ALTERNATIVE:

		ALIENWATIVE		Sit	te 1						Site 3	3A + 3B						"No	-Go"			$\overline{}$
	ENVIRONMENTAL ELEMENT	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo - Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo - Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Unmitigated	Status Quo - Baseline Impact	Cumulative Impact	Residual Impact
CODE:																						
	CONSTRUCTION PHASE																					
G-1	Geology	Negative	Probable	1	1	3.7	3.7	3.7	Negative	Probable	1.1	1.1	3.7	3.7	3.7			0	0	3.7	3.7	3.7
				VLOW	VLOW	HIGH	HIGH	HIGH			LOW	LOW	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
T-1	Topography	Negative	Definite	3.3	2.7 MOD	3.7	3.7	3.7	Negative	Definite	3.7	3.7	3.7	4 HIGH	4 HIGH			NO NO	NO NO	3.7 HIGH	3.7	3.7 HIGH
51.0.4			D 1 11	1.2	0.7	3	3.7	3.3			1.3	0.8	3	3.7	3.7			0	0	3	3	3
SLC-1	Soil and Land Capability	Negative	Probable	LOW	VLOW	MOD	HIGH	HIGH	Negative	Probable	LOW	VLOW	MOD	HIGH	HIGH			NO	NO	MOD	MOD	MOD
SWW-1	Surface Water and Wetlands	Negative	Probable	2.1	0.9	3.7	3.7	3	Negative	Probable	2.7	1.5	3.7	3.7	3.7			0	0	3.7	3.7	3.7
		.0		0.8	VLOW 0.5	HIGH 3	HIGH 3	MOD 3	-0		0.8	0.5	HIGH 3	HIGH 3	HIGH 3			NO 0	NO 0	HIGH 3	HIGH 3	HIGH 3
GW-1	Groundwater	Negative	Probable	VLOW	VLOW	MOD	MOD	MOD	Negative	Probable	VLOW	VLOW		MOD	MOD			NO	NO	MOD	MOD	MOD
				1	0.7	3	3	2.7			1.1	0.8	3	3.3	3			0	0	3	3	3
TE-1	Terrestrial Ecology	Negative	Definite	VLOW	VLOW	MOD	MOD	MOD	Negative	Definite	LOW	VLOW	MOD	HIGH	MOD			NO	NO	MOD	MOD	MOD
AF-1	Avifauna	Negative	Definite	2.4	2.4	3	3	2.7	Negative	Definite	2.1	2.1	3	3	3			0	0	3	3	3
A 1	Aviidand	Negative	Demine	MOD	MOD	MOD	MOD	MOD	regutive	Demine	MOD	MOD	MOD	MOD	MOD			NO	NO	MOD	MOD	MOD
AQ-1	Air Quality	Negative	Possible	1.3 LOW	0.6	3.3 HIGH	3.3	3.3	Negative	Possible	LOW	0.5	3.3	3.3	3.3			NO NO	0	3.3	3.3	3.3
				0.8	0.3	2.7	HIGH 3	HIGH 2.7			0.5	VLOW 0.3	2.7	2.7	2.7			0	NO O	2.7	2.7	2.7
N-1	Noise	Negative	Probable	VLOW	VLOW	MOD	MOD	MOD	Negative	Probable	VLOW	VLOW	MOD	MOD	MOD			NO	NO	MOD	MOD	MOD
505.1	Codel Facilities and	Destition	Dh-bl-	0.5	0.5	2.7	2.7	3	Danieli	Duebebb	0.4	0.4	2.7	3	3	No serbicos	D-fi-it-	4.7	0	2.7	4.7	4.7
SOC-1	Social Environment	Positive	Probable	VLOW	VLOW	MOD	MOD	MOD	Positive	Probable	VLOW	VLOW	MOD	MOD	MOD	Negative	Definite	VHIGH	NO	MOD	VHIGH	VHIGH
EC-1	Economic	Positive	Possible	1	1.3	2.7	3	3	Positive	Possible	0.8	1	2.7	2.1	2.1	Negative	Definite	4.7	0	2.7	4.7	4.7
				VLOW	LOW	MOD	MOD	MOD			VLOW	VLOW	MOD	MOD	MOD			VHIGH	NO	MOD	VHIGH	VHIGH
INF-1	Infrastructure and Traffic	Negative	Probable	4 HIGH	VLOW	2.7 MOD	4.3	1.9 LOW	Negative	Probable	HIGH	VLOW	2.7 MOD	4.3 VHIGH	1.9 LOW			NO NO	NO NO	2.7 MOD	2.7 MOD	2.7 MOD
				1.2	1	3.7	3.7	3.7			1.2	1	3.7	3.7	3.7			0	0	3.7	3.7	3.7
V-1	Visual	Negative	Probable	LOW	VLOW	HIGH	HIGH	HIGH	Negative	Probable	LOW	VLOW	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
ArCH-1	Archaeology, Palaeongology, Cultural Heritage	No Impact	Definite	0	0	0	0	0	No Impact	Definite	0	0	0	0	0			0	0	0	0	0
AICH-1	Archideology, Faldeoligology, Cultural Heritage	140 Impact	Definite	NO	NO	NO	NO	NO	140 III pact	Definite	NO	NO	NO	NO	NO			NO	NO	NO	NO	NO

Rated By: Warren Kok ALTERNATIVES:
Reviewed By:

Reviewed By:						9	ite 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
G-1	Geology																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Destruction of geology shallow than 10m				2	1	5	5	2.7		3	1	5	5	3		0				0
		Negative	Definite	3	LOW	ISO	PERM	OCCUR	MOD	3	MOD	ISO	PERM	OCCUR	MOD	1	NO				NO
Mitigation Measures:	None Possible.				2 LOW	ISO	PERM	5 OCCUR	2.7 MOD		3 MOD	ISO	PERM	5 OCCUR	MOD		0 NO				NO
Wedsures.	DEFORE MITICATION	Nanadina	D-6-11-		1.2	0.6	3	3	1		1.8	0.6	3	3	1.1		0	0	0	0	0
COMBINED WEIGHTED	BEFORE MITIGATION	Negative	Definite		LOW	ISO	MED	COULD	VLOW		LOW	ISO	MED	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION	Nanativa	Definite		1.2	0.6	3	3	1		1.8	0.6	3	3	1.1		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW	ISO	MED	COULD	VLOW		LOW	ISO	MED	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
31A103 Q00	INTIAL BASELINE INFACTS TO ENVIRONMENT	ivegative	Flobable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	ivegative	riobable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Nogativo	Probable		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH

Reviewed By:						9	ite 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
T-1	Topography																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Alteration of surface water drainage patterns				3	2	5	5	3.3		4	2	5	5	3.7		0				0
	- '	Negative	Probable	5	MOD	STUDY	PERM	OCCUR		5	HIGH	STUDY	PERM	OCCUR		1	NO			igsquare	NO
Mitigation Measures:	Stormwater management measures, have only one facility, site to drain only in one direction				LOW	ISO	5 PERM	5 OCCUP	2.7 MOD		4	2 STUDY	5 PERM	5	3.7 HIGH		0 NO			\longmapsto	0 NO
ivieusures.	aram only in one unection				3	2	5	5	3.3		4	2	5	5	3.7		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Definite								-										•
WEIGHTED					MOD	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR	HIGH		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION	Negative	Definite		2	1	5	5	2.7		4	2	5	5	3.7		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Delinite		LOW	ISO	PERM	OCCUR	MOD		HIGH	STUDY	PERM	OCCUR	HIGH		NO	#N/A	#N/A	#N/A	NO
			- 4		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	3	5	5	3.7		4	3	5	5	4		3	3	5	5	3.7
	PROJECT, BEFORE MITIGATION	Negative	Definite		MOD	LOCAL	PERM	OCCUR			HIGH	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	3	5	5	3.7		4	3	5	5	4		3	3	5	5	3.7
	PROJECT, AFTER MITIGATION	Negative	Definite		MOD	LOCAL	PERM	OCCUR	HIGH		HIGH	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH

Rated By:	Warren Kok		i	ALIERI	NATIVES:		ite 1					Cito	3A + 3E)				"11	0-G0"		
Reviewed By:					1	2	nte 1	ı —	1			Site	3A + 3b	,				IN	0-00		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SLC-1	Soil and Land Capability																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Sterilisation of agricultural land				3	1	5	5	3		4	1	5	5	3.3		0				0
·		Negative	Definite	5	MOD	ISO	PERM	OCCUR	MOD	5	HIGH	ISO	PERM	OCCUR	HIGH	1	NO				NO
Mitigation Measures:	Use Site (smaller area), Stockpile all useable topsoil & Subsoil				3 MOD	1 ISO	5 PERM	5 OCCUR	3 MOD		4 HIGH	1 ISO	5 PERM	5 OCCUR	3.3 HIGH		0 NO				NO
					3	1	5	5	3		4	1	5	5	3.3		0				0
Impact 2	Loss of soil resources - erosion	Mogativo	Definite	3	MOD	ISO		OCCUR	MOD	2	HIGH	ISO	PERM	OCCUR	HIGH		NO				NO
Mitigation	Place soil stockpiles out of water courses, Revegetate Stockpiles,	Negative	Delilite	3	2	1	5	3	1.6	3	3	1	5	5	3		0				0
Measures:	Stormwater Management				LOW	ISO		COULD	LOW		MOD	ISO	PERM	OCCUR	MOD		NO				NO
Impact 3	Pollution of soils				3	1	4	4	2.1		3	1	4	4	2.1		0				0
Mitigation		Negative	Definite	3	MOD	ISO	LONG 1	VLIKE	0.2	3	MOD	ISO	LONG	VLIKE	0.2		NO				NO 0
Mitigation Measures:	Hydro-carbon management, waste management, Access Control				1 VLOW	ISO	INCID	1 IMPOS	VLOW		1 VLOW	1 ISO	1 INCID	1 IMPOS	VLOW		0 NO				NO
	Net loss of soil volumes and utilistion potential (chemical properties,				1	1	4	5	2		2	1	4	5	2.3		0				0
Impact 4	nutrients, structure etc)	Negative	Definite	3	VLOW	ISO	LONG	OCCUR	LOW	3	LOW	ISO	LONG		MOD		NO				NO
_	Strip and stockpile maximum top soil and subsoil for rehabilitation	.vegative	Demine	,	1	1	4	5	2	,	2	1	4	5	2.3		0				0
Measures:	use. Rehabilitate all areas outside of Dam's storage area.				VLOW 3	ISO 1	LONG 4	OCCUR 5	LOW 2.7		LOW 3	ISO 1	LONG 4	OCCUR 5	MOD 2.7		NO 0				<u>NO</u> 0
Impact 5	Compaction of soils			_	MOD	ISO	LONG	OCCUR	MOD	_	MOD	ISO	LONG		MOD		NO				NO
Mitigation	Appropriate ripping and amelioration of construction impacted areas,	Negative	Definite	3	1	1	2	2	0.5	3	1	1	2	2	0.5		0				0
Measures:	outside of the Dam's storage area.				VLOW	ISO	SHORT	UNLIKE	VLOW		VLOW	ISO	SHORT	UNLIKE	VLOW		NO				NO
	DEFORE MUTICATION	N	Definite		1.8	0.7	3	3.3	1.2		2.2	0.7	3	3.3	1.3		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Definite		LOW	ISO	MED	VLIKE	LOW		MOD	ISO	MED	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION				1.2	0.7	2.4	2.3	0.7		1.6	0.7	2.4	2.6	0.8		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW	ISO	MED	COULD	VLOW		LOW	ISO	MED	COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
	3 3 1, 3				2	2	5	5	3		2	2	5	5	3		2	2	5	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable																		
					LOW	STUDY		OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION	Negative	Probable		4	2	5	5	3.7		4	2	5	5	3.7		2	2	5	5	3
	· · · · · · · · · · · · · · · · · · ·				HIGH	STUDY		OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR -	HIGH		LOW	STUDY	PERM	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		3	2	5	5	3.3		4	2	5	5	3.7		2	2	5	5	3
IMPACT	PROJECT, AFTER MITIGATION	J			MOD	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD

Rated By:	Warren Kok			ALIERI	NATIVES																
Reviewed By:		_				5	ite 1					Site	3A + 3B	ŀ				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	[emporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Femporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Femporal	Probability	Impact Risk
SWW-1	Surface Water and Wetlands					Ů,						U,						Ů,			
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Decreased water quality (suspended solids, turbidity, hydro-carbon, chemical, and microbiological)	Negative	Definite	5	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD	5	4 HIGH	3 LOCAL	2 SHORT	5 OCCUR	3 MOD	1	0 NO				0 NO
Mitigation Measures:	Suitably sized stormwater infrastructure. Water treatment of De Jager's Pan. Build >100m from SW Resources.	Negative	Definite	Э	1 VLOW	1 ISO	1 INCID	3 COULD	0.6 VLOW	5	2 LOW	2 STUDY	1 INCID	4 VLIKE	1.3 LOW	1	0 NO				0 NO
Impact 2	Decreased water quantity - runoff contained in "dirty" area.				3 MOD	2 STUDY	4 LONG	5 OCCUR	3 MOD		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7		0 NO				0 NO
Mitigation Measures:	Clean water cut-off close to facility. Locate facility high on water shed. Use Site 1 (smaller area). Line contaminated areas.	Negative	Definite	5	2 LOW	2 STUDY	4	5 OCCUR	2.7 MOD	5	3 MOD	3 LOCAL	4 LONG	5 OCCUR	3.3		0 NO				0 NO
	Sedimentation of wetlands and surface water resources	November	D. C. V.	_	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD		4 HIGH	3 LOCAL	2 SHORT	5 OCCUR	3 MOD		0 NO				0 NO
Mitigation Measures:	Suitably sized stormwater infrastructure. Water treatment of De Jager's Pan. Build >100m from SW Resources.	Negative	Definite	5	1 VLOW	1 ISO	1 INCID	2 UNLIKE	0.4 VLOW	5	2 LOW	2 STUDY	1 INCID	3 COULD	1 VLOW		0 NO				0 NO
Impact 4	Reduction in habitat integrity of downstream wetland areas	Namativa	Duchahla	١.	1 VLOW	2 STUDY	2 SHORT	3 COULD	1 VLOW	١	2 LOW	1 ISO	2 SHORT	4 VLIKE	1.3 LOW		0 NO				0 NO
Mitigation Measures:	Suitably sized stormwater infrastructure. Water treatment of De Jager's Pan. Build >100m from SW Resources.	Negative	Probable	5	1 VLOW	1 ISO	1 INCID	2 UNLIKE	0.4 VLOW	5	1 VLOW	1 ISO	2 SHORT	3 COULD	0.8 VLOW		0 NO				0 NO
COMBINED	BEFORE MITIGATION	Negative	Definite		2.5	2	2.5	4.5	2.1		3.5	2.5	2.5	4.8	2.7		0	0	0	0	0
WEIGHTED	AFTER MITIGATION				MOD 1.3	STUDY 1.3	MED 1.8	OCCUR 3	MOD 0.9		HIGH 2	LOCAL 2	MED 2	OCCUR 3.8	MOD 1.5		NO 0	#N/A 0	#N/A 0	#N/A 0	NO 0
KATING	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW			COULD	VLOW		LOW	STUDY	SHORT		LOW		NO	#N/A	#N/A	#N/A	NO
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION				HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR			HIGH	LOCAL	LONG	OCCUR	HIGH
RESIDUAL IMPACT	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, AFTER MITIGATION	Negative	Probable		3 MOD	2 STUDY	4 LONG	5 OCCUR	3 MOD		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH

Rated By:	Warren Kok			ALTERI	NATIVES																
Reviewed By:							Site 1					Site	3A + 3E	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
GW-1	Groundwater																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Decreased water quality (suspended solids, turbidity, hydro-carbon,				2	1	1	3	0.8		1	1	1	3	0.6		0				0
	chemical, and microbiological)	Negative	Definite	5	LOW	ISO	INCID	COULD	VLOW	5	VLOW	ISO	INCID	COULD		1	NO				NO
Mitigation	Hydrocarbon and chemical management.	gative	Demine	,	1	1	1	1	0.2		1	1	1	1	0.2	1	0				0
Measures:					VLOW	ISO	INCID	IMPOS	VLOW		VLOW	ISO	_	IMPOS	VLOW		NO				NO
Impact 2	Decreased water quantity - less recharge to groundwater				2	1	4	5	2.3		3	1	4	5	2.7		0				NO
Mitigation		Negative	Definite	3	LOW 2	ISO	LONG	OCCUR 5	MOD 2.3	3	MOD 3	ISO 1	4	OCCUR 5	MOD 2.7		NO 0				0
Measures:	None.				LOW	ISO	LONG		MOD		MOD	ISO	LONG		MOD		NO				NO
wicusures.					1.6	0.8	1.7	3	0.8		1.4	0.8	1.7	3	0.8		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Definite														_			_	_
WEIGHTED					LOW	ISO	SHORT	COULD	VLOW		LOW	ISO	SHORT	COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION		- 0.11		1.1	0.8	1.7	2	0.5		1.4	0.8	1.7	2	0.5		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW	ISO	SHORT	UNLIKE	VLOW		LOW	ISO	SHORT	UNLIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
					2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable						•						J		-			_	_
					LOW	LOCAL		OCCUR	MOD		LOW	LOCAL			MOD		LOW	LOCAL	LONG		MOD
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	gutive			LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakina	Duckahla		2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD

