SUMMARY OF COSTS

CAPITAL COSTS	COMPONENT NAME	COST	LAND LIABILITY	WATER LIABILITY
OPEN PIT	Portage	$75,240	$37,620	$37,620
	Goose	$73,080	$36,540	$36,540
	Vault	$1,080	$540	$540
	Phaser	$1,080	$540	$540
UNDERGROUND MINE		$0	$0	$0
TAILINGS FACILITY		$32,121,068	$16,060,534	$16,060,534
ROCK PILE	Portage	$2,707,534	$1,353,767	$1,353,767
	Vault	$30,000	$15,000	$15,000
BUILDINGS AND EQUIPMENT	Meadowbank	$8,121,236	$4,060,618	$4,060,618
	Baker Lake	$1,685,266	$842,633	$842,633
	AWAR	$749,930	$374,965	$374,965
CHEMICALS AND CONTAMINATED SOIL MANAGEMENT		$1,316,981	$658,491	$658,491
SURFACE AND GROUNDWATER MANAGEMENT		$25,409,069	$12,704,535	$12,704,535
INTERIM CARE AND MAINTENANCE		$847,800	$423,900	$423,900
	SUBTOTAL: Capital Costs	**$73,139,364**	**$36,569,682**	**$36,569,682**
	PERCENT OF SUBTOTAL		**50%**	**50%**

INDIRECT COSTS		COST	LAND LIABILITY	WATER LIABILITY
MOBILIZATION/DEMOBILIZATION		$5,589,160	$2,794,580	$2,794,580
POST-CLOSURE MONITORING AND MAINTENANCE		$4,133,524	$2,066,762	$2,066,762
ENGINEERING	5%	$3,656,968	$1,828,484	$1,828,484
PROJECT MANAGEMENT	5%	$3,656,968	$1,828,484	$1,828,484
HEALTH AND SAFETY PLANS/MONITORING, QA/QC & ENGAGEMENT COSTS	2%	$1,462,787	$731,394	$731,394
BONDING/INSURANCE	1%	$731,394	$365,697	$365,697
CONTINGENCY	15%	$10,970,905	$5,485,452	$5,485,452
MARKET PRICE FACTOR ADJUSTMENT	0%	$0	$0	$0
	SUBTOTAL: Indirect Costs	**$30,201,706**	**$15,100,853**	**$15,100,853**

TOTAL COSTS	**$103,341,070**	**$51,670,535**	**$51,670,535**

4 **Open Pit Name:** Portage **Pit #** *1*

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost	
CONTROL ACCESS										
Fence		m		#N/A	$0.00	$0			$0	$0
Signs		each		#N/A	$0.00	$0			$0	$0
Berm at crest and rock barricad		m3	1350	DRH	$2.40	$3,240	50%		$1,620	$1,620
Block roads		m3								
Other				#N/A	$0.00	$0			$0	$0
STABILITY STUDY										
Conduct stability and setback st		allow		#N/A	$0.00	$0			$0	$0
STABILIZE SLOPES										
Off-load crest, soil A		m3		#N/A	$0.00	$0			$0	$0
Off-load crest, soil B		m3		#N/A	$0.00	$0			$0	$0
Doze/trim overburden at crest		m3		#N/A	$0.00	$0			$0	$0
Drill & blast pit crest		m3		#N/A	$0.00	$0			$0	$0
Buttress slope		m3		#N/A	$0.00	$0			$0	$0
Regrade NPAG Stockpiles		m3	30000	DRH	$2.40	$72,000	50%		$36,000	$36,000
Other				#N/A	$0.00	$0			$0	$0
COVER/CONTOUR SLOPES										
Place fill, soil A		m3		#N/A	$0.00	$0			$0	$0
Place fill, soil B		m3		#N/A	$0.00	$0			$0	$0
Rip rap		m3		#N/A	$0.00	$0			$0	$0
Vegetate slopes		ha		#N/A	$0.00	$0			$0	$0
Vegetate pit floor		ha		#N/A	$0.00	$0			$0	$0
Other				#N/A	$0.00	$0			$0	$0
CONSTRUCT DIVERSION DITCHES										
Excavate ditches -soil		m3		#N/A	$0.00	$0			$0	$0
Excavate ditches -rock		m3		#N/A	$0.00	$0			$0	$0
Rip rap in channel base		m3		#N/A	$0.00	$0			$0	$0
CONSTRUCT SPILLWAY										
Excavate channel		m3		#N/A	$0.00	$0			$0	$0
Concrete		m3		#N/A	$0.00	$0			$0	$0
Rip rap		m3		#N/A	$0.00	$0			$0	$0
Other				#N/A	$0.00	$0			$0	$0
RECLAIM QUARRIES										
Contour slopes		m3		#N/A	$0.00	$0			$0	$0
Place overburden		m3		#N/A	$0.00	$0			$0	$0
Vegetate		m3		#N/A	$0.00	$0			$0	$0
FLOOD PIT-Capital										
Remove stationary equipment (		each		#N/A	$0.00	$0			$0	$0
Remove dewatering pipeline		m		#N/A	$0.00	$0			$0	$0
Remove power lines		each		#N/A	$0.00	$0			$0	$0
Construct diversion ditches		m3		#N/A	$0.00	$0			$0	$0
-Ditch, mat'l A		m3		#N/A	$0.00	$0			$0	$0
-Ditch, mat'l B		m3		#N/A	$0.00	$0			$0	$0
Construct embankment/dam		m3		#N/A	$0.00	$0			$0	$0
Supply/install pump station		each		#N/A	$0.00	$0			$0	$0
Supply/install piping system		m		#N/A	$0.00	$0			$0	$0
Remove pump post-closure		each		#N/A	$0.00	$0			$0	$0
Remove pipeline post-closure		m		#N/A	$0.00	$0			$0	$0
FLOOD PIT-Annual Cost										
Operate pumps (power)		m3		#N/A	$0.00	$0			$0	$0
Maintain pump/pipeline		allow		#N/A	$0.00	$0			$0	$0
Labour: fuel management, com		$/h		#N/A	$0.00	$0			$0	$0
Chemical addition, _____ kg/m		tonne		#N/A	$0.00	$0			$0	$0
Chemicals, purchase and shipp		tonne		#N/A	$0.00	$0			$0	$0
Passive/biological additives		$/ha		#N/A	$0.00	$0			$0	$0
Passive additives purchase and		tonne		#N/A	$0.00	$0			$0	$0
Other				#N/A	$0.00	$0			$0	$0
					Annual pumping costs	$0				
Number of years of pump flood		years								
					Total pumping costs	$0			$0	$0
					Total	$75,240			$37,620	$37,620
					% of Total				50%	50%

Open Pit Name: **Goose** **Pit # 2**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
CONTROL ACCESS									
Fence		m		#N/A	$0.00	$0		$0	$0
Signs		each		#N/A	$0.00	$0		$0	$0
Berm at crest and Rock barricade at ramp		m3	450	DRH	$2.40	$1,080	50%	$540	$540
Block roads		m3							
Other				#N/A	$0.00	$0		$0	$0
STABILITY STUDY									
Conduct stability and setback study		allow		#N/A	$0.00	$0		$0	$0
STABILIZE SLOPES									
Off-load crest, soil A		m3		#N/A	$0.00	$0		$0	$0
Off-load crest, soil B		m3		#N/A	$0.00	$0		$0	$0
Doze/trim overburden at crest		m3		#N/A	$0.00	$0		$0	$0
Drill & blast pit crest		m3		#N/A	$0.00	$0		$0	$0
Buttress slope		m3		#N/A	$0.00	$0		$0	$0
Regrade NPAG Stockpiles		m3	30000	DRH	$2.40	$72,000	50%	$36,000	$36,000
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
Remove stationary equipment (sump pumps)		each		#N/A	$0.00	$0		$0	$0
Remove dewatering pipeline		m		#N/A	$0.00	$0		$0	$0
Remove power lines		each		#N/A	$0.00	$0		$0	$0
Construct diversion ditches		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l A		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l B		m3		#N/A	$0.00	$0		$0	$0
Construct embankment/dam		m3		#N/A	$0.00	$0		$0	$0
Supply/install pump station		each		#N/A	$0.00	$0		$0	$0
Supply/install piping system		m		#N/A	$0.00	$0		$0	$0
Remove pump post-closure		each		#N/A	$0.00	$0		$0	$0
Remove pipeline post-closure		m		#N/A	$0.00	$0		$0	$0
FLOOD PIT-Annual Cost									
Operate pumps (power)		m3		#N/A	$0.00	$0		$0	$0
Maintain pump/pipeline		allow		#N/A	$0.00	$0		$0	$0
Labour: fuel management, commissioning/decom		$/h		#N/A	$0.00	$0		$0	$0
Chemical addition, _____ kg/m3 of water		tonne		#N/A	$0.00	$0		$0	$0
Chemicals, purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Passive/biological additives		$/ha		#N/A	$0.00	$0		$0	$0
Passive additives purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
				Annual pumping costs		$0			
Number of years of pump flooding		years							
				Total pumping costs		$0		$0	$0
					Total	$73,080		$36,540	$36,540
					% of Total			50%	50%

