Heronbridge College Sports-field Development
Portion 112 of the farm Nietgedacht

	IMPACTS					CONSEQUENCE			PROBABILITY	SIGNIFICANCE (WOM)	CONFIDENCE	MANAGEMENT & MITIGATION MEASURES	MITIGATION EFFICIENCY	SIGNIFICANCE (WM)	DEGREE	
	TYPE	DESCRIPTION	ALTERNATIVE	CUMULATIVE	NATURE	Extent (A)	Duration (B)	Intensity (C)	Probability (P)	Before Mitigation				After Mitigation	LOSS RESOURCE	REVERSABILITY
CONSTRUCTION PHASE																
Atmospheric Emissions	Direct	Dust emissions	Proposal	Yes	Negative	*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*	• A speed limit of 20km/h must be maintained on all dirt roads. • Dust suppression by means of either water or biodegradable chemical agent is required.	*High*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*		*High*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*		*High*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Emissions from vehicles and equipment (CO_2, NOx, SOx, VOC's etc.)	Proposal	Yes	Negative	*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*	• In terms of transportation of workers and materials, collective transportation arrangements should be made to reduce individual car journeys where possible. • All vehicles used during the project should be properly maintained and in good working order. • All vehicles and other machinery should comply with road worthy requirements and comply with legislation in terms of allowable emissions	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Noise	Direct	Noise increase due to construction activities	Proposal	Yes	Negative	*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*	• Equipment and/or machinery which will be used must comply with the manufacturer's specifications on acceptable noise levels. • Construction activities should be limited to daytime only.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Low-Medium*	*Definite*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Low*	*Definite*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*Definite*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Sewage	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	• The preferred design 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 design should be implemented. • Chemical toilets must be supplied and maintained during the construction phase • Ablution facilities (chemical toilets) are to be provided by the Contractor, at a ratio of 1:10. • Ablution facilities (chemical toilets) must be erected within 100m from all workplaces but within the development footprint. • Toilets are to be secured to the ground, and must have a closing mechanism. • Toilet paper must be provided at these facilities and must be serviced once per week. • Certified contractors to maintain and remove chemical toilets regularly. • The contractor must ensure that spillage does not occur when toilets are cleaned/serviced and contents must be properly stored and disposed of.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*

			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	must be properly stored and disposed of. • Discharge of waste into the environment and/or burial of waste are strictly prohibited. • Sanitary arrangements must be to the satisfaction of the PM, ECO, the local authorities and the applicable legal requirements.	*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*Definite*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Indirect	Silt	Proposal	No	Negative	*Neighbouring*	*Short-term*	*Low-Medium*	*Possible*	*Low*	*High*	• The preferred design 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 design should be implemented. • Instability and erosion of steep slopes must be stabilised immediately. Re-vegetation in consultation with landscape architect and ECO should be done if and where required. • To reduce the loss of material by erosion, disturbance must be kept to a minimum. • If clearing of slopes occur within the rainy season, earth berms must be created along the up-slope side of the construction area. • Where possible, natural vegetation should be retained to reduce the risk of erosion. • Silt fences must be used to stabilise the site, reduce erosion and silt entering the natural environment. No unchecked silt may enter the natural environment.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Local*	*Short-term*	*Medium-High*	*Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Short-term*	*Low-Medium*	*Possible*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Discharge to Water	Direct	Surface water run-off	Proposal	Yes	Negative	*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*	• Storm water management during construction will be implemented however, as the preferred design does not cross any watercourses and is not in close proximity to any wetlands, thus to manage impacts to surface water, the preferred design should be implemented. • 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. • 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. • Surface-water run-off and stormwater must be directed away from trenches and areas of excavation.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Short-term*	*Medium*	*Likely*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Short-term*	*Medium*	*Likely*	*Low*	*High*	Not Applicable	*None*	*Low*	*No Loss*	*Reversible*
