



Mr. David Ohori
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Ohori:

UNC and MMD have reached final agreement on all comments received from the regulatory agencies on the Section 27 Closeout Plan in the letter from MMD dated January 8, 2009. The final two items that required resolution were establishing an erosion monitoring plan and modifying the Financial Assurance calculation to the agreed upon modifications to the Closeout Plan. This letter formalizes the agreed upon erosion monitoring plan and transmits the adjusted Financial Assurance calculations.

Erosion Monitoring Plan

The erosion monitoring plan for Section 27 was agreed upon between Jed Thompson, MWH and David Ohori, MMD, in a conference call on April 2, 2009. Following construction, the site will be monitored for excessive erosion until the area is released under the New Mexico Mining Act. Erosion monitoring will focus on reclaimed areas that received cover material. Monitoring will be performed quarterly for the first year with monthly inspections during the first monsoon season (July, August and September). After the first year, inspections will be conducted annually during the monsoon season.

Inspections will be visual using the Bureau of Land Management (BLM) erosion classification system, shown in the table below.

BLM EROSION CLASSIFICATION SYSTEM	
Classification	Description
Class 1:	No soil loss or erosion; top soil layer intact, well-dispersed accumulation of litter from past year's growth plus smaller amounts of older litter.
Class 2:	Soil movement slight and difficult to recognize; small deposits of soil in form of fans or cones at end of small gullies or rills, or as accumulations behind plant crowns or behind litter, litter not well dispersed or no accumulation from past year's growth obvious.
Class 3:	Soil movement or loss more noticeable; topsoil loss evident, may be some pedestaled or hummocked plants; rill marks evident, poorly dispersed litter and bare spots not protected by litter.
Class 4:	Soil movement and loss readily recognizable; topsoil remnants with vertical sides and exposed plant roots, roots frequently exposed, litter in relatively small amounts and washed into erosion protected patches.
Class 5:	Advanced erosion; active gullies, steep sidewalls on active gullies; well developed erosion pavement on gravelly soils, litter mostly washed away.

Any Class 3 or higher erosion feature will be reported to MMD. The report will include a description of the erosion feature, photographs of the feature, probable cause of the feature, and any proposed corrective actions to repair erosion damage and address the probable cause of the feature. New Class 3 and Class 4 erosion features will be evaluated on an individual basis to determine if corrective actions are needed. Any feature that transitions between a Class 3 and a Class 4 feature between inspections and all Class 5 erosion features will have corrective actions recommended.

Any corrective actions will be agreed to by both UNC and MMD and will include a schedule for implementation of the corrective actions.

Financial Assurance

The financial assurance calculation was updated to address modifications to the Closeout Plan resulting from agency comments. As a result of the updates, the financial assurance increased from \$324,000 to \$377,000. The revised estimate is included in Attachment 1. Modifications made to the financial assurance are described below.

The estimated cost to plug the vents and shafts, shown in Attachment 1, Worksheet 6, was reduced due to the removal of Polyurethane Foam (PUF) from the design. No change was made to the estimated volume of concrete for the plugs. The current design for the plugs calls for a 12-inch thick reinforced concrete plug. The previous estimate included two feet of concrete for each plug. The previous estimate of concrete costs remains conservative.

Haul distances and haul times for borrow material, shown in Attachment 1, Worksheet 14, were adjusted to be consistent with the current borrow area. The change in borrow area resulted in an increase to the haul distances and haul times and an overall increase in the cost to haul borrow materials.

Post-closure monitoring was increased from four visits in the first 8 years to 15 visits in the first 10 years. The cost per monitoring event and post-closure monitoring for years 11 and 12 were not changed. These changes are consistent with the erosion monitoring plan presented above.

Sincerely,



James Thompson
Supervising Engineer

ATTACHMENT 1
REVISED ESTIMATE

RECLAMATION COST ESTIMATE
UNITED NUCLEAR CORPORATION SECTION 27 MINE
 Revised April 2009

Worksheet No.	Description
<u>0</u>	Schedule of Values Summary of Costs
<u>1</u>	Site Preparation
<u>2</u>	Regrading Non-Economical Storage Area
<u>3</u>	Haul Ball Mill Rejects to Non-Economic Storage Area 1
<u>4</u>	Haul Ore Material to Non-Economic Storage Area 2
<u>5</u>	Demolition
<u>6</u>	Portal Reclamation
<u>7</u>	Reclaim Disturbed Areas
<u>8</u>	Haul and Spread Topsoil
<u>9</u>	Revegetation
<u>10</u>	Post Closing Monitoring
<u>11</u>	Upgrade Existing Access Road
<u>12</u>	Fencing
<u>13</u>	Equipment Fleet Costs
<u>14</u>	Haul Additional Cover Material to Non-Economical Storage Areas, Vents, and Shafts
Assumptions	
1	2008 Davis Bacon wages for equipment operators
2	2008 rental equipment rates
3	Estimate includes 60% revegetation failure rate
4	Estimate includes 15 inspections between year 1 and year 10
5	Estimate includes a vegetation analysis at the end of years 11 and 12 for bond release
6	Assumes 3-foot thick cover and on-site suitable borrow source
7	Existing access road will be left in place
8	The existing ore loading pull through at Shaft #2 will be left in place
9	Single shift 10 hours per day, 4 days per week
10	Costs are in 2008 US Dollars
11	Assumes work performed by a third-party contractor
12	Water will be obtained from an on-site water well.
13	See other assumptions in specific worksheets

WS 0 - SCHEDULE OF VALUES
UNC SECTION 27 MINE RECLAMATION COST ESTIMATE
(rounded to nearest \$1,000)