Open Pit Name: Vault **Pit #** 3

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
CONTROL ACCESS									
Fence		m		#N/A	$0.00	$0		$0	$0
Signs		each		#N/A	$0.00	$0		$0	$0
Berm at crest and Rock barricade at ramp		m3	450	DRH	$2.40	$1,080	50%	$540	$540
Block roads		m3							
Other				#N/A	$0.00	$0		$0	$0
STABILITY STUDY									
Conduct stability and setback study		allow		#N/A	$0.00	$0		$0	$0
STABILIZE SLOPES									
Off-load crest, soil A		m3		#N/A	$0.00	$0		$0	$0
Off-load crest, soil B		m3		#N/A	$0.00	$0		$0	$0
Doze/trim overburden at crest		m3		#N/A	$0.00	$0		$0	$0
Drill & blast pit crest		m3		#N/A	$0.00	$0		$0	$0
Buttress slope		m3		#N/A	$0.00	$0		$0	$0
		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER/CONTOUR SLOPES									
Place fill, soil A		m3		#N/A	$0.00	$0		$0	$0
Place fill, soil B		m3		#N/A	$0.00	$0		$0	$0
Rip rap		m3		#N/A	$0.00	$0		$0	$0
Vegetate slopes		ha		#N/A	$0.00	$0		$0	$0
Vegetate pit floor		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
CONSTRUCT DIVERSION DITCHES									
Excavate ditches -soil		m3		#N/A	$0.00	$0		$0	$0
Excavate ditches -rock		m3		#N/A	$0.00	$0		$0	$0
Rip rap in channel base		m3		#N/A	$0.00	$0		$0	$0
CONSTRUCT SPILLWAY									
Excavate channel		m3		#N/A	$0.00	$0		$0	$0
Concrete		m3		#N/A	$0.00	$0		$0	$0
Rip rap		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
RECLAIM QUARRIES									
Contour slopes		m3		#N/A	$0.00	$0		$0	$0
Place overburden		m3		#N/A	$0.00	$0		$0	$0
Vegetate		m3		#N/A	$0.00	$0		$0	$0
FLOOD PIT-Capital									
Remove stationary equipment (sump pumps)		each		#N/A	$0.00	$0		$0	$0
Remove dewatering pipeline		m		#N/A	$0.00	$0		$0	$0
Remove power lines		each		#N/A	$0.00	$0		$0	$0
Construct diversion ditches		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l A		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l B		m3		#N/A	$0.00	$0		$0	$0
Construct embankment/dam		m3		#N/A	$0.00	$0		$0	$0
Supply/install pump station		each		#N/A	$0.00	$0		$0	$0
Supply/install piping system		m		#N/A	$0.00	$0		$0	$0
Remove pump post-closure		each		#N/A	$0.00	$0		$0	$0
Remove pipeline post-closure		m		#N/A	$0.00	$0		$0	$0
FLOOD PIT-Annual Cost									
Operate pumps (power)		m3		#N/A	$0.00	$0		$0	$0
Maintain pump/pipeline		allow		#N/A	$0.00	$0		$0	$0
Labour: fuel management, commissioning/decom		$/h		#N/A	$0.00	$0		$0	$0
Chemical addition, _____ kg/m3 of water		tonne		#N/A	$0.00	$0		$0	$0
Chemicals, purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Passive/biological additives		$/ha		#N/A	$0.00	$0		$0	$0
Passive additives purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
				Annual pumping costs		$0			
Number of years of pump flooding		years							
				Total pumping costs		$0		$0	$0
					Total	$1,080		$540	$540
					% of Total			50%	50%

Open Pit Name: Phaser **Pit #** 4

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
CONTROL ACCESS									
Fence		m		#N/A	$0.00	$0		$0	$0
Signs		each		#N/A	$0.00	$0		$0	$0
Berm at crest and rock barricade at ramp		m3	450	DRH	$2.40	$1,080	50%	$540	$540
Block roads		m3							
Other				#N/A	$0.00	$0		$0	$0
STABILITY STUDY									
Conduct stability and setback study		allow		#N/A	$0.00	$0		$0	$0
STABILIZE SLOPES									
Off-load crest, soil A		m3		#N/A	$0.00	$0		$0	$0
Off-load crest, soil B		m3		#N/A	$0.00	$0		$0	$0
Doze/trim overburden at crest		m3		#N/A	$0.00	$0		$0	$0
Drill & blast pit crest		m3		#N/A	$0.00	$0		$0	$0
Buttress slope		m3		#N/A	$0.00	$0		$0	$0
		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER/CONTOUR SLOPES									
Place fill, soil A		m3		#N/A	$0.00	$0		$0	$0
Place fill, soil B		m3		#N/A	$0.00	$0		$0	$0
Rip rap		m3		#N/A	$0.00	$0		$0	$0
Vegetate slopes		ha		#N/A	$0.00	$0		$0	$0
Vegetate pit floor		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
CONSTRUCT DIVERSION DITCHES									
Excavate ditches -soil		m3		#N/A	$0.00	$0		$0	$0
Excavate ditches -rock		m3		#N/A	$0.00	$0		$0	$0
Rip rap in channel base		m3		#N/A	$0.00	$0		$0	$0
CONSTRUCT SPILLWAY									
Excavate channel		m3		#N/A	$0.00	$0		$0	$0
Concrete		m3		#N/A	$0.00	$0		$0	$0
Rip rap		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
RECLAIM QUARRIES									
Contour slopes		m3		#N/A	$0.00	$0		$0	$0
Place overburden		m3		#N/A	$0.00	$0		$0	$0
Vegetate		m3		#N/A	$0.00	$0		$0	$0
FLOOD PIT-Capital									
Remove stationary equipment (sump pumps)		each		#N/A	$0.00	$0		$0	$0
Remove dewatering pipeline		m		#N/A	$0.00	$0		$0	$0
Remove power lines		each		#N/A	$0.00	$0		$0	$0
Construct diversion ditches		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l A		m3		#N/A	$0.00	$0		$0	$0
-Ditch, mat'l B		m3		#N/A	$0.00	$0		$0	$0
Construct embankment/dam		m3		#N/A	$0.00	$0		$0	$0
Supply/install pump station		each		#N/A	$0.00	$0		$0	$0
Supply/install piping system		m		#N/A	$0.00	$0		$0	$0
Remove pump post-closure		each		#N/A	$0.00	$0		$0	$0
Remove pipeline post-closure		m		#N/A	$0.00	$0		$0	$0
FLOOD PIT-Annual Cost									
Operate pumps (power)		m3		#N/A	$0.00	$0		$0	$0
Maintain pump/pipeline		allow		#N/A	$0.00	$0		$0	$0
Labour: fuel management, commissioning/decom		$/h		#N/A	$0.00	$0		$0	$0
Chemical addition, _____ kg/m3 of water		tonne		#N/A	$0.00	$0		$0	$0
Chemicals, purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Passive/biological additives		$/ha		#N/A	$0.00	$0		$0	$0
Passive additives purchase and shipping		tonne		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
				Annual pumping costs		$0			
Number of years of pump flooding		years							
				Total pumping costs		$0		$0	$0
					Total	$1,080		$540	$540
					% of Total			50%	50%

1 **Tailings Impoundment Name:** **Pond # 1**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
CONTROL ACCESS									
Fence		m		#N/A	$0.00	$0		$0	$0
Signs		each		#N/A	$0.00	$0		$0	$0
Berm		m3		#N/A	$0.00	$0		$0	$0
Block roads		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
STABILIZE EMBANKMENT(S)									
Toe buttress, drainage layer		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, bulk fill		m3		#N/A	$0.00	$0		$0	$0
Rip rap		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Raise crest		m3		#N/A	$0.00	$0		$0	$0
Flatten slopes		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER TAILINGS - North Cell									
NPAG UM waste rock	Updated takeoff quantities, new design	m3	3,227,600	SB3L	$5.10	$16,460,760	50%	$8,230,380	$8,230,380
Grade/shape tailings surface		m3		#N/A	$0.00	$0		$0	$0
Liner bedding		m3		#N/A	$0.00	$0		$0	$0
Subgrade preparation - compact		m2		#N/A	$0.00	$0		$0	$0
Supply geotextile/geosynthetic		m2		#N/A	$0.00	$0		$0	$0
Install geotextile/geosynthetic		m2		#N/A	$0.00	$0		$0	$0
Soil cover		m3		#N/A	$0.00	$0		$0	$0
Rock cover		m3		#N/A	$0.00	$0		$0	$0
Vegetate		m2		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
DITCHES - North Cell									
DITCHES excavate soil	Updated takeoff quantities	m3	0	SB2L	$4.60	$0	50%	$0	$0
DITCHES excavate roc	Updated takeoff quantities	m3	0	RB2L	$12.05	$0	50%	$0	$0
NPAG waste rockfill	Updated takeoff quantities	m3	0	SB4L	$5.50	$0	50%	$0	$0
COLLECTION POND - North Cell									
POND excavate soil	Updated takeoff quantities	m3	0	SB2L	$4.60	$0	50%	$0	$0
POND excavate rock	Updated takeoff quantities	m3	0	RB2L	$12.05	$0	50%	$0	$0
NPAG waste rockfill	Updated takeoff quantities	m3	0	SB4L	$5.50	$0	50%	$0	$0
COVER TAILINGS - South Cell									
NPAG UM waste rock	Updated takeoff quantities, new design	m3	1,229,500	SB4L	$5.50	$6,762,250	50%	$3,381,125	$3,381,125
Grade/shape tailings surface		m3		#N/A	$0.00	$0		$0	$0
Liner bedding		m3		#N/A	$0.00	$0		$0	$0
Subgrade preparation - compact		m2		#N/A	$0.00	$0		$0	$0
Supply geotextile/geosynthetic		m2		#N/A	$0.00	$0		$0	$0
Install geotextile/geosynthetic		m2		#N/A	$0.00	$0		$0	$0
Soil cover		m3		#N/A	$0.00	$0		$0	$0
Rock cover		m3		#N/A	$0.00	$0		$0	$0
Vegetate		m2		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER TAILINGS - Portage and Goose Pits (1 m of crushed waste rock)									
Recover, load, haul and	Goose Pit	m3	0	SB1L	$4.30	$0	50%	$0	$0
Load, haul, spread and	Goose Pit	m3	0	SB3L	$5.10	$0	50%	$0	$0
Recover, load, haul and	Portage Pit A	m3	0	SB1L	$4.30	$0	50%	$0	$0
Load, haul, spread and	Portage Pit A	m3	0	SB3L	$5.10	$0	50%	$0	$0
Recover, load, haul and	Portage Pit E	m3	0	SB1L	$4.30	$0	50%	$0	$0
Load, haul, spread and	Portage Pit E	m3	0	SB3L	$5.10	$0	50%	$0	$0
DITCHES - South Cell									
DITCHES excavate roc	Updated takeoff quantities	m3	152000	RB2L	$12.05	$1,831,600	50%	$915,800	$915,800
DITCHES excavate roc	Updated takeoff quantities	m3	57600	RB2L	$12.05	$694,080	50%	$347,040	$347,040
NPAG waste rockfill	Updated takeoff quantities	m3	0	SB4L	$5.50	$0	50%	$0	$0
COLLECTION POND - South Cell									
POND excavate soil	Updated takeoff quantities	m3	0	SB2L	$4.60	$0	50%	$0	$0
POND excavate rock	Updated takeoff quantities	m3	481326	RB2L	$12.05	$5,799,978	50%	$2,899,989	$2,899,989
NPAG waste rockfill	Updated takeoff quantities	m3	0	SB4L	$5.50	$0	50%	$0	$0
BREACH SADDLE DAM 3									
Excavate Breach Sadd	Removed as no longer required	m3	0	SB2L	$4.60	$0	50%	$0	$0
Rock placement	Removed as no longer required	m3	0	SB4H	$11.00	$0	50%	$0	$0
REMOVE PIPING ADDED FOR IN-PIT DEPOSITION									
Removing Piping		m	16035	PLRL	$22.00	$352,770	50%	$176,385	$176,385
REMOVE TAILINGS DISCHARGE									
Removing Piping	Distribution line to Vault is addressed within the Water Management Tab	m	7000	PLRL	$22.00	$154,000	50%	$77,000	$77,000
Dismantle Booster Pump		allow	1	OPS	$15,630.00	$15,630	50%	$7,815	$7,815