			Proposal			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	• The preferred design 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 design should be implemented. • 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.	*Medium*	*Low*	*No Loss*	*Reversible*

	Direct	Contamination of water from hazardous substances	Alternative 1	No	Negative	*Neighbouring*	*Incidental*	*Medium*	*Likely*	*Low*	*High*	• Drip trays must be checked and replaced for vehicles standing (parked) for prolonged periods. • Drip trays must be of a sufficient size and volume to collect any hydrocarbon leakages from a stationary vehicle. • 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. • Spilled substances must be contained in impermeable containers for removal to a licensed hazardous waste site. • Significant spills should be reported to the Project Manager or Contractors Manager and ECO who should report this to the relevant authority	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*Low*	*None*	*No Loss*	*Reversible*
	Direct	Disturbance of natural system	Proposal	Yes	Negative	*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*	• The preferred design 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 design should be implemented. • Ensure that all workers or equipment remain within development footprint.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*Neighbouring*	*Permanent*	*Medium*	*Definite*	*Medium*	*High*	It must be noted that if the proposed activities do not proceed, the site in its current form will continue to degrade, especially within the drainage area due to historical dumping.	*Low*	*Medium*	*Substantial*	*Medium Degree*
	Direct	Disturbance of aquatic ecological systems	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*	• The preferred design 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 design should be implemented. • Ensure that all workers or equipment remain within development footprint.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*Neighbouring*	*Permanent*	*Medium*	*Definite*	*Medium*	*High*	It must be noted that if the proposed activities do not proceed, the site in its current form will continue to degrade, especially within the drainage area due to historical dumping.	*Low*	*Medium*	*Substantial*	*Medium Degree*
	Indirect	Domestic waste	Proposal	No	Negative	*Local*	*Short-term*	*Low*	*Definite*	*Low-Medium*	*High*	• Waste recycling to be put in place. • Solid waste shall only be stored in the designated general waste storage area which must be enclosed and impermeable. •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.	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Local*	*Short-term*	*Low*	*Definite*	*Low-Medium*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Construction waste	Proposal	Yes	Negative	*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*	• Litter (from outside the camp included) and concrete bags etc. must be collected and put into suitable closed bins on a daily basis. • Construction rubble must be disposed of at a registered site • No Construction rubble my be used for infilling.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Local*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*

Waste Generation			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Hazardous waste	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*	• 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. 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. • 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.	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*Definite*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Soil Alteration	Direct	Loss of topsoil	Proposal	Yes	Negative	*Site*	*Permanent*	*Low-Medium*	*Definite*	*Medium*	*High*	• Top soil should be separated and re-used where possible. • The proposed designed (proposal) utilises a smaller footprint and thus will have less of an impact on top soil within the study site. It therefore should be implemented.	*Low*	*Low-Medium*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Permanent*	*Medium-High*	*Definite*	*Medium-High*	*High*		*Low*	*Medium*	*Substantial*	*Medium Degree*
			Alternative 2			*Site*	*Permanent*	*Low-Medium*	*Definite*	*Medium*	*High*		*Low*	*Low-Medium*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*Permanent*	*Low-Medium*	*Definite*	*Low-Medium*	*High*	Not Applicable	*None*	*Low*	*No Loss*	*Reversible*
	Direct	Loss of land capability	Proposal	Yes	Negative	*Site*	*Permanent*	*Low*	*Definite*	*Low-Medium*	*High*	• The proposed site does not have a high agricultural potential nor is currently used for agriculture. No mitigation measures are therefore recommended or required. • The proposed designed (proposal) utilises a smaller footprint and thus will have less of an impact on top soil within the study site. It therefore should be implemented.	*Very Low*	*Low-Medium*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Permanent*	*Low-Medium*	*Definite*	*Medium*	*High*		*Very Low*	*Medium*	*Substantial*	*Medium Degree*
