulative impact post mitigation:	**None anticipated**	**None anticipated**
Significance rating of impact after mitigation	**LOW (-ve)**	**LOW (-ve)**

(Low, Medium, Medium-High, High, or Very-High)		

Impact on biological aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Potential impacts on the CVB wetland due to impaired water quality and altered hydrological regime resulting from contaminated stormwater runoff and increased impervious surfaces reducing infiltration and increasing overland flow.**	**Potential impacts on the CVB wetland due to impaired water quality and altered hydrological regime resulting from contaminated stormwater runoff and increased impervious surfaces reducing infiltration and increasing overland flow.**
Extent and duration of impact:	**Local; long term**	**Local; long term**
Probability of occurrence:	**Probable**	**Probable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Not likely**	**Not likely**
Cumulative impact prior to mitigation:	**Water quality of watercourses in the vicinity of the facility affected (localised)**	**Water quality of watercourses in the vicinity of the facility affected (localised)**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**	**MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Likely**	**Likely**

Proposed mitigation:	- **The CVB wetland and buffer area should be demarcated as a No-Go area for the development.**
	- **Implement stormwater management as per EMPr**
	  o **Dry-sweep pens and minimise usage of water inside units for washing. Units are to be washed (with high pressure hoses) only once dry matter has been removed.**
		- **The CVB wetland and buffer area should be demarcated as a No-Go area for the development.**
		- **Implement stormwater management as per EMPr**
		  o **Dry-sweep pens and minimise usage of water inside units for washing. Units are to be washed (with high pressure hoses) only once dry matter has been removed.**

	○ No ingress of stormwater into units to protect runoff quality. ○ No wash water from inside units to reach outside environment and possibly pollute stormwater. ○ No water used during washing of units to be re-used on site. ○ Contain all sweepings and dispose of to the onsite composting facility or relevant re-use location. ○ Contain all wash water from the units inside the unit area and allow no runoff to leave the developed area. ○ Establish a stormwater collection channel around the perimeter of the developed chicken houses to capture any potentially nutrient enriched stormwater - Refuelling or maintenance of vehicles may only take place on designated, bunded surfaces. - Maintain vegetation around the facility to enhance soil stability, minimize erosion, and provide natural filtration of any runoff. - Inspect all facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.	○ No ingress of stormwater into units to protect runoff quality. ○ No wash water from inside units to reach outside environment and possibly pollute stormwater. ○ No water used during washing of units to be re-used on site. ○ Contain all sweepings and dispose of to the onsite composting facility or relevant re-use location. ○ Contain all wash water from the units inside the unit area and allow no runoff to leave the developed area. ○ Establish a stormwater collection channel around the perimeter of the developed chicken houses to capture any potentially nutrient enriched stormwater - Refuelling or maintenance of vehicles may only take place on designated, bunded surfaces. - Maintain vegetation around the facility to enhance soil stability, minimize erosion, and provide natural filtration of any runoff. - Inspect all facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.

	- **Construction/maintenance vehicles should be regularly serviced.** - **Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces.** - **Drip trays must be utilised at all fuel dispensing areas, as applicable.** - **Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the watercourse and its associated buffer area and should only occur on bunded areas with a water/oil/grease separator.** - **Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.** - **Implement appropriate erosion control measures in susceptible areas, such as using geotextiles, brush packing, straw bales, mulch, sandbags, and silt fences or traps to prevent sediment runoff.**	- **Construction/maintenance vehicles should be regularly serviced.** - **Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces.** - **Drip trays must be utilised at all fuel dispensing areas, as applicable.** - **Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the watercourse and its associated buffer area and should only occur on bunded areas with a water/oil/grease separator.** - **Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.** - **Implement appropriate erosion control measures in susceptible areas, such as using geotextiles, brush packing, straw bales, mulch, sandbags, and silt fences or traps to prevent sediment runoff.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Waste impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**

