

APPENDIX J2: IMPACT ASSESSMENT TABLES

The following tables describe the potential impacts and risks identified for the preferred Alternative 1 and the option of not implementing the proposed activities (No-Go Alternative), including the nature; consequence; extent; duration and probability of the impacts; the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated. Refer to **Appendix J1** for the Impact Assessment Criteria and Methodology used by the EAP and relevant Specialists.

1. Geographical, Geological and Physical Aspects

1.1. Planning, Design and Construction Phase

1.1.1. Physical Impacts

The following impacts are associated with the Construction Phase of the proposed development.

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Soil and groundwater contamination	No impact
Nature of impact:	Negative	The <i>status quo</i> remains. No contamination of soil and groundwater.
Extent and duration of impact:	Local and short term	N/A
Consequence of impact or risk:	<i>Ad hoc</i> spillages or leakages from construction vehicles during construction could result in the contamination of soil and groundwater.	The proposed expansion will not take place. No contamination of soil and groundwater.
Probability of occurrence:	Unlikely	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource	N/A
Degree to which the impact can be reversed:	Fully reversible	N/A
Indirect impacts:	None identified	N/A
Cumulative impact prior to mitigation:	Low negative	No impact
Significance rating of impact prior to mitigation:	Low negative	No impact
Degree to which the impact can be avoided:	High	N/A
Degree to which the impact can be managed:	High	N/A
Degree to which the impact can be mitigated:	High	N/A
Proposed mitigation:	Refer to the mitigation measures provided in the EMP (Appendix H).	No mitigation required.
Residual impacts:	None identified.	N/A
Cumulative impact post mitigation:	Low negative	N/A
Significance rating of impact after mitigation:	Low negative	No impact

1.2. Operational (Maintenance) Phase

1.2.1. Physical Impacts

The following impacts are associated with the Operational Phase (Maintenance) of the proposed development, should the Applicant be required to undertake any maintenance or repair works.

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Soil and groundwater contamination	No impact
Nature of impact:	Negative	<i>The status quo remains.</i>
Extent and duration of impact:	Local and short term	N/A
Consequence of impact or risk:	<i>Ad hoc spillages or leakages from construction vehicles during Operational Phase as part of required maintenance activities could result in the contamination of soil and groundwater.</i>	The proposed expansion will not take place. No contamination of soil and groundwater.
Probability of occurrence:	Unlikely	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource	N/A
Degree to which the impact can be reversed:	Fully reversible	N/A
Indirect impacts:	None identified	N/A
Cumulative impact prior to mitigation:	Low negative	No impact
Significance rating of impact prior to mitigation:	Low negative	No impact
Degree to which the impact can be avoided:	High	N/A
Degree to which the impact can be managed:	High	N/A
Degree to which the impact can be mitigated:	High	N/A
Proposed mitigation:	Refer to the mitigation measures in the MMP (Appendix K2).	No mitigation required.
Residual impacts:	None identified.	N/A
Cumulative impact post mitigation:	Low negative	N/A
Significance rating of impact after mitigation	Low negative	N/A

2. Ecological Aspects

2.1. Planning, Design and Construction Phase

The following impacts are associated with the Construction Phase of the proposed development, which has been assessed by the relevant specialists.