			Alternative 2			*Site*	*Permanent*	*Low*	*Definite*	*Low-Medium*	*High*		*Very Low*	*Low-Medium*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*Low*	*None*	*No Loss*	*Reversible*
	Direct	Alteration of topography	Proposal	Yes	Negative	*Site*	*Permanent*	*Medium*	*Definite*	*Medium*	*High*	Most of the Topography within the development footprint will be altered as large sections of the development footprint will be levelled as part of the sports-field design, the • Stormwater management measures must be implemented to ensure these designs do not impact on stormwater.	*Low*	*Low-Medium*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Permanent*	*Medium-High*	*Definite*	*Medium-High*	*High*		*Low*	*Medium*	*Substantial*	*Medium Degree*
			Alternative 2			*Site*	*Permanent*	*Medium*	*Definite*	*Medium*	*High*		*Low*	*Low-Medium*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Soil erosion	Proposal	Yes	Negative	*Site*	*Short-term*	*Low-Medium*	*Likely*	*Low*	*High*	• Most of the Topography within the development footprint will be altered as large sections of the development footprint will be levelled as part of the sports-field design, any instability and erosion of steep slopes must be stabilised immediately. • Stormwater management measures must be implemented to ensure these designs do not impact on stormwater. • If clearing of slopes occur within the rainy season, earth berms must be created along the up-slope side of the construction area. • Where possible, natural vegetation should be retained to reduce the risk of erosion.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Short-term*	*Low-Medium*	*Likely*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*

			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Soil pollution	Proposal	No	Negative	*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*	• All vehicle/equipment maintenance and washing must be done in the workshop area, equipped with a bund wall and grease trap oil separator. • Workshop area must be monitored for fuel and oil spills. • Spills must be cleaned up immediately and remediated to the satisfaction of the ECO and PM. • 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.	*Low*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Medium*	*Likely*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Resource Consumption	Direct	Electricity consumption	Proposal	Yes	Negative	*Neighbouring*	*Long-term*	*Low*	*Definite*	*Low-Medium*	*High*	•During the construction phase the contractors will mainly make use of generators. •The nature of the project will not require high levels of electricity usage as most of the construction will make use of plant equipment •Energy efficient/ saving technology must be incorporated within the design. during construction and for operations	*Low*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Low*	*Definite*	*Low-Medium*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Water consumption	Proposal	Yes	Negative	*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*	• Enforce water saving strategies. • Environmental awareness training.	*Low*	*low*	*Partial*	*High Degree*
			Alternative 1			*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*low*	*Partial*	*High Degree*
			Alternative 2			*Local*	*Short-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Fuel consumption	Proposal	Yes	Negative	*Neighbouring*	*Short-term*	*Low*	*Definite*	*Low*	*High*	• Record and monitor fuel consumption • Keep fuel consumption on record • Reduce theft of fuel (increase security) • Implement safe refuelling procedures if refuelling on site.	*Low*	*low*	*Partial*	*High Degree*
			Alternative 1			*Neighbouring*	*Short-term*	*Low*	*Definite*	*Low*	*High*		*Low*	*low*	*Partial*	*High Degree*
			Alternative 2			*Neighbouring*	*Short-term*	*Low*	*Definite*	*Low*	*High*		*Low*	*low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*Partial*	*High Degree*
	Direct	Raw materials consumption	Proposal	Yes	Negative	*Neighbouring*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*Medium*	• Promote effective use of raw material. • Incorporate alternative materials within design.	*Low*	*Low*	*Partial*	*High Degree*
			Alternative 1			*Neighbouring*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*Medium*		*Low*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Neighbouring*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*Medium*		*Low*	*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*Medium*	Not Applicable	*None*	*None*	*Partial*	*High Degree*
	Direct	Loss of habitat	Proposal	Yes	Negative	*Site*	*Permanent*	*Medium*	*Highly Likely*	*Medium*	*High*	• The preferred design minimises the impact to Study site. The area that will be impacted upon is also less sensitive than the rest of Study site. 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. • Exotic and invasive plants should be controlled and removed. • The drainage area must be rehabilitated	*Low*	*Low-Medium*	*Substantial*	*Medium Degree*
