



	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE	
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY
	Discharge to Water			No-Go Option			Local	Incidental	Low-Medium	Possible	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss
Direct		Surface water run-off	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>Storm water management during construction will be implemented however, as the preferred re-alignment does not cross any watercourses and is not in close proximity to any wetlands, construction stormwater from the preferred re-alignment is minimal. Thus to manage impacts to surface water, the preferred re-alignment should be implemented.</li> <li>Increased run-off during construction should be managed using berms, temporary cut-off drains, attenuation ponds or other suitable structures, in consultation with the ECO and resident Engineer.</li> <li>Cut off drains may not cause additional harm to environment. Care must be taken to consider their position and the receiving environment.</li> <li>Stormwater management system is to be installed as soon as possible following site establishment, to attenuate stormwater during the construction phase, as well as during the operational phase.</li> <li>Surface-water run-off and stormwater must be directed away from trenches and areas of excavation.</li> </ul>	Medium	Low	No Loss	Reversible
			Alternative 1			Site	Short-term	Medium	Highly Likely	Low-Medium	Very Low	Low-Medium	No Loss	Reversible	
			No-Go Option			Site	Incidental	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
Indirect		Contamination of water from hazardous substances	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>The preferred re-alignment does not cross any watercourses and is not in close proximity to any wetlands as such minimal impacts apply. Thus to manage impacts to surface water, the preferred re-alignment should be implemented.</li> <li>Drip trays must be placed under all vehicles when immobile for longer than 24 hours. Vehicles suspected of leaking must be monitored and conduct a pre start-up inspection checklist.</li> <li>Drip trays must be checked and replaced for vehicles standing (parked) for prolonged periods.</li> <li>Drip trays must be of a sufficient size and volume to collect any hydrocarbon leakages from a stationary vehicle.</li> <li>Spill kits (absorbent material) must be available on site and in all vehicles that transport hydrocarbons for dispensing to other vehicles on the construction site.</li> <li>Spilled substances must be contained in impermeable containers for removal to a licensed hazardous waste site.</li> <li>Hazardous materials of any nature must be stored at least 50m away from any water bodies.</li> <li>Contaminated wastewater to be contained, and removed to a registered site, to ensure water bodies on site are not contaminated.</li> <li>Significant spills should be reported to the Project Manager or Contractors Manager who should report this to the relevant authority</li> </ul>	Medium	Low	No Loss	Reversible
			Alternative 1			Neighbouring	Incidental	Medium	Highly Likely	Low-Medium	Very Low	Low-Medium	No Loss	Reversible	
			No-Go Option			Site	Incidental	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
Direct		Disturbance of natural system	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>The preferred re-alignment does not cross any watercourses and is not in close proximity to any wetlands as such minimal impacts apply. Thus to manage impacts to surface water, the preferred re-alignment should be implemented.</li> <li>Ensure that no workers or equipment enter sensitive areas and associated buffers.</li> </ul>	Medium	Low	No Loss	Reversible
			Alternative 1			Site	Incidental	Medium	Definite	Low-Medium	Very Low	Low-Medium	Partial	High Degree	
			No-Go Option			Site	Incidental	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
Direct		Disturbance of aquatic ecological systems	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>The preferred re-alignment does not cross any watercourses and is not in close proximity to any wetlands as such minimal impacts apply. Thus to manage impacts to surface water, the preferred re-alignment should be implemented.</li> <li>Ensure that no workers or equipment enter sensitive areas and associated buffers.</li> </ul>	Medium	Low	No Loss	Reversible
			Alternative 1			Site	Incidental	Medium	Definite	Low-Medium	Very Low	Low-Medium	Partial	High Degree	
	No-Go Option		Site			Incidental	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible	
Indirect	Domestic waste	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Low	Definite	Low-Medium	<ul style="list-style-type: none"> <li>Waste recycling to be put in place.</li> <li>Solid waste shall only be stored in the designated general waste storage area which must be enclosed and impermeable.</li> <li>All solid waste shall be disposed of by a certified contractor, off-site, at an approved landfill site. The Contractor shall supply the ECO with a certificate of disposal for auditing purposes.</li> </ul>	Medium	low	No Loss	Reversible	
		Alternative 1			Local	Incidental	Low	Definite	Low-Medium	Medium	low	No Loss	Reversible		
		No-Go Option			Local	Incidental	Low	Definite	Low-Medium	Medium	low	No Loss	Reversible		
			Preferred Re-Alignment - Alternative 3			Local	Incidental	Low-Medium	Definite	Low-Medium	<ul style="list-style-type: none"> <li>Litter (from outside the camp included) and concrete bags etc. must be collected and put into suitable closed bins on a daily basis.</li> <li>Construction rubble must be disposed of at a registered landfill site.</li> </ul>	Low	Low	No Loss	Reversible