2.1.1. Botanical Impacts

Alternatives	Alternative 1 (Preferred)		No-Go Alternative
	Low Sensitivity Area	Medium – High Sensitivity Area	
Potential impact and risk:	Damage to and loss of indigenous vegetation	Damage to and loss of indigenous vegetation	Status quo remains. No damage or loss of indigenous vegetation.
Nature of impact:	Negative Impact	Negative Impact	No Impact
Extent and duration of impact:	Site Specific; short to long term	Local & Regional; short to long term	Local; Unknown variable
Consequence of impact or risk:	No major botanical impacts will be caused as a result of the new pipeline in this area.	The new pipeline would damage the natural vegetation for about 80m of the pipeline route (16% of the new pipeline route).	Status quo remains. No damage or loss of indigenous vegetation.
Probability of occurrence:	Definite	Definite	Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Moderate to locally Significant loss	No loss of resources
Degree to which the impact can be reversed:	Partly	Partly	N/A
Indirect impacts:	At operational phase	At operational phase	N/A
Cumulative impact prior to mitigation:	Low	Low to Medium	Negligible to Low
Significance rating of impact prior mitigation:	Low negative	Low to Medium negative	Negligible to Low negative
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	N/A
Degree to which the impact can be managed:	Low to Moderate	Low to Moderate	N/A
Degree to which the impact can be mitigated:	Low to Moderate	Low to Moderate	N/A
Proposed mitigation:	None	<ul style="list-style-type: none"> All excavated topsoil and associated surface vegetation in the authorised development area, to a depth of 40cm, must be temporarily removed and set aside for replacement at the surface when trenches are infilled. 	N/A

Alternatives	Alternative 1 (Preferred)		No-Go Alternative
	Low Sensitivity Area	Medium – High Sensitivity Area	
		<ul style="list-style-type: none"> Any open trenches should be surveyed every morning and evening by an ECO or Site Agent and all trapped animals must be safely removed from these trenches. All woody invasive alien vegetation (notably black wattle (<i>Acacia mearnsii</i>) and pine (<i>Pinus</i>) must be removed from within 25m of both sides of any authorised servitude (project area), prior to final completion of the project. This should be done by hand, using only approved methodology (see Martens <i>et al.</i>, 2021), refer to the EMPr (Appendix H). No herbicide should be sprayed anywhere within the area. 	
Residual impacts:	None	Long term habitat disturbance and loss of species diversity	N/A
Cumulative impact post mitigation:	Very low	Low	Negligible to Low
Significance rating of impact after mitigation:	Very Low negative	Low negative	Negligible to Low negative

2.1.2. Aquatic Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Modification and loss of aquatic habitat and impact on water quality.	Status quo remains. No aquatic habitat loss, modification and water quality impacts
Nature of impact:	Negative impact Modification and loss of aquatic habitat and impact on water quality during the Construction Phase.	No impact
Extent and duration of impact:	Short-term and Site Specific	N/A
Consequence of impact or risk:	The impact will result in a localised disturbance and loss of degraded aquatic habitat during Construction Phase.	N/A
Probability of occurrence:	Highly probable	N/A
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	N/A
Degree to which the impact can be reversed:	Partly reversible	N/A
Indirect impacts:	-	N/A
Cumulative impact prior to mitigation:	Low	N/A
Significance rating of impact prior to mitigation:	Low negative	N/A
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	Moderate	N/A
Degree to which the impact can be mitigated:	Moderate to High	N/A
Proposed mitigation:	<ul style="list-style-type: none"> The area of disturbance associated with the construction activities should be limited as far as possible within the river corridor and the disturbed area should be rehabilitated afterwards. The disturbed area should be planted with suitable local indigenous vegetation to stabilize the banks. It is also essential that the clearing of invasive alien plants be undertaken during and after construction activities within the disturbed areas. The minimum area for the construction and laying of the pipeline should be demarcated and works contained within this area. The use of machinery within the watercourse should be avoided. Before the construction activities, any suitable indigenous riparian plants within the proposed pipeline route should be identified and set aside for revegetating the disturbed areas immediately after construction is complete. The soil and cover vegetation removed to excavate the channel in which the pipeline is to be laid should be replaced over the line at the same level as the existing level. Contaminated runoff from the pipeline installation site should be prevented from directly entering the river and associated wetland areas. Construction 	N/A