			Alternative 1			*Site*	*Permanent*	*Medium-High*	*Definite*	*Medium-High*	*High*		*Low*	*Medium*	*Substantial*	*Medium Degree*
			Alternative 2			*Site*	*Permanent*	*Medium*	*Highly Likely*	*Medium*	*High*		*Low*	*Low-Medium*	*Substantial*	*Medium Degree*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	• If the no go option is enforced, it will result in the uncontrolled spreading of alien invasive species.	*None*	*Low-Medium*	*Partial*	*High Degree*

Effects on Biodiversity	Direct	Loss of fauna	Proposal	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Likely*	*Low*	*High*	• If the preferred design is approved, construction contractors, sub-contractors and operators must ensure that no fauna taxa are unduly disturbed, trapped, hunted or killed • All workers will undergo environmental awareness training to address potential human and wildlife interaction and the permissible reactions to this interaction. •Search and Rescue operations must be implemented before any clearance of areas.	*Low*	*low*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Long-term*	*Low-Medium*	*Likely*	*Low*	*High*		*Low*	*low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Loss of flora	Proposal	No	Negative	*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*	•Search and Rescue operations must be implemented before any clearance of areas •Individuals of the Declining plant species *Hypoxis hemerocallidea* 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 form GDARD for the rescue effort if necessary. •*In situ* relocation of indigenous vegetation should be attempted • All landscaping must be done with indigenous vegetation from the surrounding area.	*Low*	*Low*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Long-term*	*Medium-High*	*Highly Likely*	*Medium*	*High*		*Low*	*Low-Medium*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Indirect	Degradation of ecological systems	Proposal	Yes	Negative	*Site*	*Short-term*	*Low-Medium*	*Possible*	*Low*	*High*	• The preferred design minimises the impact to the study site. The area that will be impacted upon is also less sensitive than the rest of the study site. 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. • Dedicated implementation of the EMPr • All landscaping must be done with indigenous vegetation from the surrounding area.	*Medium*	*Low*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Medium-term*	*Medium*	*Likely*	*Low*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Short-term*	*Low-Medium*	*Possible*	*Low*	*High*		*Medium*	*Low*	*Partial*	*High Degree*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Medium*	*Likely*	*Low-Medium*	*High*	No management of vacant land will result in the further degradation of the study site.	*None*	*Low-Medium*	*Substantial*	*Medium Degree*
	Indirect	Disruption of natural corridors	Proposal	Yes	Negative	*Site*	*Long-term*	*Medium*	*Likely*	*Low-Medium*	*High*	• The preferred design minimises the impact to the study area. The area that will be impacted upon is also less sensitive than the rest of the study area. 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. • Dedicated implementation of the EMPr	*Low*	*Low*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Long-term*	*Medium-High*	*Highly Likely*	*Medium*	*High*		*Low*	*Low-Medium*	*Substantial*	*Medium Degree*
			Alternative 2			*Site*	*Long-term*	*Medium*	*Likely*	*Low-Medium*	*High*		*Low*	*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Pollution incidents	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*	• Spill kits to be located in strategic areas for when needed • Regular site and plant inspection must be conducted • Environmental awareness training	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*Site*	*None*	*None*	*None*	*None*	*None*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*

Incidents, accidents and potential emergency situations	Direct	Health and safety	Proposal	No	Negative	*Site*	*Incidental*	*Medium*	*Likely*	*Low*	*High*	• 24 hour security and access control. • Health and Safety awareness training. • 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. • A Safety representative should be appointed	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Medium*	*Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Medium*	*Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*	The historical dumping and trespassing could create a health and safety risk if vacant site is not managed	*None*	*Low-Medium*	*No Loss*	*Reversible*
