ENERGY WEST
MINING COMPANY
A SUBSIDIARY OF PACIFICORP

Incoming
C0150009
#4197
R

P.O. Box 310
15 North Main Street
Huntington, Utah 84528

September 27, 2012

Hand Delivered

Department of Natural Resources
Utah Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84116

RECEIVED
SEP 27 2012
DIV. OF OIL, GAS & MINING

Subj: Amendment to Update the Trail Mountain Mine Reclamation Bond Calculation and Escalate Costs FY 2017, PacifiCorp, Trail Mountain Mine, C/015/0009, Emery County, Utah.

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company (Energy West), hereby submits an amendment to update the bond calculations for the Trail Mountain Mine site. This revised calculation completely replaces the bond that currently exists in the mine's mining and reclamation plan.

In 2001, the Trail Mountain Mine reclamation bond estimate was posted for $664,264.00 and escalated to 2005 dollars of $805,723.00. During the following mid-term review, the Division recalculated the bond to the amount of $1,254,000. PacifiCorp provided (Nov. 2002) a surety for $1,254,000 but has never received a copy of the Division's bond estimate for the Trail Mountain Mine. The bond estimate was never incorporated into the MRP.

In June 2012, the Division commenced its mid-term review of the Trail Mountain Mine MRP. During its review, the Division requested that Energy West provide an updated bond calculation to determine if the current surety was adequate. Through coordination and cooperation with the Division, Energy West provided an updated bond estimate (in 2012 dollars) and escalated the amount to 2017 dollars. It was found that the current surety amount was satisfactory.

However, because the newly recalculated bond follows the format of our other mine's bond calculations, Energy West prefers to replace the current bond calculation (with attached backup data). During the past mid-term review, the Division agreed with the amounts of the recalculated bond estimate.

This amendment includes text changes in Volume 1, Chapter 3, as well as, removal of the current bond estimate and replacement with the new. As required, a C1/C2 for is attached for assistance in placement of the amended pages.

File in:
- ☐ Confidential
- ☐ Shelf
- ☒ Expandable

Date Folder 092712 C/015 0009
Incoming

If needed, please feel free to contact myself at (435) 687-4712 or Dennis Oakley at (801) 220-4607 if you have any questions or concerns regarding this amendment.

Sincerely,

Dennis Oakley

for Kenneth Fleck
Geology and Environmental Affairs Manager

Encl

Cc file

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: PacifiCorp

Mine: Trail Mountain Mine **Permit Number:** C/015/0009

Title: Amendment to Update the Trail Mountain Mine Reclamation Bond Calculation and Escalate Costs FY 2017, PacifiCorp, Trail Mountain Mine, C/015/0009, Emery County, Utah.

Description, Include reason for application and timing required to implement:

Includes a more accurate bond estimate with backup data.

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: _____ ☐ increase ☐ decrease.
☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# _____
☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
☒ Yes ☐ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes ☒ No 6. Does the application require or include public notice publication?
☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # _____
☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
☐ Yes ☒ No 11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☐ Yes ☒ No 17. Does the application require or include construction, modification, or removal of surface facilities?
☐ Yes ☒ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
☐ Yes ☒ No 19. Does the application require or include certified designs, maps or calculation?
☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
☒ Yes ☐ No 21. Have reclamation costs for bonding been provided?
☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Kenneth Fleck — Print Name

Kenneth S. Fleck — Manager of Environmental Affairs — SEPT. 27, 2012

Sign Name, Position, Date

Subscribed and sworn to before me this 27 day of SEPTEMBER 20 12

Notary Public

My commission Expires: APRIL 5, 2015

Attest: State of UTAH } ss.
County of EMERY

NOTARY PUBLIC
ERROL DURRANT
608071
COMMISSION EXPIRES
APRIL 5, 2015
STATE OF UTAH

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining
		RECEIVED SEP 27 2012 DIV. OF OIL, GAS & MINING

Form DOGM- C1 (Revised March 12, 2002)

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: PacifiCorp
Mine: Trail Mountain Mine **Permit Number:** C/019/0009
Title: Amendment to Update the Trail Mountain Mine Reclamation Bond Calculation and Escalate Costs FY 2017, PacifiCorp, Trail Mountain Mine, C/015/0009, Emery County, Utah.

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Volume 1, Chapter 3, pages 72 and 73
☐ Add	☐ Replace	☒ Remove	Volume 1, Chapter 3, pages 74 - 84
☒ Add	☐ Replace	☐ Remove	Volume 1, Chapter 3, Tab - Appendix 1
☒ Add	☐ Replace	☐ Remove	Volume 1, Chapter 3, Appendix 1 - add new bond estimation
☐ Add	☐ Replace	☐ Remove	
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Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining
	RECEIVED SEP 27 2012 DIV. OF OIL, GAS & MINING

3.5.7 Cost Estimate for Reclamation

The 1979 Act "Regulation of Coal Mining and Reclamation Operations" requires the operator of a coal mine to file with the Utah Division of Oil, Gas and Mining (DOGM) a bond in the amount equal to the estimated cost of completing the work described in the operator's reclamation plan. The bond is to ensure the State of Utah that in the event of the operator being financially unable to reclaim the disturbed areas, such areas can and will be restored by the DOGM at no cost to state residents.

The strata characteristics above the coal seam, the slow and uniform rate of subsidence will not affect the surface terrain to such an extent that reclamation will be necessary. As such, a reclamation bond is not required for the surface lands over the underground workings.

An estimate of the cost of reclamation of the Trail Mountain Mine site is shown ~~on the following pages, in Table 3-4~~ in Appendix 1. ~~This table reflects the required bond increase from all additions~~. Supporting cost calculations for each major reclamation step is also presented. ~~The amount of the bond posted for this operation is broken down on the final page in Table 3-5.~~

Earthwork estimates for final reclamation are summarized in the Mass Balance Table 3-~~6~~4. The quantities are taken from cross-sectional areas shown on Plate 3-6. Cross section locations are shown on Plates 3-1 and 3-5. Estimates indicate a cut volume of 38,579 cubic yards and a required fill volume of 39,719 cubic yards for final mine site reclamation.

TABLE 3-64
MASS BALANCE

STATION	CUT VOLUME CU YDS	FILL VOLUME CU YDS	ACC CUT VOLUME CU YDS	ACC FILL VOLUME CU YDS
0+00	0	0	0	0
2+00	1,556	1,467	1,556	1,467
4+00	3,778	3,022	5,334	4,489
6+00	4,889	4,519	10,223	9,008
8+00	6,222	6,148	16,445	15,156
10+00	5,511	5,482	21,956	20,638
12+00	4,341	3,259	26,297	23,897
14+00	3,719	3,170	30,016	27,067
16+00	2,533	3,926	32,549	30,993
18+00	3,185	3,511	35,734	34,504
20+00	2,415	2,400	38,149	36,904
22+00	430	1,200	38,579	38,104
24+00	0	1,274	38,579	39,378
25+00	0	341	38,579	39,719
TOTALS	38,579	39,719	38,579	39,719

NOTES: (1) Refer to Plates 3-1 and 3-5 for cross sections. (2) Refer to Plate 3-6 for cross section

Direct Costs		
Subtotal Demolition and Removal	$369,084.77	
Subtotal Backfilling and Grading	$203,096.83	
Subtotal Revegetation	$38,547.16	
Subtotal Direct Costs	$610,728.76	
Indirect Costs		
Mob/Demob	$61,072.88	10.0%
Contingency	$30,536.44	5.0%
Engineering Redesign	$15,268.22	2.5%
Main Office Expense	$41,529.56	6.8%
Project Mainagement Fee	$15,268.22	2.5%
Subtotal Indirect Costs	$163,675.31	26.8%
Total Cost 2012 Dollars	**$774,404.06**	
Number of years		5
Escalation to 2017		0.012
Escalation Dollars	$47,592.85	
Escalated Reclamation Cost to 2017	**$821,996.91**	
Reclamation Cost (rounded to nearest $1,000)	**$822,000.00**	