1 **Tailings Impoundment Name:** **Pond # 1**

ACTIVITY/MATERIAL Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
BURY PAG ROCK								
Relocate PAG rock	m3		#N/A	$0.00	$0		$0	$0
Place cover over PAG rock	m3		#N/A	$0.00	$0		$0	$0
Raise crest of dam	m3		#N/A	$0.00	$0		$0	$0
Other			#N/A	$0.00	$0		$0	$0
STABILIZE DECANT SYSTEM								
Excavate and replace	m3		#N/A	$0.00	$0		$0	$0
Plug/backfill with concrete or clay	m3		#N/A	$0.00	$0		$0	$0
Other			#N/A	$0.00	$0		$0	$0
REMOVE TAILINGS DISCHARGE								
Cyclones	m3		#N/A	$0.00	$0		$0	$0
Pipe	m3		#N/A	$0.00	$0		$0	$0
Remove reclaim barge	allow		#N/A	$0.00	$0		$0	$0
CONSTRUCT DIVERSION DITCHES								
Excavate ditches -soil	m3		#N/A	$0.00	$0		$0	$0
Excavate ditches -rock	m3		#N/A	$0.00	$0		$0	$0
Rip rap in channel base	m3		#N/A	$0.00	$0		$0	$0
FLOOD TAILINGS								
Doze tailings to final contour	m3		#N/A	$0.00	$0		$0	$0
Raise crest of dam	m3		#N/A	$0.00	$0		$0	$0
Other			#N/A	$0.00	$0		$0	$0
UPGRADE SPILLWAY								
Excavate channel, rock	m3		#N/A	$0.00	$0		$0	$0
Excavate channel, soil	m3		#N/A	$0.00	$0		$0	$0
Concrete	m3		#N/A	$0.00	$0		$0	$0
Rip rap	m3		#N/A	$0.00	$0		$0	$0
Other			#N/A	$0.00	$0		$0	$0
CONSTRUCT SEEPAGE COLLECTION POND								
Excavate seepage collection pond	m3		#N/A	$0.00	$0		$0	$0
Doze & spread excavated material	m3		#N/A	$0.00	$0		$0	$0
Vegetate spread material	ha		#N/A	$0.00	$0		$0	$0
Bedding layer	m3		#N/A	$0.00	$0		$0	$0
Supply geomembrane	m2		#N/A	$0.00	$0		$0	$0
Install geomembrane	m2		#N/A	$0.00	$0		$0	$0
Erosion protection layer	m3		#N/A	$0.00	$0		$0	$0
INSTALL GROUNDWATER COLLECTION SYSTEM								
Excavate/install sumps	m3		#N/A	$0.00	$0		$0	$0
Install pumping wells	m3		#N/A	$0.00	$0		$0	$0
Install pumps/pipelines/power supply	LS		#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS								
Install permanent instrumentation, supply & technican	each		#N/A	$0.00	$0		$0	$0
Install permanent instrumentation and drilling	each	5	OPS	$10,000.00	$50,000	50%	$25,000	$25,000
TREAT SEEPAGE - see "Water Management" and "Water Treatment"								
TREAT SUPERNATANT								
Pump water (to pit, U/G)	m3		#N/A	$0.00	$0		$0	$0
Equipment maintenance and parts	allow		#N/A	$0.00	$0		$0	$0
Supply reagents	tonne		#N/A	$0.00	$0		$0	$0
				Annual treatment costs	$0			
Number of years of treatment	years							
				Total treatment costs	$0			$0
				Total	$32,121,068		$16,060,534	$16,060,534
				% of Total			50%	50%

* for construction of passive treatment system refer to "Water Management"

2 **Rock Pile Name:** Portage

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
STABILIZE SLOPES									
Flatten slopes with dozer		m3		#N/A	$0.00	$0		$0	$0
Flatten "bubble dump" areas		m3		#N/A	$0.00	$0		$0	$0
Divert runon, ditch mat'l A		m3		#N/A	$0.00	$0		$0	$0
Divert runon, ditch mat'l B		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, drain mat'l		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, fill mat'l A		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, fill mat'l B		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER ROCK PILE									
NPAG UM waste rock cover		m3	######	SB3L	$5.10	$2,622,854	50%	$1,311,427	$1,311,427
Subgrade preparation - doze surface		m3		#N/A	$0.00	$0		$0	$0
Soil cover - excavate,haul,spread&compact		m3		#N/A	$0.00	$0		$0	$0
Rock cover - excavate,haul & spread		m3		#N/A	$0.00	$0		$0	$0
Excavate downslope drainage channel & chute		m3		#N/A	$0.00	$0		$0	$0
Rip rap drainage channel and chute		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER SUMPS									
NPAG UM waste rock cover		m3	6800	SB3L	$5.10	$34,680	50%	$17,340	$17,340
Other				#N/A	$0.00	$0		$0	$0
VERY LOW PERMEABILITY COVER (in addition to above)									
Liner subgrade preparation - compact		m2		#N/A	$0.00	$0		$0	$0
Supply geomembrane		m2		#N/A	$0.00	$0		$0	$0
Install geomembrane		m2		#N/A	$0.00	$0		$0	$0
Protective cover - excavate,haul,spread&compa		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Install infiltration/seepage instrumentation		allow		#N/A	$0.00	$0		$0	$0
CONSTRUCT DIVERSION DITCHES									
Excavate ditches -soil		m3		#N/A	$0.00	$0		$0	$0
Excavate ditches -rock		m3		#N/A	$0.00	$0		$0	$0
Rip rap in channel base		m3		#N/A	$0.00	$0		$0	$0
CONSTRUCT SEEPAGE COLLECTION POND									
Excavate seepage collection pond		m3		#N/A	$0.00	$0		$0	$0
Doze & spread excavated material		m3		#N/A	$0.00	$0		$0	$0
Vegetate spread material		ha		#N/A	$0.00	$0		$0	$0
Bedding layer		m3		#N/A	$0.00	$0		$0	$0
Supply geomembrane		m2		#N/A	$0.00	$0		$0	$0
Install geomembrane		m2		#N/A	$0.00	$0		$0	$0
Erosion protection layer		m3							
INSTALL GROUNDWATER COLLECTION SYSTEM									
Excavate/install sumps		m3		#N/A	$0.00	$0		$0	$0
Install pumping wells		m3		#N/A	$0.00	$0		$0	$0
Install pumps/pipelines/power supply		allow		#N/A	$0.00	$0		$0	$0
RELOCATE DUMPS									
Load, haul, dump or doze		m3		#N/A	$0.00	$0		$0	$0
Add lime		tonne		#N/A	$0.00	$0		$0	$0
Contour reclaimed area		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS									
Install permanent instrumentation		each	5	OPS	$10,000.00	$50,000	50%	$25,000	$25,000
Install permanent instrumentation, drilling		each		#N/A	$0.00	$0		$0	$0
TREAT ROCK PILE SEEPAGE - see "Water Treatment"									
HEAP LEACH SEEPAGE TREATMENT - Cyanide Detox									
Cyanide destruction water treatment pumping		m3		#N/A	$0.00	$0		$0	$0
Reagents		tonnes		#N/A	$0.00	$0		$0	$0
Electrician/mechanic to maintain treatment plan		allow		#N/A	$0.00	$0		$0	$0
Equipment maintenance and parts		allow		#N/A	$0.00	$0		$0	$0
					Annual treatment costs	$0			
Number of years of treatment		years							
					Total treatment costs	$0			$0
HEAP LEACH SEEPAGE TREATMENT - ARD/ML**									
Upgrade/modify pumping system - report to WT		allow		#N/A	$0.00	$0			$0
					Total	$2,707,534		$1,353,767	$1,353,767
					% of Total			50%	50%

* For construction of passive treatment system refer to "Water Management". ARD/ML seepage treatment becomes post-closure water treatment cost
**Heap leach ARD/ML seepage treatment becomes post-closure water treatment cost

Rock Pile Name:	Vault				1				
ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
COVER ROCK PILE									
Flatten slopes with dozer		m3		#N/A	$0.00	$0		$0	$0
Flatten "bubble dump" areas		m3		#N/A	$0.00	$0		$0	$0
Divert runon, ditch mat'l A		m3		#N/A	$0.00	$0		$0	$0
Divert runon, ditch mat'l B		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, drain mat'l		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, fill mat'l A		m3		#N/A	$0.00	$0		$0	$0
Toe buttress, fill mat'l B		m3		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
COVER ROCK PILE									
NPAG UM waste rock cover (4 m thick)		m3	0	SB3L	$5.10	$0		$0	$0
Subgrade preparation - doze surface		m3		#N/A	$0.00	$0		$0	$0
Soil cover - excavate,haul,spread&compact		m3		#N/A	$0.00	$0		$0	$0
Rock cover - excavate,haul & spread		m3		#N/A	$0.00	$0		$0	$0
Excavate downslope drainage channel & chute		m3		#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
			0	#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
				#N/A	$0.00	$0		$0	$0
Supply geomembrane		m2		#N/A	$0.00	$0		$0	$0
Install geomembrane		m2		#N/A	$0.00	$0		$0	$0
Erosion protection layer		m3							
INSTALL GROUNDWATER COLLECTION SYSTEM									
Excavate/install sumps		m3		#N/A	$0.00	$0		$0	$0
Install pumping wells		m3		#N/A	$0.00	$0		$0	$0
Install pumps/pipelines/power supply		allow		#N/A	$0.00	$0		$0	$0
RELOCATE DUMPS									
Load, haul, dump or doze		m3		#N/A	$0.00	$0		$0	$0
Add lime		tonne		#N/A	$0.00	$0		$0	$0
Contour reclaimed area		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS									
Install permanent instrumentation		each	3	OPS	$10,000.00	$30,000	50%	$15,000	$15,000
Install permanent instrumentation, drilling		each		#N/A	$0.00	$0		$0	$0
TREAT ROCK PILE SEEPAGE - see "Water Treatment"									
HEAP LEACH SEEPAGE TREATMENT - Cyanide Detox									
Cyanide destruction water treatment pumping		m3		#N/A	$0.00	$0		$0	$0
Reagents		tonnes		#N/A	$0.00	$0		$0	$0
Electrician/mechanic to maintain treatment plant		allow		#N/A	$0.00	$0		$0	$0
Equipment maintenance and parts		allow		#N/A	$0.00	$0		$0	$0
					Annual treatment costs	$0			
Number of years of treatment		years							
					Total treatment costs	$0			$0
HEAP LEACH SEEPAGE TREATMENT - ARD/ML**									
Upgrade/modify pumping system - report to WTP		allow		#N/A	$0.00	$0			$0
					Total	$30,000		$15,000	$15,000
					% of Total			50%	50%