Item	Description	Unit	Quantity	Unit Cost	Extended	Worksheet
Site Preparation						
1	Install sediment control	ls	1	\$ 8,606	\$8,606	WS 1 Site Preparation
Regrading						
2	Regrade Non-economic storage areas	ac	26,962	\$ 0.86	\$23,243	WS 2 Regrading NESAs
3	Excavate and haul ball mill reject pile	cy	760	\$ 4.16	\$3,164	WS 3 Haul BM Rejects to NESAs
4	Excavate and haul ore stockpile	cy	6,616	\$ 3.57	\$23,616	WS 4 Haul Ore Mat to NESAs
5	Excavate and haul borrow materials	cy	11,052	\$ 4.20	\$46,432	WS 14 Haul Add'l Cover Mtrl
Demolition and Portal Reclamation						
6	Remove foundations, power poles, and lines	ls	1	\$ 8,031.52	\$8,032	WS 5 Demolition
7	Concrete plugs for shafts and vents	ls	1	\$ 10,305.26	\$10,305	WS 6 Portal Reclamation
Reclamation of Disturbed areas						
8	Reclaim roads and disturbed areas	ft	5,000	\$ 0.47	\$2,364	WS 7 Reclaim Disturbed Areas
Revegetation						
9	Excavate, haul and spread topsoil	cy	6,480	\$ 2.97	\$19,266	WS 8 Haul and Spread Topsoil
10	Seed, fertilize, and mulch	ac	9	\$ 3,200.00	\$29,600	WS 9 Revegetate
Permanent Facilities						
11	Upgrade existing road for permanent access	ft	3,000	\$ 3.22	\$9,665	WS 11 Upgrade Existing Road
12	Install Fencing	ft	6,000	\$ 1.65	\$9,900	WS 12 Fencing
Direct Closure Construction Cost Subtotal					\$194,000	
Direct Post Closure Construction Cost Subtotal						
Vegetation inspections and evaluation (WS 10 Post-Closure Monitoring)					\$76,000	
Indirect Costs						
				Mobilization and Demobilization	10.0%	\$ 19,400
				Contingencies	10.0%	\$ 19,400
				Engineering Redesign Fee	2.5%	\$ 4,850
				Contractor Profit and Overhead	25.0%	\$ 48,500
				Project Management Fee	6.0%	\$ 11,640
				State Procurement Cost	1.6%	\$ 3,104
Subtotal Indirect Costs					\$ 107,000	
Total Bond Amount					\$ 377,000	

PRODUCTION DETAIL

Activity Description

Install silt fence and straw bales
Build sediment pond
Set up water station

Equipment

Grader for silt fence

Labor

2 labors for silt fence and straw bale installation

Estimating Assumptions

Install silt fence at toe of non-economic storage areas	2000 ft
Silt fence in other areas	2000 ft
Total	<u>4000 ft</u>
Straw bales	500 bales
Sediment Pond = 50x 50 x 3 feet deep =	300 cy

Productivity calculations

Assume 2 days to install silt fence straw bales and build sediment pond (if needed)

COST DETAIL

Quantity **1**
 Unit Price \$ **8,605.91** Is

Equipment						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	140H Grader	100%	1	\$ 124.97	10	\$ 1,249.65
2	GMC Water truck 4000 gallon	100%	1	\$ 90.84	10	\$ 908.40
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 2,158.05

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
1	Silt fence Labor ⁽²⁾	100%	2	\$ 25.80	20	\$ 1,032.00
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 1,032.00

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Purchase Silt fence	ft	4000	\$ 0.35		\$ 1,400.00
2	Purchase Straw bales	ea	500	\$ 7.50		\$ 3,750.00
3	Water	hr	4	\$ 66.47		\$ 265.86
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 5,415.86

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost
2. Davis Bacon wage for Group III labor classification plus fringe. See Appendix B.1 for Reference

PRODUCTION DETAIL

Activity Description

Flatten side-slope Non-economic Storage Areas 1 and 2 to between a 3H:1V or 4H:1V slope
Include quantity of ball mill reject and ore stockpile material to regrade in non-economic storage areas
Ball mill and ore stockpile material will be placed in trenches at the center of the NESA piles and buried
Include quantity of material to cover NESA 1 and NESA 2 with 2 feet of additional material from borrow source
Regrade top 12" of topsoil from excavated borrow source to 10H:1V slope at base and 3H:1V slope on sidewalls

Trench excavation for ball mill reject and ore stockpile materials

Excavated volume for ball mill reject disposal	800 cy
Excavated volume for ore stockpile materials for disposal	6000 cy

Regrading quantities for bull dozer

Cut quantity for Non-economic Storage Area 1 =	1,176 cy <i>see Appendix A for quantity calculation</i>
Cut quantity for Non-economic Storage Area 2 =	1,626 cy <i>see Appendix A for quantity calculation</i>
Ore quantity =	5,753 cy <i>see Appendix A for quantity calculation</i>
Ball Mill reject =	760 cy <i>see Appendix A for quantity calculation</i>
Cover material from borrow source =	10,830 cy <i>see Appendix A for quantity calculation</i>
Topsoil replaced to borrow source =	3,300 cy <i>see Appendix A for quantity calculation</i>
Total quantity for bull dozer to grade	23,445 cy
with 15% swell factor =	26,962 cy

Equipment

D8R dozer with 14-ft wide Universal Blade

Description of dozer use

Regrading

Push down from top of slope
Average dozing distance 100 ft
Grade (in percent) - 10%
Regrading production = 900 cy per hour

Trench excavation

Trenches constructed as a low-lying depression in center of NESA's
NESA 1 has average dozing distance for trench excavation of 150 ft
NESA 2 has average dozing distance for trench excavation of 200 ft
Average grade - 0%
NESA 1 production = 700 cy per hour
NESA 2 production = 500 cy per hour