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	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY
Waste Generation	Direct	Construction waste	Alternative 1	Yes	Negative	Local	Incidental	Medium	Definite	Low-Medium	Construction rubble must be disposed of at a registered landfill site.	Low	Low	No Loss	Reversible
			No-Go Option			Local	Incidental	Medium-High	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed. This will result in the demolition of the existing equestrian centre which will create larger volumes of construction waste being produced. The same mitigation measures as above will apply.	Low	Low-Medium	No Loss	Reversible
	Direct	Hazardous waste	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Low-Medium	Definite	Low-Medium	<ul style="list-style-type: none"> <li>The classification of waste determines the handling methods and the ultimate disposal of the material. The contractor shall manage hazardous waste that are anticipated to be generated by his operations as follows: Characterise the waste to determine if it is general or hazardous (Use the Appendix 1 of the Norms and Standards for the Classification of Waste for landfill to determine whether additional classification is required). Obtain and provide an acceptable container with a label. Place hazardous waste material in the container. Inspect the container on a regular basis. Haul the full container to the licenced and correct disposal site. Provide documentary evidence of proper disposal of the waste.</li> <li>Only temporary storage of waste is allowed (once of storage of waste for a period less than 90 days). The volume of material should be limited to less than 80m3 of hazardous waste. Should this be exceeded the Norms and Standards for the Storage of Waste will need to be complied with.</li> </ul>	Low	low	No Loss	Reversible
			Alternative 1			Local	Incidental	Medium	Definite	Low-Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed. This will result in the demolition of the existing equestrian centre which will create larger volumes of potentially hazardous waste being produced. The same mitigation measures as above will apply.	Low	low	No Loss	Reversible
			No-Go Option			Local	Incidental	Medium	Definite	Low-Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed. This will result in the demolition of the existing equestrian centre which will create larger volumes of potentially hazardous waste being produced. The same mitigation measures as above will apply.	Low	low	No Loss	Reversible
			Preferred Re-Alignment - Alternative 3			Site	Permanent	Low-Medium	Definite	Medium	<ul style="list-style-type: none"> <li>Top soil should be separated and re-used where possible.</li> <li>The proposed re-alignment (alternative 3) is a shorter route and thus will have less of an impact on top soil within Porcupine Park. It therefore should be implemented.</li> </ul>	Medium	Low	Partial	High Degree
Soil Alteration	Direct	Loss of topsoil	Alternative 1	No	Negative	Site	Permanent	Medium	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low-Medium	Partial	High Degree
			No-Go Option			Site	Permanent	Low-Medium	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	Low	Partial	High Degree
			Preferred Re-Alignment - Alternative 3			Site	Permanent	Low	Definite	Low-Medium	<ul style="list-style-type: none"> <li>The proposed site does not have a high agricultural potential nor is currently used for agriculture. No mitigation measures are therefore recommended or required.</li> <li>However, overall, the proposed re-alignment (alternative 3) is a shorter route and thus will have less of an impact. It therefore should be implemented.</li> </ul>	Low	Low	Partial	High Degree
	Direct	Loss of land capability	Alternative 1	Yes	Negative	Site	Permanent	Low-Medium	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	None	Medium	Substantial	Medium Degree
			No-Go Option			Site	Permanent	Low	Definite	Low-Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	Partial	High Degree
			Preferred Re-Alignment - Alternative 3			Site	Permanent	Low-Medium	Definite	Medium	<ul style="list-style-type: none"> <li>In general, the average slope of the preferred alternative (alternative 3) is 3.6% and thus slope alteration is expected to be at a minimum. However, any changes to topography must be properly designed.</li> <li>Stormwater management measures must be implemented to ensure these changes do not impact on stormwater.</li> </ul>	Medium	low	Partial	High Degree
	Direct	Alteration of topography	Alternative 1	No	Negative	Site	Permanent	Low-Medium	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	low	Partial	High Degree
			No-Go Option			Site	Permanent	Low-Medium	Definite	Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	low	Partial	High Degree
			Preferred Re-Alignment - Alternative 3			Site	Short-term	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>In general, the average slope of the preferred alternative (alternative 3) is 3.6% and thus erosion related to steep slopes is expected to be at a minimum. However, any instability and erosion of steep slopes must be stabilised immediately.</li> <li>To reduce the loss of material by erosion, disturbance must be kept to a minimum.</li> <li>If clearing of slopes occur within the rainy season, earth berms must be created along the up-slope side of the construction area.</li> <li>Where possible, natural vegetation should be retained to reduce the risk of erosion.</li> <li>Should erosion occur due to negligence on the part of the Contractor to apply the above measures, the Contractor will be responsible for reinstatement of the eroded area to its former state at his own expense. Any surface water pollution occurring as a result of this negligence will be cleaned up by the Contractor or a nominated clean up organisation at the expenses of the Contractor.</li> </ul>	Low	Low	Partial	High Degree