Demolition Cost Summary		
Item #	Description	Cost
1	Substation, Powerline, & Poles	$ 4,273.22
2	Shop, Bathhouse	$ 21,014.10
3	Water Treatment Plant, Tanks, Fuel	$ 4,637.30
4	Sewer System	$ 4,523.24
5	Miscellaneous Concrete	$ 23,760.80
6	Concrete Pads	$ 28,232.64
7	Waste and Salt Bunkers	$ 3,360.30
8	Truck Loadout and Silo	$ 24,191.60
9	Chutes and Trusses	$ 21,814.12
10	Mine Fan	$ 30,514.76
11	Storage Shed	$ 4,000.08
12	ROM Transfer Building	$ 28,156.48
13	ROM Overland Conveyor	$ 25,084.20
14	Loading Dock and Tank Farm	$ 8,910.04
15	Coal Pile Retaining Wall	$ 3,974.16
16	Sediment Pond	$ 1,250.04
17	Portals	$ 41,600.00
18	Culvert Removal	$ 32,534.86
19	Portal Liners	$ 5,903.04
20	Gunite Removal	$ 4,501.84
21	Rock Dust Tank	$ 1,287.84
22	Fence Removal	$ 3,343.52
23	Asphalt Removal	$ 42,216.59
	Total	$ 369,084.77

01 - Substation, Powerline, & Poles											
Description Substation, Powerline, & Poles	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						15					
	01 54 33 20 0300	Excavator - 2.0 CY		1			4.0	hr	$ 156.62	$ 626.48	
	01 54 33 20 0342	Bucket Thumb		1			4.0	hr	$ 21.05	$ 84.20	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Concrete Demolition Cost					98.8						2, 3
	01 54 33 20 0300	Excavator - 2.0 CY		1			2.0	hr	$ 156.62	$ 313.24	
	01 54 33 20 0347	Hydraulic Hammer		1			2.0	hr	$ 45.57	$ 91.14	
	Equipment Operator, Medium Equipment		Eqmd	1			2.0	hr	$ 70.25	$ 140.50	
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	2			2.0	hr	$ 54.00	$ 216.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			2.0	hr	$ 58.45	$ 116.90	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			2.0	hr	$ 1.22	$ 2.44	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			2.0	hr	$ 0.38	$ 0.76	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	1
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	1			4.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					15		ton	$ 15.00	$ 225.00	
Demolished Concrete Handling					128.44						6
	01 54 33 20 4760	Loader - 8 CY		1			2.0	hr	$ 232.00	$ 464.00	
	Equipment Operator, Medium Equipment		Eqmd	1			2.0	hr	$ 70.25	$ 140.50	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			6.0	hr	$ 17.37	$ 104.22	
	01 54 33 40 6410	Toilet, portable chemical		1			6.0	hr	$ 1.62	$ 9.72	
Total										**$ 4,273.22**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 01)
(Concrete Ref - 01)

02 - Office, Shop, Bathhouse, Warehouse											
Description Shop, Bathhouse	**Means Reference Number (2012 Heavy Construction Cost Data)**	**Equipment**	**Labor**	**Quantity (number)**	**Volume (cy)**	**Weight (tons)**	**Time (hr)**	**Unit**	**Cost**	**Total Cost**	**Ref.**
Steel Demolition Cost						30					
	Foreman Average, Outside		Foreman	1			16.0	hr	$ 73.30	$ 1,172.80	
	Common Building Labor		CLAB	3			16.0	hr	$ 54.00	$ 2,592.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			16.0	hr	$ 156.62	$ 2,505.92	
	Equipment Operator, Medium Equipment		Eqmd	1			16.0	hr	$ 70.25	$ 1,124.00	
	01 54 33 20 0342	Bucket Thumb		1			16.0	hr	$ 21.05	$ 336.80	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			16.0		$ 13.14		
Concrete Demolition Cost					259						
	Foreman Average, Outside		Foreman	1			10.0	hr	$ 73.30	$ 733.00	
	Common Building Labor		CLAB	2			10.0	hr	$ 54.00	$ 1,080.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			10.0	hr	$ 156.62	$ 1,566.20	
	Equipment Operator, Medium Equipment		Eqmd	1			10.0	hr	$ 70.25	$ 702.50	
	01 54 33 20 0347	Hydraulic Hammer		1			10.0	hr	$ 45.57	$ 455.70	
	01 54 33 20 0300	Excavator - 2.0 CY		1			10.0	hr	$ 156.62	$ 1,566.20	
	01 54 33 20 0342	Bucket Thumb		1			10.0	hr	$ 21.05	$ 210.50	
	Equipment Operator, Medium Equipment		Eqmd	1			10.0	hr	$ 21.05	$ 210.50	
	01 54 33 40 0700	Compressor - 600 CFM		1			10.0	hr	$ 58.45	$ 584.50	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			10.0	hr	$ 1.22	$ 12.20	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		4			10.0	hr	$ 0.38	$ 15.20	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			10.0	hr	$ 13.14	$ 131.40	
Transportation Costs	01 54 33 20 5300	Dump Truck - 3 axle, 12 CY		2			16.0	hr	$ 73.07	$ 2,338.24	5
	Truck Driver, Heavy		Drhv	2			16.0	hr	$ 53.55	$ 1,713.60	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					336.7						3
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			16.0	hr	$ 17.37	$ 277.92	1
	01 54 33 40 6410	Toilet, portable chemical		1			16.0	hr	$ 1.62	$ 25.92	
Total										**$ 21,014.10**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 02)
(Concrete Ref - 02)

03 - Water Treatment Plant, Water StorageTanks and Fuel Storage Facility											
Description Water Treatment Plant, Tanks, Fuel	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						10					
	01 54 33 20 0300	Aeriel Lift, 60 feet		1			4.0	hr	$ 55.92	$ 223.68	
	01 54 33 20 0342	Crane - 25 ton		1			4.0	hr	$ 87.15	$ 348.60	
	Equipment Operator, Crane or Shovel		Eqhv	1			4.0	hr	$ 72.15	$ 288.60	
		Excavator - 2.0 CY		1			4.0	hr	$ 156.62	$ 626.48	
	01 54 33 20 0342	Bucket Thumb		1			4.0	hr	$ 21.05	$ 84.20	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Concrete Demolition Cost											
(Refer to 05 - Concrete Pads)											
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			2.0	hr	$ 73.07	$ 146.14	5
	Truck Driver, Heavy		Drhv	2			2.0	hr	$ 53.55	$ 214.20	
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			4.0		$ 39.35	$ 157.40	5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			4.0		$ 13.57	$ 54.28	5
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					10		ton	$ 15.00	$ 150.00	
Demolished Concrete Handling					0						
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			4.0	hr	$ 17.37	$ 69.48	1
	01 54 33 40 6410	Toilet, portable chemical		1			4.0	hr	$ 1.62	$ 6.48	
Total										**$ 4,637.30**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 03)
(Concrete Ref - 05)