Nature of impact:	**Waste generation from operational phase**	**Waste generation from operational phase**
Extent and duration of impact:	**Local; long term**	**Local; long term**
Probability of occurrence:	**Probable**	**Probable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Less space at landfill due to increased disposal**	**Less space at landfill due to increased disposal**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW-MEDIUM (-ve)**	**LOW-MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Dispose of a portion of manure and all non-infectious mortalities to the onsite composting facility. Remaining manure to be used onsite or by contracted farmers.** - **No manure stored onsite prior to removal to composting facility or use locations.** - **Compost all biodegradable domestic waste generated onsite and recycle all plastic containers.** - **Minimise new materials brought on site.** - **Maximise recycling and waste separation onsite.** - **Reuse existing materials where possible.** - **No burning of waste on site.** - **Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.**	- **Dispose of a portion of manure and all non-infectious mortalities to the onsite composting facility. Remaining manure to be used onsite or by contracted farmers.** - **No manure stored onsite prior to removal to composting facility or use locations.** - **Compost all biodegradable domestic waste generated onsite and recycle all plastic containers.** - **Minimise new materials brought on site.** - **Maximise recycling and waste separation onsite.** - **Reuse existing materials where possible.** - **No burning of waste on site.** - **Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.**
Cumulative impact post mitigation:	**Minimal waste disposal to landfill; increased recycling on site**	**Minimal waste disposal to landfill; increased recycling on site**

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

(Hazardous) Waste impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Infectious mortalities may occur during the operational phase**	**Infectious mortalities may occur during the operational phase**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Improbable**	**Improbable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**High**	**High**
Cumulative impact prior to mitigation:	**Biosecurity risk within and outside the farm**	**Biosecurity risk within and outside the farm**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**	**MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Infected mortalities arising from the onsite poultry rearing facilities must be managed and disposed of under strict guidance of the state veterinarian.** - **Safe disposal certificates for hazardous waste removed from the facility must be kept on record for a minimum period of 5 years.**	- **Infected mortalities arising from the onsite poultry rearing facilities must be managed and disposed of under strict guidance of the state veterinarian.** - **Safe disposal certificates for hazardous waste removed from the facility must be kept on record for a minimum period of 5 years.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Nuisance factors (odour) impacts:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**

Nature of impact:	**Odour generated from chicken pens**	**Odour generated from chicken pens**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Improbable**	**Improbable**
Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Nuisance to surrounding land users during removal of manure/mortalities**	**Nuisance to surrounding land users during removal of manure/mortalities**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	- **Removal of manure directly to the onsite composting facility where it is suitably processed or to suitable re-use location.** - **All manure must be covered during transport to the composting facility.** - **Mortalities (not infectious) must be transported in sealed containers.** - **Removal as per schedule to ensure clean environment.**	- **Removal of manure directly to the onsite composting facility where it is suitably processed or to suitable re-use location.** - **All manure must be covered during transport to the composting facility.** - **Mortalities (not infectious) must be transported in sealed containers.** - **Removal as per schedule to ensure clean environment.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Impacts on the socio-economic aspects:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Employment opportunities from expanded onsite agricultural operations**	**Employment opportunities from expanded onsite agricultural operations**
Extent and duration of impact:	**Local; long term**	**Local; long term**
Probability of occurrence:	**Highly probable**	**Highly probable**

Degree to which the impact can be reversed:	**Not required**	**Not required**
Degree to which the impact may cause irreplaceable loss of resources:	**Not likely**	**Not likely**
Cumulative impact prior to mitigation:	**Job creation within low-income families and social upliftment within the local community**	**Job creation within low-income families and social upliftment within the local community**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM - HIGH (+ve)**	**MEDIUM - HIGH (+ve)**
Degree to which the impact can be mitigated:	**Not required**	**Not required**
Proposed mitigation:	**Not required**	**Not required**
Cumulative impact post mitigation:	**Job creation within low-income families and social upliftment within the local community**	**Job creation within low-income families and social upliftment within the local community**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM - HIGH (+ve)**	**MEDIUM - HIGH (+ve)**