Direct	Soil erosion	Alternative 1	No	Negative	Site	Short-term	Medium	Highly Likely	Low-Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	Partial	High Degree	
		No-Go Option			Site	Short-term	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	Partial	High Degree	
		Preferred Re-Alignment - Alternative 3			Site	Incidental	Medium	Highly Likely	Low	<ul style="list-style-type: none"> <li>All vehicle/equipment maintenance and washing must be done in the workshop area, equipped with a bund wall and grease trap oil separator.</li> <li>Workshop area must be monitored for fuel and oil spills.</li> <li>Spills must be cleaned up immediately and remediated to the satisfaction of the ECO and PM.</li> <li>Spill kits must be comprehensive and available on site at all times. An adequate supply of absorbent material must be available to accommodate emergency spills.</li> </ul>	Low	low	No Loss	Reversible	
Direct	Soil pollution	Alternative 1	No	Negative	Site	Incidental	Medium	Highly Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	No Loss	Reversible	
		Preferred Re-Alignment - Alternative 3			Site	Incidental	Medium	Highly Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	No Loss	Reversible	

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE	
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY
				No-Go Option			Site	Incidental	Medium	Highly Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	No Loss
Resource Consumption	Not Applicable	Electricity consumption	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	No electricity usage is required. Generators will be used where necessary.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None		None	None	No Loss	Reversible
			No-Go Option			None	None	None	None	None		None	None	None	No Loss
	Direct	Water consumption	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Low	Highly Likely	Low	<ul style="list-style-type: none"> <li>Enforce water saving strategies.</li> <li>Environmental awareness training.</li> </ul>	Low	low	Partial	High Degree
			Alternative 1			Local	Incidental	Low	Highly Likely	Low		Low	low	Partial	High Degree
			No-Go Option			Local	Incidental	Low	Highly Likely	Low	Water requirements will be similar should the re-alignment not be authorised and the existing authorisation be constructed. The same mitigation measures as above apply.	Low	low	Partial	High Degree
	Direct	Fuel consumption	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Low	Highly Likely	Low	<ul style="list-style-type: none"> <li>Record and monitor fuel consumption regularly</li> <li>Reduce theft of fuel (increase security)</li> </ul>	Low	low	Partial	High Degree
			Alternative 1			Local	Incidental	Low	Highly Likely	Low		Low	low	Partial	High Degree
			No-Go Option			Local	Incidental	Low	Highly Likely	Low	Fuel requirements will be similar should the re-alignment not be authorised and the existing authorisation be constructed. The same mitigation measures as above apply.	Low	low	Partial	High Degree
	Direct	Raw materials consumption	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Medium-High	Highly Likely	Low-Medium	Promote effective use of raw material.	Medium	Low	Partial	High Degree
			Alternative 1			Local	Incidental	Medium-High	Highly Likely	Low-Medium		Medium	Low	Partial	High Degree
			No-Go Option			Local	Incidental	Medium-High	Highly Likely	Low-Medium	Raw Material requirements will be similar should the re-alignment not be authorised and the existing authorisation be constructed. The same mitigation measures as above apply.	Low	Low-Medium	Partial	High Degree
Effects on Biodiversity	Direct	Loss of habitat	Preferred Re-Alignment - Alternative 3	Yes	Negative	Site	Permanent	Low-Medium	Highly Likely	Low-Medium	<ul style="list-style-type: none"> <li>The preferred re-alignment minimises the impact to Porcupine Park. The area that will be impacted upon is also less sensitive than the rest of Porcupine Park. It also does not impact on any wetlands or watercourses and therefore will not result in any loss of these habitats. It is therefore preferred and should be implemented.</li> <li>Exotic and invasive plants should be controlled and removed.</li> </ul>	Medium	Low	Partial	High Degree
			Alternative 1			Site	Permanent	Medium-High	Highly Likely	Medium		Low	Low-Medium	Partial	High Degree
			No-Go Option			None	None	None	None	None		None required as the road will go through built up area (equestrian centre)	None	None	No Loss
	Direct	Loss of fauna	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Short-term	Low-Medium	Likely	Low	<ul style="list-style-type: none"> <li>If the re-alignment is approved, construction contractors, sub-contractors and operators must ensure that no fauna taxa are unduly disturbed, trapped, hunted or killed</li> <li>All workers will undergo environmental awareness training to address potential human and wildlife interaction and the permissible reactions to this interaction.</li> </ul>	Low	low	Partial	High Degree
			Alternative 1			Neighbouring	Short-term	Low-Medium	Highly Likely	Low		Low	low	Partial	High Degree
			No-Go Option			Neighbouring	Short-term	Low-Medium	Likely	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	Partial	High Degree