Production rates obtained from Caterpillar performance handbook, and summarized charts are included on page 3 of this worksheet

Assumptions

Track-type operator
 Average operator
 50min/hour efficiency
 Material unit weight = 2800 lb/cy
 Excellent visibility
 Elevation is not a factor
 Loose stockpile
 Normal dozing

Productivity calculations

Trench excavation for ball mill reject material

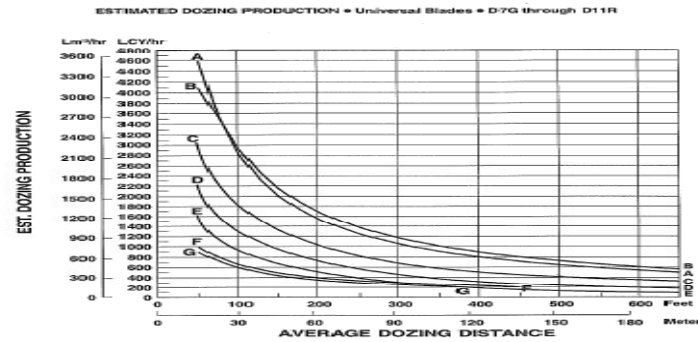
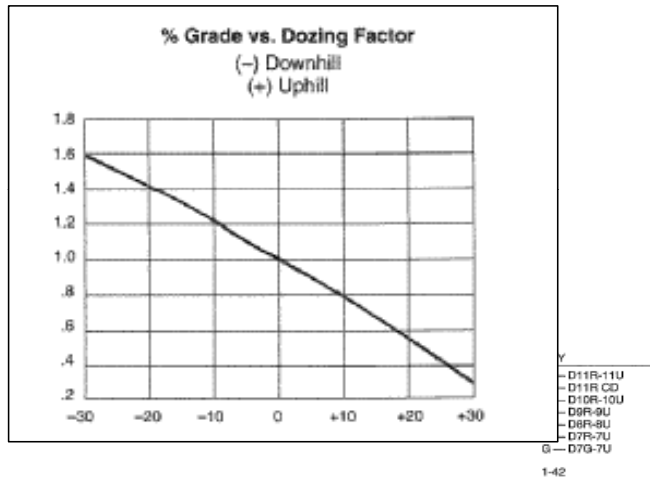
Operator Adjustment Factor	=	0.75	x	1.00	x	0.83	x	1.00	x	0.82	x	1.00	x	1.00	x	1.00	=	0.51
		Operator factor		Material factor		efficiency factor		grade factor		weight correction factor		production method/blade factor		visibility factor		elevation factor		
Net Hourly Production	=	700.00	x	0.51	=	357												
		hourly production (cy/hr)		operating adjustment factor		cy/hr												
Hours required	=	800	/	357	=	2												
		Volume to be moved		net hourly production (cy/hr)		hr												

Trench excavation for stockpiled ore material

Operator Adjustment Factor	=	0.75	x	1.00	x	0.83	x	1.00	x	0.82	x	1.00	x	1.00	x	1.00	=	0.51
		Operator factor		Material factor		efficiency factor		grade factor		weight correction factor		production method/blade factor		visibility factor		elevation factor		
Net Hourly Production	=	500.00	x	0.51	=	255												
		hourly production (cy/hr)		operating adjustment factor		cy/hr												
Hours required	=	6,000	/	255	=	24												
		Volume to be moved		net hourly production (cy/hr)		hr												

Regrading Non-economic storage areas, ball mill rejects, and stockpiled ore

Operator Adjustment Factor	=	0.75	x	1.00	x	0.83	x	1.20	x	0.82	x	1.00	x	1.00	x	1.00	=	0.61
		Operator factor		Material factor		efficiency factor		grade factor		weight correction factor		production method/blade factor		visibility factor		elevation factor		
Net Hourly Production	=	900.00	x	0.61	=	551												
		hourly production (cy/hr)		operating adjustment factor		cy/hr												
Hours required	=	26,962	/	551	=	49												
		Volume to be moved		net hourly production (cy/hr)		hr												



Reprint from Caterpillar Performance Handbook Edition 31

COST DETAIL

Quantity **26,962** **cy**
 Unit Price \$ **0.86** **per cy**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	D8R Dozer	100%	1	\$ 216.97	75	\$ 16,197.44
2	GMC Water truck 4000 gallon	100%	1	\$ 90.84	60	\$ 5,450.40
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 21,647.84

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Water	hr	24	\$ 66.47		\$ 1,595.16
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 1,595.16

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost

PRODUCTION DETAIL

Activity Description

Haul 760 cy of Ball Mill Rejects to Non-economic Storage Area 1
Place ball mill rejects in trenches at the center of the Storage Area

Equipment

D25D Truck
Struck capacity (cy) 13
Heaped capacity (cy) 18

Materials description (Volume)

760 bank cubic yards of Ball Mill Rejects will be buried in Non-economic Storage Area 1

Route description

Travel Distance (feet)	Loaded grade (%)	Rolling resistance (%)	Loaded effective grade (%)	Empty effective grade (%)
300	5.6	3	8.6	3

Assumptions

1. Efficiency factor of 0.83 for average conditions
2. Dump maneuver time = unload time
3. The empty effective grade is equal to the rolling resistance
4. Decent road conditions
5. Truck and loader will not be able to carry full load of steel balls, so multiplying Struck Capacity and loader capacity by 0.6
6. Doubled travel time listed in CAT handbook, and doubled estimates of loading and unloading times
7. No swell assumed

Hourly estimate for hauling of 760cy of Ball Mill Rejects to Non-economic Storage Area 1