04 - Sewer Collection and Pumping System											
Description Sewer System	**Means Reference Number (2012 Heavy Construction Cost Data)**	**Equipment**	**Labor**	**Quantity (number)**	**Volume (cy)**	**Weight (tons)**	**Time (hr)**	**Unit**	**Cost**	**Total Cost**	**Ref.**
Steel Demolition Cost						15					
	01 54 33 20 0342	Crane - 25 ton		1			4.0	hr	$ 87.15	$ 348.60	
	Equipment Operator, Crane or Shovel		Eqhv	1			4.0	hr	$ 72.15	$ 288.60	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Concrete Demolition Cost					30.4						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			2.0	hr	$ 156.62	$ 313.24	
	01 54 33 20 0347	Hydraulic Hammer		1			2.0	hr	$ 45.57	$ 91.14	
	Equipment Operator, Medium Equipment		Eqmd	1			2.0	hr	$ 70.25	$ 140.50	
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	2			2.0	hr	$ 54.00	$ 216.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			2.0	hr	$ 58.45	$ 116.90	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			2.0	hr	$ 1.22	$ 2.44	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			2.0	hr	$ 0.38	$ 0.76	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	1			4.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					15		ton	$ 15.00	$ 225.00	
Demolished Concrete Handling					39.52						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			6.0	hr	$ 17.37	$ 104.22	1
	01 54 33 40 6410	Toilet, portable chemical		1			6.0	hr	$ 1.62	$ 9.72	
Total										**$ 4,523.24**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 04)
(Concrete Ref - 04)

05 - Miscellaneous Concrete											
Description Miscellaneous Concrete	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost											
Concrete Demolition Cost					596.3						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			40.0	hr	$ 156.62	$ 6,264.80	
	01 54 33 20 0342	Bucket Thumb		1			40.0	hr	$ 21.05	$ 842.00	
	Equipment Operator, Medium Equipment		Eqmd	1			40.0	hr	$ 70.25	$ 2,810.00	
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	1			40.0	hr	$ 54.00	$ 2,160.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			40.0	hr	$ 58.45	$ 2,338.00	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			40.0	hr	$ 1.22	$ 48.80	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			40.0	hr	$ 0.38	$ 15.20	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			40.0	hr	$ 13.14	$ 525.60	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			40.0	hr	$ 73.07	$ 2,922.80	5
	Truck Driver, Heavy		Drhv	1			40.0	hr	$ 53.55	$ 2,142.00	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					0		ton	$ 15.00	$ -	
Demolished Concrete Handling					775.19						6
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 23,760.80**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet

(Concrete Ref - 05)

06 - Pumphouse, Tanks, and Concrete Pads											
Description Concrete Pads	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						55					
		Aeriel Lift, 60 feet		1			40	hr	$ 55.92	$ 2,236.80	
		Crane - 25 ton		1			40	hr	$ 87.15	$ 3,486.00	
	Equipment Operator, Crane or Shovel			1			40	hr	$ 72.15	$ 2,886.00	
		Excavator - 2.0 CY		1			4	hr	$ 156.62	$ 626.48	
		Bucket Thumb		1			4	hr	$ 21.05	$ 84.20	
	Equipment Operator, Medium Equipment			1			4	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside			1			40	hr	$ 73.30	$ 2,932.00	
	Common Building Labor			3			40	hr	$ 54.00	$ 6,480.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			40	hr	$ 13.14	$ 525.60	
Concrete Demolition Cost					151.3						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			8.0	hr	$ 156.62	$ 1,252.96	
	01 54 33 20 0347	Hydraulic Hammer		1			8.0	hr	$ 45.57	$ 364.56	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	Foreman Average, Outside		Foreman	1			8.0	hr	$ 73.30	$ 586.40	
	Common Building Labor		CLAB	2			8.0	hr	$ 54.00	$ 864.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			8.0	hr	$ 58.45	$ 467.60	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			8.0	hr	$ 1.22	$ 9.76	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			8.0	hr	$ 0.38	$ 3.04	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			8.0	hr	$ 13.14	$ 105.12	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			6.0	hr	$ 73.07	$ 438.42	5
	Truck Driver, Heavy		Drhv	2			6.0	hr	$ 53.55	$ 642.60	
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			24.0	hr			5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			24.0	hr			5
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					55		ton	$ 15.00	$ 825.00	
Demolished Concrete Handling					196.69						6
	01 54 33 20 4760	Loader - 8 CY		1			6.0	hr	$ 232.00	$ 1,392.00	
	Equipment Operator, Medium Equipment		Eqmd	1			6.0	hr	$ 70.25	$ 421.50	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 28,232.64**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 06)
(Concrete Ref - 06)

07 - Non Coal Waste and Salt Bunkers

Description Waste and Salt Bunkers	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						30					
	01 54 33 20 0342	Crane - 25 ton		1			2.0	hr	$ 87.15	$ 174.30	
	Equipment Operator, Crane or Shovel		Eqhv	1			2.0	hr	$ 72.15	$ 144.30	
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	2			2.0	hr	$ 54.00	$ 216.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	
Concrete Demolition Cost					16.7						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			2.0	hr	$ 156.62	$ 313.24	
	01 54 33 20 0347	Hydraulic Hammer		1			2.0	hr	$ 45.57	$ 91.14	
	Equipment Operator, Medium Equipment		Eqmd	1			2.0	hr	$ 70.25	$ 140.50	
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	2			2.0	hr	$ 54.00	$ 216.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			2.0	hr	$ 58.45	$ 116.90	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			2.0	hr	$ 1.22	$ 2.44	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			2.0	hr	$ 0.38	$ 0.76	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	1			4.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					21.71						6
	01 54 33 20 4760	Loader - 8 CY		1			2.0	hr	$ 232.00	$ 464.00	
	Equipment Operator, Medium Equipment		Eqmd	1			2.0	hr	$ 70.25	$ 140.50	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			2.0	hr	$ 17.37	$ 34.74	1
	01 54 33 40 6410	Toilet, portable chemical		1			2.0	hr	$ 1.62	$ 3.24	
Total										**$ 3,360.30**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 07)
(Concrete Ref - 07)

08 - Truck Loadout and Silo											
Description Truck Loadout and Silo	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						30					
	01 54 33 20 0342	Crane - 25 ton		1			40.0	hr	$ 87.15	$ 3,486.00	
	Equipment Operator, Crane or Shovel		Eqhv	1			40.0	hr	$ 72.15	$ 2,886.00	
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	3			40.0	hr	$ 54.00	$ 6,480.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		2			40.0	hr	$ 13.14	$ 1,051.20	
Concrete Demolition Cost					22.8						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			4.0	hr	$ 156.62	$ 626.48	
	01 54 33 20 0347	Hydraulic Hammer		1			4.0	hr	$ 45.57	$ 182.28	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			4.0	hr	$ 58.45	$ 233.80	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			4.0	hr	$ 1.22	$ 4.88	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			4.0	hr	$ 0.38	$ 1.52	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			8.0	hr	$ 73.07	$ 584.56	5
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			8.0	hr	$ 39.35	$ 314.80	5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			16.0	hr	$ 13.57	$ 217.12	5
	Truck Driver, Heavy		Drhv	2			16.0	hr	$ 53.55	$ 1,713.60	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					29.64						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 24,191.60**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 08)
(Concrete Ref - 08)

09 - Chutes and Trusses from Crusher											
Description Chutes and Trusses	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						30					
	01 54 33 20 0342	Crane - 25 ton		1			40.0	hr	$ 87.15	$ 3,486.00	
	Equipment Operator, Crane or Shovel		Eqhv	1			40.0	hr	$ 72.15	$ 2,886.00	
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	3			40.0	hr	$ 54.00	$ 6,480.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		2			40.0	hr	$ 13.14	$ 1,051.20	
Concrete Demolition Cost											
Transportation Costs											
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			16.0	hr	$ 39.35	$ 629.60	5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			16.0	hr	$ 13.57	$ 217.12	5
	Truck Driver, Heavy		Drhv	2			16.0	hr	$ 53.55	$ 1,713.60	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					0						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 21,814.12**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 09)