	Direct	Loss of flora	Preferred Re-Alignment - Alternative 3	Yes	Negative	Site	Permanent	Low-Medium	Highly Likely	Low-Medium	<ul style="list-style-type: none"> <li>Individuals of the Declining plant species <i>Boophone disticha</i> and <i>Hypoxis hemerocallidea</i> need to be relocated where applicable, to a suitable site nearby before the construction work of the development, if approved, is initiated. This should be done by suitably qualified persons to ensure the success of the rescue effort. Permits for relocation are to be obtained from GDARD for the rescue effort if necessary.</li> </ul>	Medium	Low	Partial	High Degree
			Alternative 1			Site	Permanent	Medium	Definite	Medium		Low	Low-Medium	Partial	High Degree
			No-Go Option			None	None	None	None	None		None required as the road will go through built up area (equestrian centre)	None	None	No Loss
	Indirect	Degradation of ecological systems	Preferred Re-Alignment - Alternative 3	Yes	Negative	Site	Medium-term	Low-Medium	Possible	Low	<ul style="list-style-type: none"> <li>The preferred re-alignment minimises the impact to Porcupine Park. The area that will be impacted upon is also less sensitive than the rest of Porcupine Park. It also does not impact on any wetlands or watercourses and therefore will not result in the ecological degradation of the area. It is therefore preferred and should be implemented.</li> <li>Dedicated implementation of the EMPr</li> </ul>	Medium	Low	Partial	High Degree
			Alternative 1			Local	Medium-term	Medium	Highly Likely	Medium		Low	Low-Medium	Partial	High Degree
			No-Go Option			None	None	None	None	None		None required as the road will go through built up area (equestrian centre)	None	None	No Loss
	Indirect	Disruption of natural corridors	Preferred Re-Alignment - Alternative 3	Yes	Negative	Site	Medium-term	Medium-High	Possible	Low	<ul style="list-style-type: none"> <li>The preferred re-alignment minimises the impact to Porcupine Park. The area that will be impacted upon is also less sensitive than the rest of Porcupine Park. It also does not impact on any wetlands or watercourses and therefore limits the disruption of ecological corridors. It is therefore preferred and should be implemented.</li> <li>Dedicated implementation of the EMPr</li> </ul>	Medium	Low	Partial	High Degree
			Alternative 1			Local	Medium-term	Medium	Highly Likely	Medium		Low	Low-Medium	Partial	High Degree

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE		
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSIBILITY	
			No-Go Option			None	None	None	None	None	None required as the road will go through built up area (equestrian centre)	None	None	No Loss	Reversible	
Incidents, accidents and potential emergency situations	Direct	Pollution incidents	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Medium	Highly Likely	Low	<ul style="list-style-type: none"> <li>Spill kits to be located in strategic areas for when needed</li> <li>Environmental awareness training</li> </ul>	Low	low	No Loss	Reversible	
			Alternative 1			Site	Incidental	Medium	Highly Likely	Low		Low	low	No Loss	Reversible	
			No-Go Option			Site	Incidental	Medium	Highly Likely	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	No Loss	Reversible
	Direct	Health and safety	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Medium	Likely	Low	<ul style="list-style-type: none"> <li>24 hour security and access control.</li> <li>Health and Safety awareness training.</li> <li>Contractor to submit a Health and Safety Plan, prepared in accordance with the Health and Safety Specification, for approval prior to the commencement of work.</li> <li>A Safety Agent should be appointed</li> <li>A Dedicated Occupational Health and Safety system to be implemented by Contractor's Safety Officer. To be monitored and audited by the Client's Safety Agent, in terms of the Construction Regulations (2003).</li> </ul>	Low	low	No Loss	Reversible	
			Alternative 1			Site	Incidental	Medium	Likely	Low		Low	low	No Loss	Reversible	
			No-Go Option			Site	Incidental	Medium	Likely	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	low	No Loss	Reversible
	Direct	Storage of hydrocarbons	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Medium	Highly Likely	Low	<ul style="list-style-type: none"> <li>Best practice regarding storage of substances</li> <li>Spill kits to be located in strategic areas for when needed</li> <li>Environmental awareness training</li> <li>Firefighting equipment must be accessible on site at all times.</li> <li>Display of emergency numbers</li> </ul>	Medium	low	No Loss	Reversible	
			Alternative 1			Site	Incidental	Medium	Highly Likely	Low		Medium	low	No Loss	Reversible	
			No-Go Option			Site	Incidental	Medium	Highly Likely	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	low	No Loss	Reversible
	Direct	Fire	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Low-Medium	Possible	Low	<ul style="list-style-type: none"> <li>Adhere to the appropriate emergency procedures</li> <li>Firefighting equipment must be accessible on site at all times.</li> <li>Display of emergency numbers</li> <li>In addition, designated smoking areas should be provided and there should be zero tolerance to smoking outside these areas. Cooking over open flames is not allowed.</li> </ul>	Medium	low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Low-Medium	Possible	Low		Medium	low	No Loss	Reversible	
			No-Go Option			Neighbouring	Incidental	Low-Medium	Possible	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	low	No Loss	Reversible
Social	Direct	Visual impact	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Short-term	Low-Medium	Definite	Low	<ul style="list-style-type: none"> <li>Suitable screening to be put in place during construction to minimise visual impacts.</li> <li>No littering to be allowed.</li> <li>Good housekeeping practices to be followed</li> <li>The construction footprint for the preferred alternative (Alternative 3) is smaller and thus this alternative is preferred to minimise visual impacts to the site and neighbouring properties.</li> </ul>	Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Short-term	Medium	Definite	Low-Medium		Low	Low	Low	No Loss	Reversible
