JADE HILLS - Preferred Alternative														
Nature of Impact			Without Mitigation (Baseline)					Without Mitigation Score (Baseline)	With Mitigation					With Mitigation Score (Impact Assessment)
Number	Aspect	Impact	Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/ Severity)	Receiving Environment (Significance/ Consequence)		Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/ Severity)	Receiving Environment (Significance/ Consequence)	
CONSTRUCTION PHASE														
1	Impact on Cultural, Archaeological, and Heritage Resources	Loss and/or damage to potential archaeological and historical sites within the construction footprint	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
2	Impact on Palaeontological Resources	Loss and/or damage to potential fossils within the construction footprint	-1	-1	-8	-4	-8	-5	-1	-1	-1	-4	-4	-2
3	Botanical	Vegetation Status: Loss of vulnerable vegetation and associated habitat.	-4	-1	-4	-1	-4	-3	-1	-1	-1	-1	-1	-1
4	Freshwater Resources	Degradation to the remaining vegetation within and surrounding the drainage line;	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
		Transportation of construction materials can result in disturbances to soils, and increased risk of sedimentation/erosion; and	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-2	-2
		Soil and stormwater contamination from oils and hydrocarbons.	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
5		Earthworks could be potential sources of sediment, which may be transported as runoff into the downgradient areas;	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
		Exposure of soils, leading to increased runoff, and erosion, and thus sedimentation of the drainage line;	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
		Increased sedimentation of the drainage line, leading to smothering vegetation associated with the drainage line; and	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
		Further proliferation of alien vegetation as a result of disturbances.	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-2	-2
6		Runoff from the imported material could increase the sediment load of the downstream reach of the drainage line.	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
7		Sedimentation and water quality impairment (increased hydrocarbons, suspended solids, hazardous substances and oils from the heavy machinery used) of the downgradient drainage line reach leading to further degradation of the downgradient habitat.	-4	-2	-2	-2	-4	-3	-2	-1	-1	-1	-4	-2
8		Loosening and exposure of soils leading to *in situ* erosion, and sedimentation of the downgradient drainage line reach.	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
9		Potential sedimentation for the downstream drainage line reach;	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2

10		Potential proliferation of alien and invasive vegetation species.	-4	-2	-2	-2	-8	-4	-2	-1	-1	-1	-4	-2
11	Socio-economic	Jobs created during the construction phase	8	2	4	2	2	4	0	0	0	0	0	0
12	Dust	Dust will be generated during the construction of the proposed development which may impact surrounding communities.	-4	-2	-2	-2	-4	-3	-2	-2	-2	-1	-2	-2
13	Visual	Visual impact of construction activities and plant on site	-8	-2	-2	-1	-1	-3	-8	-2	-2	-1	-1	-3
14	Traffic	Increase in trucks and construction plant	-4	-1	-1	-2	-1	-1	-4	-1	-1	-1	-1	-1
15	Noise	Noise will be generated during the construction phase.	-4	-1	-1	-2	-1	-1	-2	-1	-1	-1	-1	-1
OPERATIONAL PHASE														
16	Freshwater Resources	· Changes in the wetting patterns and hydroperiod of the drainage line; · Loss of ecoservice provisioning by the drainage line; and · Increased periods of saturation along the edge of the dam.	-4	-2	-2	-2	-4	-3	-2	-1	-1	-1	-4	-2
17		· Erosion of the downstream drainage line reach where water enters the drainage line from the spillway; and Potential increased sedimentation of the downstream drainage line due to erosion associated with the spillway.	-4	-2	-2	-2	-4	-3	-2	-1	-1	-1	-4	-2
18		Desilting activities resulting in the: •Removal of vegetation (terrestrial and wetland); and Earthworks and silt stockpiling, the runoff from which has the potential to increase silt loads within the downstream drainage line.	-4	-2	-2	-2	-4	-3	-2	-1	-1	-1	-4	-2
19		In the event where a leak has been detected within the dam wall itself, impacts include: · An increase in water quantity could cause extended periods of water saturation of the downstream drainage line reach; · Repair of a leak would entail the impacts as per Activity 4 - 8 above.	-4	-2	-2	-2	-4	-3	-2	-1	-1	-1	-4	-2
22	Visual	Visual impact of agricultural development with shade netting	-8	-1	-4	-1	-1	-3	-4	-1	-4	-1	-2	-3
23	Socio-economic	Creation of long-term employement opportunities.	8	2	8	2	4	5	0	0	0	0	0	0