* For construction of passive treatment system refer to "Water Management". ARD/ML seepage treatment becomes post-closure water treatment cost
**Heap leach ARD/ML seepage treatment becomes post-closure water treatment cost

3 Building / Equip Name: Meadowbank Bldg / Equip #: 1

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
DISPOSE MOBILE EQUIPMENT									
Decontaminate and ship off-site		allow		#N/A	$0.00	$0		$0	$0
Decontaminate and dispose on-	man	hours	2960	MECHL	$49.00	$145,040	50%	$72,520	$72,520
Other				#N/A	$0.00	$0		$0	$0
REMOVE BUILDINGS - see note below									
Mill Complex:									
Mill		m2	37800	BRS1H	$65.00	$2,457,000	50%	$1,228,500	$1,228,500
Leech Tanks		m2	12500	BRS1H	$65.00	$812,500	50%	$406,250	$406,250
Primary and Secondary Cr		m2	740	BRS1H	$65.00	$48,100	50%	$24,050	$24,050
Pebble Crusher		m2	650	BRS1H	$65.00	$42,250	50%	$21,125	$21,125
Conveyors		m2	1950	BRS1H	$65.00	$126,750	50%	$63,375	$63,375
Assay Lab		m2	440	BRS1L	$45.00	$19,800	50%	$9,900	$9,900
Accomodation Complex (Inc. N		m2	17005	BRS1L	$45.00	$765,225	50%	$382,613	$382,613
Services Building		m2	13080	BRS1L	$45.00	$588,600	50%	$294,300	$294,300
Site Services Building		m2	500	BRS1L	$45.00	$22,500	50%	$11,250	$11,250
Dome Warehouse		m2	2854	BRS1L	$45.00	$128,430	50%	$64,215	$64,215
Ore Dome		m2	21000	BRS1L	$45.00	$945,000	50%	$472,500	$472,500
Power Plant		m2	7455	BRS1H	$65.00	$484,575	50%	$242,288	$242,288
Cat Warehouse		m2	2690	BRS1L	$45.00	$121,050	50%	$60,525	$60,525
Toromont Facilities		m2	925	BRS1L	$45.00	$41,625	50%	$20,813	$20,813
Fountain Tire		m2	330	BRS1L	$45.00	$14,850	50%	$7,425	$7,425
White Coverall		m2	2790	BRS1L	$45.00	$125,550	50%	$62,775	$62,775
Batch Plant		m2	2100	BRS1L	$45.00	$94,500	50%	$47,250	$47,250
Environmental Office		m2	140	BRS1L	$45.00	$6,300	50%	$3,150	$3,150
Dike Dewatering Shop		m2	755	BRS1L	$45.00	$33,975	50%	$16,988	$16,988
Incinerator		m2	280	BRS1L	$45.00	$12,600	50%	$6,300	$6,300
Talbon Shop		m2	235	BRS1L	$45.00	$10,575	50%	$5,288	$5,288
Blue Coverall		m2	710	BRS1L	$45.00	$31,950	50%	$15,975	$15,975
Gate House		m2	100	BRS1L	$45.00	$4,500	50%	$2,250	$2,250
Fuel Dispensing Station		m2	165	BRS1H	$65.00	$10,725	50%	$5,363	$5,363
Emulsion Plant		m2	2000	BRS1H	$65.00	$130,000	50%	$65,000	$65,000
Bulk Fuel Tank		m2	1910	BRS1H	$65.00	$124,150	50%	$62,075	$62,075
Containers to Landfill		mt	3500	OPS	$20.00	$70,000	50%	$35,000	$35,000
Other				#N/A	$0.00	$0		$0	$0
BREAK BASEMENT SLABS									
Puncture Concrete Foundations		m2	25211	BRCS	$6.00	$151,266	50%	$75,633	$75,633
LANDFILL FOR DEMOLITION WASTE									
Place rock cover	Blast rock fill	m3		#N/A	$0.00	$0		$0	$0
Place soil cover	Soil Cap - Landfill and Septic Field	m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
GRADE AND CONTOUR PADS									
Accomodation Complex		ha		#N/A	$0.00	$0		$0	$0
Process Facilities		ha		#N/A	$0.00	$0		$0	$0
Offices, Repair, Lab, Warehous		ha		#N/A	$0.00	$0		$0	$0
Storage Facilites		ha		#N/A	$0.00	$0		$0	$0
Water and Wastewater Treatm		ha		#N/A	$0.00	$0		$0	$0
U/G Heating Plant		ha		#N/A	$0.00	$0		$0	$0
Emulsion Plant		ha		#N/A	$0.00	$0		$0	$0
Warehouse, Shops and Other		ha		#N/A	$0.00	$0		$0	$0
Place rock cover		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
PUNCTURE LINED SUMPS									
Puncture liner and place soil co		m3		#N/A	$0.00	$0		$0	$0
RECLAIM ROADS, LAYDOWN AREA & AIRSTRIP									
Remove culverts		each	21	OPS	$4,000.00	$84,000	50%	$42,000	$42,000
Install Water Breaks		allow	1	OPS	$40,000.00	$40,000	50%	$20,000	$20,000
Scarify airstriip		ha	4.1	SCFYL	$4,300.00	$17,630	50%	$8,815	$8,815
Scarify laydown areas		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify access roads (~10 m x		ha	12	SCFYL	$4,300.00	$51,600	50%	$25,800	$25,800
Scarify haul roads (~25 m x 14.		ha	36.3	SCFYL	$4,300.00	$156,090	50%	$78,045	$78,045
Scarify Portage/Mill Disturbed A		ha	40.6	SCFYL	$4,300.00	$174,580	50%	$87,290	$87,290
Scarify Vault Disturbed Area		ha	6.5	SCFYL	$4,300.00	$27,950	50%	$13,975	$13,975
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS									
Dispose of misc. debris and laydown area refuse				#N/A	$0.00	$0		$0	$0
					Total	$8,121,236		$4,060,618	$4,060,618
					% of Total			50%	50%

Note: Unit costs are based on 3m high, single storey building. Scale larger building areas accordingly. E.g. 10m high building multiply are

Building / Equip Name: **Baker Lake** **Bldg / Equip #:** **2**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
DISPOSE MOBILE EQUIPMENT									
Decontaminate and ship off-site		allow		#N/A	$0.00	$0		$0	$0
Decontaminate and dispose on-site		allow		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
REMOVE BUILDINGS - see note below									
Mill Complex:									
Mill		m2		#N/A	$0.00	$0	50%	$0	$0
Leech Tanks		m2		#N/A	$0.00	$0	50%	$0	$0
Primary and Secondary Crusher		m2		#N/A	$0.00	$0	50%	$0	$0
Pebble Crusher		m2		#N/A	$0.00	$0	50%	$0	$0
Conveyors		m2		#N/A	$0.00	$0	50%	$0	$0
Assay Lab		m2		#N/A	$0.00	$0	50%	$0	$0
Accomodation Complex (Inc. Nova Camp)		m2		#N/A	$0.00	$0	50%	$0	$0
Services Building		m2		#N/A	$0.00	$0	50%	$0	$0
Site Services Building		m2		#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
				#N/A	$0.00	$0	50%	$0	$0
			21180	BRS1H	$65.00	$1,376,700	50%	$688,350	$688,350
			720	BRS1L	$45.00	$32,400	50%	$16,200	$16,200
				#N/A	$0.00	$0		$0	$0
Puncture Concrete Foundations		m2	6095	BRCS	$6.00	$36,570	50%	$18,285	$18,285
LANDFILL FOR DEMOLITION WASTE									
Place rock cover	Blast rock fill	m3		#N/A	$0.00	$0		$0	$0
Place soil cover	Soil Cap - Landfill and S	m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
GRADE AND CONTOUR PADS									
Accomodation Complex		ha		#N/A	$0.00	$0		$0	$0
Process Facilities		ha		#N/A	$0.00	$0		$0	$0
Offices, Repair, Lab, Warehouse		ha		#N/A	$0.00	$0		$0	$0
Storage Facilites		ha		#N/A	$0.00	$0		$0	$0
Water and Wastewater Treatment Facilities		ha		#N/A	$0.00	$0		$0	$0
U/G Heating Plant		ha		#N/A	$0.00	$0		$0	$0
Emulsion Plant		ha		#N/A	$0.00	$0		$0	$0
Warehouse, Shops and Other		ha		#N/A	$0.00	$0		$0	$0
Place rock cover		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
PUNCTURE LINED SUMPS									
Puncture liner and place soil cover		m3		#N/A	$0.00	$0		$0	$0
RECLAIM ROADS, LAYDOWN AREA & AIRSTRIP									
Remove culverts		each		#N/A	$0.00	$0	50%	$0	$0
Scarify and install water breaks		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify airstriip		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify laydown areas		ha	50	SCFYL	$4,300.00	$215,000	50%	$107,500	$107,500
Scarify access roads (~10 m x 10 km)		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify haul roads (~25 m x 14.5 km)		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify Portage/Mill Disturbed Area		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify Vault Disturbed Area		ha		#N/A	$0.00	$0	50%	$0	$0
Recontour Diversion Ditch		m3	5720	SB1L	$4.30	$24,596	50%	$12,298	$12,298
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS									
Dispose of misc. debris and laydown area refuse				#N/A	$0.00	$0		$0	$0
a by 3.3 (10/3)					**Total**	$1,685,266		$842,633	$842,633
					% of Total			50%	50%