10 - Mine Fan											
Description Mine Fan	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						30					
	01 54 33 20 0342	Crane - 25 ton		1			40.0	hr	$ 87.15	$ 3,486.00	
	Equipment Operator, Crane or Shovel		Eqhv	1			40.0	hr	$ 72.15	$ 2,886.00	
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	3			40.0	hr	$ 54.00	$ 6,480.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		2			40.0	hr	$ 13.14	$ 1,051.20	
Concrete Demolition Cost					158.7						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			16.0	hr	$ 156.62	$ 2,505.92	
	01 54 33 20 0347	Hydraulic Hammer		1			16.0	hr	$ 45.57	$ 729.12	
	Equipment Operator, Medium Equipment		Eqmd	1			16.0	hr	$ 70.25	$ 1,124.00	
	Foreman Average, Outside		Foreman	1			16.0	hr	$ 73.30	$ 1,172.80	
	Common Building Labor		CLAB	2			16.0	hr	$ 54.00	$ 1,728.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			16.0	hr	$ 58.45	$ 935.20	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			16.0	hr	$ 1.22	$ 19.52	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			16.0	hr	$ 0.38	$ 6.08	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			16.0	hr	$ 13.14	$ 210.24	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			8.0	hr	$ 73.07	$ 584.56	5
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			8.0	hr	$ 39.35	$ 314.80	5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			16.0	hr	$ 13.57	$ 217.12	5
	Truck Driver, Heavy		Drhv	2			16.0	hr	$ 53.55	$ 1,713.60	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					206.31						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 30,514.76**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 10)
(Concrete Ref - 10)

11 - Storage Shed											
Description Storage Shed	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						15					
	01 54 33 20 0300	Excavator - 2.0 CY		1			4.0	hr	$ 156.62	$ 626.48	
	01 54 33 20 0342	Bucket Thumb		1			4.0	hr	$ 21.05	$ 84.20	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Concrete Demolition Cost											
Transportation Costs											
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	2			4.0	hr	$ 53.55	$ 428.40	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					15		ton	$ 15.00	$ 225.00	
Demolished Concrete Handling					0						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			4.0	hr	$ 17.37	$ 69.48	1
	01 54 33 40 6410	Toilet, portable chemical		1			4.0	hr	$ 1.62	$ 6.48	
Total										**$ 4,000.08**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 11)

12 - ROM Transfer Building											
Description ROM Transfer Building	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						50					
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	3			40.0	hr	$ 54.00	$ 6,480.00	
	01 54 33 60 2720	Crane 100 ton		1			40.0	hr	$ 193.37	$ 7,734.80	
	Equipment Operator, Crane or Shovel		Eqhv	1			40.0	hr	$ 72.15	$ 2,886.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		2			40.0	hr	$ 13.14	$ 1,051.20	
Concrete Demolition Cost					0						2,3
Transportation Costs	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			16.0	hr	$ 13.57	$ 217.12	
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			16.0	hr	$ 39.35	$ 629.60	
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			8.0	hr	$ 73.07	$ 584.56	5
	Truck Driver, Heavy		Drhv	2			16.0	hr	$ 53.55	$ 1,713.60	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					50		ton	$ 15.00	$ 750.00	
Demolished Concrete Handling					0						6
	01 54 33 20 4760	Loader - 8 CY		1			8.0	hr	$ 232.00	$ 1,856.00	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 28,156.48**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 12)

13 - ROM Overland Tube Conveyor											
Description ROM Overland Conveyor	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						30					
	Foreman Average, Outside		Foreman	1			28.0	hr	$ 73.30	$ 2,052.40	
	Common Building Labor		CLAB	3			28.0	hr	$ 54.00	$ 4,536.00	
	01 54 33 60 2720	Crane 100 ton		1			28.0	hr	$ 193.37	$ 5,414.36	
	Equipment Operator, Crane or Shovel		Eqhv	1			28.0	hr	$ 72.15	$ 2,020.20	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		2			28.0	hr	$ 13.14	$ 735.84	
Concrete Demolition Cost					88.5						2,3
	Foreman Average, Outside		Foreman	1			8.0	hr	$ 73.30	$ 586.40	
	Common Building Labor		CLAB	2			8.0	hr	$ 70.25	$ 1,124.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			8.0	hr	$ 156.62	$ 1,252.96	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 20 0347	Hydraulic Hammer		1			8.0	hr	$ 45.57	$ 364.56	
	01 54 33 40 0700	Compressor - 600 CFM		1			16.0	hr	$ 58.45	$ 935.20	
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			16.0	hr	$ 1.22	$ 19.52	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			16.0	hr	$ 0.38	$ 6.08	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			16.0	hr	$ 13.14	$ 210.24	
Transportation Costs	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			8.0	hr	$ 13.57	$ 108.56	
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			8.0	hr	$ 39.35	$ 314.80	
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			8.0	hr	$ 73.07	$ 584.56	5
	Truck Driver, Heavy		Drhv	2			8.0	hr	$ 53.55	$ 856.80	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					30		ton	$ 15.00	$ 450.00	
Demolished Concrete Handling					115.05						6
	01 54 33 20 4760	Loader - 8 CY		1			8.0	hr	$ 232.00	$ 1,856.00	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			28.0	hr	$ 17.37	$ 486.36	1
	01 54 33 40 6410	Toilet, portable chemical		1			28.0	hr	$ 1.62	$ 45.36	
Total										**$ 25,084.20**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 13)
(Concrete Ref - 13)

14 - Loading Dock and Tank Farm											
Description Loading Dock and Tank Farm	**Means Reference Number (2012 Heavy Construction Cost Data)**	**Equipment**	**Labor**	**Quantity (number)**	**Volume (cy)**	**Weight (tons)**	**Time (hr)**	**Unit**	**Cost**	**Total Cost**	**Ref.**
Steel Demolition Cost						5					
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	1			2.0	hr	$ 54.00	$ 108.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			2.0	hr	$ 156.62	$ 313.24	
	01 54 33 20 0342	Bucket Thumb		1			2.0		$ 21.05	$ 42.10	
	Equipment Operator, Medium Equipment		Eqhv	1			2.0	hr	$ 70.25	$ 140.50	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	
Concrete Demolition Cost					49.3						2,3
	Foreman Average, Outside		Foreman	1			8.0	hr	$ 73.30	$ 586.40	
	Common Building Labor		CLAB	2			8.0	hr	$ 70.25	$ 1,124.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			8.0	hr	$ 156.62	$ 1,252.96	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 20 0347	Hydraulic Hammer		1			8.0	hr	$ 45.57	$ 364.56	
	01 54 33 40 0700	Compressor - 600 CFM		1			8.0	hr	$ 58.45	$ 467.60	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			8.0	hr	$ 1.22	$ 9.76	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			8.0	hr	$ 0.38	$ 3.04	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			8.0	hr	$ 13.14	$ 105.12	
Transportation Costs											
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			8.0	hr	$ 73.07	$ 584.56	5
	Truck Driver, Heavy		Drhv	1			8.0	hr	$ 53.55	$ 428.40	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					5		ton	$ 15.00	$ 75.00	
Demolished Concrete Handling					64.09						6
	01 54 33 20 4760	Loader - 8 CY		1			8.0	hr	$ 232.00	$ 1,856.00	
	Equipment Operator, Medium Equipment		Eqmd	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			8.0	hr	$ 17.37	$ 138.96	1
	01 54 33 40 6410	Toilet, portable chemical		1			8.0	hr	$ 1.62	$ 12.96	
Total										**$ 8,910.04**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 14)
(Concrete Ref - 14)