	Direct	Storage of hydrocarbons	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*	• Best practice regarding storage of substances • Spill kits to be located in strategic areas for when needed • Environmental awareness training • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers • Quantity management of regarding storage area and quantities	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Fire	Proposal	No	Negative	*Neighbouring*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*	• Adhere to the appropriate emergency procedures • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers • 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.	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Incidental*	*Medium*	*Possible*	*Low*	*Medium*	If site remains unmanaged, fires could occur as a result from illegal dumping	*None*	*low*	*No Loss*	*Reversible*
	Direct	Visual impact	Proposal	No	Negative	*Neighbouring*	*Short-term*	*Low-Medium*	*Definite*	*Low*	*High*	• Suitable screening to be put in place during construction to minimise visual impacts. • No littering to be allowed. • Good housekeeping practices to be followed • The construction footprint for the preferred alternative (Proposal) is smaller and thus this alternative is preferred to minimise visual impacts to the site and neighbouring properties.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Short-term*	*Low-Medium*	*Definite*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Short-term*	*Low-Medium*	*Definite*	*Low*	*High*	Illegal dumping and uncontrolled activities on site increases the visual impact on the neighbouring area	*None*	*Low*	*No Loss*	*Reversible*
	Direct	Safety and security	Proposal	No	Negative	*Neighbouring*	*Incidental*	*Low*	*Possible*	*Low*	*Medium*	• 24 hour access control to the site and 24 hour security. • 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.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Low*	*Possible*	*Low*	*Medium*		*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Low*	*Possible*	*Low*	*Medium*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*Medium*	No management on site will result in the increase of illegal activities.	*None*	*Low*	*No Loss*	*Reversible*
	Direct	Traffic disruptions	Proposal	Yes	Negative	*Neighbouring*	*Incidental*	*Medium*	*Definite*	*Low-Medium*	*Medium*	• Traffic warning and calming measures will be put in place when construction activities may impact on traffic flow.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Incidental*	*Medium*	*Definite*	*Low-Medium*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Incidental*	*Medium*	*Definite*	*Low-Medium*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*

Social			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Loss of cultural heritage	Proposal	No	Negative	*Site*	*Permanent*	*Low*	*Improbable*	*Low*	*High*	• No heritage resources have been identified in the vicinity of the re-alignment. • The chance find procedure in the EMPr must be adhered to.	*Medium*	*Low*	*Partial*	*High Degree*
			Alternative 1			*Site*	*Permanent*	*Low*	*Improbable*	*Low*	*High*		*Medium*	*Low*	*Partial*	*High Degree*
			Alternative 2			*Site*	*Permanent*	*Low*	*Improbable*	*Low*	*High*		*Medium*	*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*Partial*	*High Degree*
	Direct	Impacts on existing infrastructure and users	Proposal	No	Negative	*None*	*None*	*None*	*None*	*None*	*High*	None required	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Loss of sense of place	Proposal	No	Negative	*Neighbouring*	*Long-term*	*None*	*Possible*	*Low*	*Medium*	• Suitable screening to be put in place during construction to minimise visual impacts. • No littering to be allowed. • Good housekeeping practices to be followed • The development involves the relocation existing sports-field to adjacent property	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*None*	*Possible*	*Low*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*None*	*Possible*	*Low*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Economic	Direct	Decline/increase in economy	Proposal	Yes	Positive	*Local*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*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*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*Medium*		*Low*	*Medium-High*	*No Loss*	*Reversible*
			Alternative 2			*Local*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*Medium*		*Low*	*Medium-High*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Short-term*	*Low-Medium*	*Likely*	*Low*	*Medium*	Should the project not go ahead, there will not be any generation of new employment opportunities.	*None*	*Low*	*No Loss*	*Reversible*
	Direct	Employment	Proposal	Yes	Positive	*Local*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*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*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*Medium*		*Low*	*Medium-High*	*No Loss*	*Reversible*
			Alternative 2			*Local*	*Short-term*	*Medium*	*Highly Likely*	*Low-Medium*	*Medium*		*Low*	*Medium-High*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Short-term*	*Low-Medium*	*Likely*	*Low*	*Medium*	Should the project not go ahead, there will not be any generation of new employment opportunities.	*None*	*Low*	*No Loss*	*Reversible*
OPERATIONAL PHASE																