	<p>of the pipeline should preferably be undertaken in the low rainfall months when the water quality impacts from the construction activities can better be contained.</p> <ul style="list-style-type: none"> • All materials on the construction site(s) should be properly stored and contained. Disposal of waste from the site should also be properly managed. Construction workers should be given ablution facilities at the construction sites that are located away from the river and wetland area (at least 30m) and regularly serviced. These measures should be addressed, implemented, and monitored in terms of the EMPr (Appendix H) for the Construction Phase. • The pipeline should be amply protected and constructed downstream of the dam to ensure that no erosion or breakage of the pipeline occurs should the dam spill. • Regular monitoring and maintenance of the pipeline and its associated infrastructure should be conducted to enable rapid repair of the pipeline. The monitoring should also be for the occurrence of erosion of the river channel and adjacent areas as well as the growth of invasive alien plants in the disturbed areas. Any erosion and invasive alien vegetation detected within the area disturbed by the construction of the pipeline should be addressed as soon as possible. <p><i>The method statement for the construction of the water pipeline was subsequently sent to the aquatic specialist for the project. The excavator will be utilised for shallow excavations and moving of material and will mostly be making use of existing gravel roads where the soil is already compacted and use of machinery along the roads would be acceptable. Where however it is necessary for the back-acter to work outside of the existing gravel roads and within the watercourse, it is recommended that an aquatic ecologist be present onsite to ensure that work in any sensitive aquatic habitats is carefully undertaken.</i></p>	
Residual impacts:	Low; The residual impacts are limited to no habitat modification or loss	N/A
Cumulative impact post mitigation:	Very low negative	N/A
Significance rating of impact after mitigation:	Very Low negative	N/A

2.2. Operational (Maintenance) Phase

The following impacts are associated with the Operational Phase (Maintenance) of the proposal, which has been assessed by the relevant Specialists should the Applicant be required to undertake any maintenance or repair works.

2.2.1. Botanical Impacts

Alternatives	Alternative 1 (Preferred)		No-Go Alternative
	Low Sensitivity Area	Medium – High Sensitivity Area	
Potential impact and risk:	Temporary loss of current fairly high levels of ecological connectivity; associated Habitat Fragmentation.	Temporary loss of current fairly high levels of ecological connectivity; associated Habitat Fragmentation.	Status quo remains. No temporary loss of ecological connectivity and no Habitat Fragmentation would occur.
Nature of impact:	Negative Impact	Negative Impact	No Impact
Extent and duration of impact:	Site Specific; short term	Site Specific; short to long term	Site Specific; Unknown variable
Consequence of impact or risk:	No major botanical impacts will be caused as a result of the new pipeline during operational phase.	The new pipeline construction and disturbance will disrupt the moderate diversity plant community present in about 80m of the pipeline route (16% of the new pipeline route).	Status quo remains. No damage or loss of vegetation.
Probability of occurrence:	Highly probable	Definite	Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Moderate loss	No loss of resources
Degree to which the impact can be reversed:	Partly	Partly	NA
Indirect impacts:	Temporary loss of current fairly high levels of ecological connectivity; associated Habitat Fragmentation.	Temporary loss of current fairly high levels of ecological connectivity; associated Habitat Fragmentation.	NA
Cumulative impact prior to mitigation:	Low	Low to Medium	Negligible to Low
Significance rating of impact prior to mitigation:	Low negative	Low negative	Negligible to Low negative
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	NA
Degree to which the impact can be managed:	Low	Low	NA
Degree to which the impact can be mitigated:	Low	Low	NA
Proposed mitigation:	None	<ul style="list-style-type: none"> All excavated topsoil and associated surface vegetation in the authorised development area, to a depth of 40cm, must be temporarily removed and set aside for replacement at the surface when trenches are infilled. 	NA