			No-Go Option			Neighbouring	Short-term	Low-Medium	Definite	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
	Direct	Safety and security	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Incidental	Low	Possible	Low	<ul style="list-style-type: none"> <li>24 hour access control to the site and 24 hour security.</li> <li>Workers found to be engaging in activities such as excessive consumption of alcohol, drug use or selling of any such items on site must be disciplined.</li> </ul>	Medium	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Low	Possible	Low		Medium	Low	No Loss	Reversible	
			No-Go Option			Neighbouring	Incidental	Low	Possible	Low		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	Low	No Loss	Reversible
	Direct	Traffic disruptions	Preferred Re-Alignment - Alternative 3	Yes	Negative	Local	Incidental	Medium	Definite	Low-Medium	<ul style="list-style-type: none"> <li>Traffic warning and calming measures will be put in place when construction activities may impact on traffic flow.</li> </ul>	Low	Low	No Loss	Reversible	
			Alternative 1			Local	Incidental	Medium	Definite	Low-Medium		Low	Low	No Loss	Reversible	
			No-Go Option			Local	Incidental	Medium	Definite	Low-Medium		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
	Direct	Loss of cultural heritage	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Permanent	Low	Improbable	Low	<ul style="list-style-type: none"> <li>No heritage resources have been identified in the vicinity of the re-alignment.</li> <li>The chance find procedure in the EMP must be adhered to.</li> </ul>	Medium	Low	Partial	High Degree	
			Alternative 1			Site	Permanent	Low	Improbable	Low		Medium	Low	Partial	High Degree	

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE		
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY	
	Direct	Loss of cultural heritage	No-Go Option	No	Negative	Site	Permanent	Low	Improbable	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	Low	Partial	High Degree	
	Direct	Impacts on existing infrastructure and users	Preferred Re-Alignment - Alternative 3	No	Negative	None	None	None	None	None	None	None required	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None		None	None	No Loss	Reversible
			No-Go Option			Site	Permanent	Medium-High	Definite	Medium-High	The no-go option will result in the destruction of the existing equestrian estate and is thus not supported. No mitigation measures are possible to reduce the significance of this impact.		None	Medium-High	Irreplaceable	Irreversible
	Direct	Loss of sense of place	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Short-term	Low-Medium	Possible	Low	Low	<ul style="list-style-type: none"> <li>Suitable screening to be put in place during construction to minimise visual impacts.</li> <li>No littering to be allowed.</li> <li>Good housekeeping practices to be followed</li> <li>The construction footprint for the preferred alternative (Alternative 3) is smaller and thus this alternative is preferred to minimise changes to the sense of place to the site and neighbouring properties.</li> </ul>	Low	Low	No Loss	Reversible
			Alternative 1			Neighbouring	Short-term	Low-Medium	Possible	Low	Low		Low	Low	No Loss	Reversible
			No-Go Option			Site	Permanent	Medium-High	Definite	Medium-High	The loss of the equestrian centre would result in a loss of some of the sense of place in the area as in general there is a strong equestrian community in the area. No mitigation measures are possible.		None	Medium-High	Partial	High Degree
	Economic	Direct	Decline/increase in economy	Preferred Re-Alignment - Alternative 3	Yes	Positive	Local	Incidental	Medium	Definite	+Low-Medium	Local contractors and suppliers to be used during the construction phase as far as possible.	Low	+Medium-High	No Loss	Reversible
				Alternative 1			Local	Incidental	Medium	Definite	+Low-Medium		Low	+Medium-High	No Loss	Reversible
No-Go Option				Local			Incidental	Medium	Definite	Low-Medium	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.		Low	+Medium-High	No Loss	Reversible
Direct		Costs associated with demolition of equestrian	Preferred Re-Alignment - Alternative 3	No	Negative	None	None	None	None	None	None	None required	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None		None	None	No Loss	Reversible
			No-Go Option			Site	Short-term	Medium-High	Definite	Low-Medium	The demolition of the equestrian centre would result in economic losses. No mitigation measures are possible.		None	Low-Medium	Partial	High Degree
Direct		Employment	Preferred Re-Alignment - Alternative 3	Yes	Positive	Local	Incidental	Medium	Highly Likely	+Low-Medium	Wherever possible labour, materials and services will be sourced locally.	Low	+Medium-High	No Loss	Reversible	
			Alternative 1			Local	Incidental	Medium	Highly Likely	+Low-Medium		Low	+Medium-High	No Loss	Reversible	
			No-Go Option			Local	Incidental	Medium	Highly Likely	+Low-Medium		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	+Medium-High	No Loss	Reversible
<b>OPERATIONAL PHASE</b>																
Atmospheric Emissions	Not Applicable	Dust emissions	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	The East-West link road will be tarred and dust emissions are not expected.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None		None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None		N/A during the operational phase.	None	None	No Loss	Reversible