Impacts on the cultural-historical aspects:	
Nature of impact:	**None anticipated as confirmed by HWC**
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Noise & dust impacts		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Noise and dust generated from operational activities on site**	**Noise and dust generated from operational activities on site**
Extent and duration of impact:	**Local; short term**	**Local; short term**
Probability of occurrence:	**Improbable**	**Improbable**

Degree to which the impact can be reversed:	**Possible**	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	**Low**
Cumulative impact prior to mitigation:	**Nuisance to resident in the immediate vicinity.**	**Nuisance to resident in the immediate vicinity.**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	**Already implemented:** - **The operation is part of a large farm with neighbours a considerable distance away.** **To be implemented:** - **Restrict working hours to weekdays and half day Saturday and no work (except for vital tasks) on Sundays and public holidays.** - **Awareness on site of workers to keep noise levels down outside of working hours.** - **Establish suitable vegetation within any bare areas onsite.** - **Shield dust blowing onto roads and adjacent land users.** - **Dissipate dust with water if needed.**	**Already implemented:** - **The operation is part of a large farm with neighbours a considerable distance away.** **To be implemented:** - **Restrict working hours to weekdays and half day Saturday and no work (except for vital tasks) on Sundays and public holidays.** - **Awareness on site of workers to keep noise levels down outside of working hours.** - **Establish suitable vegetation within any bare areas onsite.** - **Shield dust blowing onto roads and adjacent land users.** - **Dissipate dust with water if needed.**
Cumulative impact post mitigation:	**No impact anticipated**	**No impact anticipated**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**	**LOW (-ve)**

Visual impacts / Sense of Place:		
	Proposed Development Layout 1	**Proposed Development Layout 2 (Preferred)**
Nature of impact:	**Increase in visual intrusion within the agricultural landscape**	**Increase in visual intrusion within the agricultural landscape**
Extent and duration of impact:	**Local; long term**	**Local; long term**
Probability of occurrence:	**Definite**	**Definite**

Degree to which the impact can be reversed:	**Low**	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**	**Unlikely**
Cumulative impact prior to mitigation:	**Units visible from internal farm roads.**	**Units visible from internal farm roads.**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**	**LOW - MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Possible**	**Possible**
Proposed mitigation:	**Already implemented:** - **The operation is part of a large farm with neighbours a considerable distance away.** **Still to be implemented:** - **Plant trees to increase visual absorption capacity**	**Already implemented:** - **The operation is part of a large farm with neighbours a considerable distance away.** - **Minimised development footprint compared to Layout 1** **Still to be implemented:** **Plant trees to increase visual absorption capacity**
Cumulative impact post mitigation:	**Potential visual intrusion for land users that make use of the farm's internal access roads.**	**Potential visual intrusion for land users that make use of the farm's internal access roads.**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW - MEDIUM (-ve)**	**LOW (-ve)**

Impacts associated with the No-Go Alternative

Potential impacts on the socio-economic aspects:	
Nature of impact:	**Loss of economic opportunities - No new jobs will be created onsite, limiting onsite employment opportunities for the local community.**
Extent and duration of impact:	**Local; long term**
Probability of occurrence:	**Probable**
Degree to which the impact can be reversed:	**Unlikely**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**
Cumulative impact prior to mitigation:	**Social degradation of local labour force**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**
Degree to which the impact can be mitigated:	**Unlikely**
Proposed mitigation:	**No onsite mitigation available**
Cumulative impact post mitigation:	**Social degradation of local labour force**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**MEDIUM (-ve)**

Potential impacts on the socio-economic aspects:	
Nature of impact:	**Limits increase in food supply: The local or regional poultry supply may not expand as anticipated, potentially affecting food availability and price stability.**
Extent and duration of impact:	**Local; medium term**
Probability of occurrence:	**Probable**
Degree to which the impact can be reversed:	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**
Cumulative impact prior to mitigation:	**Unmet need for affordable protein**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Unlikely**
Proposed mitigation:	**No onsite mitigation available**
Cumulative impact post mitigation:	**Unmet need for affordable protein**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**