No. Loader	=	7.8	/	2.4	=	3.3	passes
		Struck truck capacity x 0.6 (LCY)		Loader bucket capacity x 0.6 (LCY)			
Net Truck Capacity	=	2.4	x	3.3	=	7.8	LCY
		Loader bucket capacity (LCY)		no. loader passes/truck			
Loading time/Truck	=	2	x	3.3	=	7	min
		loader cycle time (min)		no. loader passes/truck			
Truck cycle time	=	2.5	+	1.6	+	2	+ 2 = 8 min
		Load time (min)		Loaded travel time (min)		Unload/maneuve	Empty travel time (min)
No. trucks required	=	8.1	/	6.5	=	1.2	Trucks (use 2)
		truck cycle time (min)		total loading time			
Production rate	=	7.8	x	2	/	8.1	= 1.9 LCY/min
		net truck capacity		no. trucks		truck cycle time	
Hourly production	=	1.9	x	60	x	0.83	= 95.9 LCY/hr
		production rate (LCY/min)		60min/hr		efficiency factor	
Hours required	=	760	/	95.9	=	7.9	hr
		volume to be moved (LCY)		hourly production (LCY/hr)			

COST DETAIL

Quantity **760 cy**
 Unit Price \$ **4.16 per cy**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	966G Loader	100%	1	\$ 148.84	8	\$ 1,179.41
2	D25D Truck	100%	1	\$ 178.440	8	\$ 1,413.96
3	GMC Water truck 4000 gallon	50%	1	\$ 90.84	8	\$ 359.91
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 2,953.28

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Water	hr	3	\$ 66.47		\$ 210.67
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 210.67

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost
2. Dozer for pile knockdown
3. Unit price based on bank volume

PRODUCTION DETAIL

Activity Description

Haul 5753 cy of Stockpiled Ore material to Non-economic Storage Area 2
Place Stockpiled Ore material in trenches at the center of the Storage Area

Equipment

D25D Truck
Struck capacity (cy) 13
Heaped capacity (cy) 18

Materials description (Volume)

5753 bank cy of Stockpiled Ore material will be buried in Non-economic Storage Area 2
15% Swell factor so total quantity = 6616 cy

Route description

Travel Distance (feet)	Loaded	Rolling	Loaded effective	Empty effective
400	4	3	7	3

Assumptions

1. Efficiency factor of 0.83 for average conditions
2. Dump maneuver time = unload time
3. The empty effective grade is equal to the rolling resistance
4. Decent road conditions
5. Doubling cycle times and loading times for each activity

Hourly estimate to haul 6053cy of Stockpiled Ore Material to Non-economic Storage Area 2

No. Loader Passes/Truck	=	13	/	4	=	3.3	passes
		Struck truck capacity (LCY)		Loader bucket capacity (LCY)			
Net Truck Capacity	=	4	x	3.3	=	13	LCY
		Loader bucket capacity (LCY)		no. loader passes/truck			
Loading time/Truck	=	2	x	3.3	=	7	min
		loader cycle time (min)		no. loader passes/truck			
Truck cycle time	=	2	+	2	+	2	+ 2 = 8 min
		Load time (min)		Loaded travel time (min)		Unload/maneuver time (min)	Empty travel time (min)
No. trucks required	=	8	/	7	=	1.2	Trucks (use 2)
		truck cycle time (min)		total loading time (min)			
Production rate	=	13	x	2	/	8	= 3.3 LCY/min
		net truck capacity (LCY)		no. trucks		truck cycle time (min)	
Hourly production	=	3.3	x	60	x	0.83	= 161.9 LCY/hr
		production rate (LCY/min)		60min/hr		efficiency factor	
Hours required	=	6616	/	161.9	=	41	hr
		volume to be moved (LCY)		hourly production (LCY/hr)			

COST DETAIL

Quantity **6616 cy**
 Unit Price \$ **3.57 per cy**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	966G Loader	100%	1	\$ 148.84	41	\$ 6,084.14
2	D25D Truck	100%	2	\$ 178.44	41	\$ 14,588.20
3	GMC Water truck 4000 gallon	50%	1	\$ 90.84	41	\$ 1,856.64
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 22,528.98

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Water	hr	16	\$ 66		\$ 1,086.76
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 1,086.76

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost
2. Unit price includes swell
3. Dozer for pile knockdown.

PRODUCTION DETAIL

Activity Description

Remove foundation remnants and place in non-economic storage area 1

Remove power line

Remove power pole

Equipment

Dump truck

Loader

Water truck

Labor

N/A

Estimating Assumptions

1. Assume that foundations greater than 3 feet deep can be buried in place at least 1 ft bgs
2. Dispose power poles on site (no cutting) or salvage.
3. Leave ore loading station in place per closure plan

Productivity calculations

Assume 1 day for foundation removal

Assume 1 day to remove and dispose of power poles

COST DETAIL

Quantity **1**
 Unit Price \$ **8,031.52**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	966G Loader	100%	1	\$ 148.84	20	\$ 2,976.80
2	D25D Truck	100%	1	\$ 178.44	20	\$ 3,568.80
3	GMC Water truck 4000 gallon	25%	1	\$ 90.84	20	\$ 454.20
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 6,999.80

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Electrical utility		1	\$ 500.00		\$ 500.00
2	Water	hr	8	\$ 66.47		\$ 531.72
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 1,031.72

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost

PRODUCTION DETAIL

Activity Description

Build concrete plugs

Shaft #1 diameter = 5 ft

Shaft #2 diameter = 12 ft

Vent holes 1, 2, 3 diameter = 5 ft

Cover with 3' thick soil layer (2' of soil and rock from borrow source, 1' topsoil)

Volume of concrete needed for shafts =	132.7 ft ² x	2 ft depth =	9.8 cy of concrete
Volume of concrete needed for vents =	19.6 ft ² x	2 ft depth	1.5 cy of concrete each
<u>Reinforcement</u>			
Total Concrete needed			14.2 cy

Equipment

N/A

Labor

N/A

Estimating Assumptions

N/A

Productivity calculations

Assume 1 week to construct reinforcement cages for plugs

1 day for concrete pour all shafts and vents

1 day to cover using surrounding soils.