Rated By:	Warren Kok		ı	ALIEKI	NATIVES:		:- 1					C:+-	24 . 20					"NI	0.60"		
Reviewed By:					1	5	ite 1	1				Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
TE-1	Terrestrial Ecology																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Destruction of vegetation	No. of	6.6.1	-	3 MOD	1 ISO	5 PERM	5 OCCUR	3 MOD		4 HIGH	1 ISO	5 PERM	5 OCCUR	3.3 HIGH		0 NO				0 NO
Mitigation	Search and Rescue, Alien invasive control, Separate topsoil stripping /	Negative	Definite	5	2	1	5	5	2.7	5	3	1	5	5	3	1	0				0
Measures:	stockpiling (including seedbed), Rehab Temp Impact Areas				LOW	ISO	PERM	OCCUR	MOD		MOD	ISO	PERM	OCCUR	MOD		NO				NO
Impact 2	Loss of faunal populations				2	1	1	3	0.8		2	1	1	3	0.8		0				0
iiipact 2	2000 of faultal populations	Negative	Definite	3	LOW	ISO	INCID	COULD	VLOW	3	LOW	ISO		COULD	VLOW		NO				NO
Mitigation	Search and Rescue, Alien invasive control, Rehab Temp Impact Areas	Negative	Demine	,	1	1	1	2	0.4	,	1	1	1	2	0.4		0				0
Measures:	Scaren and Nescae, Allen invasive control, Netido Temp impace Aleas				VLOW	ISO	INCID	UNLIKE	VLOW		VLOW	ISO		UNLIKE	VLOW		NO				NO
Impact 3	Loss of biodiversity				2	1	5	3	1.6		2	1	5	5	2.7		0				0
impact 5	2000 Of Blodiversity	Negative	Definite	2	LOW	ISO	PERM	COULD	LOW	2	LOW	ISO	PERM	OCCUR	MOD		NO				NO
Mitigation	Harvest Seeds, Alien invasive control, Indigenous Seedmix-Rehab	Negative	Demnite	_	1	1	5	1	0.5		1	1	5	1	0.5		0				0
Measures:	areas, Separate topsoil stripping / stockpiling (including seedbed)				VLOW	ISO	PERM	IMPOS	VLOW		VLOW	ISO	PERM	IMPOS	VLOW		NO				NO
Impact 4	Loss of habitat and habitat fragmentation	Negativo	Definite	5	3 MOD	1 ISO	4 LONG	5 OCCUR	2.7 MOD	5	4 HIGH	1 ISO	4 LONG	5 OCCUR	3 MOD		0 NO				0 NO
Mitigation	Consecutive Rehab of Dam	Negative	Delilille	Э	2	1	4	5	2.3	5	2	1	4	5	2.3		0				0
Measures:	Consecutive Kenub of Duni				LOW	ISO	LONG	OCCUR	MOD		LOW	ISO	LONG	OCCUR	MOD		NO				NO
Impact 5	Loss of species diversity				2	1	4	3	1.4		2	1	4	3	1.4		0				0
impact 5	•	Negative	Definite	2	LOW	ISO	LONG	COULD	LOW	2	LOW	ISO	LONG	COULD	LOW		NO				NO
Mitigation	Search and Rescue Operations, Seedbank, Separate topsoil stripping	reguire	Demme	_	1	1	4	2	0.8	_	1	1	4	2	0.8		0				0
Measures:	and replacement (including seedbed)				VLOW	ISO	LONG	UNLIKE	VLOW		VLOW	ISO	LONG	UNLIKE	VLOW		NO			oxdot	NO
Impact 6	Increase in alien invasive species				3	2	4	5	3		3	2	4	5	3		0			<u> </u>	0
·	morease in anei invasive species	Negative	Definite	3	MOD	STUDY	LONG	OCCUR	MOD	3	MOD	STUDY	LONG	OCCUR	MOD		NO				NO
Mitigation	Alien invasive control, Indigenous Seedmix - Rehab area	.0			1	1	4	5	2	J	1	1	4	5	2		0				0
Measures:					VLOW	ISO	LONG	OCCUR	LOW		VLOW	ISO	LONG	OCCUR	LOW		NO			-	NO
	BEFORE MITIGATION	Nogativo	Definite		1.8	0.8	2.6	2.9	1		2.1	0.8	2.6	3	1.1		0	0	0	0	0
COMBINED	BEFORE WITIGATION	Negative	Delilille		LOW	ISO	MED	COULD	VLOW		MOD	ISO	MED	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION		- 4 -		1	0.7	2.6	2.6	0.7		1.2	0.7	2.6	2.6	0.8		0	0	0	0	0
MATING	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		VLOW	ISO	MED	COULD	VLOW		LOW	ISO	MED	COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
5.A103 Q30	THE STOLETTE WITHOUT TO ENVIRONMENT	певание	Demine		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		3	2	4	5	3		4	2	4	5	3.3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	gat.re			MOD	STUDY	LONG	OCCUR	MOD		HIGH	STUDY	LONG	OCCUR	HIGH		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		2	2	4	5	2.7		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION				LOW	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok			ALIERI	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3E	3				۱"	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AF-1	Avifauna																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Loss of foraging / breeding habitat				3	2	4	4	2.4		2	2	4	4	2.1		0				0
·	Loss of foraging / breeding habitat	Negative	Definite	5	MOD	STUDY	LONG	VLIKE	MOD	5		STUDY	LONG	VLIKE	MOD	1	NO				NO
Mitigation	Use Site 3.	reguire	Demine	,	3	2	4	4	2.4	,	2	2	4	4	2.1	_	0				0
Measures:						STUDY	LONG	VLIKE	MOD			STUDY	LONG	VLIKE	MOD		NO				NO
Impact 2	Electrocutions of birds (will be the same as existing Tx lines)	NO ADDITIONAL			0 NO				NO		0 NO				0 NO		0 NO				0 NO
Mitigation	Eskom transmission line bird impact reduction standards to be	IMPACT	Definite		0				0		0				0		0				0
_	implemented.				NO				NO		NO				NO		NO				NO
					3	2	4	4	2.4		2	2	4	4	2.1		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Definite		MOD	STUDY	LONG	VLIKE	MOD		LOW	STUDY	LONG	VLIKE	MOD		NO	#N/A	#N/A	#N/A	NO
WEIGHTED					3	2	4	4	2.4		2	2	4	4	2.1		0	0	0	0	0
	AFTER MITIGATION	Negative	Definite			_								,			-				Ţ.
	(If mitigation is effective / possible this rating wil decrease)				MOD	STUDY	LONG	VLIKE	MOD		LOW	STUDY	LONG	VLIKE	MOD		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
312133 000	THE BASELINE IN ACTS TO ENVIRONMENT	14CBative	Deminte		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No. of the	5.5.3		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	2	4	5	2.7		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Definite		LOW	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok		1	ALIERI	NATIVES																
Reviewed By:						5	ite 1					Site	3A + 3E	3				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AQ-1	Air Quality																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Greenhouse gas emissions				2	2	2	5	2		2	2	2	5	2		0				0
·	3	Negative	Possible	3	LOW	STUDY	SHORT		LOW	3	LOW				LOW	1	NO				NO
Mitigation	Reduce energy consumption, Regular vehicle maintenance,				1	2	2	3	1	Ĭ	1	2	2	3	1	_	0				0
Measures:	Consecutive Rehab				VLOW	STUDY 3	SHORT 2	COULD 5	VLOW 3		VLOW 4	3	SHORT 2	COULD 5	VLOW 3		NO 0				NO O
Impact 2	Nuisance and fall out dust				HIGH		SHORT		MOD		HIGH		SHORT		MOD		NO				NO
Mitigation	Watering to reduce dust mobilisation, Use Site 3, Revegetate	Negative	Possible	4	2	2	2	3	1.2	3	2	2	2	3	1.2		0				0
Measures:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				LOW	STUDY	SHORT	COULD	LOW		LOW	STUDY	SHORT	COULD	LOW		NO				NO
Impact 3	Increased particulate matter (PM2.5 and PM10)				2	3	2	3	1.4		2	3	2	3	1.4		0				0
impact 3		Negative	Possible	5	LOW	LOCAL	SHORT	COULD	LOW	5	LOW	LOCAL	SHORT	COULD	LOW		NO				NO
Mitigation	Watering to reduce dust mobilisation, Use Site 3, Revegetate	reguire	1 0331310	,	2	1	2	2	0.7	,	2	1	2	2	0.7		0				0
Measures:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				LOW	ISO	SHORT	UNLIKE	VLOW		LOW	ISO	SHORT		VLOW		NO				NO
	BEFORE MITIGATION	Negative	Possible		2.1	2.2	1.6	3.3	1.3		1.9	2	1.5	3	1.1		0	0	0	0	0
COMBINED		gative	1 0331510		MOD	LOCAL	SHORT	VLIKE	LOW		LOW	STUDY	SHORT	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION				1.4	1.3	1.6	2.1	0.6		1.3	1.1	1.5	1.9	0.5		0	0	0	0	0
KATING	(If mitigation is effective / possible this rating wil decrease)	Negative	Possible		LOW	STLIDY	SHORT	COLLID	VLOW		LOW	STLIDY	SHORT	IINIIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
											-										
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
					MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED		HIGH		MOD	REG	MED	OCCUR	HIGH
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, BEFORE MITIGATION	,			MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR			MOD	REG	MED	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, AFTER MITIGATION	richative	1 0331016		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH

Reviewed By:			ĺ			9	ite 1					Site	3A + 3B	}				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
N-1	Noise																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Increased ambient noise levels				3	3	2	4	2.1		2	3	2	3	1.4		0				0
	moreasea amsient noise tereis	Negative	Probable	3	MOD	LOCAL	SHORT	VLIKE	MOD	3	LOW	LOCAL	SHORT	COULD		1	NO				NO
Mitigation Measures:	6am - 6pm construction time, No Construction on Sundays	Ü			LOW	ISO	1 INCID	3 COULD	0.8 VLOW		2 LOW	ISO	1 INCID	3	0.8 VLOW	_	0 NO				NO
ivieusures.					1.8	1.8	1.2	2.4	0.8		1.2	1.8	1.2	1.8	0.5		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Probable																		•
WEIGHTED					LOW	STUDY	SHORT	COULD	VLOW		LOW	STUDY	SHORT	UNLIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION	Negative	Probable		1.2	0.6	0.6	1.8	0.3		1.2	0.6	0.6	1.8	0.3		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	ivegative	Flobable		LOW	ISO	INCID	UNLIKE	VLOW		LOW	ISO	INCID	UNLIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
					2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Possible		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	3	3	5	3		2	3	3	5	2.7		2	3	3	5	2.7
	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD

Rated By:	Warren Kok		î	ALIERI	NATIVES		ite 1		1			Cito	3A + 3B					"NI	10-G0"		
Reviewed By:						3	ite 1				1	Site	3A + 3B	1	l		1	IN	0-60		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SOC-1	Social Environment																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Camden Close Down - loss of employement, loss of electricity	Nesskins	Definite		0 NO				0 NO		0 NO				0 NO	_	5 VHIGH	5 NAT	4 LONG	5 OCCUR	4.7 VHIGH
Mitigation Measures:	Don't close down the power station.	Negative	Definite		0 NO				0 NO		0 NO				0 NO	5	0 NO				0 NO
Impact 2	Retention of Jobs	Positive	Definite	5	3 MOD	3 LOCAL	3 MED	5 OCCUR	3 MOD	5	3 MOD	3 LOCAL	3 MED	5 OCCUR	3 MOD		0 NO				0 NO
Mitigation Measures:	None possible	1 datave	Delinite	,	3 MOD	3 LOCAL	3 MED	5 OCCUR	MOD	,	3 MOD	3 LOCAL	3 MED	5 OCCUR	MOD		0 NO				NO
Impact 3	Employment Oportunities - direct and indirect	Positive	Definite	5	2 LOW	3 LOCAL	2 SHORT	2 UNLIKE	0.9 VLOW	5	2 LOW	3 LOCAL		2 UNLIKE	0.9 VLOW		0 NO				0 NO
Mitigation Measures:	Employ Unemployed Locals				3 MOD	3 LOCAL	3 MED	4 VLIKE	2.4 MOD	,	3 MOD	3 LOCAL	2 SHORT	4 VLIKE	2.1 MOD		0 NO				NO
Impact 4	Public Uncertainty	Negative	Definite	1	3 MOD	2 STUDY	2 SHORT	3 COULD	1.4 LOW	1	3 MOD	2 STUDY	2 SHORT	3 COULD	1.4 LOW		0 NO				0 NO
Mitigation Measures:	Frequent communication, EO/ELO to be appointed, Complaints Register and Feedback, Community Relations Programme			-	2 LOW	1 ISO	2 SHORT	2 UNLIKE	0.7 VLOW	-	2 LOW	2 STUDY	2 SHORT	2 UNLIKE	0.8 VLOW		NO				NO NO
Impact 5	Deviant social behaviour, Community / Landowner health & safety (crime, STD's)	Negative	Definite	1	MOD	3 LOCAL	2 SHORT	COULD	1.6 LOW	1	MOD	2 STUDY	2 SHORT	COULD	1.4 LOW		0 NO				0 NO
Mitigation Measures:	Employ Unemployed Locals, Community Policing Forum, No workers housed in site, Access and Work Monitoring, STD Education, Fines	·			VLOW	2 STUDY	2 SHORT	1 IMPOS	0.3 VLOW		1 VLOW	2 STUDY	2 SHORT	1 IMPOS	0.3 VLOW		0 NO				0 NO
Impact 6	Environmental nuisance	Negative	Definite	2	MOD 2	3 LOCAL 3	2 SHORT 1	VLIKE 3	MOD	1	LOW 1	3 LOCAL 1	2 SHORT 1	3 COULD 1	LOW		NO NO				NO 0
Mitigation Measures:	Complaints register and Feedback, Fines for breaking rules				LOW 3	LOCAL	INCID 5	COULD 5	1.2 LOW 3		VLOW 3	ISO 1	INCID 5	IMPOS 5	0.2 VLOW		0 NO 0				0 NO 0
Impact 7 Mitigation	Change in Land Use	Negative	Definite	1	MOD 4	ISO 1	PERM 5	OCCUR 5	MOD 3.3	1	MOD 3	ISO 1	PERM 5	OCCUR 5	MOD 3		NO 0				NO 0
Measures:	Demarcate impact footprint				HIGH	ISO 1.4	PERM 1.3	OCCUR 1.8	0.5	_	MOD 1.2	ISO 1.3	PERM 1.2	OCCUR 1.6	MOD 0.4		NO 5	5	4	5	NO 4.7
COMBINED WEIGHTED	BEFORE MITIGATION	Positive	Definite		LOW	STUDY	SHORT	UNLIKE	VLOW		LOW	STUDY		UNLIKE	VLOW	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH
RATING	AFTER MITIGATION (If mitigation is effective / possible this rating wil decrease)	Positive	Definite		1.4 LOW	1.3 STUDY	1.4 SHORT	2 UNLIKE	0.5 VLOW		1.2 LOW	1.2 STUDY	1.2 SHORT	1.8 UNLIKE	0.4 VLOW		0 NO	0 #N/A	0 #N/A	0 #N/A	0 NO
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Probable		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positivo	Probable		LOW 2	LOCAL 3	MED 3	OCCUR 5	2.7		LOW 3	LOCAL 3	MED 3	OCCUR 5	MOD 3	Non	LOW 5	LOCAL 5	MED 4	OCCUR 5	MOD 4.7
IMPACT	PROJECT, BEFORE MITIGATION	Positive	Probable		LOW 3	LOCAL 3	MED 3	OCCUR 5	MOD 3		MOD 3	LOCAL 3	MED 3	OCCUR 5	MOD 3	Neg	VHIGH 5	NAT 5	LONG 4	OCCUR 5	VHIGH 4.7
RESIDUAL IMPACT	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, AFTER MITIGATION	Positive	Probable		MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	OCCUR	MOD	Beg	VHIGH	NAT	LONG	OCCUR	