	Indirect	Emissions from vehicles and equipment (CO2, NOx, SOx, VOC's etc.)	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Long-term	Low	Definite	Low-Medium	<ul style="list-style-type: none"> <li>Employ speed limits on road</li> <li>Employ mechanisms to ensure that road users stick to the speed limit, such as speed traps etc. (sticking to the speed limit, reduces fuel consumption and decreases emissions).</li> </ul>	Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Long-term	Low	Definite	Low-Medium		Low	Low	No Loss	Reversible	
			No-Go Option			Neighbouring	Long-term	Low	Definite	Low-Medium		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
Noise	Indirect	Noise increase due to vehicles using the road	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Long-term	Medium	Definite	Medium	<ul style="list-style-type: none"> <li>Employ speed limits on road</li> <li>Employ mechanisms to ensure that road users stick to the speed limit, such as speed traps etc.</li> <li>Road surface will be layered with asphalt and materials to minimize noise impacts</li> </ul>	Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Long-term	Medium	Definite	Medium		Low	Low	No Loss	Reversible	
			No-Go Option			Neighbouring	Long-term	Medium	Definite	Medium		Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Low	Low	No Loss	Reversible
Not Applicable	Sewage	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible		
		Alternative 1			None	None	None	None	None		None	None	No Loss	Reversible		

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE		
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY	
Discharge to Water (Surface and Groundwater)			No-Go Option			None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
	Not Applicable	Silt	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None	None	None	None	No Loss	Reversible
			No-Go Option			None	None	None	None	None	None	None	None	N/A during the operational phase.	None	None
	Direct	Surface water run-off	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Long-term	Medium	Definite	Medium	Storm water management system to be implemented and maintained.	Medium	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Long-term	Medium	Definite	Medium		Low	No Loss	Reversible		
			No-Go Option			Neighbouring	Long-term	Medium	Definite	Medium		Low	No Loss	Reversible		
	Indirect	Contamination of water from hazardous substances	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Low-Medium	Possible	Low	Employ speed limits on road Employ mechanisms to ensure that road users stick to the speed limit, such as speed traps etc. to limit potential incidents on the road resulting in spills	Very Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Low-Medium	Possible	Low		Low	No Loss	Reversible		
			No-Go Option			Neighbouring	Incidental	Low-Medium	Possible	Low		Low	No Loss	Reversible		
	Not Applicable	Disturbance of natural system	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	High	Low	No Loss	Reversible	
			Alternative 1			None	None	None	None	None		High	Low	No Loss	Reversible	
			No-Go Option			None	None	None	None	None		None	None	No Loss	Reversible	
	Indirect	Disturbance of aquatic ecological systems	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Incidental	Low-Medium	Improbable	Low	The only potential disturbance of aquatic ecological systems is through poor management of stormwater. This can be mitigated through: Stormwater management	Medium	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Low-Medium	Improbable	Low		Medium	Low	No Loss	Reversible	
			No-Go Option			Neighbouring	Incidental	Low-Medium	Improbable	Low		Medium	Low	No Loss	Reversible	
	Waste Generation	Indirect	Domestic waste	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Low	Possible	Low	As part of management of the road, litter should be collected and disposed of at an approved landfill site.	Low	Low	No Loss	Reversible
				Alternative 1			Neighbouring	Incidental	Low	Possible	Low		Low	Low	No Loss	Reversible
No-Go Option				Neighbouring			Incidental	Low	Possible	Low	Low		Low	No Loss	Reversible	
Not Applicable		Construction waste	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None		None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None		None	None	No Loss	Reversible	
Indirect		Hazardous waste	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Medium	Possible	Low	The only hazardous waste expected is through incidents/accidents resulting in oil/fuel spillages. Should this occur, the following process must be followed: Characterise the waste to determine if it is general or hazardous (Use the Appendix 1 of the Norms and Standards for the Classification of Waste for landfill to determine whether additional classification is required). Obtain and provide an acceptable container with a label. Place hazardous waste material in the container. Inspect the container on a regular basis Haul the full container to the licenced and correct disposal site. Provide documentary evidence of proper disposal of the waste.	Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Medium	Possible	Low		Low	Low	No Loss	Reversible	
			No-Go Option			Neighbouring	Incidental	Medium	Possible	Low		Low	Low	No Loss	Reversible	
Not Applicable	Loss of topsoil	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible		
		Alternative 1			None	None	None	None	None		None	None	No Loss	Reversible		
		No-Go Option			None	None	None	None	None		None	None	No Loss	Reversible		
			Preferred Re-Alignment - Alternative 3			None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE		
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSIBILITY	