Note: Unit costs are based on 3m high, single storey building. Scale larger building areas accordingly. E.g. 10m high building multiply area by 3.3 (10/3)

Building / Equip Name: AWAR **Bldg / Equip #:** 3

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
DISPOSE MOBILE EQUIPMENT									
Decontaminate and ship off-site		allow		#N/A	$0.00	$0		$0	$0
Decontaminate and dispose on-site		allow		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
REMOVE BUILDINGS - see note below									
Mill Complex:									
Mill		m2		#N/A	$0.00	$0	50%	$0	$0
Leech Tanks		m2		#N/A	$0.00	$0	50%	$0	$0
Primary and Secondary Crusher		m2		#N/A	$0.00	$0	50%	$0	$0
Pebble Crusher		m2		#N/A	$0.00	$0	50%	$0	$0
Conveyors		m2		#N/A	$0.00	$0	50%	$0	$0
Assay Lab		m2		#N/A	$0.00	$0	50%	$0	$0
Accomodation Complex (Inc. Nova Camp)		m2		#N/A	$0.00	$0	50%	$0	$0
Services Building		m2		#N/A	$0.00	$0	50%	$0	$0
Site Services Building		m2		#N/A	$0.00	$0	50%	$0	$0
Dome Warehouse		m2		#N/A	$0.00	$0	50%	$0	$0
Ore Dome		m2		#N/A	$0.00	$0	50%	$0	$0
Power Plant		m2		#N/A	$0.00	$0	50%	$0	$0
Cat Warehouse		m2		#N/A	$0.00	$0	50%	$0	$0
Toromont Facilities		m2		#N/A	$0.00	$0	50%	$0	$0
Fountain Tire		m2		#N/A	$0.00	$0	50%	$0	$0
White Coverall		m2		#N/A	$0.00	$0	50%	$0	$0
Batch Plant		m2		#N/A	$0.00	$0	50%	$0	$0
Environmental Office		m2		#N/A	$0.00	$0	50%	$0	$0
Dike Dewatering Shop		m2		#N/A	$0.00	$0	50%	$0	$0
Incinerator		m2		#N/A	$0.00	$0	50%	$0	$0
Talbon Shop		m2		#N/A	$0.00	$0	50%	$0	$0
Blue Coverall		m2		#N/A	$0.00	$0	50%	$0	$0
Gate House		m2		#N/A	$0.00	$0	50%	$0	$0
Fuel Dispensing Station		m2		#N/A	$0.00	$0	50%	$0	$0
Emulsion Plant		m2		#N/A	$0.00	$0	50%	$0	$0
Bulk Fuel Tank		m2		#N/A	$0.00	$0	50%	$0	$0
Containers to Landfill		each		#N/A	$0.00	$0	50%	$0	$0
Other				#N/A	$0.00	$0		$0	$0
BREAK BASEMENT SLABS									
Puncture Concrete Foundations		m2		#N/A	$0.00	$0	50%	$0	$0
LANDFILL FOR DEMOLITION WASTE									
Place rock cover	Blast rock fill	m3		#N/A	$0.00	$0		$0	$0
Place soil cover	Soil Cap - Landfill and Septic Field	m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
GRADE AND CONTOUR PADS									
Accomodation Complex		ha		#N/A	$0.00	$0		$0	$0
Process Facilities		ha		#N/A	$0.00	$0		$0	$0
Offices, Repair, Lab, Warehouse		ha		#N/A	$0.00	$0		$0	$0
Storage Facilites		ha		#N/A	$0.00	$0		$0	$0
Water and Wastewater Treatment Facilities		ha		#N/A	$0.00	$0		$0	$0
U/G Heating Plant		ha		#N/A	$0.00	$0		$0	$0
Emulsion Plant		ha		#N/A	$0.00	$0		$0	$0
Warehouse, Shops and Other		ha		#N/A	$0.00	$0		$0	$0
Place rock cover		m3		#N/A	$0.00	$0		$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
PUNCTURE LINED SUMPS									
Puncture liner and place soil cover		m3		#N/A	$0.00	$0		$0	$0
RECLAIM QUARRIEST									
Drill and blast slopes to 1:1	Slope work removed.	m3	0	RB3H	$17.80	$0	50%	$0	$0
Floor drainage work	Floor work only.	m3	2300	SB3L	$5.10	$11,730	50%	$5,865	$5,865
RECLAIM ROADS									
Remove culverts		each	38	OPS	$4,000.00	$152,000	50%	$76,000	$76,000
Remove bridges (clear Span bridges and HADD bridges)		each	9	OPS	$25,000.00	$225,000	50%	$112,500	$112,500
Scarify and install water breaks		ha	84	SCFYL	$4,300.00	$361,200	50%	$180,600	$180,600
Scarify airstriip		ha		#N/A	$0.00	$0	50%	$0	$0
Scarify laydown areas		ha		#N/A	$0.00	$0	50%	$0	$0
Vegetate		ha		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
SPECIALIZED ITEMS									
Dispose of misc. debris and laydown area refuse				#N/A	$0.00	$0		$0	$0
					Total	$749,930		$374,965	$374,965
					% of Total			50%	50%

Note: Unit costs are based on 3m high, single storey building. Scale larger building areas accordingly. E.g. 10m high building multiply area by 3.3 (10/3)

1 **Chemicals/Soil Area Name:**

Note: The procedures, equipment and packaging for clean up and removal of chemicals or contaminated soils are highly dependent on the nature of the

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost	% Land	Land Cost	Water Cost
HAZARDOUS MATERIALS AUDIT									
Hazardous materials audit		mandays	1	#N/A	$0.00	$0		$0	$0
BUILDING DECONTAMINATION & CONSOLIDATION OF HAZARDOUS MATERIALS									
Environmental technician/coordinator		mandays		#N/A	$0.00	$0		$0	$0
Decontaminate: oil, fuel		mandays		#N/A	$0.00	$0		$0	$0
Decontaminate maintenance shop		mandays	10	OPS	$1,000.00	$10,000	50%	$5,000	$5,000
Decontaminate power plant		mandays	10	OPS	$1,000.00	$10,000	50%	$5,000	$5,000
Decontaminate bulk fuel storage		mandays	10	OPS	$1,000.00	$10,000	50%	$5,000	$5,000
Decontaminate ANFO plant		mandays	3	OPS	$1,000.00	$3,000	50%	$1,500	$1,500
Decontaminate offices/warehouse/accom		mandays		#N/A	$0.00	$0		$0	$0
Removal of asbestos siding on buildings		m2		#N/A	$0.00	$0		$0	$0
Removal of friable asbestos on equipment		m2		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
HAZARDOUS MATERIALS REMOVAL									
Waste oils		litre	0	#N/A	$0.00	$0		$0	$0
Waste fuel		litre	309000	ORL	$0.43	$132,870	50%	$66,435	$66,435
Oily/Glycol contaminated water		litre	58456	ORL	$0.43	$25,136	50%	$12,568	$12,568
Waste batteries		each	1	OPS	$3,000.00	$3,000	50%	$1,500	$1,500
Assay & environmental lab reagents		kg	10000	PCRH	$2.50	$25,000	50%	$12,500	$12,500
Mill and Water Treatment Reagents		kg	285614	PCRH	$2.50	$714,035	50%	$357,018	$357,018
Machine shop paints, solvents, filters etc		each	1	OPS	$20,000.00	$20,000	50%	$10,000	$10,000
Glycol		kg	16170	PCRH	$2.50	$40,425	50%	$20,213	$20,213
Process reagents		kg		#N/A	$0.00	$0		$0	$0
Nuclear sources		allow		#N/A	$0.00	$0		$0	$0
Other hazardous materials		allow		#N/A	$0.00	$0		$0	$0
HAZARDOUS MATERIALS									
Transportation to disposal facility		allow		#N/A	$0.00	$0		$0	$0
Disposal fees		allow		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
CONTAMINATED SOILS									
Contam. soil investigation - Phase 1		each	1	CS1L	$7,500.00	$7,500	50%	$3,750	$3,750
Contam. soil investigation - Phase 2		each	1	CS2L	$50,000.00	$50,000	50%	$25,000	$25,000
CONTAMINATED SOIL REMOVAL									
Excavate and transport to onsite facility		m3		#N/A	$0.00	$0		$0	$0
Manage hydrocarbon remediation at facility		m3	2745	CSRL	$47.00	$129,015	50%	$64,508	$64,508
Reagents/stabilizing agent		m2		#N/A	$0.00	$0	50%	$0	$0
Excavate and transport to offsite facility		m3	137	OPS	$1,000.00	$137,000	50%	$68,500	$68,500
Contour decontaminated area		m3		#N/A	$0.00	$0		$0	$0
CONTAMINATED SOIL VERY LOW PERMEABILITY COVER									
Supply geomembrame, HDPE, ES3, GCL		m2		#N/A	$0.00	$0		$0	$0
Upper and lower bedding layers		m3		#N/A	$0.00	$0		$0	$0
Install geomembrane, HDPE, ES3, GCL		m2		#N/A	$0.00	$0		$0	$0
Erosion protection layer		m3		#N/A	$0.00	$0		$0	$0
Vegetate		m2		#N/A	$0.00	$0		$0	$0
Install infiltration/seepage instrumentation		allow		#N/A	$0.00	$0		$0	$0
Other				#N/A	$0.00	$0		$0	$0
OTHER									
				#N/A	$0.00	$0		$0	$0
					Total	$1,316,981		$658,491	$658,491
					% of Total			50%	50%