15 - Coal Pile Retaining Wall											
Description Coal Pile Retaining Wall	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						5					
Concrete Demolition Cost					29.6						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			4.0	hr	$ 156.62	$ 626.48	
	01 54 33 20 0347	Hydraulic Hammer		1			4.0	hr	$ 45.57	$ 182.28	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	Foreman Average, Outside		Foreman	1			4.0	hr	$ 73.30	$ 293.20	
	Common Building Labor		CLAB	2			4.0	hr	$ 54.00	$ 432.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			4.0	hr	$ 58.45	$ 233.80	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			4.0	hr	$ 1.22	$ 4.88	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			4.0	hr	$ 0.38	$ 1.52	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			4.0	hr	$ 13.14	$ 52.56	
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	1			4.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					5		ton	$ 15.00	$ 75.00	
Demolished Concrete Handling					38.48						6
	01 54 33 20 4760	Loader - 8 CY		1			4.0	hr	$ 232.00	$ 928.00	
	Equipment Operator, Medium Equipment		Eqmd	1			4.0	hr	$ 70.25	$ 281.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			4.0	hr	$ 17.37	$ 69.48	1
	01 54 33 40 6410	Toilet, portable chemical		1			4.0	hr	$ 1.62	$ 6.48	
Total										**$ 3,974.16**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 15)
(Concrete Ref - 15)

16 - Sediment Pond											
Description Sediment Pond	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						5					
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	1			2.0	hr	$ 54.00	$ 108.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			2.0	hr	$ 156.62	$ 313.24	
	01 54 33 20 0342	Bucket Thumb		1			2.0	hr	$ 21.05	$ 42.10	
	Equipment Operator, Medium Equipment		Eqhv	1			2.0	hr	$ 70.25	$ 140.50	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	
Concrete Demolition Cost											
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			2.0	hr	$ 73.07	$ 146.14	5
	Truck Driver, Heavy		Drhv	2			2.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					5		ton	$ 15.00	$ 75.00	
Demolished Concrete Handling					0						
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			2.0	hr	$ 17.37	$ 34.74	1
	01 54 33 40 6410	Toilet, portable chemical		1			2.0	hr	$ 1.62	$ 3.24	
Total										**$ 1,250.04**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 16)

17 - Portal											
Description Portals	**Reference Number (Personal Communications with Division)**	**Equipment**	**Labor**	**Quantity (number)**	**Volume (cy)**	**Weight (tons)**	**Time (hr)**	**Unit**	**Cost**	**Total Cost**	**Ref.**
Steel Demolition Cost	(see note)										
Concrete Demolition Cost	(see note)										
Miscellaneous											
Portal Closure	AML1			8				ea	$ 5,200.00	$ 41,600.00	
Total										**$ 41,600.00**	

Note: Costs are all inclusive of equipment and labor to backfill and seal portal.

18 - Culvert Removal											
Description Culvert Removal	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						104.5					
		Excavator - 2.0 CY		1			40.0	hr	$ 156.62	$ 6,264.80	
	01 54 33 20 0342	Bucket Thumb		1			40.0	hr	$ 21.05	$ 842.00	
	Equipment Operator, Medium Equipment		Eqmd	1			40.0	hr	$ 70.25	$ 2,810.00	
	Foreman Average, Outside		Foreman	1			40.0	hr	$ 73.30	$ 2,932.00	
	Common Building Labor		CLAB	2			40.0	hr	$ 54.00	$ 4,320.00	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			40.0	hr	$ 13.14	$ 525.60	
Concrete Demolition Cost											
Transportation Costs											
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			8.0		$ 39.35	$ 314.80	5
	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			8.0		$ 13.57	$ 108.56	5
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					104.5		ton	$ 15.00	$ 1,567.50	
Demolished Concrete Handling					0						
	01 54 33 20 4760	Loader - 8 CY		1			40.0	hr	$ 232.00	$ 9,280.00	
	Equipment Operator, Medium Equipment		Eqmd	1			40.0	hr	$ 70.25	$ 2,810.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			40.0	hr	$ 17.37	$ 694.80	1
	01 54 33 40 6410	Toilet, portable chemical		1			40.0	hr	$ 1.62	$ 64.80	
Total										**$ 32,534.86**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 18)

19 - Portal Liners											
Description Portal Liners	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost											
Concrete Demolition Cost					20.5						2,3
	01 54 33 20 0300	Excavator - 2.0 CY		1			12.0	hr	$ 156.62	$ 1,879.44	
	01 54 33 20 0347	Hydraulic Hammer		1			12.0	hr	$ 45.57	$ 546.84	
	Equipment Operator, Medium Equipment		Eqmd	1			12.0	hr	$ 70.25	$ 843.00	
	Foreman Average, Outside		Foreman	1			12.0	hr	$ 73.30	$ 879.60	
	Common Building Labor		CLAB	1			12.0	hr	$ 54.00	$ 648.00	
	01 54 33 40 0700	Compressor - 600 CFM		1			12.0	hr	$ 58.45	$ 701.40	4
	01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.		1			12.0	hr	$ 1.22	$ 14.64	
	01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.		1			12.0	hr	$ 0.38	$ 4.56	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			12.0	hr	$ 13.14	$ 157.68	
Transportation Costs											
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					0		ton	$ 15.00		
Demolished Concrete Handling					26.65						6
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			12.0	hr	$ 17.37	$ 208.44	1
	01 54 33 40 6410	Toilet, portable chemical		1			12.0	hr	$ 1.62	$ 19.44	
Total										**$ 5,903.04**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: Portal liner is based on (2) wing walls 8'x12'x8" either side portal opening and 1 header 2'x28'x12" across the top of the wing wall (3 portals)

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet

(Concrete Ref - 19)

20 - Gunite Removal											
Description Gunite Removal	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						5					
	Foreman Average, Outside		Foreman	1			8.0	hr	$ 73.30	$ 586.40	
	Common Building Labor		CLAB	1			8.0	hr	$ 54.00	$ 432.00	
	01 54 33 20 0300	Excavator - 2.0 CY		1			8.0	hr	$ 156.62	$ 1,252.96	
	01 54 33 20 0342	Bucket Thumb		1			8.0	hr	$ 21.05	$ 168.40	
	Equipment Operator, Medium Equipment		Eqhv	1			8.0	hr	$ 70.25	$ 562.00	
	01 54 33 40 0190	Aeriel Lift, 60 feet		1			8.0		$ 55.92	$ 447.36	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			8.0	hr	$ 13.14	$ 105.12	
Concrete Demolition Cost											
Transportation Costs	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 73.07	$ 292.28	5
	Truck Driver, Heavy		Drhv	2			4.0	hr	$ 53.55	$ 428.40	
Miscellaneous											
Disposal Fee - Metal	02 41 19 23 0950					5		ton	$ 15.00	$ 75.00	
Demolished Concrete Handling					0						
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			8.0	hr	$ 17.37	$ 138.96	1
	01 54 33 40 6410	Toilet, portable chemical		1			8.0	hr	$ 1.62	$ 12.96	
Total										**$ 4,501.84**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 20)

21 - Rock Dust Tank											
Description Rock Dust Tank	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						15					
	Foreman Average, Outside		Foreman	1			2.0	hr	$ 73.30	$ 146.60	
	Common Building Labor		CLAB	1			2.0	hr	$ 54.00	$ 108.00	
	01 54 33 60 2720	Crane 100 ton		1			2.0	hr	$ 193.37	$ 386.74	
	Equipment Operator, Crane or Shovel		Eqhv	1			2.0	hr	$ 72.15	$ 144.30	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			2.0	hr	$ 13.14	$ 26.28	1
Concrete Demolition Cost	N/A										2, 3
Transportation Costs	01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton		1			2.0	hr	$ 13.57	$ 27.14	5
	01 54 33 40 7300	Tractor, 4x2, 220hp		1			2.0	hr	$ 39.35	$ 78.70	5
	Truck Driver, Heavy		Drhv	1			2.0	hr	$ 53.55	$ 107.10	
Miscellaneous											
Disposal Fee - Metal	02 41 19.23 0950					15		ton	$ 15.00	$ 225.00	
Demolished Concrete Handling	N/A										
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			2.0	hr	$ 17.37	$ 34.74	1
	01 54 33 40 6410	Toilet, portable chemical		1			2.0	hr	$ 1.62	$ 3.24	
Total										**$ 1,287.84**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 21)