Atmospheric Emissions	Direct	Dust emissions	Proposal	Yes	Negative	*None*	*None*	*None*	*None*	*None*	*High*	The sports-fields do not contribute to dust emissions, therefor no mitigation measures required	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
		Emissions from vehicles	Proposal	Yes	Negative	*Neighbouring*	*Short-term*	*Low*	*Likely*	*Low*	*Medium*	• Employ speed limits on internal road • Employ mechanisms to ensure that road users stick to the speed limit, such as speed traps etc. (sticking to the speed limit,	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Short-term*	*Low*	*Likely*	*Low*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*

	Direct	and equipment (CO2, NOx, SOx, VOC's etc.)	Alternative 2			*Neighbouring*	*Short-term*	*Low*	*Likely*	*Low*	*Medium*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*Medium*	Not Applicable	*Low*	*Low*	*No Loss*	*Reversible*
Noise	Direct	Noise increase due to vehicles using the road	Proposal	Yes	Negative	*Neighbouring*	*Long-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*	•The proposed development involves the relocation of existing sports-fields. Thus the noise impacts generated from the existing fields will be transferred to the adjacent property, thereby not contributing to an increase of noise pollution. • Peak noise impacts will also be during sporting events and not on a daily basis	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Low-Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Discharge to Water (Surface and Groundwater)	Direct	Sewage	Proposal	No	Negative	*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*	• Due to the lack in formal infrastructure, the school will install sewer treatment plants to address demand. The plant operates as an enclosed system and will therefor not impact any watercourses. However, due to the potential to spill as a result of breakage, it must be well maintained and placed within a bunded area.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Indirect	Silt	Proposal	No	Negative	*Site*	*Incidental*	*Low*	*Possible*	*Low*	*High*	• All alternatives include a formalised stormwater system. All surfaces altered during construction will be compacted and covered by an alternative surface or grass, thereby minimising citification.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low*	*Possible*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Surface water run-off	Proposal	Yes	Negative	*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*	• Storm water management system to be implemented and maintained.	*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Long-term*	*Medium*	*Definite*	*Medium*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Yes	Negative	*Site*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*	No formalised structure in place	*None*	*Low-Medium*	*No Loss*	*Reversible*
	Direct	Contamination of water from hazardous substances	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*	Water Quality Measurements must be taken from the grey water used for irrigation to ensure the quality remains within set parameters.	*None*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*		*None*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*		*None*	*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Incidental*	*Medium*	*Possible*	*Low*	*High*	No formalised structure in place, surface water may be contaminated by illegal dumping	*None*	*Low*	*No Loss*	*Reversible*
	Direct	Disturbance of natural system	Proposal	Yes	Negative	*None*	*None*	*None*	*None*	*None*	*High*	During operation phase all channelized structures are in place and maintained to control run-off from natural areas.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*		*None*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
			Proposal			*None*	*None*	*None*	*None*	*None*	*High*	During operation phase all channelized structures are in place and maintained to control run-off from natural areas	*None*	*None*	*No Loss*	*Reversible*

	Direct	Disturbance of aquatic ecological systems	Alternative 1	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*Medium*	areas.	*None*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
Waste Generation	Direct	Domestic waste	Proposal	No	Negative	*Site*	*Incidental*	*Low*	*Likely*	*Low*	*High*	• As part of management of the sports-facilities, litter should be collected and disposed of at an approved landfill site. • Waste bins must be distributed through-out entire site where applicable.	*Low*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Likely*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low*	*Likely*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Construction waste	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
	Direct	Hazardous waste	Proposal	No	Negative	*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*	The only hazardous waste expected is through incidents/accidents resulting in oil/fuel spillages from the maintenance equipment and workshop area. 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			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Loss of topsoil	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Loss of land capability	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Not	Alteration of topography	Proposal	Not	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*