1 **Capital Expenditures and Short Term Water Treatment identified in 'Instructions' worksheet**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
FLOOD PITS						
Repurpose/Install dewatering pumps and piping for pit flooding	$100,000 to repurpose existing portage pump system, additional $100,000 to repurpose pumps for Vault line	Allow	2	OPS	$100,000.00	$200,000
Vault pipeline supply (Large Dia.)	twin 8 km pipeline, high supply cost	m	16000	PLSH	$143.00	$2,288,000
Vault pipeline install	twin 8 km pipeline	m	16000	PLIL	$50.00	$800,000
Pumped pit flooding water (Third portage Lake and Reclaim Poi	Updated as per 2023 Water Management Plan	m3	23,333,333	OPS	$0.02	$466,667
Pumped pit flooding water (Third portage Lake) - Goose Pit	Updated as per 2023 Water Management Plan	m3	2,000,000	OPS	$0.02	$40,000
Pumped pit flooding water (Wally Lake) - Vault Pit	Updated as per 2023 Water Management Plan	m3	23,382,216	OPS	$0.02	$467,644
Pump maintenance and operation (5 yrs)						
Maintain pumps (2 skilled labourer x 12hr days, 4months/yr, 5yrs)		manhours	14880	LAB-SH	$49.60	$738,048
Annual Pump Servicing (2 x Manufacturer Consultant x 7days/year x 5 years)		manhours	840	OPS	$120.00	$100,800
Pump Servicing Travel Allowance (Round Trip Flight/person)		visits	10	OPS	$4,000.00	$40,000
Camp Accomodations		days	1310	ACCML	$100.00	$131,000
DYKE RECONNECTION						
Bay-Goose Dike Reconnection (1-2-3)		m3	94000	SB2L	$4.60	$432,400
Rock placement Bay-Goose (1-2-3)		m3	27900	SB2H	$7.30	$203,670
South Camp Dike Reconnection		m3	24000	SB2L	$4.60	$110,400
Rock placement South Camp Dike		m3	9500	SB2H	$7.30	$69,350
Channel Vault Pit to North Phaser	removed, no longer needed based on pump and pipe arrangement	m3	0	SB2L	$4.60	$0
Rock placement Channel Vault Pit	removed, no longer needed based on pump and pipe arrangement	m3	0	SB2H	$7.30	$0
Vault Pit to Wally Lake Reconnection		m3	27000	SB2L	$4.60	$124,200
Rock Placement Vault Pit Reconnection		m3	10800	SB2H	$7.30	$78,840
Remove fill		m3		#N/A	$0.00	$0
Contour water intake area		m3		#N/A	$0.00	$0
STABILIZE SEDIMENT PONDS/WATER MANAGEMENT PONDS						
Place soil cover		m3		#N/A	$0.00	$0
Doze & spread excavated material		m3		#N/A	$0.00	$0
Vegetate spread material		ha		#N/A	$0.00	$0
Rip rap in channel base		each		#N/A	$0.00	$0
REDIRECT RUNOFF/CONSTRUCT DIVERSION DITCHES						
Excavate ditches -soil		m3		#N/A	$0.00	$0
Excavate ditches -rock		m3		#N/A	$0.00	$0
Stabilize side slopes		m3		#N/A	$0.00	$0
Rip rap in channel base		m3		#N/A	$0.00	$0
BREACH DITCHES (Diversion ditch)						
Excavate breaches		m3		#N/A	$0.00	$0
Backfill/recontour (consider work on 1000m of diversion ditch: 1000m x 4m²)		m3	4000	SB2L	$4.60	$18,400
Install flow dissipation		m3		#N/A	$0.00	$0
Vegetate remainder of ditch		m2		#N/A	$0.00	$0
DECOMISSION FRESH WATER SUPPLY						
Breach embankment		m		#N/A	$0.00	$0
Remove pump/barge		Allow	1	OPS	$3,000.00	$3,000
Remove pipeline		m	1000	PLRL	$22.00	$22,000
WATER CONTROL IN RECLAMATION QUARRY						
Install pumping system		LS		#N/A	$0.00	$0
Remove pumping system		LS		#N/A	$0.00	$0
REMOVE PIPELINES						
Remove pipes	Vault pipeline removal added to total	m	18000	PLRL	$22.00	$396,000
Concrete plug deep pipes		m3		#N/A	$0.00	$0
Other - diffuser		each	2	OPS	$3,000.00	$6,000
GROUNDWATER COLLECTION SYSTEM						
Excavate/install sumps		m3		#N/A	$0.00	$0
Install pumping wells		m3		#N/A	$0.00	$0
Install pumps/pipelines/power supply		LS		#N/A	$0.00	$0
CONSTRUCT CONTAMINATED WATER STORAGE POND						
Excavate pond		m3		#N/A	$0.00	$0
Doze & spread excavated material		m3		#N/A	$0.00	$0
Vegetate spread material		ha		#N/A	$0.00	$0
Bedding layer		m3		#N/A	$0.00	$0
Supply geomembrane		m2		#N/A	$0.00	$0
Install geomembrane		m2		#N/A	$0.00	$0
Erosion protection layer		m3		#N/A	$0.00	$0
CONSTRUCT PASSIVE TREATMENT SYSTEM (e.g. Constructed Wetland)						
Construct access roads		km		#N/A	$0.00	$0
Install HDPE piping system from collection pond		m		#N/A	$0.00	$0
Inter-cell flow structures		allow		#N/A	$0.00	$0
Install liners		m2		#N/A	$0.00	$0
Install growth media		m3		#N/A	$0.00	$0
Wetland vegetation		ha		#N/A	$0.00	$0
CONSTRUCT TEMPORARY WATER TREATMENT PLANT						
Build treatment plant		LS		#N/A	$0.00	$0
Build sludge containment facility		LS		#N/A	$0.00	$0
Storage, Prep and Reactor Tanks/Silos	vault treatment added, doubled from 2020 cost	Allow	4	OPS	$855,000.00	$3,420,000
Mech. Equip. (Metering Pumps and Air)	vault treatment added, doubled from 2020 cost	Allow	4	OPS	$385,000.00	$1,540,000
Piping	vault treatment added, doubled from 2020 cost	%	30		$744,000.00	$744,000
Electrical	vault treatment added, doubled from 2020 cost	%	15		$372,000.00	$372,000
Instrumentation and Controls	vault treatment added, doubled from 2020 cost	%	15		$372,000.00	$372,000
Equipment Installation Costs	vault treatment added, doubled from 2020 cost	%	35		$868,000.00	$868,000
DECOMMISION TEMPORARY WATER TREATMENT PLANT (If Necessary)						
Decontaminate and dispose equipment on site	vault treatment added, doubled from 2020 cost	manhours	1080	LAB-USL	$31.00	$33,480
Camp Accomodations	vault treatment added, doubled from 2020 cost	days	90	ACCML	$100.00	$9,000
Demolish Structure	vault treatment added, doubled from 2020 cost	m2	3000	BRS1L	$45.00	$135,000
Scarify Footprint	vault treatment added, doubled from 2020 cost	ha	0.3	SCFYH	$6,030.00	$1,809
SHORT TERM WATER TREATMENT*						
Annual water treatment cost, from "Water Treatment"	Adjusted based on 2022 Water Management Plan	yr	9		$1,241,929.03	$11,177,361
					Total	$25,409,069

For cost of long-term/post-closure water treatment see "WATER TREATMENT" Worksheet"

1 **Water Treatment**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
OPERATE TEMPORARY WATER TREATMENT PLANT						
Reagent Allowance		allow	1	OPS	$500,000.00	$500,000
Direct Pumping cost	Adjusted based on 2022 Water Management	m3	##########	OPS	$0.07	$566,471
Skilled Labourer (1 skilled labourers X 12hr/day, 6 Months/year)		manhours	2160	OPER-WTH	$59.86	$129,298
Annual Treatment Plant Servicing (2 Consultants x 7days/year)		manhours	168	OPS	$120.00	$20,160
Treatment Plant Servicing Travel Allowance (Round Trip Flight/person)		visits	2	OPS	$4,000.00	$8,000
Camp Accomodations		days	180	ACCML	$100.00	$18,000
ADDITION OF REAGENTS						
H2O2		kg		#N/A	$0.00	$0
lime		kg		#N/A	$0.00	$0
ferric sulphate		kg		#N/A	$0.00	$0
ferrous sulphate		kg		#N/A	$0.00	$0
flocculents		kg		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
LABOUR AND SUPPLIES						
Annual fuel		litres		#N/A	$0.00	$0
Annual power		kW-h		#N/A	$0.00	$0
Electrician/mechanic to maintain treatment plant		allow		#N/A	$0.00	$0
Equipment maintenance and parts		allow		#N/A	$0.00	$0
Misc. supplies, hoses, tools		allow		#N/A	$0.00	$0
Communications		allow		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
WATER SAMPLING AND ANALYSES						
Sampling equipment		allow		#N/A	$0.00	$0
Analyses		allow		#N/A	$0.00	$0
Shipping to laboratory		allow		#N/A	$0.00	$0
Reporting		allow		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
SITE ACCESS						
Road maintenance (incl. snow removal)		allow		#N/A	$0.00	$0
Winter road tariff		allow		#N/A	$0.00	$0
Truck rental		allow		#N/A	$0.00	$0
Air support		allow		#N/A	$0.00	$0
					Annual water treatment costs	$1,241,929
Number of years of water treatment		years	1			
					Total	$1,241,929