Soil Alteration	Not Applicable	Loss of land capability	Alternative 1	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
	Not Applicable	Alteration of topography	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
	Direct	Soil erosion	No-Go Option	No	Negative	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Preferred Re-Alignment - Alternative 3			Site	Incidental	Low-Medium	Possible	Low	The only potential cause of soil erosion during operation is through poor management of stormwater. This can be mitigated through: • Stormwater management	Medium	Low	No Loss	Reversible	
			Alternative 1			Site	Incidental	Low-Medium	Possible	Low		Medium	Low	No Loss	Reversible	
	Indirect	Soil pollution	No-Go Option	No	Negative	Site	Incidental	Low-Medium	Possible	Low	Should the proposed re-alignment not be approved, the originally approved alignment will be constructed which will result in similar impacts. It is expected that these would be at the same level as both the preferred re-alignment. The same mitigation measures as above apply.	Medium	Low	No Loss	Reversible	
			Preferred Re-Alignment - Alternative 3			Neighbouring	Incidental	Medium	Possible	Low		The only potential soil pollution expected is through incidents/accidents resulting in oil/fuel spillages. Should this occur, the following process must be followed: • Characterise the waste to determine if it is general or hazardous (Use the Appendix 1 of the Norms and Standards for the Classification of Waste for landfill to determine whether additional classification is required). Obtain and provide an acceptable container with a label. Place hazardous waste material in the container. Inspect the container on a regular basis Haul the full container to the licenced and correct disposal site. Provide documentary evidence of proper disposal of the waste.	Low	Low	No Loss	Reversible
			Alternative 1			Neighbouring	Incidental	Medium	Possible	Low	Low		Low	No Loss	Reversible	
	Resource Consumption	Not Applicable	Electricity consumption	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
				Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible
No-Go Option				None			None	None	None	None	None	None	None	No Loss	Reversible	
Not Applicable		Water consumption	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	No Loss	Reversible	
Not Applicable		Fuel consumption	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	No Loss	Reversible	
Not Applicable		Raw materials consumption	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	No Loss	Reversible	
Effects on Biodiversity	Not Applicable	Loss of habitat	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	No Loss	Reversible	
	Indirect	Loss of fauna	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Medium	Possible	Low	Due to the shorter length of the preferred alternative (Alternative 3) within Porcupine Park, this alternative is preferred and the potential for animals needing to cross the road is lessened (and thus the intensity and probability of the impact are reduced). However, in order to prevent road kill incidents, it is suggested that a fence/wall be placed alongside the road reserve. This will also ensure that Porcupine Park cannot be accessed outside of the official access points which will minimise poaching incidents.	Low	Low	Partial	High Degree	
			Alternative 1			Neighbouring	Incidental	Medium-High	Likely	Low		Low	Low	Partial	High Degree	
			No-Go Option			Neighbouring	Incidental	Low-Medium	Improbable	Low	Should the proposed re-alignment not be approved, the existing alignment will be constructed. This is outside Porcupine Park and thus road kill is unlikely.	None	Low	No Loss	Reversible	
	Not Applicable	Loss of flora	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	No Loss	Reversible	



	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE		
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY	
		Not Applicable	Degradation of ecological systems	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible
Alternative 1				None			None	None	None	None	None	None	None	None	No Loss	Reversible
No-Go Option				None			None	None	None	None	None	None	None	N/A during the operational phase.	None	None
Direct		Disruption of natural corridors	Preferred Re-Alignment - Alternative 3	Yes	Negative	Site	Long-term	Low-Medium	Definite	Low-Medium	Currently fauna occurring within Porcupine Park are limited to the boundary of Porcupine Park. With the preferred alternative (Alternative 3), a very small section of the area will no longer be accessible during operation. This impact is much greater for the alternative re-alignment which traverses the whole of the Porcupine Park. The preferred alternative (Alternative 3) should therefore be implemented.	Very Low	Low-Medium	Partial	High Degree	
			Alternative 1			Site	Long-term	Medium-High	Definite	Medium	None	Medium	Substantial	Medium Degree		
			No-Go Option			Site	Incidental	Low-Medium	Likely	Low	None	Low	No Loss	Reversible		
Incidents, accidents and potential emergency situations		Indirect	Pollution incidents	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Medium	Possible	Low	The only potential pollution incidents expected is through incidents/accidents resulting in oil/fuel spillages. Should this occur, the following process must be followed: • Characterise the waste to determine if it is general or hazardous (Use the Appendix 1 of the Norms and Standards for the Classification of Waste for landfill to determine whether additional classification is required). Obtain and provide an acceptable container with a label. Place hazardous waste material in the container. Inspect the container on a regular basis Haul the full container to the licenced and correct disposal site. Provide documentary evidence of proper disposal of the waste.	Low	low	No Loss	Reversible