Alternatives	Alternative 1 (Preferred)		No-Go Alternative
	Low Sensitivity Area	Medium – High Sensitivity Area	
		<ul style="list-style-type: none"> Any open trenches should be surveyed every morning and evening by an ECO or Site Agent and all trapped animals must be safely removed from these trenches. All woody invasive alien vegetation (notably black wattle (<i>Acacia mearnsii</i>) and pine (<i>Pinus</i>) must be removed from within 25m of both sides of any authorised servitude (project area), prior to final completion of the project. This should be done by hand, using only approved methodology (see Martens et al., 2021). Refer to the MMP (Appendix K2). No herbicide should be sprayed anywhere within the area. 	
Residual impacts:	None	Long term habitat disturbance and loss of species diversity	NA
Cumulative impact post mitigation:	Low	Low	Negligible to Low
Significance rating of impact after mitigation:	Low positive	Low positive	Negligible to Low negative
Potential impact and risk:	Alien Invasive Plants	Alien Invasive Plants	Status quo remains.
Nature of impact:	Negative Impact	Negative Impact	No Impact
Extent and duration of impact:	Site Specific; Short Term	Site Specific; Short To Long Term	Site Specific; Unknown variable
Consequence of impact or risk:	Soil disturbance will facilitate alien plant invasion in the area	Soil disturbance will facilitate alien plant invasion in the area	Status quo remains.
Probability of occurrence:	Definite	Definite	Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Minor Loss	Moderate to Significant loss	No loss of resources
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	NA
Indirect impacts:	Loss of indigenous plant diversity in area	Loss of indigenous plant diversity in area	NA
Cumulative impact prior to mitigation:	Low	Low to Medium	Negligible to Low
Significance rating of impact prior to mitigation:	Low negative	Low to Medium negative	Negligible to Low negative
Degree to which the impact can be avoided:	Cannot be avoided	Cannot be avoided	NA

Alternatives	Alternative 1 (Preferred)		No-Go Alternative
	Low Sensitivity Area	Medium – High Sensitivity Area	
Degree to which the impact can be managed:	Can be managed	Can be managed	NA
Degree to which the impact can be mitigated:	Can be mitigated	Can be mitigated	NA
Proposed mitigation:	Mitigation measures have been provided in the MMP (Appendix K2).		NA
Residual impacts:	None	None	NA
Cumulative impact post mitigation:	Low	Low	Negligible to Low
Significance rating of impact after mitigation:	Low positive	Low positive	Negligible to Low negative

2.2.2. Aquatic Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Impact on water quality	Status quo remains. Deterioration of degraded aquatic habitat.
Nature of impact:	Negative impact	Negative Impact
Extent and duration of impact:	Site Specific, Local and Long-term	Site Specific, Local and Long-term
Consequence of impact or risk:	The impact will result in the localised degradation of aquatic integrity if not adequately monitored and managed.	Should the status quo remained the ongoing degradation of aquatic habitat.
Probability of occurrence:	Probable	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss
Degree to which the impact can be reversed:	Partly reversible	Partly reversible
Indirect impacts:	Potential of increased disturbance of aquatic habitat due to need to maintain pipeline.	N/A
Cumulative impact prior to mitigation:	Low	Low
Significance rating of impact prior to mitigation:	Medium to Low negative	Low negative
Degree to which the impact can be avoided:	Moderate	High to Moderate
Degree to which the impact can be managed:	Moderate	High to Moderate
Degree to which the impact can be mitigated:	Moderate	Moderate
Proposed mitigation:	<ul style="list-style-type: none"> The area of disturbance associated with the construction activities should be limited as far as possible within the river corridor and the disturbed area should be rehabilitated afterwards. The disturbed area should be planted with suitable local indigenous vegetation to stabilize the banks. It is also essential that the clearing of invasive alien plants 	Prevent ongoing disturbance of site; control growth of alien vegetation.