22 - Fence Removal											
Description Fence Removal	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost						10					
	Foreman Average, Outside		Foreman	1			8.0	hr	$ 73.30	$ 586.40	
	Common Building Labor		CLAB	2			8.0	hr	$ 54.00	$ 864.00	
	01 54 33 40 0470	Back-hoe 112hp		1			8.0	hr	$ 84.65	$ 677.20	
	Equipment Operator, Light Equipment		Eqlt	1			8.0	hr	$ 67.55	$ 540.40	
	01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose		1			8.0	hr	$ 13.14	$ 105.12	1
Concrete Demolition Cost	N/A										2, 3
Transportation Costs											
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		1			4.0	hr	$ 13.57	$ 54.28	5
	Truck Driver, Heavy		Drhv	1			4.0	hr	$ 53.55	$ 214.20	
Miscellaneous											
Disposal Fee - Metal	02 41 19.23 0950					10		ton	$ 15.00	$ 150.00	
Demolished Concrete Handling	N/A										
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			8.0	hr	$ 17.37	$ 138.96	1
	01 54 33 40 6410	Toilet, portable chemical		1			8.0	hr	$ 1.62	$ 12.96	
Total										**$ 3,343.52**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of steel demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip.
6 - A swell factor of 1.3 is used for crushed concrete.

Note: For concrete volumes and steel weights, refer to Concrete and Steel Estimations sheet
(Steel Ref - 22)

23 - Asphalt Removal											
Description Asphalt Removal	Means Reference Number (2012 Heavy Construction Cost Data)	Equipment	Labor	Quantity (number)	Volume (cy)	Weight (tons)	Time (hr)	Unit	Cost	Total Cost	Ref.
Steel Demolition Cost											
Concrete Demolition Cost	N/A										
Transportation Costs					838.37						6
	01 54 33 40 6500	Dump Truck - 3 axle, 12 CY		3			36.0	hr	$ 73.07	$ 7,891.56	5
	Truck Driver, Heavy		Drhv	3			36.0	hr	$ 53.55	$ 5,783.40	
Miscellaneous											
Disposal Fee - Asphalt	02 41 19.23 0950					1131.8		ton	$ 15.00	$ 16,976.99	7
Demolished Concrete Handling	N/A										
	01 54 33 20 4760	Loader - 8 CY		1			36.0	hr	$ 232.00	$ 8,352.00	
	Equipment Operator, Medium Equipment		Eqmd	1			36.0	hr	$ 70.25	$ 2,529.00	
	01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4		1			36.0	hr	$ 17.37	$ 625.32	1
	01 54 33 40 6410	Toilet, portable chemical		1			36.0	hr	$ 1.62	$ 58.32	
Total										**$ 42,216.59**	

Reference Information
1 - From Nielson Construction services contract with Energy West Mining - Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
2 - Concrete rubble disposed of as fill or permanently backfilled inside portals.
3 - Base on a concrete demolition production of 200 cubic yards per 8 hour shift. (Reference: http://www.indeco-breakers.com). Time increases depending on complexity of job.
4 - Added 5% for larger size compressor.
5 - For haul of asphalt demolition material to Nielsen's landfill. Distance is approximately 16.0 miles one-way. Time estimate is 1.5 hours for one round trip. Transportation dictates all machinery and labor times.
6 - A swell factor of 1.3 is used for asphalt.
7 - Assume weight of crushed asphalt is approximately 3510 lbs/cy (Ref. US Federal Highway Administration, Publication Number: FHWA-RD-97-148). Original quantity is 644.9 cy.
Asphalt will be hauled to Nielson Construction landfill and permanently disposed (Ref. personal communication with Nielson Construction). This landfill is a class 1 landfill.

Wage and Equipment Rates

Ref. - RSMeans Heavy Construction Data Handbook - 2012

Wage Rates	Abbrv.	Hourly Rate (includes O&P)
Foreman Average, Outside	Foreman	$73.30
Common Building Labor	CLAB	$ 54.00
Equipment Operator, Crane or Shovel	Eqhv	$ 72.15
Equipment Operator, Medium Equipment	Eqmd	$ 70.25
Equipment Operator, Light Equipment	Eqlt	$ 67.55
Truck Driver, Light	Trlt	$ 52.10
Truck Driver, Heavy	Trhv	$ 53.55

Equipment Rental Rates - Means Code	Description	Hourly Rate (includes O&P)	
01 54 33 20 0200	Excavator - 1.5 CY	$ 120.05	
01 54 33 20 0300	Excavator - 2.0 CY	$ 156.62	
01 54 33 20 0320	Excavator - 2.5 CY	$ 206.50	
01 54 33 20 0342	Bucket Thumb	$ 21.05	
01 54 33 20 0347	Hydraulic Hammer	$ 45.57	
01 54 33 20 1930	Grader 55,000 lbs.	$ 177.50	
01 54 33 20 3300	Sheepsfoot Vibratory Roller	$ 137.62	
01 54 33 20 3350	Smooth Drum Vibratory Roller	$ 64.35	
01 54 33 20 3525	Scraper - selp prop single 14 CY	$ 192.12	
01 54 33 20 3550	Scraper - selp prop duale 21 CY	$ 246.75	
01 54 33 20 3600	Scraper - selp prop duale 31 CY	$ 358.50	
01 54 33 20 4150	Dozer - 105hp	$ 68.85	
01 54 33 20 4310	Dozer - 300hp	$ 214.75	
01 54 33 20 4360	Dozer - 410hp	$ 284.00	
01 54 33 20 4760	Loader - 5.5 CY	$ 120.00	
01 54 33 20 4810	Loader - 8 CY	$ 232.00	
01 54 33 20 5300	Dump Truck - 3 axle, 12 CY	$ 73.07	
01 54 33 20 5310	Dump Truck - 4 axle, 18 CY	$ 93.12	
01 54 33 40 0460	Back-hoe 80hp	$ 45.47	
01 54 33 40 0470	Back-hoe 112hp	$ 84.65	
01 54 33 40 0600	Compressor - 600 CFM	$ 58.45	
01 54 33 40 0940	Air tools, breaker, pavement, 60 lb.	$ 1.22	
01 54 33 40 1000	Hose w/couplings 50 ft., 1" dia.	$ 0.38	
01 54 33 40 5800	Chain Saw, 18"	$ 3.42	
01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4	$ 17.37	Includes 3/4 ton 4x4 truck, metal tool box, acetylene kit, rack for oxygen and acetylene, 1/2" electric drill, 71/4 " circular saw, 9" grinder.
01 54 33 40 6500	Trailer, platform, flush deck, 2 axle, 25 ton	$ 13.57	
01 54 33 40 6950	Water Truck, Off-Highway 6000 gal.	$ 135.62	
01 54 33 40 7290	Flat Bed Truck	$ 26.97	
01 54 33 40 7300	Tractor, 4x2, 220hp	$ 39.35	
01 54 33 40 0190	Aeriel Lift, 60 feet	$ 55.92	
01 54 33 60 2500	Crane - 25 ton	$ 87.15	
01 54 33 60 2720	Crane - 100 ton	$ 193.37	
01 54 33 50 2200	Hydromulcher 3000 gal	$ 37.97	
01 54 33 40 6360	Torch, cutting, acetylene-oxygen 150' hose	$ 13.14	
Equipment Mobilization	**up to 50 miles RT**	**RT Cost each**	
01 54 36.50 0020	Equipment - 70 to 150hp	$ 246.00	
01 54 36.50 0100	Equipment - over 150hp	$ 455.00	
01 54 36.50 0600	Scraper - Self propelled 24 CY	$ 680.00	
01 54 36.50 2100	Crane - over 75 ton	$ 460.00	

Miscellaneous	Description	Cost / ton	
Nielson Construction	Disposal Fee	$ 15.00	Personal Communication w/Nielson Construction
01 54 33 40 6410	Toilet, portable chemical	$ 1.62	
01 54 33 40 2700*	Portable ventilation fan	$ 45.43	

*Substitute 100 kw genator for portable ventilation fan. Assuming a comparable cost.