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						S	ite 1					Site	3A + 3E	3				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
EC-1	Economic																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Camden Close Down - Loss of Economic Development	Marcal Co.	2		0 NO				0 NO		0 NO				0 NO	_	5 VHIGH	5 NAT	4 LONG	5 OCCUR	4.7 VHIGH
Mitigation Measures:	Don't close down the power station.	Negative	Definite		0 NO				0 NO		0 NO				0 NO	5	0 NO				0 NO
	Employment Oportunities - direct and indirect				2 LOW	3 LOCAL	2 SHORT	2	0.9 VLOW		2	3	2 SHORT	2 UNLIKE	0.9 VLOW		0 NO				0 NO
Mitigation	Employ Unemployed Locals	Positive	Definite	5	3 MOD	3	3	4	2.4	5	3	3	3	4 VLIKE	2.4 MOD		0 NO				0 NO
Measures:	Retention of Jobs				3	LOCAL 3	MED 3	VLIKE 5	MOD 3		MOD 3	LOCAL 3	MED 3	5	3		0				0
Mitigation	None possible	Positive	Definite	5	MOD 3	LOCAL 3	MED 3	OCCUR 5	MOD 3	5	MOD 3	LOCAL 3	MED 3	OCCUR 5	MOD 3		NO 0				NO 0
Measures:	Loss of agricultural production				MOD 3	LOCAL 1	MED 5	OCCUR 5	MOD 3		MOD 5	LOCAL 1	MED 5	OCCUR 5	MOD 3.7		NO 0				NO O
Impact 4 Mitigation		Negative	Definite	1	MOD 3	ISO 1	PERM 5	OCCUR 5	MOD 3	1	VHIGH 5	ISO 1	PERM 5	OCCUR 5	HIGH 3.7		NO 0				NO 0
Measures:	None possible				MOD 2	ISO 1	PERM 3	OCCUR 5	MOD 2		VHIGH 3	ISO 1	PERM 3	OCCUR 5	HIGH 2.3		NO 0				NO 0
Impact 5	Development Cost	Negative	Definite	3	LOW	ISO	MED	OCCUR	LOW	1	MOD	ISO	MED	OCCUR	MOD		NO				NO
Mitigation Measures:	Develop Site 1.				2 LOW	ISO	3 MED	5 OCCUR	2 LOW		3 MOD	1 ISO	3 MED	5 OCCUR	2.3 MOD		0 NO				0 NO
COMBINED	BEFORE MITIGATION	Positive	Probable		1.7	1.7	2	2.8	1 VLOW		1.7	1.6	1.7	2.3 COULD	0.8 VLOW	Neg	5 VHIGH	5 NAT	4	5 OCCUR	4.7
WEIGHTED RATING	AFTER MITIGATION				LOW 2	1.7	2.2	COULD 3.3	1.3		LOW 1.9	STUDY 1.6	SHORT 1.9	2.8	1		0	0	0	0	VHIGH 0
KATING	(If mitigation is effective / possible this rating wil decrease)	Positive	Probable		LOW	STUDY	MED	VLIKE	LOW		LOW	STUDY	SHORT	COULD	VLOW	Neg	NO	#N/A	#N/A	#N/A	NO
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Possible		2 LOW	3 LOCAL	3 MED	5 OCCUR	2.7 MOD		2 LOW	3 LOCAL	3 MED	5 OCCUR	2.7 MOD		2 LOW	3 LOCAL	3 MED	5 OCCUR	2.7 MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Dositivo	Dossible		3	3	3	5	3		2	3	3	4	2.1	Neg	5	5	4	5	4.7
IMPACT	PROJECT, BEFORE MITIGATION	Positive	Possible		MOD	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	VLIKE	MOD	Neg	VHIGH	NAT		OCCUR	VHIGH
RESIDUAL IMPACT	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, AFTER MITIGATION	Positive	Possible		3 MOD	3 LOCAL	3 MED	5 OCCUR	MOD		2 LOW	3 LOCAL	3 MED	4 VLIKE	2.1 MOD	Neg	5 VHIGH	5 NAT	4 LONG	5 OCCUR	4.7 VHIGH

natea by.	Warren Kok		1		1/KIIVES		4					611	24 . 25					114	10.00!		
Reviewed By:		1					ite 1					Site	3A + 3E	3	1	1			10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
INF-1	Infrastructure																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Inturruption of Electrical Services				5	5	2	5	4		5	5	2	5	4		0				0
<u> </u>		Negative	Definite	5	VHIGH	NAT	SHORT	OCCUF	HIGH	5	VHIGH	NAT	SHORT	OCCUR		1	NO				NO 0
Mitigation Measures:	Construct Tx lines before switching				NO			1	NO		NO				NO NO		0 NO				NO
					3	2	2	3	1.4		0				0		0				0
Impact 2	Traffic inturruptions	Mogativo	Possible	5	MOD	STUDY	SHORT	COULD	LOW		NO				NO		NO				NO
Mitigation	None required	Negative	Possible	Э	1	2	2	3	1		0				0		0				0
Measures:	rone reganica				VLOW	STUDY	SHORT	COULD	VLOW		NO				NO		NO				NO
	BEFORE MITIGATION	Negative	Definite		5	5	2	5	4		5	5	2	5	4		0	0	0	0	0
COMBINED WEIGHTED	DEI ONE MITTOATION	Negative	Deminic		VHIGH	NAT	SHORT	OCCUF	HIGH		VHIGH	NAT	SHORT	OCCUR	HIGH		NO	#N/A	#N/A	#N/A	NO
	AFTER MITIGATION				1	2	2	3	1		1	2	2	3	1		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		VLOW	STUDY	SHORT	COULE	VLOW		VLOW	STUDY	SHORT	COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
					3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable			STUDY	_	OCCUF	MOD			STUDY		OCCUR	MOD		MOD	STUDY		OCCUR	MOD
	INITIAL INADACTS TO SAIL/IDONNASSIT . ADDITIONAL INADACTS SDOM				5	5	3	5	4.3		5	5	3	5	4.3		3	2	3	5	2.7
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION	Negative	Probable		VHIGH	NAT	_	_			VHIGH	NAT		_			MOD				
	· · · · · · · · · · · · · · · · · · ·							OCCUF						OCCUR				STUDY		OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		3	2	2	4	1.9		3	2	2	4	1.9		3	2	3	5	2.7
IMPACT	PROJECT, AFTER MITIGATION				MOD	STUDY	SHORT	VLIKE	LOW		MOD	STUDY	SHORT	VLIKE	LOW		MOD	STUDY	MED	OCCUR	MOD

Rated By: Reviewed By:	Warren Kok			ALTERI	NATIVES		ite 1			1		Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
V-1	Visual																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Visual impact of barrier system installation (all infrastructure)	Namativa	D-fi-it-	_	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD	5	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD	1	0 NO				0 NO
Mitigation Measures:	Revegtate topsoil stockpiles, construction site screening	Negative	Definite	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW	1	0 NO				0 NO
Impact 2	Visual impact of starter wall - Ash Dam	N	5 ()		3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD	_	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD		0 NO				0 NO
Mitigation Measures:	None possible	Negative	Definite	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW		0 NO				0 NO
Impact 3	Visual impact of Ash Return Water Dam				3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD	_	3 MOD	2 STUDY	2 SHORT	5 OCCUR	2.3 MOD		0 NO				0 NO
Mitigation Measures:	Revegetate exposed areas, construction site screening	Negative	Definite	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW	5	2 LOW	2 STUDY	2 SHORT	5 OCCUR	2 LOW		0 NO				0 NO
Impact 4	Visual impact of relocated Tx Lines				0 NO				0 NO		0 NO				0 NO		0 NO				0 NO
Mitigation Measures:	None required.	Negative	Definite	3	0 NO				0 NO	3	0 NO				0 NO		0 NO				0 NO
Impact 5	Visual impact of construction of associated infrastructure		- 6 1		3 MOD	2 STUDY	2 SHORT	4 VLIKE	1.9 LOW		3 MOD	2 STUDY	2 SHORT	4 VLIKE	1.9 LOW		0 NO				0 NO
Mitigation Measures:	Revegetate exposed areas, construction site screening	Negative	Definite	3	2 LOW	2 STUDY	2 SHORT	3 COULD	1.2 LOW	3	2 LOW	2 STUDY	2 SHORT	3 COULD	1.2 LOW		0 NO				0 NO
COMBINED	BEFORE MITIGATION	Negative	Definite		2.2	1.4	1.4	3.5	1.2		2.2	1.4	1.4	3.5	1.2		0	0	0	0	0
WEIGHTED					MOD	STUDY	SHORT	VLIKE	LOW		MOD	STUDY	SHORT	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION (If mitigation is effective / possible this rating wil decrease)	Negative	Definite		1.4 LOW	1.4 STUDY	1.4 SHORT	3.4 VLIKE	1 VLOW		1.4 LOW	1.4 STUDY	1.4 SHORT	3.4 VLIKE	1 VLOW		0 NO	0 #N/A	0 #N/A	0 #N/A	0 NO
STATUS QUO	INITIAL IMPACTS TO ENVIRONMENT	Negative	Probable		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				HIGH 4	LOCAL 3	LONG 4	OCCUR 5	HIGH 3.7		HIGH 4	LOCAL 3	LONG 4	OCCUR 5	HIGH 3.7		HIGH 4	LOCAL 3	LONG 4	OCCUR 5	HIGH 3.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH
RESIDUAL IMPACT	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, AFTER MITIGATION	Negative	Probable		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH		4 HIGH	3 LOCAL	4 LONG	5 OCCUR	3.7 HIGH

Reviewed By:						9	Site 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
ArCH-1	Archaeology, Palaeontology, Cultural Heritage																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
Mitigation		No Impact	Definite	1	NO				NO 0	1	NO 0				NO 0	1	NO 0				NO 0
Measures:	None required.				NO				NO		NO				NO		NO				NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED					NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	140 impact	Demine		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	No Impact	Definite		0				0		0				0		0				0
314103 Q00	INTIAL BASELINE IMITACIS TO ENVIRONMENT	No impact	Deminte		NO				NO		NO				NO		NO				NO
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No Impact	Definite		0				0		0				0		0				0
IMPACT	PROJECT, BEFORE MITIGATION	No impact	Definite		NO				NO		NO				NO		NO				NO
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No Impact	Definite		0				0		0				0		0				0
IMPACT	PROJECT, AFTER MITIGATION	но ппрасс	Definite		NO				NO		NO				NO		NO				NO

SIGNIFICANCE RATING SCALE

	Rating	Description
5	VERY HIGH	Of the highest order possible within the bounds of impacts which could occur. In the case of adverse impacts: there is no possible mitigation and/or remedial activity which could offset the impact. In the case of beneficial impacts, there is no real alternative to achieving this benefit.
4	HIGH	Impact is of substantial order within the bounds of impacts, which could occur. In the case of adverse impacts: mitigation and/or remedial activity is feasible but difficult, expensive, time-consuming or some combination of these. In the case of beneficial impacts, other means of achieving this benefit are feasible but they are more difficult, expensive, time-consuming or some combination of these.
3	MODERATE	Impact is real but not substantial in relation to other impacts, which might take effect within the bounds of those which could occur. In the case of adverse impacts: mitigation and/or remedial activity are both feasible and fairly easily possible. In the case of beneficial impacts: other means of achieving this benefit are about equal in time, cost, effort, etc.
2	LOW	Impact is of a low order and therefore likely to have little real effect. In the case of adverse impacts: mitigation and/or remedial activity is either easily achieved or little will be required, or both. In the case of beneficial impacts, alternative means for achieving this benefit are likely to be easier, cheaper, more effective, less time consuming, or some combination of these.
1	VERY LOW	Impact is negligible within the bounds of impacts which could occur. In the case of adverse impacts, almost no mitigation and/or remedial activity is needed, and any minor steps which might be needed are easy, cheap, and simple. In the case of beneficial impacts, alternative means are almost all likely to be better, in one or a number of ways, than this means of achieving the benefit. Three additional categories must also be used where relevant. They are in addition to the category represented on the scale, and if used, will replace the scale.
0	NO IMPACT	There is no impact at all - not even a very low impact on a party or system.

SPATIAL RATING SCALE

Ratir	ng	Description
5	Global/National	The maximum extent of any impact.
	Regional/Provinc	The spatial scale is moderate within the bounds of impacts possible, and will be felt at a regional scale
4	ial	(District Municipality to Provincial Level).
3	Local	The impact will affect an area up to 5 km from the proposed route corridor.
2	Study Area	The impact will affect a route corridor not exceeding the boundary of the corridor.
4	Isolated Sites /	The impact will effect an eyes as his say than the consist of
1'	proposed site	The impact will affect an area no bigger than the servitude.

TEMPORAL RATING SCALE (DURATION)

LLIVIE	ONAL NATING SCALL	(DOMATION)
Ratin	g	Description
1	Incidental	The impact will be limited to isolated incidences that are expected to occur very sporadically.
2	Short-term	The environmental impact identified will operate for the duration of the construction phase or a period of
2	Short-term	less than 5 years, whichever is the greater.
3	Medium term	The environmental impact identified will operate for the duration of life of the line.
4	Long term	The environmental impact identified will operate beyond the life of operation.
5	Permanent	The environmental impact will be permanent.

DEGREE OF PROBABILITY

Rating	Description
1	1 Practically impossible
2	2 Unlikely
3	Could happen
4	Very Likely
	It's going to happen / has occurred

DEGREE OF CERTAINTY

DEGREE OF CER	IAINTY
Rating	Description
Definite	More than 90% sure of a particular fact.
Probable	Between 70 and 90% sure of a particular fact, or of the likelihood of that impact occurring.
Possible	Between 40 and 70% sure of a particular fact or of the likelihood of an impact occurring.
Unsure	Less than 40% sure of a particular fact or the likelihood of an impact occurring.
Can't know	The consultant believes an assessment is not possible even with additional research.