	<p>be undertaken during and after construction activities within the disturbed areas.</p> <ul style="list-style-type: none"> • The minimum area for the construction and laying of the pipeline should be demarcated and works contained within this area. • The use of machinery within the watercourse should be avoided. • Before the construction activities, any suitable indigenous riparian plants within the proposed pipeline route should be identified and set aside for revegetating the disturbed areas immediately after construction is complete. • The soil and cover vegetation removed to excavate the channel in which the pipeline is to be laid should be replaced over the line at the same level as the existing level. • Contaminated runoff from the pipeline installation site should be prevented from directly entering the river and associated wetland areas. Construction of the pipeline should preferably be undertaken in the low rainfall months when the water quality impacts from the construction activities can better be contained. • All materials on the construction site(s) should be properly stored and contained. Disposal of waste from the site should also be properly managed. Construction workers should be given ablution facilities at the construction sites that are located away from the river and wetland area (at least 30m) and regularly serviced. These measures should be addressed, implemented, and monitored in terms of the MMP (Appendix K2) for the construction phase. • The pipeline should be amply protected and constructed downstream of the dam to ensure that no erosion or breakage of the pipeline occurs should the dam spill. • Regular monitoring and maintenance of the pipeline and its associated infrastructure should be conducted to enable rapid repair of the pipeline. The monitoring should also be for the occurrence of erosion of the river channel and adjacent areas as well as the growth of invasive alien plants in the disturbed areas. Any erosion and invasive alien vegetation detected within the area disturbed by the construction of the pipeline should be addressed as soon as possible. 	
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	<ul style="list-style-type: none"> The method statement for the construction of the water pipeline was subsequently sent to the aquatic specialist for the project. The excavator will be utilised for shallow excavations and moving of material and will mostly be making use of existing gravel roads where the soil is already compacted and use of machinery along the roads would be acceptable. Where however it is necessary for the back-acter to work outside of the existing gravel roads and within the watercourse, it is recommended that an aquatic ecologist be present onsite to ensure that work in any sensitive aquatic habitats is carefully undertaken. 	
Residual impacts:	Low; The residual impacts are limited to no habitat modification or loss.	N/A
Cumulative impact post mitigation:	Low	Very Low
Significance rating of impact after mitigation:	Low negative	Very Low negative to No Impact

2.3. Decommissioning and Closure Phase

The following impacts are associated with the Decommissioning and Closure Phase of the proposed development, which has been assessed by the Aquatic Specialist.

2.3.1. Aquatic Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Modification and loss of aquatic habitat and impact on water quality as a result of the decommissioning of the pipeline.	The <i>status quo</i> remains. No development will take place.
Nature of impact:	Negative impact Aquatic habitat disturbance and water quality impacts associated with the decommissioning of the pipeline.	No impact
Extent and duration of impact:	Short-term and Site Specific	N/A
Consequence of impact or risk:	The impact will result in a localised disturbance of aquatic habitat during decommissioning Phase.	N/A
Probability of occurrence:	Highly probable	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss	N/A
Degree to which the impact can be reversed:	Reversible	N/A
Indirect impacts:	-	N/A
Cumulative impact prior to mitigation:	Very Low	N/A

Significance rating of impact prior to mitigation:	Low negative	N/A
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	Moderate	N/A
Degree to which the impact can be mitigated:	Moderate to High	N/A
Proposed mitigation:	<ul style="list-style-type: none"> The area of disturbance associated with the construction activities should be limited as far as possible within the river corridor and the disturbed area should be rehabilitated afterwards. The disturbed area should be planted with suitable local indigenous vegetation to stabilize the banks. It is also essential that the clearing of invasive alien plants be undertaken during and after construction activities within the disturbed areas. The minimum area for the construction and laying of the pipeline should be demarcated and works contained within this area. The use of machinery within the watercourse should be avoided. Before the construction activities, any suitable indigenous riparian plants within the proposed pipeline route should be identified and set aside for revegetating the disturbed areas immediately after construction is complete. The soil and cover vegetation removed to excavate the channel in which the pipeline is to be laid should be replaced over the line at the same level as the existing level. Contaminated runoff from the pipeline installation site should be prevented from directly entering the river and associated wetland areas. Construction of the pipeline should preferably be undertaken in the low rainfall months when the water quality impacts from the construction activities can better be contained. All materials on the construction site(s) should be properly stored and contained. Disposal of waste from the site should also be properly managed. Construction workers should be given ablution facilities at the construction sites that are located away from the river and wetland area (at least 30m) and regularly serviced. These measures should be addressed, implemented, and monitored in terms of the MMP (Appendix K2). 	N/A