Concrete Volume Estimation[1]/Steel Demolition[2]

Ref Sheet	Facility Description	Length	Width	Height	Area	Radius	CF	CY	Tons	Notes
01	**Substation**								15	
	Retaining Wall	275	0.67	5			921.25	34.1		Estimated and average height of 5'
	Pads		1		920		920	34.1		
	Foundation	275	3	1			825	30.6		
	Total							**98.8**	**15**	
02	**Office/Shop/Bathhouse/Warehouse**								30	considers metal in office, bathhouse, and shop plus includes demo of wood framed office
	Pads		0.5		4904		2452	90.8		
	Retaining Wall	25	0.67	5			83.75	3.1		
	Foundation	362	2	1			724	26.8		
	Concrete Block Walls	520	0.67	16			5574.4	138.3		CY multiplied by .67 to account for air space of blocks
	Total							**259.1**	**30**	
03	**Water Treatment Plant, Water StorageTanks and Fuel Storage Facility**								**10**	
04	**Sewer System/Collection Pumping**								**15**	misc equipment
	Walls	90	0.67	8			482.4	17.9		
	Pads		0.33		476		157.08	5.8		
	Foundation	90	2	1			180	6.7		
	Total							**30.4**	**15**	
05	**Concrete Pads**									
	Curb and Gutter	1300	2	1			2600	96.3		
	Miscellaneous Other							500.0		Arbitrarily added yardage to cover all miscellaneous concrete
	Total							**596.3**		
06	**Pumphouse, Tanks and Concrete Pads**								55	Steel demo includes raw water tank, lines, and pumphouse building
	Pumphouse - foundation	140	2	1			280	10.4		
	Pumphouse - stemwall	140	3	0.67			281.4	10.4		
	Pumphouse - pad	45	20	0.5			450	16.7		
	Area Pad			0.5	5062.1		2531.05	93.7		Includes pads around pumphouse, tanks, and water treatment building
	Tank - foundation			1	188.5	15	188.5	7.0		perimeter is equal to approx 100'
	Tank - pad		0.5		706.85		353.425	13.1		pad around water treatment, water tank, and pumphouse
	Total							**151.3**	**55**	
07	**Non Coal Waste Bunker and Salt Bunkers**	84	0.67	8			450.24	**16.7**	**30**	
08	**Truck Loadout Silo (pad)**		1		615.734	14	615.734	**22.8**	**30**	misc equipment, rebar, etc.
09	**Chute and Trusses from Crusher**								**30**	
10	**Main Fan**								30	
	Walls	245	0.67	8			1313.2	48.6		
	Pads		0.5		4304		2152.0	79.7		
	Top		0.33		2484		819.7	30.4		
	Total							**158.7**	**30**	
11	**Storage Shed**								**15**	
12	**ROM Transfer Building**								**50**	
13	**ROM Overland Tube Conveyor**								30	
	Bent Structure Foundation	34.5	15	4			2070.0	76.7		
	Support Platform	20	4	4			320.0	11.9		
	Total							**88.5**	**30**	
14	**Loading Dock/Tank Farm**								5	Steel estimates include rebar and steel edge protectors
	Pads		0.33		1492		492.4	18.2		
	Walls	175	0.67	4			469.0	17.4		
	Foundation	175	2	1			350.0	13.0		
	Stairs	14	4	0.33			18.5	0.7		
	Total							**49.3**	**5**	
15	**Coal Pile Retaining Wall - includes all**	150	0.667	8			800.4	**29.6**	**5**	Steel estimates include rebar and steel edge protectors
16	**Sediment Pond**								**5**	
17	**Portals - Sealing**									Not applicable to demolition costs
18	**Culvert Removal**									
	12" - 326' @ 12lbs/ft								2	weights based on Hanson Corrugated Steel Pipe chart 2 2/3" x 1/2" (avg. of all thicknesses)
	18" - 60' @ 18lbs/ft								0.5	weights based on Hanson Corrugated Steel Pipe chart 2 2/3" x 1/2" (avg. of all thicknesses)
	48" - 136' @ 76lbs/ft								5	weights based on Hanson Corrugated Steel Pipe chart 3" x 1" (avg. of all thicknesses)
	66" - 1914' @ 101lbs/ft								97	weights based on Hanson Corrugated Steel Pipe chart 3" x 1" (avg. of all thicknesses)
	Total								**104.5**	
19	**Portal Liners**	40	8	1			320.0	**11.9**		
20	**Gunite Removal**								**5**	fencing
21	**Rock Dust Tank**								**15**	
N/A	**Concrete Barriers**									Mobile items. Will be removed from site by others prior to reclamation
22	**Fence Removal**								**10**	
23	**Asphalt**		0.33		52761		17411.1	**644.9**		Transported to Nielson's Landfill
	Grand Total						**Total**	**1513.2**	**435**	Grand total does not include volume of asphalt

1 Concrete quantity estimates are based on volumes generated from an AutoCAD drawing of the surface facilities at Trail Mountain Mine, or actual field measurements, and not actual pour tickets or contractor invoices.

2 Steel weights for demolition are estimated.

Earthwork Cost Summary	
Description	**Cost**
Earthwork	**$ 138,709.25**
Riprap	**$ 64,387.58**
Total	**$ 203,096.83**

Earthwork - Dozer/Track-Hoe Work														
Means Reference Number	Station Location/Type Equipment	Hourly Equipment Cost	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
01 54 33 20 4360	Dozer - 410hp	$ 284.00	$ 70.25	$ 354.25	1	$ 354.25	$/HR	39,710.0	CY	158.0	CY/HR	251.3	HR	$ 89,023.03
01 54 33 20 0300	Excavator - 2.0 CY	$ 156.62	$ 70.25	$ 226.87	1	$ 226.87	$/HR			(see note)		125.65	HR	$ 28,506.22
	Sub-Totals													**$ 117,529.25**
Miscellaneous														
	Foreman Average, Outside			$ 71.20	1	$ 71.20	$/HR					251.3	HR	$ 17,893.00
01 54 33 40 7200	Pickup Truck - 3/4 ton 4x4			$ 13.08	1	$ 13.08	$/HR					251.3	HR	$ 3,287.00
	Total Earthwork													**$ 138,709.25**

Note: Track-hoe is utilized to support Dozer activities. Usage is dictated by 1/2 Dozer hours.