1 **Interim Care and Maintenance**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
INTERIM CARE & MAINTENANCE						
on-site caretaker		manmonths		#N/A	0	$0
extra personnel		manmonths		#N/A	0	$0
-electrician		manmonths		#N/A	0	$0
-mechanic		manmonths		#N/A	0	$0
annual fuel		litre		#N/A	0	$0
misc. supplies		allow		#N/A	0	$0
pick-up truck		each		#N/A	0	$0
small dozer		allow		#N/A	0	$0
small excavator		allow		#N/A	0	$0
snow machine		allow		#N/A	0	$0
communications		allow		#N/A	0	$0
SNP/AEMP water sampling & r		each		#N/A	0	$0
geotechnical assessment		each		#N/A	0	$0
interim water treatment				#N/A		$0
Maintenance, Surveillance, Monitoring and inspection -				#N/A		$282,600
other		each		#N/A	0	$0
					Annual Interim C&M Cost	$282,600
Number of years of ICM		years	3		**Total**	$847,800

m **Post-Closure Monitoring & Maintenance:**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
MONITORING & INSPECTIONS - **ACTIVE CLOSURE (2026 to 2034)**						
Monitoring programs (Meadowbank and AWAR)		each		#N/A	$0.00	$0
- Active closure		each	1	OPS	#########	$100,000
- Post-closure		each		#N/A	$0.00	$0
Annual geotechnical inspection		each		#N/A	$0.00	$0
- Active closure (1 eng, 7 days, 150$/h, + report at 5000$, 2500$ of transport, 700$ of accommodation)		each	1	OPS	$20,800.00	$20,800
- Post-closure		each		#N/A	$0.00	$0
Groundwater monitoring		each	1	OPS	$10,000.00	$10,000
Survey inspection		each		#N/A	$0.00	$0
Regulatory costs*		each	1	OPS	$15,500.00	$15,500
Site water monitoring		each		#N/A	$0.00	$0
- Active closure		each	1	OPS	$73,100.00	$73,100
- Post-closure		each		#N/A	$0.00	$0
Air Quality Monitoring Program (AQMP)		each		#N/A	$0.00	$0
Wildlife Effects Monitoring Program (WEMP)		each		#N/A	$0.00	$0
Vegetation Monitoring		each		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
COVER MAINTENANCE - **ACTIVE CLOSURE (2026 to 2034)**						
Repair erosion - infill gullies		allow		#N/A	$0.00	$0
Repair erosion - upgrade diversion ditches		allow		#N/A	$0.00	$0
Remove problem vegetation		allow		#N/A	$0.00	$0
Repair animal damage		allow		#N/A	$0.00	$0
Repair/upgrade access controls		allow		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
SPILLWAY MAINTENANCE - **ACTIVE CLOSURE (2026 to 2034)**						
Repair erosion		m3		#N/A	$0.00	$0
Clear spillway		each		#N/A	$0.00	$0
CWTS MAINTENANCE - **ACTIVE CLOSURE (2026 to 2034)**						
Maintain flow, restore vegetation		allow		#N/A	$0.00	$0
MAINTENANCE AND SURVEILLANCE - **ACTIVE CLOSURE (2026 to 2034)**						
Site care-taker		manhours	480	OPERH	$65.00	$31,200
Site Vehicle and equipment		allow	1	OPS	$20,000.00	$20,000
Accommodations		mandays	20	ACCML	$100.00	$2,000
Site Maintenance		allow	1	OPS	$10,000.00	$10,000
Subtotal, Annual active-closure costs						$282,600
Discount rate for calculation of net present value of active-closure cost, %				3.00%		
Number of years of active-closure activity				9	years	
Present Value of payment stream (at Year 2024) - Active closure (2026 to 2034)						$2,200,354
MONITORING & INSPECTIONS - **POST CLOSURE (2035 to 2045)**						
Monitoring programs (Meadowbank and AWAR)		each		#N/A	$0.00	$0
- Active closure		each		#N/A	$0.00	$0
- Post-closure		each	0.5	OPS	#########	$50,000
Annual geotechnical inspection		each		#N/A	$0.00	$0
- Active closure		each		#N/A	$0.00	$0
- Post-closure (1 eng, 7 days, 150$/h, + report at 5000$, 2500$ of transport, 700$ of accommodation)		each	1	OPS	$20,800.00	$20,800
Groundwater monitoring		each	1	OPS	$10,000.00	$10,000
Survey inspection		each		#N/A	$0.00	$0
Regulatory costs*		each	1	OPS	$15,500.00	$15,500
Site water monitoring		each		#N/A	$0.00	$0
- Active closure		each		#N/A	$0.00	$0
- Post-closure		each	1	OPS	$49,432.00	$49,432
Air Quality Monitoring Program (AQMP)		each		#N/A	$0.00	$0
Wildlife Effects Monitoring Program (WEMP)		each		#N/A	$0.00	$0
Vegetation Monitoring		each		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
COVER MAINTENANCE - **POST CLOSURE (2035 to 2045)**						
Repair erosion - infill gullies		allow		#N/A	$0.00	$0
Repair erosion - upgrade diversion ditches		allow		#N/A	$0.00	$0
Remove problem vegetation		allow		#N/A	$0.00	$0
Repair animal damage		allow		#N/A	$0.00	$0
Repair/upgrade access controls		allow		#N/A	$0.00	$0
Other				#N/A	$0.00	$0
SPILLWAY MAINTENANCE - **POST CLOSURE (2035 to 2045)**						
Repair erosion		m3		#N/A	$0.00	$0
Clear spillway		each		#N/A	$0.00	$0
CWTS MAINTENANCE - **POST CLOSURE (2035 to 2045)**						
Maintain flow, restore vegetation		allow		#N/A	$0.00	$0
MAINTENANCE AND SURVEILLANCE - **POST CLOSURE (2035 to 2045)**						
Site care-taker		manhours	480	OPERH	$65.00	$31,200
Site Vehicle and equipment		allow	1	OPS	$20,000.00	$20,000
Accommodations		mandays	20	ACCML	$100.00	$2,000
Site Maintenance		allow	1	OPS	$10,000.00	$10,000
Subtotal, Annual post-closure costs						$208,932
Discount rate for calculation of net present value of post-closure cost, %				3.00%		
Number of years of post-closure activity				11	years	
Present Value of payment stream (at Year 2024) - Post closure (2035 to 2045)						$1,933,169
POST-CLOSURE WATER TREATMENT**						
Annual water treatment cost, from "Water Treatment"						$1,241,929
Subtotal, Annual post-closure costs						$1,241,929
Discount rate for calculation of net present value of post-closure cost, %				3.00%		
Number of years of post-closure activity (included in ICM, 3 YEARS)				0	years	
Present Value of payment stream (at Year 2024)						$0
Present Value of payment stream - TOTAL at Year 2024						$4,133,524

*Regulatory costs - annual reporting, management plans, progress reports etc.

1 **Mobilization/Demobilization:**

ACTIVITY/MATERIAL	Notes	Units	Quantity	Cost Code	Unit Cost	Cost
MOBILIZE HEAVY EQUIPMENT						
Barge to/from Baker Lake		each	2	OPS	500000	$1,000,000
Excavators	5	km	550	mherh	10.25	$5,638
Dump trucks	3	km	330	mherh	10.25	$3,383
Dozers	3	km	330	mherh	10.25	$3,383
Demolition shears	3	km	330	mherh	10.25	$3,383
Crane	1	km	110	mherh	10.25	$1,128
Loader	2	km	220	mherh	10.25	$2,255
Compactor	1	km	110	mherh	10.25	$1,128
Elavator equipment's	3	km	330	mherh	10.25	$3,383
other	4	km	440	mherh	10.25	$4,510
Light duty vehicles	4	km	440	mherh	10.25	$4,510
MOBILIZE MISC. EQUIPMENT						
Pump shipping		each		#N/A	0	$0
Pipe shipping		m		#N/A	0	$0
Minor tools and equipment		allow		#N/A	0	$0
Truck tires		allow		#N/A	0	$0
Other	1 lot	each	1	OPS	50000	$50,000
MOBILIZE CAMP						
Reclamation activities		allow		#N/A	0	$0
Long term reclamation activities (eg pump flooding)		allow		#N/A	0	$0
MOBILIZE AND HOUSE WORKERS						
Maintain Camp Accommodations (50 workers, 180 per year, 3 years)		days	27000	accml	100	$2,700,000
Reclamation activities - travel time (50 workers, 4 trips per year, 6h per trip)		hour	1200	lab-usl	31	$37,200
Reclamation activities - transport cost (50 workers, 4 trips per year, 3 years)		each	600	#N/A	2500	$1,500,000
Long term reclamation activities (eg pump flooding) - transport		each		#N/A	0	$0
Long term reclamation activities (eg pump flooding) - travel time		each		#N/A	0	$0
Monitoring Airfare		each		#N/A	0	$0
WORKER ACCOMODATIONS						
Reclamation activities		manmonths		#N/A	0	$0
Long term reclamation activities (eg pump flooding)		each	0		0	$0
Long term reclamation activities (eg pump flooding)		manhours	0	#N/A	0	$0
Reclamation activities (placement of aggregate cap - 95 days crew of ten)		manmonths	30	accmh	5425	$162,750
Reclamation activities - travel time (10 workers, 3 trips per year, 6h per trip)		hour	180	lab-usl	31	$5,580
Reclamation activities - transport cost (10 workers, 3 trips per year)		each	30	#N/A	2500	$75,000
MOBILIZE FUEL						
Fuel freight - reclamation activities		litre		#N/A	0	$0
Fuel freight - long term reclamation activities		litre		#N/A	0	$0
Fuel freight accomodations		litre		#N/A	0	$0
WINTER ROAD						
Construction and operation		km		#N/A	0	$0
Limited winter use		km		#N/A	0	$0
Winter road tarriff		km		#N/A	0	$0
DEMOBILIZE HEAVY EQUIPMENT						
Excavators	4	km	440	MHERH	10.25	$4,510
Dump trucks	6	km	660	MHERH	10.25	$6,765
Dozers	3	km	330	MHERH	10.25	$3,383
Demolition shears	2	km	220	MHERH	10.25	$2,255
Crane	1	km	110	MHERH	10.25	$1,128
Loader	2	km	220	MHERH	10.25	$2,255
Compactor	1	km	110	MHERH	10.25	$1,128
Light duty vehicles	4	km	440	MHERH	10.25	$4,510
Other						$0
DEMOBILIZE CAMP						
		allow		#N/A	0	$0
DEMOBILIZE WORKERS						
crew travel time		mandays		#N/A	0	$0
crew transportation		each		#N/A	0	$0
WINTER ROAD						
Construction and operation		km		#N/A	0	$0
Limited winter use		km		#N/A	0	$0
Winter road tarriff		km		#N/A	0	$0
					Total	$5,589,160

Unit Cost Table (for refining unit costs see "Estimator" worksheet)