Impact Risk = (SIGNIFICANCE + Spatial + Temporal) / 3 X Probability / 5

Rating	Impact class	Description
0.1 – 1.0	1	Very Low
1.1 – 2.0	2	Low
2.1 – 3.0	3	Moderate
3.1 – 4.0	4	High
4.1 – 5.0	5	Very High

ALTERNATIVE:

				Sit	te 1						Site 3	BA + 3B						"No	-Go"			
	ENVIRONMENTAL ELEMENT	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Unmitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact
CODE:																						
	OPERATIONAL PHASE																					
G-2	Geology	Negative	Probable	0	0	3.7	3.7	3.7	Negative	Probable	0	0	3.7	3.7	3.7			0	0	3.7	3.7	3.7
			- 6	NO 0	NO 0	HIGH 3.7	HIGH 3.7	HIGH 3.7		- 6	NO 0	NO 0	HIGH 3.7	HIGH 4	HIGH 4			NO 0	NO 0	HIGH 3.7	HIGH 3.7	HIGH 3.7
T-2	Topography	Negative	Definite	NO	NO	HIGH	HIGH	HIGH	Negative	Definite	NO	NO	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
SLC-2	Soil and Land Capability	Negative	Probable	1.8 LOW	1 VLOW	MOD	3.7 HIGH	3.3 HIGH	Negative	Probable	LOW	1.2 LOW	MOD	3.7 HIGH	3.7 HIGH			NO	NO	MOD	MOD	MOD
SWW-2	Surface Water and Wetlands	Negative	Probable	1.9	0.8	3.7	3.7	2.7	Negative	Probable	2.4	1	3.7	3.7	3.7			0	0	3.7	3.7	3.7
5	Surface vider and victionas	reguire	TTODUDIC	LOW	VLOW	HIGH	HIGH	MOD	regutive	TTODUDIC	MOD	VLOW	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
GW-2	Groundwater	Negative	Probable	2.7 MOD	0.8 VLOW	3 MOD	3.3 HIGH	MOD	Negative	Probable	2.7 MOD	0.8 VLOW	MOD	3.3 HIGH	MOD			NO	NO	MOD	MOD	MOD
TF 2	Terrestrial Ecology	Negative	Definite	1.4	2.7	3	3	2.7	Magativa	Definite	1.4	2.7	3	3.3	3			0	0	3	3	3
TE-2	(The direction of the project impact is positive, although the residual impact remains negative)	Negative	Delinite	LOW	MOD	MOD	MOD	MOD	Negative	Delinite	LOW	MOD	MOD	HIGH	MOD			NO	NO	MOD	MOD	MOD
AF-2	Avifauna	Negative	Definite	NO	0 NO	3 MOD	3 MOD	3 MOD	Negative	Definite	NO	0 NO	3 MOD	3	3 MOD			NO	0 NO	MOD	3	3
				1.3	0.8	3.3	3.3	3.3			1.2	0.7	3.3	3.3	3.3			0	0	3.3	3.3	3.3
AQ-2	Air Quality	Negative	Possible	LOW	VLOW	HIGH	HIGH	HIGH	Negative	Possible	LOW	VLOW	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
N-2	Noise	Negative	Probable	0	0	2.7	2.3	2.3	Negative	Probable	0	0	2.7	2.3	2.3			0	0	2.7	2.7	2.7
				NO 0.3	NO 0.6	MOD 2.7	MOD 2.7	MOD 2.7			NO 0.6	NO 0.9	MOD 2.7	MOD 2.7	MOD 2.7			NO 0	NO 0	MOD 2.7	MOD 4.7	MOD 4.7
SOC-2	Social Environment	Positive	Probable	VLOW	VLOW	MOD	MOD	MOD	Positive	Probable		VLOW	MOD	MOD	MOD	Negative	Definite	NO	NO	MOD	VHIGH	
EC-2	Economic	Positive	Definite	0	0	2.7	3	3	Positive	Definite	0	0	2.7	2.4	2.4	Negative	Definite	0	0	2.7	4.7	4.7
				NO 0	NO 0	MOD 2.7	MOD 4.3	MOD 2.7			NO 0	NO 0	MOD 2.7	4.3	MOD 2.7	-0		NO O	NO 0	MOD 2.7	VHIGH 2.7	VHIGH 2.7
INF-2	Infrastructure and Traffic	Negative	Definite	NO	NO	MOD	VHIGH	MOD	Negative	Definite	NO	NO	MOD	VHIGH	MOD			NO	NO	MOD	MOD	MOD
V-2	Visual	Negative	Definite	2.3	2	3.7	3.7	3.7	Negative	Definite	2.3	2	3.7	3.7	3.7			0	0	3.7	3.7	3.7
_ * -	1344	.vegative	Semine	MOD	LOW	HIGH	HIGH	HIGH	.vegative	Demine	MOD	LOW	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH
ArCH-2	Archaeology, Palaeongology, Cultural Heritage	No Impact	Definite	NO	NO	NO	0 NO	0 NO	No Impact	Definite	NO	NO	NO	NO	0 NO			NO	NO	NO	NO	NO

Reviewed By:						9	ite 1					Site	3A + 3B	,				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
G-2	Geology																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
		No Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measures:	None Required				0 NO				0 NO		0 NO				0 NO		0 NO				0 NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED	BEFORE WITHGATION	No impact	Dennite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION				0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUR	INITIAL PASSURE IN ARASTS TO SANGROUN ASAIT	No. of the last of	D. J. J.		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH	1	MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	NI	Deskahla		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Dushahla		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH

Rated By: Warren Kok
Reviewed By: ALTERNATIVES:

Reviewed By:						9	ite 1					Site	3A + 3B					"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
T-2	Topography																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
Mitigation		No Impact	Definite	1	NO				NO 0	1	NO				NO 0	1	NO				NO 0
Measures:	None Required				NO				NO		NO				NO		0 NO				NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED	BEI ONE WITHOUTON	No impact	Demine		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No impact	Demine		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUG	INITIAL DASSUME INADASTS TO SANVIDONINASMIT	Namakiya	Definite.		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	D-fi-it-		3	3	5	5	3.7		4	3	5	5	4		3	3	5	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		MOD	LOCAL	PERM	OCCUR	HIGH		HIGH	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namadina	D-fi-it-		3	3	5	5	3.7		4	3	5	5	4		3	3	5	5	3.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Definite		MOD	LOCAL	PERM	OCCUR	HIGH		HIGH	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH

Reviewed By:	wurren kok		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NATIVES		ite 1			ı		Sito	3A + 3E	1		1		"N	10-GO"			
Reviewed by.		ī	ī				ite i					Jite	JA 1 JL	,	1			11	10-00		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SLC-2	Soil and Land Capability																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	Pollution of soils - leachate				4	1	5	4	2.7		5	1	5	4	2.9		0				0
Impact 1	1 oliution of 30lis - leachate	Negative	Definite	5	HIGH	ISO	PERM	VLIKE	MOD	5	VHIGH	ISO	PERM	VLIKE	MOD	1	NO				NO
Mitigation	Install leachate collection system	Negative	Demine	,	2	1	5	3	1.6	,	3	1	5	3	1.8	1 -	0				0
Measures:	motan reactive concessor system				LOW	ISO	PERM	COULD	LOW		MOD	ISO		COULD	LOW		NO				NO
Impact 2	Erosion of soils				3	1	5	5	3		4	1	5	5	3.3		0				0
Milliantina	Discount of the desired of the second of the	Negative	Definite	3	MOD	ISO		OCCUR	MOD	3	HIGH	ISO		OCCUR			NO				NO 0
Mitigation Measures:	Place soil stockpiles out of water courses, Revegetate Stockpiles, Stormwater Management				2 LOW	ISO	5 PERM	3 COULD	1.6 LOW		3 MOD	1 ISO	5 PERM	3 COULD	1.8 LOW		0 NO				NO
ivieasures.	Stormwater wanagement						P LIKIVI				_							0	0	0	
0014511155	BEFORE MITIGATION	Negative	Definite		2.9	0.8	4	3.5	1.8		3.7	0.8	4	3.5	2		0	0	0	0	0
COMBINED WEIGHTED		· ·			MOD	ISO	LONG	VLIKE	LOW		HIGH	ISO	LONG	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION				1.6	0.8	4	2.4	1		2.4	0.8	4	2.4	1.2		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW	ISO	LONG	COULD	VLOW		MOD	ISO	LONG	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
					2	2	5	5	3			2			3			711177			
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable					_	J		2		5	5	·		2	Z	5	5	3
					LOW	STUDY	PERM	OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		4	2	5	5	3.7		4	2	5	5	3.7		2	2	5	5	3
IMPACT	PROJECT, BEFORE MITIGATION	ivegative	riodable		HIGH	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	2	5	5	3.3		4	2	5	5	3.7		2	2	5	5	3
	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR			LOW	STUDY	PERM	OCCUR	MOD

Rated By: Warren Kok ALTERN Site 1 Site 3A + 3B "NO-GO" Reviewed By: Risk Risk mpact Risk robability robability Neighting IMPACT DESCRIPTION mpact I Direction of Impact | Degree of Certainty patial SWW-2 Surface Water and Wetlands OPERATIONAL PHASE 5 Decreased water quality - leachate, suspended solids, turbidity, 3 3 5 **3.3** 5 3 2 5 **3.3** 0 0 4 Impact 1 hydrocarbons, E.coli and trace elements HIGH LOCAL MED OCCUR LOCAL SHORT OCCUR NO NO Definite 5 5 1 Negative Mitigation Suitably sized stormwater infrastructure. Water treatment of De 1 1 3 3 **1** 2 1 4 0 0 Jager's Pan. Build >100m from SW Resources. VLOW ISO MED COULD VLOW LOW STUDY INCID VLIKE LOW NO Measures: NO 2 3 4 2 5 **2.7** 0 2 1.9 3 3 0 Sedimentation of wetlands and surface water resources Impact 2 LOW STUDY MED MOD LOCAL SHORT OCCL MOD NO NO VLIKE LOW Negative Definite 5 Mitigation Suitably sized stormwater infrastructure. Water treatment of De 1 1 3 0.7 1 3 0 0 Measures: Jager's Pan. Build >100m from SW Resources. VLOW ISO MED UNLIK **VLOW** LOW STUDY INCID COULD VLOW NO NO 1 3 2 4 1.3 0 0 Reduction in habitat integrity of downstream wetland areas Impact 3 VLOW ISO MED COULD LOW ISO SHORT VLIKE LOW NO **VLOW** NO 5 5 Negative Probable Mitigation Suitably sized stormwater infrastructure. Water treatment of De 2 0.8 0 1 3 2 0.7 1 1 3 0 Measures: Jager's Pan. Build >100m from SW Resources. VLOW ISO MED UNLIKE **VLOW** VLOW ISO SHORT COULD **VLOW** NO NO 2.3 2 3 4 1.9 3.3 2.3 2 4.7 2.4 0 0 0 0 0 BEFORE MITIGATION Negative Definite COMBINED STUDY MED MOD VLIKE LOW HIGH LOCAL SHORT OCCU MOD NO #N/A #N/A #N/A NO WEIGHTED 2.3 0.8 1.7 1.7 1.3 3.3 1 3 1 0 0 0 0 0 AFTER MITIGATION 1 RATING Definite Negative (If mitigation is effective / possible this rating wil decrease) VLOW ISO MED COULD **VLOW** LOW STUDY SHORT VLIKE **VLOW** NO #N/A #N/A #N/A NO 3.7 3.7 3.7 4 5 4 5 4 STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Probable HIGH LOCAL LONG OCCU **HIGH** HIGH LOCAL LONG OCCUR HIGH HIGH LOCAL LONG HIGH CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 4 3 4 5 3.7 4 4 5 3.7 4 3 4 5 3.7 Negative Probable IMPACT PROJECT, BEFORE MITIGATION LOCAL LONG HIGH HIGH LOCAL HIGH HIGH LOCAL LONG OCCU HIGH LONG HIGH 2 2 4 5 2.7 4 3 4 5 3.7 4 3 4 5 3.7 RESIDUAL INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative Probable IMPACT PROJECT, AFTER MITIGATION LOW STUDY LONG OCCU MOD HIGH LOCAL LONG OCCUR HIGH LOCAL HIGH LONG HIGH

ALTERNATIVES: Rated By: Warren Kok Reviewed By: Site 1 Site 3A + 3B "NO-GO" Risk mpact Risk mpact Risk robability Neighting robability Neighting IMPACT DESCRIPTION Direction of Impact | Degree of Certainty patial GW-2 Groundwater OPERATIONAL PHASE 3 4 4 2.7 3 3 4 4 2.7 0 0 Decreased water quality - Leachate (heavy metals) Impact 1 MOD LOCAL LONG VLIKE MOD LOCAL LONG VLIKE NO MOD NO MOD Negative Definite 5 5 1 Mitigation 2 1 1 3 0.8 2 1 1 3 0.8 0 0 Install leachate collection, Install Barrier System LOW ISO INCID COULD VLOW LOW ISO INCID COULD VLOW NO Measures: NO 3 2.7 4 2.7 0 0 3 4 4 3 3 4 0 0 BEFORE MITIGATION Negative Definite COMBINED MOD LOCAL LONG VLIKE MOD MOD LOCAL LONG VLIKE MOD NO #N/A #N/A #N/A NO WEIGHTED 2 1 1 3 0.8 1 1 3 0.8 0 0 0 0 RATING AFTER MITIGATION Negative Definite (If mitigation is effective / possible this rating wil decrease) LOW ISO INCID COULD LOW INCID COULD VLOW NO **VLOW** ISO #N/A #N/A #N/A NO 2 3 4 5 3 2 4 5 3 2 4 5 3

LOW

3

MOD

2 3

LOCAL LONG OCCL

LOCAL LONG OCCUI

LOW LOCAL LONG OCCU

3

4 5

4 5

MOD

3.3

HIGH

3

MOD

LOW

3

MOD

2 3

LOCAL LONG OCCU

4 5

LOCAL LONG OCCUR

4 5

LOW LOCAL LONG OCCU

3

MOD

3.3

HIGH

3

MOD

LOW LOCAL LONG

2

LOW

2 3

LOW

3

LOCAL LONG

4 5

4 5

LOCAL LONG

MOD

3

MOD

3

MOD

Negative

Negative

Negative

Probable

Probable

Probable

STATUS QUO

IMPACT

RESIDUAL

IMPACT

INITIAL IMPACTS TO ENVIRONMENT

PROJECT, BEFORE MITIGATION

PROJECT, AFTER MITIGATION

CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM

INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM

ALTERNATIVES: Rated By: Warren Kok Site 1 Site 3A + 3B "NO-GO" Reviewed By: Risk Risk Impact Risk **Aagnatude** Aagnatude Weighting Weighting IMPACT DESCRIPTION Direction of Impact Degree of Certainty emporal Impact I **Femporal** Impact I TE-2 Terrestrial Ecology OPERATIONAL PHASE 5 1 4 3 1.4 2 1 4 3 1.4 0 0 Impact 1 Consecutive rehabiliation LOW ISO LONG COULD LOW LOW ISO LONG COULD LOW NO NO 5 Positive Definite 5 1 Alien invasive control, Ameliorate soils replaced, Indigenous seedmix, 3 1 4 5 2.7 1 4 5 2.7 0 0 Mitigation Watering of seeded areas MOD ISO LONG MOD ISO LONG NO Measures: MOD MOD NO 1.4 1.4 0 2 1 4 3 4 0 0 0 0 2 1 3 BEFORE MITIGATION Positive Definite COMBINED LOW ISO LONG COULD LOW LOW ISO LONG COULD LOW NO #N/A #N/A #N/A NO WEIGHTED 2.7 3 1 4 5 3 1 4 5 2.7 0 0 0 0 0 RATING AFTER MITIGATION Positive Definite (If mitigation is effective / possible this rating wil decrease) MOD ISO LONG OCCU MOD MOD ISO NO #N/A #N/A #N/A NO LONG OCCU MOD 3 4 3 4 5 3 3 4 3 2 5 3 2 2 5 STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Definite MOD STUDY LONG OCCU MOD STUDY LONG OCCU MOD STUDY LONG MOD MOD MOD 5 3 4 5 3 5 3 CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 3 2 4 4 2 3.3 4 Negative Definite IMPACT PROJECT, BEFORE MITIGATION MOD STUDY LONG OCCUP MOD STUDY LONG OCCU MOD HIGH STUDY LONG OCCUR HIGH MOD 2 2 4 5 2.7 4 5 3 3 5 3 RESIDUAL INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 3 2 4 Negative Definite IMPACT PROJECT, AFTER MITIGATION LOW STUDY LONG OCCU MOD MOD STUDY LONG OCCU MOD MOD STUDY LONG MOD Rated By: Warren Kok ALTERNATIVES:
Reviewed By:

Reviewed By:						9	Site 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AF-2	Avifauna																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
		No Additional Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measures:	None Required	·			NO NO				NO		NO NO				0 NO		0 NO				NO
wiedsures.					0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Definite		NO	#N/A	#N/A	#N/A	NO		NO	_	#N/A		NO		NO		#N/A		NO
WEIGHTED RATING	AFTER MITIGATION	N			0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
CTATUS OUG	INITIAL DACFUNIF INADACTE TO ENVIRONMAENT	Manadion	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Nogativo	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok		. <u>-</u>	ALTERN	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3E	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AQ-2	Air Quality																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	Greenhouse gas emissions				2	1	2	3	1		2	2	2	3	1.2		0				0
	-	Negative	Possible	3	LOW	ISO	SHORT	COULD	VLOW	3	LOW			COULD	LOW	1	NO				NO
Mitigation	Reduce energy consumption, Regular vehicle maintenance,				1	1	2	3	0.8	Ĭ	1	2	2	3	1	-	0				0
Measures:	Consecutive Rehab				VLOW 3	ISO 3	3	COULD 5	VLOW 3		VLOW 3	3	3	COULD 5	VLOW 3		NO 0				NO 0
Impact 2	Nuisance and fall out dust				MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	OCCUR	MOD		NO				NO
Mitigation	Watering to reduce dust mobilisation, Use Site 3, Revegetate	Negative	Possible	3	3	1	3	5	2.3	2	3	1	2	5	2		0				0
Measures:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				MOD	ISO	MED	OCCUR	MOD		MOD	ISO	SHORT	OCCUR	LOW		NO				NO
Impact 3	Increased particulate matter (PM2.5 and PM10)				3	4	3	5	3.3		4	4	3	5	3.7		0				0
impact 5		Negative	Possible	5	MOD	REG	MED	OCCUR	HIGH	5	HIGH	REG	MED	OCCUR			NO				NO
Mitigation	Watering to reduce dust mobilisation, Use Site 3, Revegetate				2	3	3	3	1.6]	3	3	3	3	1.8		0				0
Measures:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				LOW	LOCAL	MED	COULD	LOW		MOD	LOCAL		COULD	LOW		NO				NO
	BEFORE MITIGATION	Negative	Possible		2	2.1	2	3.3	1.3		2.1	2.1	1.8	2.9	1.2		0	0	0	0	0
COMBINED WEIGHTED		.vegative	1 0331010		LOW	LOCAL	SHORT	VLIKE	LOW		MOD	LOCAL	SHORT	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
	AFTER MITIGATION				1.5	1.4	2	2.6	0.8		1.6	1.5	1.7	2.3	0.7		0	0	0	0	0
KAIIIG	(If mitigation is effective / possible this rating wil decrease)	Negative	Possible		LOW	STUDY	SHORT	COLLD	VLOW		LOW	STUDY	SHORT	COLLD	VLOW		NO	#N/A	#N/A	#N/A	NO
					3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Possible															4			
					MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR			MOD	REG	MED	OCCUR	HIGH
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, BEFORE MITIGATION				MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, AFTER MITIGATION		. 000.0.0		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH

Trainen non																				
					9	Site 1		,			Site	3A + 3B	,	,			"N	0-G0"		
IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
Noise																				
OPERATIONAL PHASE			5						5						5					
Increased ambient noise levels				0				0		0				0		0				0
moreasea amsient noise tereis	Negative	Probable	1	NO					1					NO	1	NO				NO
6am - 6pm construction time, No Construction on Sundays			_	0					_					0	_	0				NO NO
				NO	0	0	0	-			0	0	0	NU			0	0	0	0
BEFORE MITIGATION	Negative	Probable		U	U	U	U	_		_				U				_	U	
				NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
AFTER MITIGATION	Namakiya	Deskahla		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
(If mitigation is effective / possible this rating wil decrease)	Negative	Probable		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
INITIAL DASSUME IMPACTS TO ENVIRONMENT		0.1.11		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
PROJECT, BEFORE MITIGATION	Negative	Probable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
PROJECT, AFTER MITIGATION	Negative	Probable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
	Noise OPERATIONAL PHASE Increased ambient noise levels 6am - 6pm construction time, No Construction on Sundays BEFORE MITIGATION (If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION	Noise OPERATIONAL PHASE Increased ambient noise levels 6am - 6pm construction time, No Construction on Sundays BEFORE MITIGATION Negative AFTER MITIGATION (If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative	Noise OPERATIONAL PHASE Increased ambient noise levels Frobable BEFORE MITIGATION AFTER MITIGATION INITIAL BASELINE IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION Direction of Impact Degree of Certainty Probable Probable	Noise Probable Negative Probable Negative Probable Initial impacts to environment Negative Probable N	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	Site 1 S	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Site 1 Impact Degree of Certainty Degree of Certa	Noise Probable The part Probable P	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	Site 3	Site 1	Site 1 Site 3A + 3B Site 3A +	Moise Probable P	Moise Probable P	Site 1	MPACT DESCRIPTION	IMPACT DESCRIPTION

Reviewed By:	Walter Nok						Site 1					Site	3A + 3E	3		I		"N	10-GO"		
= 1	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SOC-2	Social Environment																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	Employment Oportunities - direct and indirect				1	3	3	2	0.9		1	3	3	2	0.9		0				0
	Employment Oportunities affect and marreet	Positive	Probable	5		LOCAL		UNLIKE	VLOW	5	_	LOCAL		UNLIKE		5	NO				NO
Mitigation	Employ Unemployed Locals				2	3	3	3	1.6	Ĭ	2	3	3	3	1.6	ľ	0				0
Measures:					LOW	LOCAL 3	MED 3	COULD 2	1.1		LOW 3	LOCAL 3	MED 3	COULD 3	1.8		NO 0				NO 0
Impact 2	Less environmental nuisance				LOW	LOCAL	_	UNLIKE	LOW		MOD	LOCAL		COULD	LOW		NO				NO
Mitigation	Maintain - (Complaints register and Feedback, Fines for breaking	Positive	Probable	1	3	3	3	4	2.4	2	3	3	3	4	2.4	1	0				0
Measures:	rules)				MOD	LOCAL	MED	VLIKE	MOD		MOD	LOCAL	MED	VLIKE	MOD		NO				NO
					0.7	1.8	1.8	1.2	0.3		1.1	2.1	2.1	1.6	0.6		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Positive	Probable		VLOW	STUDY	SHORT	UNLIKE	VLOW		LOW	LOCAL	MED	UNLIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED	AFTER ANTICATION				1.3	1.8	1.8	1.9	0.6		1.6	2.1	2.1	2.3	0.9		0	0	0	0	0
RATING	AFTER MITIGATION (If mitigation is effective / possible this rating wil decrease)	Positive	Probable		-												-				
	(ij mitigation is effective / possible this rating will decrease)				LOW	STUDY	SHORT	UNLIKE	VLOW		LOW	LOCAL		COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Probable		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
SIAIOS QUO	THE DESCRIPTION ACTS TO ENVIRONMENT	1 0311140	Trobubic		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	5	5 1 11		2	3	3	5	2.7		2	3	3	5	2.7		5	5	4	5	4.7
IMPACT	PROJECT, BEFORE MITIGATION	Positive	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		VHIGH	NAT	LONG	OCCUR	VHIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	3	3	5	2.7		2	3	3	5	2.7		5	5	4	5	4.7
IMPACT	PROJECT, AFTER MITIGATION	Positive	Probable		LOW	LOCAL	MED	OCCUR			LOW	LOCAL	MED	OCCUR			VHIGH	NAT	LONG	OCCUR	VHIGH

Rated By: Warren Kok ALTERNATIVES:

Reviewed By:

Reviewed By:						S	ite 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
EC-2	Economic																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
		NO IMPACT	Definite	1	NO				NO O	1	NO				NO 0	1	NO				NO 0
Mitigation Measures:	None Required				0 NO				NO		0 NO				NO		0 NO				NO
	BEFORE MITIGATION	Positive	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED					NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION	Diti	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	Positive	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
CT.47116 0110	INITIAL DASSUME INADASTS TO SANUDOMASAT		5.00		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Definite		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positive	Definite		3	3	3	5	3		3	3	3	4	2.4	Nog	5	5	4	5	4.7
IMPACT	PROJECT, BEFORE MITIGATION	rositive	Demille		MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	VLIKE	MOD	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positive	Definite		3	3	3	5	3		3	3	3	4	2.4	Non	5	5	4	5	4.7
IMPACT	PROJECT, AFTER MITIGATION	Positive	Definite		MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	VLIKE	MOD	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH

Turren non		i i																		
					9	Site 1					Site	3A + 3E	3	,			"N	0-G0"		
IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
Infrastructure																				
OPERATIONAL PHASE			5						5						5					
NO ADDITIONAL IMACT				0				0		0				0		0				0
	No Impact	Definite	5	NO					1	_				NO	1					NO
None Required.	·		_	0					_					0	-	_				NO NO
				NO	0	0	0	-			0	0	0	NU			0	0	0	
BEFORE MITIGATION	No Impact	Definite		U	U	U	U	_						U				_	U	0
				NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
AFTER MITIGATION	No love of	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
(If mitigation is effective / possible this rating wil decrease)	No impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
				3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD
INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM		- 4 -		5	5	3	5	4.3		5	5	3	5	4.3		3	2	3	5	2.7
	Negative	Definite		VHIGH	NAT	MED	OCCUR	VHIGH		VHIGH	NAT	MED	OCCUR	VHIGH		MOD	STUDY	MED	OCCUR	MOD
INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
PROJECT, AFTER MITIGATION	Negative	Definite		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD
	IMPACT DESCRIPTION Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT None Required. BEFORE MITIGATION AFTER MITIGATION (If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION	IMPACT DESCRIPTION Direction of Impact Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT None Required. BEFORE MITIGATION AFTER MITIGATION If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION Negative	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT None Required. BEFORE MITIGATION No Impact Definite AFTER MITIGATION If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Definite Definite Definite Definite Definite	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT None Required. BEFORE MITIGATION No Impact Definite AFTER MITIGATION If mitigation is effective / possible this rating wil decrease) INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Definite Definite INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION Negative Definite	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT No Impact No Impact Definite Definite To No Impact Definite Initial BASELINE IMPACTS TO ENVIRONMENT INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION Definite Definite Definite Definite Definite Definite Definite Definite To No Impact Definite Definite	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Infrastructure OPERATIONAL PHASE NO ADDITIONAL IMACT No Impact No Impact Definite Definite Definite ONO NO NO NO NO NO NO NO NO	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Direction of Impact Direction of Impact Degree of Certainty Direction of Impact Direction of Impact	IMPACT DESCRIPTION Direction of Impact Degree of Certainty Direction of Impact Degree of Certainty Degree of Certainty

Reviewed By:							Site 1					Site	3A + 3E					"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
V-2	Visual																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	Visual impact - Ash Dam				3	2	2	5	2.3		3	2	2	5	2.3		0				0
·		Negative	Definite	5	MOD	STUDY	SHORT	OCCUF	MOD	5	_	STUDY	SHORT		MOD	1	NO				NO
Mitigation Measures:	Revegetate exposed areas consecutively, clean litter and waste				LOW	STUDY	SHORT	OCCUR	LOW		2 LOW	STLIDY	2 SHORT	5 OCCUR	LOW		0 NO				NO NO
					3	2	2	5	2.3		3	2	2	5	2.3		0				0
Impact 2	Visual Impact - Associated Infrastructure	Negative	Definite	5	MOD	STUDY	SHORT	OCCUP	MOD	5	MOD	STUDY	SHORT	OCCUR	MOD	1	NO				NO
Mitigation	Maintain revegetated areas, clean litter and waste	ivegative	Delinite	3	2	2	2	5	2	5	2	2	2	5	2	1	0				0
Measures:	3					STUDY			LOW			STUDY		OCCUR	LOW		NO				NO
	BEFORE MITIGATION	Negative	Definite		3	2	2	5	2.3		3	2	2	5	2.3		0	0	0	0	0
COMBINED WEIGHTED			200		MOD	STUDY	SHORT	OCCUR	MOD		MOD	STUDY	SHORT	OCCUR	MOD		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION				2	2	2	5	2		2	2	2	5	2		0	0	0	0	0
_	(If mitigation is effective / possible this rating wil decrease)	Negative	Definite		LOW	STUDY	SHORT	OCCUR	LOW		LOW	STUDY	SHORT	OCCUR	LOW		NO	#N/A	#N/A	#N/A	NO
					4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		HIGH	LOCAL	LONG	OCCUF			HIGH	LOCAL	LONG				HIGH	LOCAL	LONG	OCCUR	HIGH
CUMULI ATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				4	3	Δ	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		HIGH	LOCAL	LONG	OCCUP			HIGH	_	LONG				HIGH	LOCAL		OCCUR	HIGH
	,				4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
RESIDUAL IMPACT	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, AFTER MITIGATION	Negative	Definite		HICH	_	LONG						-				-				
IIII ACI	TROJECT, ALTER MITTOATION				HIGH	LOCAL	LUNG	OCCUR	HIGH		HIGH	LUCAL	LONG	UCCUR	HIGH		HIGH	LUCAL	LONG	UCCUR	HIGH

Rated By: ALTERNATIVES:

Rateu by.				ALILINI	MATIVES	•															
Reviewed By:					S	ite 1					Site	3A + 3E	3				"N	IO-GO"			
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
ArCH-2	Archaeology, Palaeontology, Cultural Heritage																				
	OPERATIONAL PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
	NO ABBITIONAL IMITACI	No Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation	Mitigation:			-	0				0	_	0				0	1	0				0
Measures:					NO	-	-	_	NO		NO	_	-	_	NO		NO	-	-		NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED					NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION				0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
_	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
					0				0		0				0		0				0
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	No Impact	Definite		NO				NO		NO				NO		NO				NO
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM		- 0		0				0		0				0		0				0
IMPACT	PROJECT, BEFORE MITIGATION	No Impact	Definite		NO				NO		NO				NO		NO				NO
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM		- 0		0				0		0				0		0				0
IMPACT	PROJECT, AFTER MITIGATION	No Impact	Definite		NO				NO		NO				NO		NO				NO

SIGNIFICANCE RATING SCALE

	Rating	Description
5	VERY HIGH	Of the highest order possible within the bounds of impacts which could occur. In the case of adverse impacts: there is no possible mitigation and/or remedial activity which could offset the impact. In the case of beneficial impacts, there is no real alternative to achieving this benefit.
4	HIGH	Impact is of substantial order within the bounds of impacts, which could occur. In the case of adverse impacts: mitigation and/or remedial activity is feasible but difficult, expensive, time-consuming or some combination of these. In the case of beneficial impacts, other means of achieving this benefit are feasible but they are more difficult, expensive, time-consuming or some combination of these.
3	MODERATE	Impact is real but not substantial in relation to other impacts, which might take effect within the bounds of those which could occur. In the case of adverse impacts: mitigation and/or remedial activity are both feasible and fairly easily possible. In the case of beneficial impacts: other means of achieving this benefit are about equal in time, cost, effort, etc.
2	LOW	Impact is of a low order and therefore likely to have little real effect. In the case of adverse impacts: mitigation and/or remedial activity is either easily achieved or little will be required, or both. In the case of beneficial impacts, alternative means for achieving this benefit are likely to be easier, cheaper, more effective, less time consuming, or some combination of these.
1	VERY LOW	Impact is negligible within the bounds of impacts which could occur. In the case of adverse impacts, almost no mitigation and/or remedial activity is needed, and any minor steps which might be needed are easy, cheap, and simple. In the case of beneficial impacts, alternative means are almost all likely to be better, in one or a number of ways, than this means of achieving the benefit. Three additional categories must also be used where relevant. They are in addition to the category represented on the scale, and if used, will replace the scale.
0	NO IMPACT	There is no impact at all - not even a very low impact on a party or system.

SPATIAL RATING SCALE

Ratir	ng	Description
5	Global/National	The maximum extent of any impact.
4	Regional/Provinc	The spatial scale is moderate within the bounds of impacts possible, and will be felt at a regional scale
4	ial	(District Municipality to Provincial Level).
3	Local	The impact will affect an area up to 5 km from the proposed route corridor.
2	Study Area	The impact will affect a route corridor not exceeding the boundary of the corridor.
1	Isolated Sites / proposed site	The impact will affect an area no bigger than the servitude.

TEMPORAL RATING SCALE (DURATION)

LLIVIE	ONAL NATING SCALL	(DOMATION)
Ratin	g	Description
1	Incidental	The impact will be limited to isolated incidences that are expected to occur very sporadically.
2	Short-term	The environmental impact identified will operate for the duration of the construction phase or a period of
2	Short-term	less than 5 years, whichever is the greater.
3	Medium term	The environmental impact identified will operate for the duration of life of the line.
4	Long term	The environmental impact identified will operate beyond the life of operation.
5	Permanent	The environmental impact will be permanent.

DEGREE OF PROBABILITY

Rating	Description
1	1 Practically impossible
2	2 Unlikely
3	Could happen
4	Very Likely
	It's going to happen / has occurred

DEGREE OF CERTAINTY

DEGREE OF CER	IAINTY
Rating	Description
Definite	More than 90% sure of a particular fact.
Probable	Between 70 and 90% sure of a particular fact, or of the likelihood of that impact occurring.
Possible	Between 40 and 70% sure of a particular fact or of the likelihood of an impact occurring.
Unsure	Less than 40% sure of a particular fact or the likelihood of an impact occurring.
Can't know	The consultant believes an assessment is not possible even with additional research.