Earthwork - Rip Rap												
Description Riprap Channel	Means Reference	Equipment Cost/hour	Operator's Hourly Wage Rate[A]	Number of Men or Eq.	Units	Quantity (CY)	Quantity (Tons)	Production Rate	Units	Equipment Time	Units	Cost
								50	LF/hr			
Loader - 5.5 CY	01 54 33 20 4760	$ 120.00		1	$/HR					41.3	HR	$ 4,956.00
Equipment Operator, Medium Equipment	Eqmd		$ 70.25	1	$/HR					41.3	HR	$ 2,901.33
Excavator - 2.0 CY	01 54 33 20 0300	$ 156.62		1	$/HR					41.3	HR	$ 6,468.41
Equipment Operator, Medium Equipment	Eqmd		$ 70.25	1	$/HR					41.3	HR	$ 2,901.33
Pickup Truck - 3/4 ton 4x4	01 54 33 40 7200	$ 17.37		1	$/HR					41.3	HR	$ 717.38
CLAB	Common Building Labor		$ 54.00	1	$/HR					41.3	HR	$ 2,230.20
Foreman Average, Outside	Foreman Average, Outside		$73.30	1	$/HR					41.3	HR	$ 3,027.29
Riprap Sizes												
D50 = 1.0 feet						122	165					$ 3,294.00
D50 = 1.5 feet						1867	2520					$ 42,847.65
Total												**$ 64,387.58**

[A] RSMeans Heavy Construction Cost Data 2011 - Refer to Wage and Rate Sheet

Note - Riprap costs are based off Nielson Construction rates (8/2012) of 1 ft = $20/ton and 1.5 ft = $17/ton

Trail Mountain Mine Revegetation

Pocking	Equipment Rental (hr) (Includes O & P)[A]	Operator's Hourly Wage RateA	Material Cost	Labor Hourly Cost [A]	Unit	Number	Area (AC)	Quantity	Units	Production Rate	Units	Time	Units	Cost
							10.4		AC					
Volume								3532.6	CY	340	CY/AC			
Excavator, 2 CY	$ 156.62	$ 67.75				1				180	CY/HR	19.6	HR	$4,403
Subtotal														**$4,403**
Seeding/Planting														
Seed Mix - Riparian			$ 438.85		$/AC	2	0.78	26.5	LBS					$ 684.61
Seed Mix - Grassland/Shrub			$ 452.83		$/AC	2	9.61	403.6	LBS					$ 8,703.30
CLAB				$ 54.00		4				4	Acre/HR	2.6		$ 561.06
Container plants			$ 4.50					1006	Containers					$ 4,527.00
CLAB				$ 54.00		4				48	Cont/HR	20.95833		$ 4,527.00
Intermediate Total														$ 19,002.96
Add 25% Reseeding Cost														$ 4,750.74
Subtotal														**$ 23,753.70**
Mulching														
Hay			$ 100.00					10.39	AC	0.67	AC/HR	6.9		
Hay Quantity***								4000	LBS/AC					$ 2,078.00
Mulcher, Diesel powered	$ 37.97					1						6.9	HR	$ 263.01
Flat Bed Truck	$ 26.97	$ 52.10				1						6.9	HR	$ 547.69
CLAB				54.00		2						6.9	HR	$ 748.08
Hydromulch								10.39	AC	0.67	AC/HR			
Truck 4 x 2, 220hp	$ 39.35	$ 52.10				1						6.9	HR	$ 633.44
Hydromulcher, 3000 gal	$ 37.97	$ 53.55				1						6.9	HR	$ 633.93
Wood Fiber Mulch****			$ 10.50	per 50 lb. bag				2000	LBS/AC					$ 4,363.80
CLAB				54.00		3						6.9	HR	$ 1,122.12
Subtotal														**$ 10,390.07**
Total														**$ 38,547.16**

* Seedmix prices based on Stevenson Intermountain Seed Prices quoted in August 2012. See attached.

** Seedling tree prices based on High Mountain Nursery Prices in August 2012 (http://www.highmtnnursery.com/servlet/StoreFront).

*** Cost of Hay is based on local prices of $100/ton (Personal Communication).

**** Current (1/2012) price for woodfiber mulch from Granite Seed, Lehi, Utah. Phone contact.

[A] RSMeans Heavy Construction Cost Data 2012 - Refer to Wage and Rate Sheet

Price Quotation

Date: 8/2/2012
Quoted By: Jason

STEVENSON
INTERMOUNTAIN SEED, INC.
P.O. Box 2, Ephraim, UT 84627
Phone: (435) 283-6639 Fax:(435) 283-4155
Email:sales@siseed.com

Quote to (Company): Energy West
Address: 1407 West North Temple
Suite 310, SLC 84116

Contact Person: Dennis Oakley
Phone: 1801.220.4607
Fax: 801.220.4725
Email: dennis.oakley@pacificorp.com

Quantity Pounds	Bulk-PLS	Lot No.	Species	Variety	Additional Information	Price /Pound	Total Cost
2.7	PLS		Slender Wheatgrass			$ 3.50	$ 9.45
1.21	PLS		Mountain Brome			$ 6.50	$ 7.87
3.3	PLS		Great Basin Wildrye			$ 12.00	$ 39.60
2.3	PLS		Indian Ricegrass			$ 7.00	$ 16.10
0.08	PLS		Western Yarrow			$ 27.00	$ 2.16
0.5	PLS		Cicer Milkvetch			$ 4.50	$ 2.25
0	pls		Nuttall Lomatium			NA	NA
0.3	PLS		Yellow Sweet Clover			$ 4.00	$ 1.20
0.1	PLS		Palmer Penstemon			$ 21.00	$ 2.10
3.3	PLS		Utah Service Berry			$ 49.00	$ 161.70
5.6	PLS		Antelope Bitterbrush			$ 19.00	$ 106.40
1.6	pls		Silvery Lupine		*Substitute for Nuttal Lomatium	$ 65.00	$ 104.00
							$ -
						$ 218.50	$ -
							$ -
							$ -
							$ -
							$ -
							$ -

Project Name/No.: Grasslands/ Shrub Community (9.61ac)
Mix: X **Separates:**
Shipped Via: Best Way
FOB: Origin
Terms: Net 30
Additional Information: Price is per ac

Thank You!

We appreciate your request
for a price quotation and your business.

Sub Total:	$ 452.83
Tax:	None
Mixing/Handling:	None
Shipping:	TBD
Total:	$ 452.83

Price Quotation

Date: 8-2-2012
Quoted By:Jason

STEVENSON
INTERMOUNTAIN SEED, INC.
P.O. Box 2, Ephraim, UT 84627
Phone: (435) 283-6639 Fax:(435) 283-4155
Email:sales@siseed.com

Quote to (Company): Energy West
Address: 1407 West Nnorth Temple
Suite 310, SLC 84116

Contact Person: Dennis Oakley
Phone: 801.220.4607
Fax: 801.220.4725
Email: dennis.oakley@pacificorp.com

Quantity Pounds	Bulk-PLS	Lot No.	Species	Variety	Additional Information	Price /Pound	Total Cost
3.2	PLS		Mt. Brome			$ 6.50	$ 20.80
8	PLS		Great Basin			$ 12.00	$ 96.00
0.5	PLS		Kentucky Bluegrass			$ 2.50	$ 1.25
0.5	PLS		Pacific Aster			$ 110.00	$ 55.00
N/A			Western Virginblower			NA	NA
1	PLS		White Sweetclover			$ 4.00	$ 4.00
0.2	PLS		Eaton Penstemon			$ 79.00	$ 15.80
1	PLS		Golden Current			$ 89.00	$ 89.00
1.6	PLS		Blue Elderberry			$ 55.00	$ 88.00
0.6	PLS		BlueAster		*Substitute for Western Virginblower	$ 115.00	$ 69.00
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -

Project Name/No.: Riparian Community Seed Mix (.78ac)
Mix: X **Separates:**
Shipped Via: Best Way
FOB: Origin
Net 30
Additional Information: Price is per ac

Thank You!

We appreciate your request
for a price quotation and your business.

Sub Total:	$ 438.85
Tax:	None
Mixing/Handling:	None
Shipping:	TBD
Total:	$ 438.85