ITEM	Detail	COST CODE	UNITS	LOW $	HIGH $	SPECIFIED $	COMMENTS
Accommodation							
		ACCM	manday	100.00	175.00		
Buildings - Decontaminate							
	Asbestos	BDA	m2	25.60	51.20		Low: removal of asbestos siding & flooring; High: removal of insulated pipes, friable a
Buildings - Remove							Unit costs are based on 3m high, single storey building. Scale areas accordingly.
	Wood	BRW	m2	27.50	41.00		
	Concrete	BRC	m2	40.00	65.00	6.00	Specified: puncture concrete foundation slabs
	Steel - teardown	BRS1	m2	45.00	65.00		
	Steel - for salvage	BRS2	m2	67.00	100.00		
Concrete work							
	Small pour	CSF	m3	426.50	639.75		Low: YK; High=1.5xLow
	Large pour	CLF	m3	353.50	530.25	2130.00	Specified: concrete crown pillar
Contaminated Soils							
	ESA Phase 1	CS1	each	7500.00	0.00		Low: small, "clean" site
	ESA Phase 1	CS2	each	50000.00	0.00		Low: small, "clean" site
	Remediate on site	CSR	m3	47.00	146.00		
Dozing							
	doze rock piles	DR	m3	1.05	2.40		Low cost: doze crest off dump
	doze overburden/soil piles	DS	m3	0.95	3.80		High cost: push up to 300 m
Excavate Rock; Low Spec's and QA/QC							
	drill/blast/load/short haul	RB1	m3	11.40	17.05		Low: quarry operations for bulk fill
	drill/blast/load/long haul	RB2	m3	12.05	17.80		
	RB1 + spread and compact	RB3	m3	12.05	17.80		
	RB2 + spread and compact	RB4	m3	12.50	30.75		
	Specified activity	RBS	m3	0.00	0		
Excavate Rock; High Spec's and QA/QC							(e.g. ditch/spillway excavation)
	drill/blast/load/short haul	RC1	m3	12.05	17.80		Low: foundation excavation;High:spillway excavation
	drill/blast/load/long haul	RC2	m3	12.70	18.40		
	RC1 + spread and compact	RC3	m3	12.70	18.40		e,g, cover construction
	RC2 + spread and compact	RC4	m3	13.50	19.20		e,g, cover construction
	Specified activity	RCS	m3	0.00	0.00	175.00	Specified-drift excavation
Excavate Rip Rap							
	drill/blast/load/short haul/place	RR1	m3	13.50	17.75		High: quarry & place rip rap in channel
	drill/blast/load/long haul/place	RR2	m3	14.20	20.65		
	source is waste dump/short haul	RR3	m3	7.00	0.00		cost includes sorting
	source is waste dump/long haul	RR4	m3	7.60	0.00		
	Specified activity	RRS	m3	0.00	0		
Excavate Soil; Low Spec's and QA/QC							
	clear & grub	SBC	m2	3.40	5.00		
	excavate/load/short haul	SB1	m3	4.30	5.90		
	excavate/load/long haul	SB2	m3	4.60	7.30		
	SB1 + spread and compact	SB3	m3	5.10	8.90		Low: non-engineered; High: engineered
	SB2 + spread and compact	SB4	m3	5.50	11.00		Low: non-engineered; High: engineered
	Specified activity	SBS	m3	3.20	6.30		Low: rehandle waste rock dump by dozing; High: rehandle waste rock by hauling
	Tailings	SBT	m3	1.35	3.70	15.50	High: contour surface - wet or frozen; Specified: haul/place wet infill
Excavate Soil, High Spec's and QA/QC							
	excavate/load/short haul	SC1	m3	6.80	9.30		
	excavate/load/long haul	SC2	m3	7.10	11.75		
	SC1 + spread and compact	SC3	m3	8.90	14.20		Low: non-engineered; High: engineered
	SC2 + spread and compact	SC4	m3	9.30	23.20		Low: non-engineered; High: engineered (e.g. complex covers, low volume dam construction)
	Specified activity	SCS	m3	0.00	0.00	18.80	Backfill adit with waste rock
Fence							
		FNC	m	13.55	203.00		
Fuel and Electricity							
	Fuel cost - gas	FCG	litre	1.05	1.40		
	Fuel cost - diesel	FCD	litre	0.99	1.39		
	Fuel mobilization	FCM	litre	0.22	0.42		High: winter road usage
	Electricity	FCE	kW-h	0.17	0.19	0.49	Low and High: Yellowknife; Specified: diesel generator
Geo-Synthetics							
	geotextile	GST	m2	3.44	0.00		Supply and install
	geogrid	GSG	m2	5.75			
	liner, HDPE	GSHDPE	m2	7.95			Supply and install; large quantity
	liner, ES3	GSES3	m2	20.20			FOB Yellowknife
	geosynthetic installation	GSI	m2	3.16	14.00		Low: geotextile; High:ES3 or HDPE
	bentonite soil amendment	GSBA	tonne	308.30	348.50		FOB Edmonton, add shipping & mixing
Grouting (/m3 of rock grouted)							
		grout	m3	236.55	286.75		High: cement, FOB Yellowknife

Unit Cost Table (for refining unit costs see "Estimator" worksheet)

Labour & Equipment Rates						
Site manager	sman	$/hr	125.00	152.00		
Supervisor	super	$/hr	52.00	91.84		
Registered engineer	eng	$/hr	95.00	220.00		
Environmental coordinator	envco	$/hr	74.16	130.00		
Environmental technologis	envtech	$/hr	36.00	0.00		
Electrician	elec	$/hr	74.00	95.00		
Journeyman - various	journey	$/hr	44.00	71.79		
Labour - skilled	lab-s	$/hr	41.00	49.60		
Labour - unskilled	lab-us	$/hr	31.00	43.98		
Equipment operator	oper	$/hr	41.00	65.00		
Heavy duty mechanic	mech	$/hr	49.00	72.85		
Water treatment plant oper	oper-wt	$/hr	41.00	59.86		
Security / first aid	safety	$/hr	36.00	66.97		
Administrative staff	admin	$/hr	38.00	57.89		
			0	0		
Equipment rates include operator and fuel			0	0		
Loader - 4 cu.yd (3.06m3)	load-s	$/hr	175.00	0.00		
Loader - 7 cu.yd (5.35m3)	load-l	$/hr	315.00	0.00		
Excavator - 26.76-30.84 to	exc-s	$/hr	190.00	0.00		
Excavator - 68.95+tonnes	exc-l	$/hr	420.00	0.00		
Grader	grad	$/hr	190.00	0.00		
Dump truck off hwy 30-50	truck-s	$/hr	225.00	0.00		
Dump truck off hwy 55-75	truck-l	$/hr	300.00	0.00		
dozer, small	dozers	$/hr	205.00	260.00		
dozer, large	dozerl	$/hr	490.00	565.00		
smooth drum compactor	comp	$/hr	155.00	0.00		
scooptram, 6 yd3 bucket	scoop	$/hr	170.00	0.00		
flat bed truck with hiab	hiab	$/hr	155.00	0.00		
fuel truck	ftruck	$/hr	150.00	0.00		
water truck	wtruck	$/hr	58.00	150.00		
Mobilize Heavy Equipment						
Road access	MHER	kmtonne	3.40	10.25		
Air access	MHEA	kmtonne	12.00	0		cargo rate>500lb
Mobilize Camp						
Road access	MCR	each	50000.00	0		refurbish existing camp
Mobilize Workers						
flight	MW	each	4500.00	9100.00		Low:e.g. 8 passenger; High: Dash 7
Oil Removal						
oil removal	OR	litre	0.43	1.20		Low:waste oil heater; High: ship offsite
PCB Removal			0.00	0.00		
Remove from site	PCBR	litre	40.20	46.90		Low: shipping, handling & disposal from Yellowknife
Pipes, small (<6in dia.)						
site	PSR	m	1.00	24.00		Low: remove/dispose on site; High: remove/re-use
supply	PSS	m	6.10	11.10		Low:supply; High:supply and ship
install	PSI	m	25.00	0.00		
Pipes, large (>6in dia.)						
site	PLR	m	22.00	72.00		Low: remove/dispose on site; High: remove/re-use
supply	PLS	m	129.00	143.00		Low:supply; High:supply and ship
install	PLI	m	50.00	0.00		
Power Lines						
site	POWR	m	25.50	0.00		
Process Chemicals						
Remove from site	PCR	kg	0.45	2.50		Low: shipping, handling & disposal from Yellowknife
Pumps						
Pump capital cost	PC	each	195000.00	0.00		
Pump shipping	PS	each	2500.00	0.00		
Pump operating cost	POC	m3	0.12	0.00		pump operating costs should be calculated based on pump capacity, fuel costs, etc.
Pump maintenance	PM	allow	25000.00	0.00		
Pump sand BackFill						
	PBF	m3	85.00	300.00		
Scarify - road/mine site			0	0		
	SCFY	ha	4300	6030	2150.00	
Shaft, Raise & Portal Closures						
Shaft & Raises	SR	m2	645.00	2132.00		Low:pre-cast concrete slabs, little site prep. Area=shaft+>1m all around
Portals	POR	m3	18.80	250.00	1200.00	Low:unit cost code SCS;High:excavate & backfill collapsed portal;Spec: installed pressure plug
Site Inspection Report			0.00	0.00		
	RPT	each	10000.00	20000.00		
SpillWay - Clear			0.00	0.00		
	SW	each	3000.00	7000.00		
Survey/Instrumentation			0	0		
	SI	each	1800.00	3600.00		2 person crew
Treatment Plant - Construct						
Small (< 1000 m3/d)	TPS	lump sum	9,000,000	########		
Large (> 1000 m3/d)	TPL	lump sum	15,000,000	########		
Constructed Wetland	CWTS	ha	200,000	300,000		
Treatment Plant - Operate			0	0		
	TPO	m3	0.35	2.00		
Treatment Chemicals						
ferric sulphate	ferric	kg	1.19			
ferrous sulphate	ferrous	kg	1.32			
lime	lime	kg	0.56	0.00		
hydrogen peroxide, 35%	hperox	kg	1.50			
Sodium Metabisulfate	Nametab	kg	1.18			
Caustic soda, 50%	caustic	kg	0.74			
Sulfuric acid, 93%	sulfuric	kg	0.31			
flocculant	flocc	kg	6.00			
copper sulphate	copper	kg				
shipping	shipping	kg	0.20			
Vegetation						
Hydroseed, Flat	VHF	ha	4000.00	0.00		
Hydroseed, Sloped	VHS	ha	4500.00	0.00		
Veg. blanket/erosion mat	VB	ha	13000.00	0.00		
Tree planting	VT	ha	2600.00	6000.00		
Wetland species	VW	ha	0.00	0.00	47.72	Specified= /m3, Wetland Growth Media Substrate mixed and installed (sand, biochar and fertilizer, woodchips)
Water Sampling/Analysis/Reporting			0.00	0.00		
	WS	each	7000.00	10000.00		
Winter Road			0.00	0.00		
Construction	WRC	km	2000.00	11500.00		
Usage	WRU	kmtonne	0.29	0		