				Alternative 1			Neighbouring	Incidental	Medium	Possible	Low	Low	low	No Loss	Reversible	
				No-Go Option			Neighbouring	Incidental	Medium	Possible	Low	Low	low	No Loss	Reversible	
	Direct	Health and safety	Preferred Re-Alignment - Alternative 3	No	Negative	Site	Incidental	Medium	Possible	Low	• Speed limits to be implemented. • Traffic calming and safety measures to be implemented during any maintenance activities taking place on the side of the road (e.g. collecting litter, cutting grass etc.).	Medium	low	No Loss	Reversible	
			Alternative 1			Site	Incidental	Medium	Possible	Low	Medium	low	No Loss	Reversible		
			No-Go Option			Site	Incidental	Medium	Possible	Low	Medium	low	No Loss	Reversible		
	Not Applicable	Storage of hydrocarbons	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None	None	None	None	No Loss	Reversible	
			No-Go Option			None	None	None	None	None	None	None	None	N/A during the operational phase.	None	None
	Indirect	Fire	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Incidental	Medium-High	Possible	Low	• Maintenance of road reserve (e.g. grass cutting) to prevent high fire load and to act as a firebreak.	Low	low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Medium-High	Possible	Low	Low	low	No Loss	Reversible		
			No-Go Option			Neighbouring	Incidental	Medium-High	Possible	Low	Low	low	No Loss	Reversible		
	Social	Direct	Visual impact	Preferred Re-Alignment - Alternative 3	No	Negative	Neighbouring	Long-term	Medium	Highly Likely	Medium	• A suitable boundary wall/fence should be put in place to limit visual impacts. • Maintenance of the road should include litter collection. • Rehabilitation of construction footprint must be undertaken.	Low	Low-Medium	No Loss	Reversible
				Alternative 1			Neighbouring	Long-term	Medium-High	Highly Likely	Medium	Low	Low-Medium	No Loss	Reversible	
				No-Go Option			Neighbouring	Long-term	Medium	Highly Likely	Medium	Low	Low-Medium	No Loss	Reversible	
Direct		Safety and security	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Incidental	Medium	Possible	Low	• Fence/wall to be put in place to limit access to Porcupine Park from the road and to ensure only access is through official access points.	Low	Low	No Loss	Reversible	
			Alternative 1			Neighbouring	Incidental	Medium	Possible	Low	Low	Low	No Loss	Reversible		
			No-Go Option			Neighbouring	Incidental	Medium	Possible	Low	Low	Low	No Loss	Reversible		
Direct		Traffic disruptions	Preferred Re-Alignment - Alternative 3	No	Positive	Local	Long-term	Medium	Definite	+Medium	The proposed East West Link Road the road will provide great benefits to the greater road network in Johannesburg including improved capacity and traffic flow for the area, improved east-west linkage and improved mobility). No mitigation measures are required.	None	+Medium	No Loss	Reversible	
			Alternative 1			Local	Long-term	Medium	Definite	+Medium	None	+Medium	No Loss	Reversible		
			No-Go Option			Local	Long-term	Medium	Definite	+Medium	None	+Medium	No Loss	Reversible		

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE			
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE									LOSS RESOURCE	REVERSABILITY		
		Direct	Loss of equestrian centre	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	The proposed re-alignment will not result in the destruction of the existing equestrian centre.	None	None	No Loss	Reversible	
Alternative 1				None			None	None	None	None	None		None	None	No Loss	Reversible	
No-Go Option				No			Negative	Site	Permanent	Medium	Definite		Medium	No mitigation measures available.	None	Medium	Irreplaceable
Not Applicable		Loss of cultural heritage	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None	None		None	None	None	No Loss	Reversible
			No-Go Option			None	None	None	None	None	None		None	N/A during the operational phase.	None	None	No Loss
Direct		Loss of sense of place	Preferred Re-Alignment - Alternative 3	Yes	Negative	Neighbouring	Long-term	Medium	Likely	Low-Medium	<ul style="list-style-type: none"> <li>A suitable boundary wairrence should be put in piace to limit visual impacts.</li> <li>Maintenance of the road should include litter collection.</li> <li>Rehabilitation of construction footprint must be undertaken.</li> <li>The preferred alternative (Alternative 3) should be implemented as it limits changes to Porcupine Park.</li> </ul>	Medium	low	No Loss	Reversible		
			Alternative 1			Neighbouring	Long-term	Medium-High	Likely	Low-Medium		Very Low	Low-Medium	No Loss	Reversible		
			No-Go Option			Neighbouring	Long-term	Medium-High	Definite	Medium		The loss of the equestrian centre would result in a loss of some of the sense of place in the area as in general there is a strong equestrian community in the area. No mitigation measures are possible.	None	Medium	No Loss	Reversible	
Economic	Not Applicable	Decline/increase in economy	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible		
			Alternative 1			None	None	None	None	None		None	None	None	No Loss	Reversible	
			No-Go Option			No	Negative	Site	Permanent	Medium		Definite	Medium	Demolition of the equestrian estate will result in a loss of income.	None	Medium	No Loss
	Not Applicable	Employment	Preferred Re-Alignment - Alternative 3	Not Applicable	Not Applicable	None	None	None	None	None	None	N/A during the operational phase.	None	None	No Loss	Reversible	
			Alternative 1			None	None	None	None	None	None		None	None	None	No Loss	Reversible
			No-Go Option			No	Negative	Site	Permanent	Low-Medium	Definite		Medium	Demolition of the equestrian estate will result in a loss of employment opportunities.	None	Medium	No Loss