Soil Alteration	Applicable	Alteration of topography	Alternative 2	Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Soil erosion	Proposal	Yes	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	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*	*Medium*	*Likely*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Medium*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Yes	Negative	*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*	Without a formal stormwater system in place erosion will continue and worsen in time	*None*	*Low-Medium*	*No Loss*	*Reversible*
	Direct	Soil pollution	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	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			*Site*	*Incidental*	*Medium*	*Likely*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*	Without any management structures in place soil pollution can not be monitored or managed.	*None*	*Low-Medium*	*Partial*	*High Degree*
Resource Consumption	Not Applicable	Electricity consumption	Proposal	Yes	Negative	*Neighbouring*	*Long-term*	*Low-Medium*	*Possible*	*Low*	*High*	• The nature of the project will not require high levels of electricity usage as most of the activities will occur during the day • Energy efficient/ saving technology must be incorporated within the design. during operations. • Energy saving initiatives should be enforces: switching off lights during night. only turning on spot-lights when required.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Medium*	*Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Low-Medium*	*Possible*	*Low*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Water consumption	Proposal	Yes	Negative	*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*	• Water saving initiatives must be implemented. • Irrigation of sports-fields must be done at specific times to minimise evaporation. • Reuse of water must be promoted	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Long-term*	*Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Fuel consumption	Proposal	Yes	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	• Maintenance work must be managed as sufficient as possible to promote the efficient use of fuel.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
	Not Applicable	Raw materials consumption	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*

Effects on Biodiversity	Not Applicable	Loss of habitat	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	Without formalising the vacant land, the site will continue to degrade which will result in the loss of Habitat	*None*	*Low-Medium*	*Partial*	*High Degree*
	Not Applicable	Loss of fauna	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	Without formalising the vacant land, the site will continue to degrade which will result in the loss of Fauna.	*None*	*Low-Medium*	*Partial*	*High Degree*
	Not Applicable	Loss of flora	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	Without formalising the vacant land, the site will continue to degrade which will result in the loss of Flora.	*None*	*Low-Medium*	*Partial*	*High Degree*
	Not Applicable	Degradation of ecological systems	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	Without formalising the vacant land, the site will continue to degrade increasing the footprint of disturbance within the study site	*None*	*Low-Medium*	*Partial*	*High Degree*
	Direct	Disruption of natural corridors	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Long-term*	*Low-Medium*	*Highly Likely*	*Low-Medium*	*High*	Without formalising the vacant land, the site will continue to degrade the ecological system.	*None*	*Low-Medium*	*Partial*	*High Degree*
	Direct	Pollution incidents	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*	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			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Possible*	*Low*	*High*		*Low*	*low*	*No Loss*	*Reversible*

Incidents, accidents and potential emergency situations			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
	Direct	Health and safety	Proposal	No	Negative	*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*	• Speed limits to be implemented. • Traffic calming and safety measures to be implemented during any maintenance activities taking place on the site (e.g. collecting litter, cutting grass and landscaping). • Appropriate medical personnel and equipment must be present on site during sporting events. • An Safety representative must be appointed within the workshop area.	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*High*	Not Applicable	*None*	*low*	*No Loss*	*Reversible*