COST DETAIL

Quantity **1**
 Unit Price \$ **10,305.26**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	966G Loader	100%	1	\$ 148.84	10	\$ 1,488.40
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 1,488.40

Labor						
Item	Description	Commitment	Quantity	Rate ⁽²⁾	Hours	Cost
1	Build reinforcement	100%	2	\$ 25.80	100	\$ 5,160.00
2	Place concrete	100%	2	\$ 25.80	10	\$ 516.00
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 5,676.00

Materials and Subcontractors						
Item	Description	Unit	Quantity	Rate	Remarks	Cost
1	Reinforcement		1	\$ 1,000.00		\$ 1,000.00
2	Concrete	cy	15	\$ 125.00		\$ 1,875.00
3	Water	hr	4	\$ 66.47		\$ 265.86
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 3,140.86

Notes:

1. Davis Bacon wage for Group III labor classification plus fringe. See Appendix for reference.
2. Delivered concrete costs are based UNC experience.

PRODUCTION DETAIL

Activity Description

Reclaim roads and disturbed areas

Reclaim all other roads and disturbed areas by ripping and regrading the surface to provide positive drainage

Equipment

Motor grader

Water truck

Materials description (Volume)

Length of roads and disturbed areas for reclamation =	5000 ft of roads	x 20 ft wide =	2.3 ac
		<u>0.5 ac of other areas</u>	<u>0.5 ac</u>
Total disturbed area to reclaim =			2.8 ac

Productivity calculations

Rip roads to be closed	5000 ft x	1 mph =	1 hr per pass
		x	5 passes
		=	5 hrs
Rip other disturbed area			1 hrs
Regrade roads and disturbed area-----> assume 5 passes =		total ripping	6 hrs
			6 hrs
Total Production time			12 hrs

Assumptions

1. Reveg included in revegetation item

COST DETAIL

Quantity **5000 ft**
 Unit Price \$ **0.47 per ft**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	140H Grader	100%	1	\$ 124.965	12	\$ 1,499.58
2	GMC Water truck 4000 gallon	50%	1	\$ 90.84	12	\$ 545.04
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 2,044.62

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Material						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Water	hr	5	\$ 66.47		\$ 319.03
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 319.03

Notes:

1. See WS 13 Equipment Cost for breakdown of equipment costs.

PRODUCTION DETAIL

Activity Description

Move topsoil from stockpiled areas to Non-economic Storage Area 1 and Non-economic Storage Area 2.

Perform finish grading for topsoil replaced to borrow source. Topsoil kept close to borrow source, no hauling necessary

Equipment

D25D Truck

Capacity=13 cubic yards

Materials description (Volume)

West topsoil stockpile (cy)	2100 (x 20% swell)	2520
East topsoil stockpile (cy)	3300 (x 20% swell)	<u>3960</u>
Total volume (cy)	5400 (x 20% swell)	6480

For production purposes assume the following

West topsoil stockpile will be used to cover NESA-1

East topsoil stockpile will be used to cover NESA-2

Assume 4 hours to finish grade borrow source, determined using WS 2 (4 hours added to required time for 140H grader in Equipment Fleet table)

Assumptions

Constructed roads for hauling materials are in moderately good condition

Truck is using 26.5R25 tires

Doubled travel time as listed on the top of spreadsheet, which came from the CAT handbook or assumed values

Productivity Calculations

Objective	Volume material (cy)	Source	Distance (feet)	Loaded grade	Loaded effective grade	Load time (minutes)	Loaded Travel time (minutes)	Unload time (minutes)	Empty effective grade	Empty travel time (minutes)
Cover NESA1	2520	West topsoil stockpile	820	2.4	5.4	1	0.8	0.75	3	0.5
Cover NESA2	3960	East topsoil stockpile	850	1.2	4.2	1	0.75	0.75	3	0.5

Hours required to cover NESA #1

Cycle time	=	2	+	1.6	+	1.5	+	1	=	6.1
		Load time (min)		Loaded travel time (min)		Unload time		Empty trip time		minutes
Cycles/hour	=	60	/	6.1	=	9.8				
		min/hr				cycles/hour				
Hourly production	=	13	x	9.8	=	127.9				
		Load (cy)		Cycles/hour		cy/hour				
Hours required	=	2520	/	127.9	=	19.7				
		Volume (cy)		cy/hour						

Hours required to cover NESA #2

Topsoil from East Stockpile

Cycle time	=	2	+	1.5	+	1.5	+	1	=	6
		Load time		Loaded travel time		Unload time		Empty trip time		minutes
Cycles/hour	=	60	/	6	=	10.0				
		min/hr				cycles/hour				
Hourly production	=	13	x	10.0	=	130.0				
		Load (cy)		Cycles/hour		cy/hour				
Hours required	=	3960	/	130.0	=	30.5				
		Volume (cy)		cy/hour						

Total time	=	50.2	for one truck	Use 2 trucks	25.1	hrs
		hours				

COST DETAIL

Quantity **6480 cy**
 Unit Price **\$ 2.97 per cy**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	966G Loader	100%	1	\$ 148.84	25	\$ 3,733.59
2	D25D Truck	100%	2	\$ 178.44	25	\$ 8,952.20
3	140H Grader	100%	1	\$ 124.97	29	\$ 3,634.56
4	GMC Water truck 4000 gallon	100%	1	\$ 90.84	25	\$ 2,278.69
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 18,599.04