Impact Risk = (SIGNIFICANCE + Spatial + Temporal) / 3 X Probability / 5

Rating	Impact class	Description
0.1 – 1.0	1	Very Low
1.1 – 2.0	2	Low
2.1 – 3.0	3	Moderate
3.1 – 4.0	4	High
4.1 – 5.0	5	Very High

ALTERNATIVE:

		Site 1 Site 3A + 3B													"No-Go"										
			•	Sit	te 1						Site 3	3A + 3B					•	"No)-Go"						
ENVIRONMENTAL ELEMENT		Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Mitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Project Impact - Unmitigated	Project Impact - Unmitigated	Status Quo Baseline Impact	Cumulative Impact	Residual Impact			
CODE:																									
	CLOSURE PHASE																								
G-3	Geology	Negative	Probable	0	0	3.7	3.7	3.7	Negative	Probable	0	0	3.7	3.7	3.7			0	0	3.7	3.7	3.7			
		-9		NO	NO	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH			
T-3	Topography	Negative	Probable	1.6 LOW	MOD	3.7 HIGH	3.3 HIGH	2.7 MOD	Negative	Probable	1.6 LOW	MOD	3.7 HIGH	3.7 HIGH	2.9 MOD			NO NO	NO	3.7 HIGH	3.3 HIGH	2.7 MOD			
SLC-3	Soil and Land Capability	Negative	Probable	1.9	0.6	3	3.7	3.3	Negative	Probable	2.1	0.6	3	3.7	3.7			0	0	3	3	3			
320-3	Son and Land Capability	ivegative	FIODADIC	LOW	VLOW		HIGH	HIGH	ivegative	FIODAble	MOD	VLOW	MOD	HIGH	HIGH			NO	NO	MOD	MOD	MOD			
SWW-3	Surface Water and Wetlands	Negative	Probable	1.2 LOW	0.5 VLOW	3.7 HIGH	3.7 HIGH	2.7 MOD	Negative	Probable	1.5 LOW	0.6 VLOW	3.7 HIGH	3.7 HIGH	2.7 MOD			NO	NO	3.7 HIGH	3.7 HIGH	3.7			
GW-3	Groundwater	Negative	Probable	1.1	0.5	3	3.3	3	Negativa	Probable	1.1	0.5	3	3.3	3			0	0	3	3	3			
GW-3		Negative	Probable	LOW	VLOW	MOD	HIGH	MOD	Negative	Probable	LOW	VLOW	MOD	HIGH	MOD			NO	NO	MOD	MOD	MOD			
TE-3	Terrestrial Ecology (The direction of the project impact is positive, although the residual impact	Negative	Probable	1	1.5	3	3	2.7	Negative	Probable	1	1.5	3	3.3	3			0	0	3	3	3			
	remains negative)			VLOW	LOW	MOD	MOD	MOD			VLOW	LOW	MOD	HIGH	MOD			NO	NO	MOD	MOD	MOD			
AF-3	Avifauna	Negative	Definite	NO NO	NO NO	MOD	MOD	MOD	Negative	Definite	NO	NO NO	MOD	MOD	MOD			NO NO	0 NO	MOD	MOD	MOD			
				1.3	0.8	3.3	3.3	2.7			1.3	0.8	3.3	3.3	2.7			0	0	3.3	3.3	2.7			
AQ-3	Air Quality	Negative	Possible	LOW	VLOW	HIGH	HIGH	MOD	Negative	Possible	LOW	VLOW	HIGH	HIGH	MOD			NO	NO	HIGH	HIGH	MOD			
N-3	Noise	Negative	Probable	0	0	2.7	2.3	2.3	Negative	Probable	0	0	2.7	2.3	2.3			0	0	2.7	2.7	2.7			
				NO 0	NO 0	MOD 2.7	MOD 2.7	MOD 1.8			NO O	NO	MOD 2.7	MOD 2.7	1.8			NO 0	NO O	MOD 2.7	4.7	4.7			
SOC-3	Social Environment	Positive	Probable	NO	NO	MOD	MOD	LOW	Positive	Probable	NO	NO	MOD	MOD	LOW	Negative	Definite	NO	NO	MOD	VHIGH	VHIGH			
56.3	5	Do-sitely	D-fi-it-	0	0	2.7	3	1.8	D. elelen	D. finite.	0	0	2.7	2.4	2.4	Manadia	D-fi-it-	0	0	2.7	4.7	4.7			
EC-3	Economic	Positive	Definite	NO	NO	MOD	MOD	LOW	Positive	Definite	NO	NO	MOD	MOD	MOD	Negative	Definite	NO	NO	MOD	VHIGH	VHIGH			
INF-3	Infrastructure	Negative	Definite	0	0	2.7	4.3	2.7	Negative	Definite	0	0	2.7	4.3	2.7			0	0	2.7	2.7	2.7			
				NO 0.7	NO 3.3	MOD 3.7	3.7	MOD 2.7			0.3	NO 3.3	MOD 3.7	3.7	3.3			NO 0	NO O	MOD 3.7	MOD 3.7	3.3			
V-3	Visual	Negative	Probable	VLOW	HIGH	HIGH	HIGH	MOD	Negative	Probable	VLOW	HIGH	HIGH	HIGH	HIGH			NO	NO	HIGH	HIGH	HIGH			
ArCH-3	Archaeology, Palaeongology, Cultural Heritage	No Impact	Definite	0	0	0	0	0	No Impact	Definite	0	0	0	0	0			0	0	0	0	0			
AICH	Anchaeology, Falacongology, Cultural Heritage	140 IIIIpact	Delilite	NO	NO	NO	NO	NO	140 iiiipact	Definite	NO	NO	NO	NO	NO			NO	NO	NO	NO	NO			

Reviewed By:						9	ite 1					Site	3A + 3B	,				"N	0-G0"			
IMPACT DESCRIPTION		Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	
G-3	Geology																					
	CLOSURE PHASE			5						5						5						
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0	
		No Impact	Definite	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measure:	None Required				0 NO				0 NO		0 NO				0 NO		0 NO				NO	
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	
COMBINED	BEI ONE WITHOUTON	No impact	Delilite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO	
WEIGHTED RATING	AFTER MITIGATION				0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	
	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO	
STATUS OUR	INITIAL PASSURE IN ARASTS TO SANGROUN ASAIT	No. of the last of	5 1 11		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7	
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH	1	MOD	LOCAL	PERM	OCCUR	HIGH	
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Ni	Db-bl-		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7	
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH	
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7	
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH	

ALTERNATIVES: Rated By: Warren Kok Reviewed By: Site 1 Site 3A + 3B "NO-GO" Risk mpact Risk mpact Risk robability Neighting robability IMPACT DESCRIPTION Direction of Impact | Degree of Certainty patial T-3 Topography CLOSURE PHASE 5 Alteration of surface water drainage patterns - stormwater runoff from 2 4 3 1.6 2 2 4 3 0 0 1.6 Impact 1 rehabilitated areas LOW STUDY LONG COULD LOW LOW STUDY LONG COULD LOW NO NO Probable Positive 5 5 1 Mitigation Ensure suitable soil cover, vegetation covers, free draining areas, 3 2 4 5 3 3 2 4 5 3 0 0 storm water attentuation, Regular surveying during profiling MOD STUDY LONG MOD STUDY LONG NO Measure: MOD MOD NO 1.6 1.6 0 2 2 4 3 2 4 3 0 0 0 BEFORE MITIGATION Positive Probable COMBINED LOW STUDY LONG COULD LOW LOW STUDY LONG COULD LOW NO #N/A #N/A #N/A NO WEIGHTED 3 2 4 5 3 2 4 5 3 0 0 0 0 RATING AFTER MITIGATION Positive Probable (If mitigation is effective / possible this rating wil decrease) MOD STUDY LONG OCCU MOD STUDY LONG OCCUR NO MOD MOD #N/A #N/A #N/A NO 3 3 5 5 3.7 3 3 5 5 3.7 3 5 5 3.7 STATUS QUO INITIAL IMPACTS TO ENVIRONMENT Negative Definite MOD LOCAL PERM OCCU HIGH MOD LOCAL PERM OCCU MOD LOCAL PERM O HIGH HIGH 2 3 5 5 3.3 3 3 5 5 3.7 2 3 5 5 3.3 CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative Probable IMPACT PROJECT, BEFORE MITIGATION LOW LOCAL PERM OCCUP MOD LOW HIGH LOCAL PERM OCCUR HIGH LOCAL PERM OCCUR HIGH INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 2 3 5 4 2.7 3 3 5 4 2.9 2 3 5 4 2.7 RESIDUAL

LOW LOCAL PERM VLIKE

MOD

MOD LOCAL PERM VLIKE

MOD

LOW LOCAL

PERM VLIKE

MOD

Negative

IMPACT

PROJECT, AFTER MITIGATION

Probable

Reviewed By: IMPACT DESCRIPTION Direction of Impact Degree of Certainty Degree of Certainty SLC-3 Soil and Land Capability		Temporal 1 Probability	Impact Risk	Weighting	tude	Site 3	3A + 3B	$\overline{\Box}$	Risk			"N	O-GO"		
> 2	Spatial	Temporal Probability	act	hting	tude				ş						
SLC-3 Soil and Land Capability			<u> </u>	Weigl	Magnatude	Spatial	Temporal	Probability	Impact Ri	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
CLOSURE PHASE 5				5						5					
Impact 1 Pollution of soils - hydrocarbon / chemical spills, spills from pipelines	1	5 5	2.7		3	1	5	5	3		0				0
during rehabilitation Negative Definite 5	V ISO	PERM OCCU		5	MOD	ISO			MOD	1	NO				NO
Mitigation Hydrocarbon and Chemical Management	1	1 3	0.6	,	2	1	1	3	0.8	-	0				0
Measure: VLOW		INCID COUL	D VLOW		LOW 4	ISO 1	INCID C	5	VLOW 3.3		NO 0				NO 0
Impact 2 Erosion of soils		PERM OCCL			HIGH	ISO	PERM C		HIGH		NO				NO
Mitigation Fertilize soils prior to seeding, Water seeded areas, ensure slopes are Negative Definite 3	1	5 3	1.6	3	3	1	5	3	1.8		0				0
Measure: not steeper than 1:3, Water seeded areas	V ISO	PERM COUL			MOD	ISO	PERM C		LOW		NO				NO
Impact 3 Low soil fertility and usability	1	4 4	2.1		3	1	4	4	2.1		0				0
Negative Definite 5	D ISO	LONG VLIK	E MOD	5	MOD	ISO	LONG	VLIKE	MOD		NO				NO
Mitigation Ameliorate soils prior to resuse in capping facility.	1	1 2	0.4	,	1	1	1	2	0.4		0				0
Measure: VLOW		INCID UNLI			VLOW	ISO	INCID U	JNLIKE \	VLOW		NO				NO
DEFORE MITIGATION Nogative Definite	Definite 2.3 0.9 4 4 1.9 2.8 0.9 4 4	2.1		0	0	0	0	0							
COMBINED	D ISO	LONG VLIK	E LOW		MOD	ISO	LONG	VLIKE	MOD		NO	#N/A	#N/A	#N/A	NO
RATING AFTER MITIGATION 1.1	0.9	1.7 2.3	0.6		1.6	0.9	1.7	2.3	0.6		0	0	0	0	0
(If mitigation is effective / possible this rating wil decrease) Negative Definite	V ISO	SHORT COUL	D VLOW		LOW	ISO S	SHORT C	COLLD	VLOW		NO	#N/A	#N/A	#N/A	NO
	_						_								
STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Probable		5 5	3		2	2	5	5	3		2	2	5	5	3
LOW LOW		PERM OCCL					PERM C		MOD		LOW	STUDY			MOD
CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative Probable	2	5 5	3.7		4	2	5	5	3.7		2	2	5	5	3
IMPACT PROJECT, BEFORE MITIGATION HIGH	H STUDY	PERM OCCU	JR HIGH		HIGH	STUDY	PERM C	OCCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD
RESIDUAL INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative Probable	2	5 5	3.3		4	2	5	5	3.7		2	2	5	5	3
IMPACT PROJECT, AFTER MITIGATION Negative Probable MOD	D STUDY	PERM OCCU	JR HIGH		HIGH	STUDY	PERM C	CCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD

Rated By:	Warren Kok		ALTERI	NATIVES	:																
Reviewed By:						9	ite 1					Site	3A + 3E	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SWW-3	Surface Water and Wetlands																				
	CLOSURE PHASE			5						5						5					
Impact 1	Decreased water quality (suspended solids, turbidity, hydro-carbon,				2	2	4	4	2.1		3	3	4	5	3.3		0				0
•	chemical, and microbiological)	Negative	Definite	5	LOW	STUDY	LONG	VLIKE	MOD	5	MOD			OCCUR		1	NO				NO
Mitigation	Rehab of unnecessary infrastructure, Water treatment of De Jager's				1	1	1	4	0.8	Ĭ	2	2	1	4	1.3	-	0				0
Measure:	Pan, Slope not exceed 1:3				VLOW 3	ISO 2	INCID	VLIKE 4	VLOW 2.4		LOW 3	STUDY 2	INCID 4	VLIKE 4	2.4		NO 0				NO O
Impact 2	Reduction in habitat integrity of downstream wetland areas				MOD	STUDY	LONG		MOD			STUDY			MOD		NO				NO
Mitigation		Negative	Probable	3	1	1	4	4	1.6	3	1	1	4	4	1.6		0				0
Measure:	Fertilise topsoil, Indigenous Seeding, Water rehabed areas				VLOW	ISO	LONG	VLIKE	LOW		VLOW	ISO	LONG	VLIKE	LOW		NO				NO
Impact 3	Sedimentation of wetlands and surface water resources				2	2	2	5	2		2	2	2	5	2		0				0
ilipact 3	Sedimentation of wetlands and surface water resources	Negative	Probable	3	LOW	STUDY	SHORT	OCCUR	LOW	3	LOW	STUDY	SHORT	OCCUR	LOW		NO				NO
Mitigation	Fertilise topsoil, Indigenous Seeding, Water rehabed areas	regutive	11000010	,	1	1	1	2	0.4	,	1	1	1	2	0.4		0				0
Measure:	retainse topson, margenous seeding, mater renased dreas				VLOW	ISO	INCID	UNLIKE	VLOW		VLOW	ISO	INCID	UNLIKE	VLOW		NO				NO
	BEFORE MITIGATION	Negative	Probable		1.7	1.5	2.5	3.1	1.2		2	1.8	2.5	3.5	1.5		0	0	0	0	0
COMBINED	BEI ONE WITHGATION	ivegative	riobable		LOW	STUDY	MED	VLIKE	LOW		LOW	STUDY	MED	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION				0.7	0.7	1.3	2.5	0.5		1.1	1.1	1.3	2.5	0.6		0	0	0	0	0
TUAT THE C	(If mitigation is effective / possible this rating wil decrease)	Positive	Definite		VLOW	ISO		COULD	VLOW		LOW	STUDY			VLOW		NO	#N/A	#N/A	#N/A	NO
	in magazionis effective, possible tins rating will decrease,																		<u> </u>		_
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
		-			HIGH	LOCAL	LONG	OCCUR			HIGH	LOCAL	LONG	OCCUR			HIGH	LOCAL	LONG	OCCUR	HIGH
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	egutive	codbie		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Drobable		3	3	4	4	2.7		3	3	4	4	2.7		4	3	4	5	3.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	LONG	VLIKE	MOD		MOD	LOCAL	LONG	VLIKE	MOD		HIGH	LOCAL	LONG	OCCUR	HIGH

		,	VATIVES																		
Reviewed By:						5	ite 1					Site	3A + 3E	3				۱"	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
GW-3	Groundwater																				
	CLOSURE PHASE			5						5						5					
Impact 1	Decreased water quality - hydrocarbon / chemicals used on site during				2	1	4	3	1.4		2	1	4	3	1.4		0				0
iiiipact 1	the closure phase	Negative	Definite	5	LOW	ISO	LONG	COULD	LOW	5	LOW	ISO	LONG	COULD	LOW	1	NO				NO
Mitigation	Hydrocarbon / Chemical Management	regutive	Demine	3	1	1	1	2	0.4	,	1	1	1	2	0.4	1 *	0				0
Measure:	<u> </u>				VLOW	ISO	INCID	UNLIKE	VLOW		VLOW	ISO	INCID				NO				NO
Impact 2	Surface water ingress into the ash body producing polluted ground water				3 MOD	ISO	4 LONG	4 VLIKE	2.1 MOD		3 MOD	1 ISO	4 LONG	4 VLIKE	2.1 MOD		0 NO				0 NO
Mitigation		Negative	Probable	3	2	2	A LONG	VLIKE 3	1.6	3	2	2	4	3	1.6		0				0
Measure:	Topsoil layer >300mm, Sustainable Indigenous Vegetation Cover					STUDY	LONG	COULD			LOW			COULD			NO				NO
					1.9	0.8	3.2	2.7	1.1		1.9	0.8	3.2	2.7	1.1		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Negative	Probable								-										_
WEIGHTED					LOW	ISO	LONG	COULD	LOW		LOW	ISO	LONG	COULD	LOW		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION	Negative	Definite		1.1	1.1	1.7	1.9	0.5		1.1	1.1	1.7	1.9	0.5		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	ivegative	Demine		LOW	STUDY	SHORT	UNLIKE	VLOW		LOW	STUDY	SHORT	UNLIKE	VLOW		NO	#N/A	#N/A	#N/A	NO
					2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD
CURALU ATIVE	INITIAL INADACTS TO SANGROUNASTAT. ADDITIONAL INADACTS SDOAM				3	3	LONG		3.3			3	4	5	3.3			3	4	5	3
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable			_	4	5			3						2		4		_
IIVIPACI	PROJECT, BEFORE MITIGATION					LOCAL	LONG	OCCUR			MOD			OCCUR	HIGH		LOW	LOCAL	LONG		MOD
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	перацие	coable		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD

Rated By: Warren Kok					NATIVES																
Reviewed By:		_				5	Site 1					Site	3A + 3E	1				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
TE-3	Terrestrial Ecology																				
	CLOSURE PHASE			5						5						5					
Impact 1	Capping of the waste body				2	1	4	2	0.9		2	1	4	2	0.9		0				0
·	capping of the waste body	Positive	Probable	5	LOW	ISO	LONG	UNLIKE		5	LOW	ISO		UNLIKE	VLOW	1	NO				NO
Mitigation	Alien invasive control, Ameliorate soils replaced, Indigenous seedmix				3	1	4	5	2.7	,	3	1	4	5	2.7	_	0				0
Measure:					MOD	ISO	LONG 4		MOD		MOD	ISO	LONG 4		MOD		NO				NO
Impact 2	Increase in alien invasive species				3 MOD	ISO		5 OCCUR	2.7 MOD		3 MOD	1 ISO	LONG	5 OCCUR	2.7 MOD		0 NO				0 NO
Mitigation		Negative	Probable	3	1	1	4	5	2	3	1	1	4	5	2		0				0
Measure:	Alien invasive control, Indigenous Seedmix - Rehab area				VLOW	ISO	LONG		LOW		VLOW	ISO	LONG	OCCUR	LOW		NO				NO
					1.9	0.8	3.2	2.5	1		1.9	0.8	3.2	2.5	1		0	0	0	0	0
COMBINED	BEFORE MITIGATION	Positive	Probable		LOW	ISO	LONG	COULD	VLOW		LOW	ISO	LONG	COULD	VLOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED																		<u> </u>	'		
	AFTER MITIGATION	Positive	Probable		1.8	0.8	3.2	4	1.5		1.8	0.8	3.2	4	1.5		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)				LOW	ISO	LONG	VLIKE	LOW		LOW	ISO	LONG	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
CT. T. I.C. O. I.O.	INITIAL PASSUANS INARASTS TO SAIL (IDONIASSAIT	No. of the last of	0.5.3		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	2	4	5	3		4	2	4	5	3.3		3	2	4	5	3
	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	STUDY	LONG	OCCUR	MOD		HIGH	STUDY	LONG	OCCUR	HIGH		MOD	STUDY	LONG		MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				2	2	4	5	2.7		3	2	4	5	3		3	2	4	5	3
	PROJECT, AFTER MITIGATION	Negative	Probable				-	OCCUR			MOD		-		MOD		MOD	CTUDY			
IIII ACI					LUW	31007	LUNG	OCCUR	מטואו		MOD	STUDY	LUNG	OCCUR	מטואו		MOD	STUDY	LONG	OCCUR	MOD

Rated By: Warren Kok ALTERNATIVES:

Reviewed By:

Reviewed By:						S	ite 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AF-3	Avifauna																				
	CLOSURE PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
		No Additional Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measure:	None Required				0 NO				NO NO		0 NO				NO		0 NO				0 NO
	BEFORE MITIGATION	Negative	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED					NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
	AFTER MITIGATION	Negative	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	rregutive	Demine		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL DASCLING INADACTS TO ENVIDONIMENT	Nogativo	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Delilite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	regative	Dennite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Nogativo	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Dennite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok		ALTERN	NATIVES																	
Reviewed By:						S	ite 1					Site	3A + 3E	3				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AQ-3	Air Quality																				
	CLOSURE PHASE			5						5						5					
Impact 1	Greenhouse gas emissions				2	1	2	3	1		2	1	2	3	1		0				0
		Negative	Possible	3	LOW	ISO	SHORT	COULD	VLOW	3	LOW	ISO			VLOW	1	NO				NO
Mitigation	Reduce energy consumption, Regular vehicle maintenance,				1	1	1	3	0.6	Ĭ	1	1	1	3	0.6	l -	0				0
Measure:	Consecutive Rehab				VLOW 3	ISO 3	INCID 3	COULD 5	VLOW 3		VLOW 3	ISO 3	3	COULD 5	VLOW 3		NO 0				NO 0
Impact 2	Nuisance and fall out dust				MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	OCCUR	MOD		NO				NO
Mitigation	Watering to reduce dust mobilisation, Use Site 3, Revegetate	Negative	Possible	3	3	1	3	5	2.3	3	3	1	3	5	2.3		0				0
Measure:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				MOD	ISO	MED	OCCUR	MOD		MOD	ISO	MED	OCCUR	MOD		NO				NO
Impact 3	Increased particulate matter (PM2.5 and PM10)				3	4	3	5	3.3		3	4	3	5	3.3		0				0
		Negative	Possible	5	MOD	REG	MED	OCCUR	HIGH	5	MOD	REG	MED	OCCUR	_		NO				NO
	Watering to reduce dust mobilisation, Use Site 3, Revegetate				2	3	3	3	1.6]	2	3	3	3	1.6		0				0
Measure:	stockpiles, Dust-aside / Chemical Suppressant on Roads.				LOW	LOCAL	MED	COULD	LOW		LOW	LOCAL	MED	COULD	LOW		NO				NO
	BEFORE MITIGATION	Negative	Possible		2	2.1	2	3.3	1.3		2	2.1	2	3.3	1.3		0	0	0	0	0
COMBINED		.vegative	1 0331010		LOW	LOCAL	SHORT	VLIKE	LOW		LOW	LOCAL	SHORT	VLIKE	LOW		NO	#N/A	#N/A	#N/A	NO
WEIGHTED RATING	AFTER MITIGATION				1.5	1.4	1.8	2.6	0.8		1.5	1.4	1.8	2.6	0.8		0	0	0	0	0
KATING	(If mitigation is effective / possible this rating wil decrease)	Negative	Possible		LOW	STLIDY	SHORT	COLLID	VLOW		LOW	STUDY	SHORT	COLLID	VLOW		NO	#N/A	#N/A	#N/A	NO
						4		5	3.3			4	3	5	3.3			4		5	3.3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Possible		3		3				3						3	4	3		
					MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR			MOD	REG	MED	OCCUR	HIGH
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, BEFORE MITIGATION				MOD	REG		OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	4	2.7		3	4	3	4	2.7		3	4	3	4	2.7
IMPACT	PROJECT, AFTER MITIGATION		. 000.0.0		MOD	REG	MED	VLIKE	MOD		MOD	REG	MED	VLIKE	MOD		MOD	REG	MED	VLIKE	MOD

Reviewed By:						5	ite 1					Site	3A + 3E	}				"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
N-3	Noise																				
	CLOSURE PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMACT				0				0		0				0		0				0
•		No Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measure:	None Required.				0 NO				0 NO		0 NO				NO		0 NO				NO
Wicusure.					0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED	BEFORE MITIGATION	No Impact	Definite		NO				NO		NO		#N/A	_	NO		NO	#N/A			NO
WEIGHTED RATING	AFTER MITIGATION				0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
CTATUS OUG	INITIAL DACELINE INADACTE TO ENVIDONMAENT	Namakiya	Probable		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negativo	Drobable		2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD

ALTERNATIVES: Rated By: Warren Kok Reviewed By: Site 1 Site 3A + 3B "NO-GO" Risk mpact Risk mpact Risk robability Neighting robability IMPACT DESCRIPTION Direction of Impact | Degree of Certainty patial SOC-3 Social Environment CLOSURE PHASE 5 5 0 0 0 0 0 0 NO ADDITIONAL IMACT Impact 1 NO NO NO NO NO NO No Impact Definite 1 1 1 Mitigation 0 0 0 0 0 0 None Required. Measure: NO NO NO NO NO NO 0 0 0 0 0 0 0 0 0 0 0 0 0 BEFORE MITIGATION No Impact Definite COMBINED NO #N/A #N/A #N/A NO NO #N/A #N/A #N/A NO NO #N/A #N/A #N/A NO WEIGHTED 0 0 0 0 0 0 0 0 0 0 0 0 RATING AFTER MITIGATION No Impact Definite (If mitigation is effective / possible this rating wil decrease) NO #N/A #N/A #N/A NO NO #N/A #N/A #N/A NO #N/A NO #N/A #N/A NO 2 2.7 2 3 3 5 3 5 2.7 2 3 3 5 2.7 STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT Positive Probable LOW LOCAL MED MOD LOW LOCAL MED MOD LOW LOCAL MED MOD 2 5 2.7 2 3 3 5 2.7 5 5 4 5 4.7 CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 3 3 Positive Probable Neg IMPACT PROJECT, BEFORE MITIGATION LOW LOCAL MED LOW MOD LOCAL MED MOD NAT LONG OCCUR VHIGH

2 3

Positive

Probable

4 3

LOW LOCAL LONG COULD

1.8

LOW

2

3 4 3

LOW LOCAL LONG COULD

1.8

LOW

5 5

NAT

4 5

LONG

4.7

INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM

PROJECT, AFTER MITIGATION

RESIDUAL

IMPACT

Rated By: Warren Kok ALTERNATIVES:
Reviewed By:

Reviewed By:						S	ite 1					Site	3A + 3B					"N	10-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
EC-3	Economic																				
	CLOSURE PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMACT				0				0		0				0		0				0
Mitigation		No Impact	Definite	1	NO				NO 0	1	NO				NO 0	1	NO				NO 0
Mitigation Measure:	None Required.				0 NO				NO		0 NO				NO		0 NO				NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED		ito impacc	Demine.		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
_	AFTER MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No impact	Deminic		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUG	INITIAL DACCIONE INADACTO TO ENVIDONIMAENT	Positive	Definite		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Definite		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positive	Definite		3	3	3	5	3		3	3	3	4	2.4	Neg	5	5	4	5	4.7
IMPACT	PROJECT, BEFORE MITIGATION	1 ositive	Demitte		MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	VLIKE	MOD	1.05	VHIGH	NAT	LONG	OCCUR	VHIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positive	Definite		2	3	4	3	1.8		3	3	3	4	2.4	Neg	5	5	4	5	4.7
IMPACT	PROJECT, AFTER MITIGATION	FUSILIVE	Delilite		LOW	LOCAL	LONG	COULD	LOW		MOD	LOCAL	MED	VLIKE	MOD	iveg	VHIGH	NAT	LONG	OCCUR	VHIGH

nated by.	Waltell Rok			MATIVES											_						
Reviewed By:						S	ite 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
INF-3	Infrastructure																				
	CLOSURE PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMACT				0				0		0				0		0				0
		No Impact	Definite	1	NO				NO	1	NO				NO	1	NO				NO
Mitigation Measure:	None Required.			_	0 NO				NO NO	_	0 NO				NO NO	_	0 NO				NO NO
ivieasure.					NO		0	0				^	0	_	NU			_	^	0	
COMBINED	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	U		0	0	0	0	0
WEIGHTED		·			NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION		5.6.1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	No Impact	Definite		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
			- 4.		3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				5	5	3	5	4.3		5	5	3	5	4.3		3	2	3	5	2.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		VHIGH	NAT	MED	OCCUR			VHIGH	NAT	MED	OCCUR			MOD	STUDY	MED	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM				3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Definite		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD

Reviewed By:																_			"		
Reviewed By:							ite 1					Site	3A + 3E					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
V-3	Visual																				
	CONSTRUCTION PHASE			5						5						5					
Impact 1	Capping of Ash Dam				1	2	2	2	0.7		1	2	2	1	0.3		0				0
	capping of Asia built	Positive	Probable	5	VLOW	STUDY	SHORT	UNLIKE	VLOW	5	_		SHORT		VLOW	1	NO				NO
Mitigation	Utilise indigenous seedmix				3	3	4	5	3.3		3	3	4	5	3.3	_	0				0
Measure:	-				MOD		LONG	OCCUR			MOD		LONG	OCCUR	HIGH		NO				NO
	BEFORE MITIGATION	Positive	Probable		1	2	2	2	0.7		1	2	2	1	0.3		0	0	0	0	0
COMBINED WEIGHTED					VLOW	STUDY	SHORT	UNLIKE	VLOW		VLOW	STUDY	SHORT	IMPOS	VLOW		NO	#N/A	#N/A	#N/A	NO
-	AFTER MITIGATION				3	3	4	5	3.3		3	3	4	5	3.3		0	0	0	0	0
_	(If mitigation is effective / possible this rating wil decrease)	Positive	Probable		MOD	LOCAL	LONG	OCCUR	HIGH		MOD	LOCAL	LONG	OCCUR	HIGH		NO	#N/A	#N/A	#N/A	NO
					4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		HIGH	LOCAL	LONG	OCCUR			HIGH	_	LONG	-			HIGH	LOCAL	LONG	OCCUR	_
61124111 ATN /5	THE PROPERTY OF THE PROPERTY O				4	2	LOIVO	5	3.7			3	4	5	3.7		4	3	LONG	5	3.7
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM PROJECT, BEFORE MITIGATION	Negative	Probable		4	3	4	_			4	_						-	4	-	
IIVIFACI	FROJECI, BEFORE WITHGATION					LOCAL	LONG	OCCUR					LONG				HIGH	LOCAL	LONG	OCCUR	
	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		3	3	4	4	2.7		3	3	4	5	3.3		3	3	4	5	3.3
IMPACT	PROJECT, AFTER MITIGATION	.524114			MOD	LOCAL	LONG	VLIKE	MOD		MOD	LOCAL	LONG	OCCUR	HIGH		MOD	LOCAL	LONG	OCCUR	HIGH

Reviewed By:						9	Site 1					Site	3A + 3B					"N	0-G0"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
ArCH-3	Archaeology, Palaeontology, Cultural Heritage																				
	CLOSURE PHASE			5						5						5					
Impact 1	NO ADDITIONAL IMPACT				0				0		0				0		0				0
Mitigation		No Impact	Definite	1	NO				NO 0	1	NO 0				NO 0	1	NO 0				NO 0
Measure:	Mitigation:				NO				NO		NO				NO		NO				NO
	BEFORE MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
COMBINED WEIGHTED		ito impacc	Demine.		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
RATING	AFTER MITIGATION	No Impact	Definite		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
	(If mitigation is effective / possible this rating wil decrease)	ito impacc	Demine.		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO		NO	#N/A	#N/A	#N/A	NO
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	No Impact	Definite		0				0		0				0		0				0
SIATOS QUO	INTIAL BASELINE IIVIT ACTS TO ENVIRONMENT	No impact	Deminte		NO				NO		NO				NO		NO				NO
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No Impact	Definite		0				0		0				0		0				0
IMPACT	PROJECT, BEFORE MITIGATION	No impact	Dellilite		NO				NO		NO				NO		NO				NO
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No Impact	Definite		0				0		0				0		0				0
IMPACT	PROJECT, AFTER MITIGATION	No impact	Definite		NO				NO		NO				NO		NO				NO

SIGNIFICANCE RATING SCALE

	Rating	Description
5	VERY HIGH	Of the highest order possible within the bounds of impacts which could occur. In the case of adverse impacts: there is no possible mitigation and/or remedial activity which could offset the impact. In the case of beneficial impacts, there is no real alternative to achieving this benefit.
4	HIGH	Impact is of substantial order within the bounds of impacts, which could occur. In the case of adverse impacts: mitigation and/or remedial activity is feasible but difficult, expensive, time-consuming or some combination of these. In the case of beneficial impacts, other means of achieving this benefit are feasible but they are more difficult, expensive, time-consuming or some combination of these.
3	MODERATE	Impact is real but not substantial in relation to other impacts, which might take effect within the bounds of those which could occur. In the case of adverse impacts: mitigation and/or remedial activity are both feasible and fairly easily possible. In the case of beneficial impacts: other means of achieving this benefit are about equal in time, cost, effort, etc.
2	LOW	Impact is of a low order and therefore likely to have little real effect. In the case of adverse impacts: mitigation and/or remedial activity is either easily achieved or little will be required, or both. In the case of beneficial impacts, alternative means for achieving this benefit are likely to be easier, cheaper, more effective, less time consuming, or some combination of these.
1	VERY LOW	Impact is negligible within the bounds of impacts which could occur. In the case of adverse impacts, almost no mitigation and/or remedial activity is needed, and any minor steps which might be needed are easy, cheap, and simple. In the case of beneficial impacts, alternative means are almost all likely to be better, in one or a number of ways, than this means of achieving the benefit. Three additional categories must also be used where relevant. They are in addition to the category represented on the scale, and if used, will replace the scale.
0	NO IMPACT	There is no impact at all - not even a very low impact on a party or system.