	<ul style="list-style-type: none"> • The pipeline should be amply protected and constructed downstream of the dam to ensure that no erosion or breakage of the pipeline occurs should the dam spill. • Regular monitoring and maintenance of the pipeline and its associated infrastructure should be conducted to enable rapid repair of the pipeline. The monitoring should also be for the occurrence of erosion of the river channel and adjacent areas as well as the growth of invasive alien plants in the disturbed areas. Any erosion and invasive alien vegetation detected within the area disturbed by the construction of the pipeline should be addressed as soon as possible. • The method statement for the construction of the water pipeline was subsequently sent to the aquatic specialist for the project. The excavator will be utilised for shallow excavations and moving of material and will mostly be making use of existing gravel roads where the soil is already compacted and use of machinery along the roads would be acceptable. Where however it is necessary for the back-acter to work outside of the existing gravel roads and within the watercourse, it is recommended that an aquatic ecologist be present onsite to ensure that work in any sensitive aquatic habitats is carefully undertaken. 	
Residual impacts:	No residual impacts	N/A
Cumulative impact post mitigation:	Very low negative	N/A
Significance rating of impact after mitigation:	Very Low negative	N/A

3. Socio-Economic Aspects

3.1. Planning, Design and Construction Phase

The following impacts are associated with the Construction Phase of the proposed development.

3.1.1. Socio-Economic Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Temporary employment opportunities	The status quo remains. No development will take place.
Nature of impact:	Positive Temporary employment opportunities could be created during the construction phase.	No impact.
Extent and duration of impact:	Local and short-term	N/A
Consequence of impact or risk:	The impact would contribute to local employment.	The proposed expansion will not take place.
Probability of occurrence:	Definite	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss.	N/A
Degree to which the impact can be reversed:	Not required.	N/A
Indirect impacts:	None identified.	N/A
Cumulative impact prior to mitigation:	Medium positive	No benefit.
Significance rating of impact prior to mitigation:	Low positive	No benefit.
Degree to which the impact can be avoided:	Not required.	N/A
Degree to which the impact can be managed:	High	N/A
Degree to which the impact can be mitigated:	Not required.	N/A
Proposed mitigation:	None required. However, the Developer should encourage Contractors to employ local labours, where possible.	N/A
Residual impacts:	None identified.	N/A
Cumulative impact post mitigation:	Medium positive	No benefit.
Significance rating of impact after mitigation:	Low positive	No benefit.

3.1.2. Traffic Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Increased traffic congestion within the local community.	The status quo remains.
Nature of impact:	Negative The movement of large construction vehicles will affect traffic flows within close proximity of the site.	No impact.
Extent and duration of impact:	Local and short-term	N/A
Consequence of impact or risk:	Potential safety risks and nuisance for road users could also occur during the construction phase of the proposed development; however it is unlikely.	The proposed expansion will not take place.
Probability of occurrence:	Highly probable	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	N/A
Degree to which the impact can be reversed:	Fully reversible	N/A
Indirect impacts:	None identified.	N/A
Cumulative impact prior to mitigation:	No impact	No impact
Significance rating of impact prior to mitigation	Low negative	No impact
Degree to which the impact can be avoided:	High	N/A
Degree to which the impact can be managed:	High	N/A
Degree to which the impact can be mitigated:	High	N/A
Proposed mitigation:	Refer to the mitigation measures in the EMPr (Appendix H).	N/A
Residual impacts:	No impact	N/A
Cumulative impact post mitigation:	No impact	N/A
Significance rating of impact after mitigation	Negligible	No impact

3.1.3. Nuisance Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Noise nuisance	The status quo remains.
Nature of impact:	Negative	No impact
Extent and duration of impact:	Local and Short-term	N/A
Consequence of impact or risk:	Increased noise levels could be a nuisance to the surrounding environment, however it is unlikely since the site is located away from residential areas.	The proposed expansion will not take place.
Probability of occurrence:	Definite	N/A