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Material and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Water	hr	10	\$ 66.47		\$ 666.90
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 666.90

- Notes:
1. See WS 13 Equipment Cost for breakdown of equipment costs
 2. Trucks can drive down slopes to spread topsoil.
 3. Unit price includes swell

PRODUCTION DETAIL

Activity Description

Seed and fertilize topsoil

Equipment

Scarification

Discing

Drill seed

Mulching and crimping

Estimating Assumptions

1. Assume 9.25 acres to be seeded
2. Assume 60% revegetation failure rate
3. 12 year monitoring and evaluation period

Productivity calculations

N/A

COST DETAIL

Quantity **9.25** acre
 Unit Price \$ **3,200.00** per acre

Revegetation						
Item	Description	Unit	Quantity	Rate	Remarks	Cost
1	Initial revegetation	ac	9.25	\$ 2,000.00		\$ 18,500.00
2	Follow-up revegetation	ac	5.55	\$ 2,000.00		\$ 11,100.00
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 29,600.00

Notes

1. Cost based on the vegetation study by Cedar Creek (May, 2006) and experience at similar projects.

PRODUCTION DETAIL

Activity Description

N/A

Equipment

N/A

Estimating Assumptions

1. 12 year monitoring and evaluation period
2. Perform 6 site visits in year 1 and annual evaluations years 2 through 10
3. Assume 1 scientist and 2 days travel
4. Provide quantitative vegetation analysis in Year 11 and 12 sufficient for bond release
5. Base cost on initial vegetation study

Productivity calculations

N/A

COST DETAIL

Quantity **1**
 Unit Price \$ **76,000.00** Is

Inspections and Bond Release Vegetation Evaluation						
Item	Description	Unit	Quantity	Rate	Remarks	Cost
1	Vegetation inspections	ea	15	\$ 3,400.00		\$ 51,000.00
2	Vegetation quantitative analysis for bond release	ea	2	\$ 12,500.00		\$ 25,000.00
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 76,000.00

Notes

1. Cost based on initial vegetation study by Cedar Creek

PRODUCTION DETAIL

Activity Description

Upgrade the main access road to be left in place post closure per the closure plan

Equipment

Motor grader
Water truck

Materials description (Volume)

Existing access road length =	3000	ft
Width =	25	ft
Area =	75000	ft ²
Thickness=	0.25	ft
Volume of gravel =	694	yd ³

Productivity calculations

Upgrade existing road		1 mph	1 hr/pass
Regrade	3000 ft x	x	5 passes
		=	5 hrs

Assumptions

N/A

COST DETAIL

Quantity **3000 linear ft**
 Unit Price \$ **3.22 per linear ft**

Equipment Fleet						
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost
1	140H Grader	100%	1	\$ 124.97	5	\$ 624.83
2	GMC Water truck 4000 gallon	50%	1	\$ 90.84	5	\$ 227.10
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
	Select Equipment			\$ -		\$ -
Total Item Cost						\$ 851.93

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Material						
Item	Description	Units	Quantity	Rate	Remarks	Cost
1	Import gravel	cy	694	\$ 12.50		\$ 8,681
2	Water	hr	2	\$ 66.47		\$ 132.93
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ 8,813.49

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost
2. Gravel costs based on UNC-experience with recent local costs.

PRODUCTION DETAIL

Activity Description

Install fencing around perimeter of site

Equipment

Included in unit price

Materials description (Volume)

1500 ft per side = 6000 lf
Fencing

wires: 4

Max ht.: 40"

Wire spacing: 16, 6, 6 & 12 inches

Wire: top smooth, others barbed

Post spacing: 16.5 to 30 ft

of stays between line posts: 1-4

Productivity calculations

N/A

Assumptions

None.

EQUIPMENT COSTS								
Item	Equipment ⁽²⁾	Weekly Rate	Hourly Rate	Burden Hourly Labor	Fuel Consumption gal/hr	Hourly Fuel	Hourly Maintenance	Total Hourly Rate
1	D8R Dozer	\$5,465	\$136.63	\$ 31.84	9	\$ 40.50	\$8.00	\$216.97
2	GMC Water truck 4000 gallon	\$1,870	\$ 46.75	\$ 31.84	2.5	\$ 11.25	\$1.00	\$90.84
3	966G Loader	\$3,380	\$ 84.50	\$ 31.84	5	\$ 22.50	\$10.00	\$148.84
4	D25D Truck	\$4,740	\$118.50	\$ 31.84	5.8	\$ 26.10	\$2.00	\$178.44
5	140H Grader	\$2,625	\$65.63	\$ 31.84	5	\$ 22.50	\$5.00	\$124.97
6	60 KW Diesel 3 Phase	\$405	\$10.13	\$ 31.84	5	\$22.50	\$2.00	\$66.47

Total Hours Used												
Item	Equipment ⁽²⁾	WS 1	WS 2	WS 3	WS 4	WS 5	WS 6	WS 7	WS 8	WS 11	WS 14	Total Hours
1	D8R Dozer	0	75	0	0	0	0	0	0	0	0	75
2	GMC Water truck 4000 gallon	10	60	8	41	20	0	12	25	5	125	305
3	966G Loader	0	0	8	41	20	10	0	25	0	125	228
4	D25D Truck	0	0	8	41	20	0	0	25	0	125	218
5	140H Grader	10	0	0	0	0	0	12	29	5	0	56

Notes:

1. Diesel fuel rates estimated from state-wide averages and current fuel price trends.
\$4.50
2. Equipment rates from Wagner Equipment rental rates posted on-line.