SPATIAL RATING SCALE

Ratir	ng	Description
5	Global/National	The maximum extent of any impact.
	Regional/Provinc	The spatial scale is moderate within the bounds of impacts possible, and will be felt at a regional scale
4	ial	(District Municipality to Provincial Level).
3	Local	The impact will affect an area up to 5 km from the proposed route corridor.
2	Study Area	The impact will affect a route corridor not exceeding the boundary of the corridor.
4	Isolated Sites /	The impact will effect an execuse his gray than the consist of
1'	proposed site	The impact will affect an area no bigger than the servitude.

TEMPORAL RATING SCALE (DURATION)

LLIVIE	ONAL NATING SCALL	(DOMATION)
Ratin	g	Description
1	Incidental	The impact will be limited to isolated incidences that are expected to occur very sporadically.
2	Short-term	The environmental impact identified will operate for the duration of the construction phase or a period of
2	Short-term	less than 5 years, whichever is the greater.
3	Medium term	The environmental impact identified will operate for the duration of life of the line.
4	Long term	The environmental impact identified will operate beyond the life of operation.
5	Permanent	The environmental impact will be permanent.

DEGREE OF PROBABILITY

Rating	Description
1	1 Practically impossible
2	2 Unlikely
3	Could happen
4	Very Likely
	It's going to happen / has occurred

DEGREE OF CERTAINTY

DEGREE OF CER	IAINTY
Rating	Description
Definite	More than 90% sure of a particular fact.
Probable	Between 70 and 90% sure of a particular fact, or of the likelihood of that impact occurring.
Possible	Between 40 and 70% sure of a particular fact or of the likelihood of an impact occurring.
Unsure	Less than 40% sure of a particular fact or the likelihood of an impact occurring.
Can't know	The consultant believes an assessment is not possible even with additional research.

Impact Risk = (SIGNIFICANCE + Spatial + Temporal) / 3 X Probability / 5

Rating	Impact class	Description
0.1 – 1.0	1	Very Low
1.1 – 2.0	2	Low
2.1 – 3.0	3	Moderate
3.1 – 4.0	4	High
4.1 – 5.0	5	Very High

ALTERNATIVE:

			Site 1		9	Site 3A + 3B			"No-Go"	
	ENVIRONMENTAL ELEMENT	Risdual Direction of Impact	Residual Degree of Certainty	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Residual Impact	Risdual Direction of Impact	Residual Degree of Certainty	Residual Impact
CODE:										
	CLOSURE PHASE									
G-3	Geology	Negative	Probable	3.7 HIGH	Negative	Probable	3.7 HIGH			3.7 HIGH
T-3	Topography	Negative	Probable	2.7 MOD	Negative	Probable	2.9 MOD			2.7 MOD
SLC-3	Soil and Land Capability	Negative	Probable	3.3 HIGH	Negative	Probable	3.7 HIGH			3 MOD
SWW-3	Surface Water and Wetlands	Negative	Probable	2.7 MOD	Negative	Probable	2.7 MOD			3.7 HIGH
GW-3	Groundwater	Negative	Probable	3 MOD	Negative	Probable	3 MOD			3 MOD
TE-3	Terrestrial Ecology (The direction of the project impact is positive, although the residual impact remains negative)	Negative	Probable	2.7 MOD	Negative	Probable	3 MOD			3 MOD
AF-3	Avifauna	Negative	Definite	3 MOD	Negative	Definite	3 MOD			3 MOD
AQ-3	Air Quality	Negative	Possible	2.7 MOD	Negative	Possible	2.7 MOD			2.7 MOD
N-3	Noise	Negative	Probable	2.3 MOD	Negative	Probable	2.3 MOD			2.7 MOD
SOC-3	Social Environment	Positive	Probable	1.8 LOW	Positive	Probable	1.8 LOW	Negative	Definite	4.7 VHIGH
EC-3	Economic	Positive	Definite	1.8 LOW	Positive	Definite	2.4 MOD	Negative	Definite	4.7 VHIGH
INF-3	Infrastructure	Negative	Definite	2.7 MOD	Negative	Definite	2.7 MOD			2.7 MOD
V-3	Visual	Negative	Probable	2.7 MOD	Negative	Probable	3.3 HIGH			3.3 HIGH
ArCH-3	Archaeology, Palaeongology, Cultural Heritage	No Impact	Definite	0 NO	No Impact	Definite	0 NO			0 NO

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						5	ite 1					Site	3A + 3E	3				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
G-3	Geology																				
	CLOSURE PHASE			5						5						5					i I
STATUS OUG	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
STATUS QUU	INITIAL BASELINE IIVIPACTS TO ENVIRONMENT	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, BEFORE MITIGATION	Negative	riobable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakina	Duckahla		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH

Rated By:	Warren Kok			ALTERN	IATIVES	:															
Reviewed By:						,	Site 1					Site	3A + 3E	3				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
T-3	Topography																				
	CLOSURE PHASE			5						5						5					i
STATUS OUL	INITIAL IMPACTS TO ENVIRONMENT	Negative	Definite		3	3	5	5	3.7		3	3	5	5	3.7		3	3	5	5	3.7
STATUS QUU	INITIAL IMPACTS TO ENVIRONMENT	ivegative	Delinite		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		2	3	5	5	3.3		3	3	5	5	3.7		2	3	5	5	3.3
IMPACT	PROJECT, BEFORE MITIGATION	ivegative	Probable		LOW	LOCAL	PERM	OCCUR	HIGH		MOD	LOCAL	PERM	OCCUR	HIGH		LOW	LOCAL	PERM	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		2	3	5	4	2.7		3	3	5	4	2.9		2	3	5	4	2.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	LOCAL	PERM	VLIKE	MOD		MOD	LOCAL	PERM	VLIKE	MOD		LOW	LOCAL	PERM	VLIKE	MOD

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3I	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
SLC-3	Soil and Land Capability																				
	CLOSURE PHASE			5						5						5					
STATUS OUG	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		2	2	5	5	3		2	2	5	5	3		2	2	5	5	3
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	STUDY	PERM	OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD		LOW	STUDY	PERM	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		4	2	5	5	3.7		4	2	5	5	3.7		2	2	5	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		HIGH	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		3	2	5	5	3.3		4	2	5	5	3.7		2	2	5	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	STUDY	PERM	OCCUR	HIGH		HIGH	STUDY	PERM	OCCUR	HIGH		LOW	STUDY	PERM	OCCUR	MOD

ALTERNATIVES: Rated By: Warren Kok Reviewed By: Site 1 Site 3A + 3B "NO-GO" Impact Risk Impact Risk mpact Risk Magnatude Magnatude robability robability Neighting IMPACT DESCRIPTION Direction of Impact Degree of Certainty Spatial patial SWW-3 Surface Water and Wetlands 5 CLOSURE PHASE 4 3 4 5 3.7 4 3 4 5 3.7 4 3 4 5 3.7 STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT Negative Probable HIGH LOCAL LONG OCCUR HIGH LOCAL LONG OCCU HIGH HIGH LOCAL LONG OCCUR HIGH HIGH 4 4 4 3.7 4 4 3.7 CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM 3 5 3.7 4 5 3 5 Negative Probable IMPACT PROJECT, BEFORE MITIGATION HIGH LOCAL LONG OCCUP HIGH LOCAL LONG OCCUR HIGH LOCAL LONG OCCUR HIGH HIGH HIGH 3 3 4 4 2.7 3 3 4 4 2.7 4 3 4 5 3.7 RESIDUAL INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM Negative Probable PROJECT, AFTER MITIGATION IMPACT MOD LOCAL LONG VLIKE MOD MOD LOCAL LONG VLIKE MOD HIGH LOCAL LONG OCCUR HIGH

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3E	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
GW-3	Groundwater																				
	CLOSURE PHASE			5						5						5					ł
STATUS OUG	INITIAL DASSLINE IMPACTS TO FAMILIDAMAENT	Namakiya	Probable		2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Deskahla		3	3	4	5	3.3		3	3	4	5	3.3		2	3	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	LOCAL	LONG	OCCUR	HIGH		MOD	LOCAL	LONG	OCCUR	HIGH		LOW	LOCAL	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM		5.1.11		2	3	4	5	3		2	3	4	5	3		2	3	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD		LOW	LOCAL	LONG	OCCUR	MOD

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3E	3				"N	10-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
TE-3	Terrestrial Ecology																				
	CLOSURE PHASE			5						5						5					
STATUS OUG	INITIAL DASSLINE IMPACTS TO ENVIDONMENT	No making	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No making	Deskahla		3	2	4	5	3		4	2	4	5	3.3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		MOD	STUDY	LONG	OCCUR	MOD		HIGH	STUDY	LONG	OCCUR	HIGH		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No making	Deskahla		2	2	4	5	2.7		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		LOW	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						5	ite 1					Site	3A + 3E	3				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AF-3	Avifauna																				
	CLOSURE PHASE			5						5						5					
STATUS OUG	INITIAL DACELING INADACTS TO ENVIDONIMENT	Namakiya	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Definite		3	2	4	5	3		3	2	4	5	3		3	2	4	5	3
IMPACT	PROJECT, AFTER MITIGATION	Negative	Definite		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD		MOD	STUDY	LONG	OCCUR	MOD

Rated By:	Warren Kok			ALTERN	NATIVES	:															
Reviewed By:						9	ite 1					Site	3A + 3E	3				"N	IO-GO"		
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
AQ-3	Air Quality																				
	CLOSURE PHASE			5						5						5					
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	POSSIDIE		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Possible		3	4	3	5	3.3		3	4	3	5	3.3		3	4	3	5	3.3
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Possible		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH		MOD	REG	MED	OCCUR	HIGH
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	No making	Danaible		3	4	3	4	2.7		3	4	3	4	2.7		3	4	3	4	2.7
IMPACT	PROJECT, AFTER MITIGATION	Negative	Possible		MOD	REG	MED	VLIKE	MOD		MOD	REG	MED	VLIKE	MOD		MOD	REG	MED	VLIKE	MOD

Rated By:	ALTERNATIVES: Site 1 Site 3A + 3B "NO-GO"																				
Reviewed By:							Site 1							Site 3A + 3B							
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
N-3	Noise																				
	CLOSURE PHASE			5						5						5					i
STATUS OUO	INITIAL DASCLING INDACTS TO ENVIDONMENT	Negative	Probable		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
IMPACT	PROJECT, BEFORE MITIGATION	ivegative	riodable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Probable		2	2	3	5	2.3		2	2	3	5	2.3		2	3	3	5	2.7
IMPACT	IMPACT PROJECT, AFTER MITIGATION	ivegative	Probable		LOW	STUDY	MED	OCCUR	MOD		LOW	STUDY	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD

Rated By: Warren Kok							ALTERNATIVES: Site 1 Site 3A + 3B "NO-GO"															
Reviewed By:	Reviewed By:							Site 1								"NO-GO"						
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	
SOC-3	Social Environment																					
	CLOSURE PHASE			5						5						5						
CTATUS OUG	INITIAL DACELING INADACTS TO ENVIRONMENT	Positive	Doobabla		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7	
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Probable		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD	
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Positive	Probable		2	3	3	5	2.7		2	3	3	5	2.7		5	5	4	5	4.7	
IMPACT	PROJECT, BEFORE MITIGATION	Positive	Probable	LOW	LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH	
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Diti	Deskahla		2	3	4	3	1.8		2	3	4	3	1.8	N	5	5	4	5	4.7	
IMPACT	PROJECT, AFTER MITIGATION	Positive	Probable		LOW	LOCAL	LONG	COULD	LOW		LOW	LOCAL	LONG	COULD	LOW	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH	

Rated By: Warren Kok							ALTERNATIVES:																
Reviewed By:							ite 1			Site 3A + 3B							"NO-GO"						
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk		
EC-3	Economic																						
	CLOSURE PHASE			5						5						5							
STATUS OUG	INITIAL DASSUBE INDASTS TO FAILUDONIAGAIT	Diti	Definite		2	3	3	5	2.7		2	3	3	5	2.7		2	3	3	5	2.7		
STATUS QUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Positive	Definite		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		LOW	LOCAL	MED	OCCUR	MOD		
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Daniti	Definite		3	3	3	5	3		3	3	3	4	2.4		5	5	4	5	4.7		
IMPACT	PROJECT, BEFORE MITIGATION	Positive	Definite		MOD	LOCAL	MED	OCCUR	MOD		MOD	LOCAL	MED	VLIKE	MOD	Neg VHI	VHIGH	NAT	LONG	OCCUR	VHIGH		
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Danishi	Definite		2	3	4	3	1.8		3	3	3	4	2.4	N	5	5	4	5	4.7		
IMPACT	PROJECT, AFTER MITIGATION	Positive Definit	Definite		LOW	LOCAL	LONG	COULD	LOW		MOD	LOCAL	MED	VLIKE	MOD	Neg	VHIGH	NAT	LONG	OCCUR	VHIGH		

								ALTERNATIVES: Site 1 Site 3A + 3B "NO-GO"													
Reviewed By:							Site 1							Site 3A + 3B							
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk
INF-3	Infrastructure																				
	CLOSURE PHASE			5						5						5					i
STATUS OUO	INITIAL DASCLING IMPACTS TO ENVIDONMENT	Negative	Definite		3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Delilille		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		5	5	3	5	4.3		5	5	3	5	4.3		3	2	3	5	2.7
IMPACT	PROJECT, BEFORE MITIGATION	ivegative	Demille		VHIGH	NAT	MED	OCCUR	VHIGH		VHIGH	NAT	MED	OCCUR	VHIGH		MOD	STUDY	MED	OCCUR	MOD
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Definite		3	2	3	5	2.7		3	2	3	5	2.7		3	2	3	5	2.7
IMPACT	IMPACT PROJECT, AFTER MITIGATION	Negative	Demnite		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD		MOD	STUDY	MED	OCCUR	MOD

Rated By:	ALTERNATIVES: Site 1 Site 3A + 3B "NO-GO"																					
Reviewed By:	Reviewed By:							Site 1								"NO-GO"						
	IMPACT DESCRIPTION	Direction of Impact	Degree of Certainty	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	Weighting	Magnatude	Spatial	Temporal	Probability	Impact Risk	
V-3	Visual																					
	CONSTRUCTION PHASE			5						5						5						
STATUS OUO	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7	
STATUS QUU	INITIAL BASELINE IMPACTS TO ENVIRONMENT	Negative	Definite		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH	
CUMULATIVE	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Negative	Drobable		4	3	4	5	3.7		4	3	4	5	3.7		4	3	4	5	3.7	
IMPACT	PROJECT, BEFORE MITIGATION	Negative	Probable		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH		HIGH	LOCAL	LONG	OCCUR	HIGH	
RESIDUAL	INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM	Namakiya	Darbabla		3	3	4	4	2.7		3	3	4	5	3.3		3	3	4	5	3.3	
IMPACT	PROJECT, AFTER MITIGATION	Negative	Probable		MOD	LOCAL	LONG	VLIKE	MOD		MOD	LOCAL	LONG	OCCUR	HIGH		MOD	LOCAL	LONG	OCCUR	HIGH	

Warren Kok ALTERNATIVES: Rated By: Reviewed By: Site 1 Site 3A + 3B "NO-GO" Impact Risk mpact Risk mpact Risk Magnatude Magnatude robability robability robability Weighting IMPACT DESCRIPTION Direction of Impact Degree of Certainty Spatial patial ArCH-3 Archaeology, Palaeontology, Cultural Heritage 5 5 CLOSURE PHASE 0 0 0 0 0 0 STATUS QUO INITIAL BASELINE IMPACTS TO ENVIRONMENT No Impact Definite NO NO NO NO NO NO 0 0 0 0 0 0 CUMULATIVE INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM No Impact Definite IMPACT PROJECT, BEFORE MITIGATION NO NO NO NO NO NO 0 0 0 0 0 0 RESIDUAL INITIAL IMPACTS TO ENVIRONMENT + ADDITIONAL IMPACTS FROM No Impact Definite IMPACT PROJECT, AFTER MITIGATION NO NO NO NO NO NO