Potential impacts on the geographical and physical aspects:	
Nature of impact:	**Underutilization of agricultural land: Land designated for the facility may remain unproductive and continue to degrade**
Extent and duration of impact:	**Local; long term**
Probability of occurrence:	**Probable**
Degree to which the impact can be reversed:	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**

Cumulative impact prior to mitigation:	**Degradation of unproductive agricultural land**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Unlikely**
Proposed mitigation:	**Soil rehabilitation or alternative land use**
Cumulative impact post mitigation:	**Improved productivity or profitability**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW(+ve)**

Potential impacts on the socio-economic aspects:	
Nature of impact:	**Reduced support for local suppliers: Suppliers and service providers who would have benefited from increased demand for materials, feed, and other resources will miss out on these economic opportunities.**
Extent and duration of impact:	**Local; medium term**
Probability of occurrence:	**Possible**
Degree to which the impact can be reversed:	**Possible**
Degree to which the impact may cause irreplaceable loss of resources:	**Unlikely**
Cumulative impact prior to mitigation:	**Missed opportunity for local economic growth**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**
Degree to which the impact can be mitigated:	**Unlikely**
Proposed mitigation:	**No onsite mitigation available**
Cumulative impact post mitigation:	**Missed opportunity for local economic growth**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**LOW (-ve)**

Impacts Assessment Summary:

Impacts	Layout 1	Layout 2 (Preferred)
IMPACTS DURING PLANNING, DESIGN & CONSTRUCTION PHASES		
Higher intensity agriculture - increased hardened surfaces within the agricultural landscape.	LOW-MEDIUM (-ve)	LOW (-ve)
Potential impacts on the CVB wetland through increased sedimentation, altered surface water flow patterns, and impaired water quality resulting from vegetation clearance, soil disturbance, compaction, creation of hardened surfaces, and contaminated runoff during construction activities.	LOW (-ve)	VERY LOW (-ve)
Employment opportunities during the construction phase (temporary)	MEDIUM (+ve)	MEDIUM (+ve)
Waste generation from construction activities – general construction waste.	LOW (-ve)	LOW (-ve)
Dust generation from construction activities	VERY LOW (-ve)	VERY LOW (-ve)
Noise generated from construction activities	VERY LOW (-ve)	VERY LOW (-ve)
Increase in visual intrusion within the agricultural landscape	LOW-MEDIUM (-ve)	LOW (-ve)
IMPACTS DURING OPERATIONAL PHASE		
Intensified use of access roads	LOW (-ve)	LOW (-ve)
Potential impacts on the CVB wetland due to impaired water quality and altered hydrological regime resulting from contaminated stormwater runoff and increased impervious surfaces reducing infiltration and increasing overland flow.	LOW (-ve)	LOW (-ve)
Waste generation from operational phase	LOW (-ve)	LOW (-ve)
Hazardous waste – infections mortalities	LOW (-ve)	LOW (-ve)
Odour generated from chicken pens	LOW (-ve)	LOW (-ve)
Employment opportunities from expanded operations	MEDIUM - HIGH (+ve)	MEDIUM - HIGH (+ve)
Noise & dust generation from operational phase	LOW (-ve)	LOW (-ve)
Increase in visual intrusion within the agricultural landscape	LOW - MEDIUM (-ve)	LOW (-ve)
IMPACTS ASSOCIATED WITH THE NO-GO ALTERNATIVE		
Loss of economic opportunities - No new jobs will be created onsite	MEDIUM -	MEDIUM -
Limits increase in affordable protein supply	LOW -	LOW -
Underutilization of agricultural land	LOW -	LOW -
Reduced support for local suppliers	LOW -	LOW -