PRODUCTION DETAIL

Activity Description

Haul 10,830 cy of cover/topsoil material to NESA 1, NESA 2, and vents and shafts

Equipment

966G Loader

D25D Truck

Struck capacity (cy) 13

Heaped capacity (cy) 18

Materials description (Volume)

4,200 cy material will be spread over Non-economic Storage Area 1

6,600 cy material will be spread over Non-economic Storage Area 2

10 cy material will be spread over vents and the single shaft with 5-foot diameter

20 cy material will be spread over the single shaft with 12-foot diameter

Assumptions

1. Volumes based on 3-foot covers.
2. Efficiency factor of 0.83 for average conditions
3. Dump maneuver time = unload time
4. The empty effective grade is equal to the rolling resistance
5. Decent road conditions
6. Truck and loader will not be able to carry full load of material, so multiplying Struck Capacity and loader capacity by 0.8
7. Doubled travel time listed in CAT handbook, and doubled estimates of loading and unloading times

Route description borrow source to NESA 1

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective grade (%)	Empty effective
1000	3	3	6	3

Route description #2-borrow source to NESA 2

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
1800	2	3	5	3

Route description #3 -borrow source to Vent 1

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
680	2	3	5	3

Route description #4-borrow source to Vent 2

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
2000	0	3	3	3

Route description #5-borrow source to Vent 3

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
3200	0	3	3	3

Route description #6-borrow source to Shaft 1

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
1400	1	3	4	3

Route description #7-borrow source to Shaft 2

Travel Distance (feet)	Loaded grade (%)	Rolling	Loaded effective	Empty effective
3300	1	3	4	3

13,380

Hourly estimate for hauling 4089 cy of material to Non-economic Storage Area 1

No. Loader Passes/Truck	=	10.4	/	3.2	=	3.3	passes
		Struck truck capacity x 0.8 (LCY)		Loader bucket capacity x 0.8 (LCY)			
		Loader bucket capacity (LCY)		no. loader passes/truck			
Loading time/Truck	=	2	x	3.3	=	7	min
		loader cycle time		no. loader			
Truck cycle time	=	2	+	4	+	2	+ 2.1 = 10.1 min
		Load time (min)		Loaded travel time (min)		Unload/maneuver time (min)	Empty travel time
No. trucks required	=	10.1	/	6.5	=	1.6	Trucks (use 2)
		truck cycle time (min)		total loading time (min)			
Production rate	=	10.4	x	2	/	10.1	= 2.1 LCY/min
		net truck capacity (LCY)		no. trucks		truck cycle time (min)	
Hourly production	=	2.1	x	60	x	0.83	= 102.6 LCY/hr
		production rate		60min/hr		efficiency factor	
Hours required	=	4200	/	102.6	=	41.0	hr
		volume to be moved (LCY)		hourly production			

Hourly estimate for hauling 6963 cy of material to Non-economic Storage Area 2

No. Loader Passes/Truck	=	10.4	/	3.2	=	3.3	passes
		Struck truck capacity x 0.8 (LCY)		Loader bucket capacity x 0.8 (LCY)			
Net Truck Capacity	=	3.2	x	3.3	=	10.4	LCY
		Loader bucket		no. loader			
Loading time/Truck	=	2	x	3.3	=	7	min
		loader cycle time (min)		no. loader passes/truck			
Truck cycle time	=	2	+	5.6	+	2	+ 3.4 = 13 min
		Load time (min)		Loaded travel time (min)		Unload/maneuver time (min)	Empty travel time (use 2)
No. trucks required	=	13	/	6.5	=	2.0	Trucks
		truck cycle time (min)		total loading time (min)			
Production rate	=	10.4	x	2	/	13	= 1.6 LCY/min
		net truck capacity (LCY)		no. trucks		truck cycle time (min)	
Hourly production	=	1.6	x	60	x	0.83	= 79.7 LCY/hr
		production rate (LCY/min)		60min/hr		efficiency factor	
Hours required	=	6600	/	79.7	=	82.8	hr
		volume to be moved (LCY)		hourly production			

Hourly estimate for hauling 8.4cy of material to Vent 1

No. Loader Passes/Truck	=	10.4	/	3.2 Loader bucket capacity x 0.8 (LCY)	=	3.3	passes	
Net Truck Capacity	=	3.2 Loader bucket capacity (LCY)	x	3.3 no. loader passes/truck	=	10.4	LCY	
Loading time/Truck	=	2 loader cycle time (min)	x	3.3 no. loader passes/truck	=	7	min	
Truck cycle time	=	2 Load time (min)	+	2.2 Loaded travel time (min)	+	2 Unload/maneuver time (min)	+ 1.2 Empty travel time	= 7.4 min
No. trucks required	=	7.4 truck cycle time (min)	/	6.5 total loading time (min)	=	1.1	Trucks (use 2)	
Production rate	=	10.4 net truck capacity (LCY)	x	2 no. trucks	/	7.4 truck cycle time (min)	= 2.8 LCY/min	
Hourly production	=	2.8 production rate (LCY/min)	x	60 60min/hr	x	0.83 efficiency factor	= 140.0 LCY/hr	
Hours required	=	10 volume to be moved (LCY)	/	140.0 hourly production (LCY/hr)	=	0.1	hr	