	Direct	Storage of hydrocarbons	Proposal	No	Negative	*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*	• Best practice regarding storage of substances • Spill kits to be located in strategic areas for when needed • Environmental awareness training • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers • Quantity management of regarding storage area and quantities	*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Low-Medium*	*Highly Likely*	*Low*	*High*		*Medium*	*low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
	Direct	Fire	Proposal	No	Negative	*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*Medium*	• Adhere to the appropriate emergency procedures • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers	*Low*	*low*	*No Loss*	*Reversible*
			Alternative 1			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*Medium*		*Low*	*low*	*No Loss*	*Reversible*
			Alternative 2			*Site*	*Incidental*	*Medium*	*Possible*	*Low*	*Medium*		*Low*	*low*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Site*	*Incidental*	*Medium-High*	*Highly Likely*	*Low-Medium*	*Medium*	If site remains unmanaged, fires could occur as a result from illegal dumping	*None*	*Low-Medium*	*No Loss*	*Reversible*
Social	Direct	Visual impact	Proposal	No	Positive	*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*	• A well maintained sports-field will suit the sense of place. • Well landscaped areas will be seen from the adjacent roads	*None*	*Medium*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*		*None*	*Medium*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*		*None*	*Medium*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*	Illegal dumping and uncontrolled activities on site increases the visual impact on the neighbouring area	*Low*	*Medium*	*No Loss*	*Reversible*
	Direct	Safety and security	Proposal	No	Positive	*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*	• Fence/wall to be put in place to limit unauthorised access to the sports-fields to ensure only access is through official access points. • Lighting and movement on site will decrease illegal activities within the area.	*Low*	*Medium*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*		*Low*	*Medium*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*		*Low*	*Medium*	*No Loss*	*Reversible*
			No-Go Option	No	Negative	*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*	No management on site will result in the increase of illegal activities.	*None*	*Medium*	*No Loss*	*Reversible*
	Direct	Traffic disruptions	Proposal	Yes	Negative	*Neighbouring*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*	• Traffic warning and calming measures will be put in place when big sporting events may impact on traffic flow.	*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Short-term*	*Medium*	*Definite*	*Low-Medium*	*High*		*Low*	*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*
			Proposal			*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*

	Not Applicable	Loss of cultural heritage	Alternative 1	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	N/A during the operational phase.	*None*	*None*	*No Loss*	*Reversible*
	Direct	Loss of sense of place	Proposal	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	The development involves the relocation of existing sports-fields to the adjacent property. Therefore, the sense of place will not be changed as most of the adjacent properties are associated with Heronbridge College.	*None*	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			Alternative 2			*None*	*None*	*None*	*None*	*None*	*High*		*None*	*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	*None*	*None*	*None*	*None*	*High*	The site in its current state will continue, therefore will not alter its current sense of place	*None*	*None*	*No Loss*	*Reversible*
Economic	Direct	Decline/increase in economy	Proposal	Yes	Positive	*Neighbouring*	*Long-term*	*Medium*	*Definite*	*Medium*	*Medium*	Development and formalisation of vacant land will secure future of Heronbridge College, thereby increasing the potential economy of the local community by providing more development and investment opportunities.	*None*	*Medium*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Medium*	*Definite*	*Medium*	*Medium*		*None*	*Medium*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Medium*	*Definite*	*Medium*	*Medium*		*None*	*Medium*	*No Loss*	*Reversible*
			No-Go Option	Yes	Negative	*Neighbouring*	*Long-term*	*Medium*	*Highly Likely*	*Medium*	*High*	If the study site stays vacant it will not contribute to economical growth for the local community	*None*	*Medium*	*No Loss*	*Reversible*
	Direct	Employment	Proposal	Yes	Positive	*Neighbouring*	*Long-term*	*Low*	*Possible*	*Low*	*Medium*	Local employment must be enforced if additional employment is required for the operation phase.	*Very Low*	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Neighbouring*	*Long-term*	*Low*	*Possible*	*Low*	*Medium*		*Very Low*	*Low*	*No Loss*	*Reversible*
			Alternative 2			*Neighbouring*	*Long-term*	*Low*	*Possible*	*Low*	*Medium*		*Very Low*	*Low*	*No Loss*	*Reversible*
	Not Applicable		No-Go Option	Not Applicable	Not Applicable	*None*	*None*	*None*	*None*	*None*	*High*	Not Applicable	*None*	*None*	*No Loss*	*Reversible*