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Degree to which the impact may cause irreplaceable loss of resources:	No loss	N/A
Degree to which the impact can be reversed:	Irreversible	N/A
Indirect impacts:	None identified	N/A
Cumulative impact prior to mitigation:	Low	No impact.
Significance rating of impact prior to mitigation:	Low negative	No impact.
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	Moderate	N/A
Degree to which the impact can be mitigated:	Moderate	N/A
Proposed mitigation:	Refer to the mitigation measures in the EMPr (Appendix H).	None required
Residual impacts:	Low negative	N/A
Cumulative impact post mitigation:	Low negative	No impact
Significance rating of impact after mitigation:	Negligible	No impact
Potential impact and risk:	Dust nuisance	The status quo remains. No construction activities will take place on site.
Nature of impact:	Negative The construction activities could generate dust on site.	No impact
Extent and duration of impact:	Local and Short-term	N/A
Consequence of impact or risk:	Dust could affect the construction personnel and the surrounding environment.	The proposed expansion will not take place.
Probability of occurrence:	Definite	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	N/A
Degree to which the impact can be reversed:	Fully reversible	N/A
Indirect impacts:	None	N/A
Cumulative impact prior to mitigation:	Low	No impact
Significance rating of impact prior to mitigation:	Low negative	No impact
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	High	N/A
Degree to which the impact can be mitigated:	High	N/A
Proposed mitigation:	Refer to the mitigation measures provided in the EMPr (Appendix H).	None required
Residual impacts:	Low	N/A

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Cumulative impact post mitigation:	Low	No impact
Significance rating of impact after mitigation:	Negligible	No impact

3.2. Operational (Maintenance) Phase

The following impacts are associated with the Operational Phase of the proposed development, should the Applicant wish to undertake maintenance or repair works. The mitigation measures have been incorporated in the Maintenance Management Plan (MMP), Appendix K2 of the draft BAR

3.2.1. Nuisance Impacts

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Noise nuisance	The <i>status quo</i> remains. The maintenance will not take place on-site.
Nature of impact:	Negative	No impact.
Extent and duration of impact:	Local and Short-term	N/A
Consequence of impact or risk:	The proposed development site is located far from the local community however, during maintenance and repairs works noise nuisance could potentially affect the local community and the surrounding environment.	N/A
Probability of occurrence:	Definite	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss	N/A
Degree to which the impact can be reversed:	Irreversible	N/A
Indirect impacts:	None identified	N/A
Cumulative impact prior to mitigation:	Low	No impact
Significance rating of impact prior to mitigation:	Low negative	No impact
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	Moderate	N/A
Degree to which the impact can be mitigated:	Moderate	N/A
Proposed mitigation:	Refer to the mitigation measures provided in the MMP (Appendix K2).	None required
Residual impacts:	Low	N/A
Cumulative impact post mitigation:	Low negative	No impact
Significance rating of impact after mitigation	Negligible	No impact

Alternatives	Alternative 1 (Preferred)	No-Go Alternative
Potential impact and risk:	Dust nuisance	The status quo remains. The maintenance will not take place on-site.
Nature of impact:	Negative The maintenance vehicles and activities could generate dust clouds on the site.	No impact
Extent and duration of impact:	Local and Short-term	N/A
Consequence of impact or risk:	Dust could affect the maintenance staff, labourers or other members on-site. Dust could also affect the living conditions of adjacent residents, local community and the environment.	N/A
Probability of occurrence:	Definite	N/A
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	N/A
Degree to which the impact can be reversed:	Fully reversible	N/A
Indirect impacts:	None	N/A
Cumulative impact prior to mitigation:	Low	No impact.
Significance rating of impact prior to mitigation	Low negative	No impact
Degree to which the impact can be avoided:	Moderate	N/A
Degree to which the impact can be managed:	Moderate	N/A
Degree to which the impact can be mitigated:	Moderate	N/A
Proposed mitigation:	Refer to the mitigation measures provided in the MMP (Appendix K2).	None required
Residual impacts:	Low	N/A
Cumulative impact post mitigation:	Low	No impact
Significance rating of impact after mitigation	Negligible	No impact