Hourly estimate for hauling 8.4cy of material to Vent 2

No. Loader Passes/Truck	=	10.4	/	3.2 Loader bucket capacity x 0.8 (LCY)	=	3.3	passes	
Net Truck Capacity	=	3.2 Loader bucket capacity (LCY)	x	3.3 no. loader passes/truck	=	10.4	LCY	
Loading time/Truck	=	2 loader cycle time (min)	x	3.3 no. loader passes/truck	=	7	min	
Truck cycle time	=	2 Load time (min)	+	4.2 Loaded travel time (min)	+	2 Unload/maneuver time (min)	+ 3.6 Empty travel time (min)	= 11.8 min
No. trucks required	=	11.8 truck cycle time (min)	/	6.5 total loading time (min)	=	1.8	Trucks (use 2)	
Production rate	=	10.4 net truck capacity (LCY)	x	2 no. trucks	/	11.8 truck cycle time (min)	= 1.8	LCY/min
Hourly production	=	1.8 production rate (LCY/min)	x	60 60min/hr	x	0.83 efficiency factor	= 87.8	LCY/hr
Hours required	=	10 volume to be moved (LCY)	/	87.8 hourly production (LCY/hr)	=	0.1	hr	

Hourly estimate for hauling 8.4cy of material to Vent 3

No. Loader Passes/Truck	=	10.4	/	3.2	=	3.3	passes
		Struck truck capacity x 0.8 (LCY)		Loader bucket capacity x 0.8 (LCY)			
Net Truck Capacity	=	3.2	x	3.3	=	10.4	LCY
		Loader bucket capacity (LCY)		no. loader passes/truck			
Loading time/Truck	=	2	x	3.3	=	7	min
		loader cycle time (min)		no. loader passes/truck			
Truck cycle time	=	2	+	6.4	+	2	+ 6.1 = 16.5 min
		Load time (min)		Loaded travel time (min)		Unload/maneuver time (min)	Empty travel time (min)
No. trucks required	=	16.5	/	6.5	=	2.5	Trucks (use 2)
		truck cycle time (min)		total loading time (min)			
Production rate	=	10.4	x	2	/	16.5	= 1.3 LCY/min
		net truck capacity (LCY)		no. trucks		truck cycle time (min)	
Hourly production	=	1.3	x	60	x	0.83	= 62.8 LCY/hr
		production rate (LCY/min)		60min/hr		efficiency factor	
Hours required	=	10	/	62.8	=	0.2	hr
		volume to be moved (LCY)		hourly production (LCY/hr)			

Hourly estimate for hauling 8.4cy of material to Shaft 1

No. Loader Passes/Truck	=	10.4	/	3.2 Loader bucket capacity x 0.8 (LCY)	=	3.3	passes
Net Truck Capacity	=	3.2 Struck truck capacity x 0.8 (LCY)	x	3.3 no. loader passes/truck	=	10.4	LCY
Loading time/Truck	=	2 loader cycle time (min)	x	3.3 no. loader passes/truck	=	7	min
Truck cycle time	=	2 Load time (min)	+	3.4 Loaded travel time (min)	+	2 Unload/maneuver time (min)	+ 2.5 Empty travel time (min) = 9.9 min
No. trucks required	=	9.9 truck cycle time (min)	/	6.5 total loading time (min)	=	1.5	Trucks (use 2)
Production rate	=	10.4 net truck capacity (LCY)	x	2 no. trucks	/	9.9 truck cycle time (min)	= 2.1 LCY/min
Hourly production	=	2.1 production rate (LCY/min)	x	60 60min/hr	x	0.83 efficiency factor	= 104.6 LCY/hr
Hours required	=	10 volume to be moved (LCY)	/	104.6 hourly production (LCY/hr)	=	0.1	hr

Hourly estimate for hauling 20 cy of material to Shaft 2

No. Loader Passes/Truck	=	10.4	/	3.2 Loader bucket capacity x 0.8 (LCY)	=	3.3	passes
Net Truck Capacity	=	3.2 Loader bucket capacity (LCY)	x	3.3 no. loader passes/truck	=	10.4	LCY
Loading time/Truck	=	2 loader cycle time (min)	x	3.3 no. loader passes/truck	=	7	min
Truck cycle time	=	2 Load time (min)	+	8.4 Loaded travel time (min)	+	2 Unload/maneuver time (min)	+ 6.2 Empty travel time (min)
No. trucks required	=	18.6 truck cycle time (min)	/	6.5 total loading time (min)	=	2.9	Trucks (use 2)
Production rate	=	10.4 net truck capacity (LCY)	x	2 no. trucks	/	18.6 truck cycle time (min)	= 1.1 LCY/min
Hourly production	=	1.1 production rate (LCY/min)	x	60 60min/hr	x	0.83 efficiency factor	= 55.7 LCY/hr
Hours required	=	20 volume to be moved (LCY)	/	55.7 hourly production (LCY/hr)	=	0.4	hr

COST DETAIL

Quantity **11,052 cy**
 Unit Price \$ **4.20 per cy**

Equipment Fleet							
Item	Description	Commitment	Quantity	Rate ⁽¹⁾	Hours	Cost	
1	966G Loader	100%	1	\$ 148.84	125	\$ 18,542.93	
2	D25D Truck	100%	1	\$ 178.44	125	\$ 22,230.58	
3	140H Grader	50%	1	\$ 124.97	0	\$ -	
4	GMC Water truck 4000 gallon	50%	1	\$ 90.84	125	\$ 5,658.56	
5	D8R Dozer	25%	1	\$ 216.97	0	\$ -	
	Select Equipment			\$ -	0	\$ -	
Total Item Cost						\$ 46,432.06	

Labor						
Item	Description	Commitment	Quantity	Rate	Hours	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Materials and Subcontractors						
Item	Description	Units	Quantity	Rate	Remarks	Cost
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
				\$ -		\$ -
Total Item Cost						\$ -

Notes:

1. See WS 13 Equipment Cost for breakdown of Equipment cost
2. Dozer for pile knockdown
3. Unit price based on bank volume