0006

OK

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340 telephone
(801) 359-3940 fax
(801) 538-7223 TTY
www.nr.utah.gov

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

March 17, 2003

Rick Olsen, General Manager
Canyon Fuel Company, LLC
P.O. Box 1029
Wellington, Utah 84542

Re: Reclamation Cost Estimate, Canyon Fuel Company, LLC, Dugout Canyon Mine, C/007/039, Outgoing File

Dear Mr. Olsen:

During the recent permitting action for the waste rock disposal site, the Division determined the bond cost estimate for the Dugout Canyon Mine to be $2,141,000. This amount was slightly higher than the amount Canyon Fuel had calculated for this permitting action. Vicky Miller of your office asked us to provide the calculations for the cost estimate so that you may be able to understand the differences and better match the cost estimate. A copy of our calculations is enclosed for your use.

If you have any questions, please feel free to call me at (801) 538-5325.

Sincerely,

Daron R. Haddock
Permit Supervisor

an
Enclosure
cc: O:\007039.DUG\FINAL\costestimate.doc

Utah!
Where ideas connect

Bonding Calculations

Direct Costs

Subtotal Demolition and Removal	$640,923.00	
Subtotal Backfilling and Grading	$555,735.00	
Subtotal Revegetation	$272,424.00	
Direct Costs	$1,469,082.00	
Indirect Costs		
Mob/Demob	$146,908.00	10.0%
Contingency	$73,454.00	5.0%
Engineering Redesign	$36,727.00	2.5%
Main Office Expense	$99,898.00	6.8%
Project Mainagement Fee	$36,727.00	2.5%
Subtotal Indirect Costs	$393,714.00	26.8%
Total Cost	$1,862,796.00	
Escalation factor		0.0282
Number of years		5
Escalation	$277,892.00	
Reclamation Cost Escalated	$2,140,688.00	
Bond Amount (rounded to nearest $1,000)	$2,141,000.00	

Bonding Calculations

Direct Costs		
Subtotal Demolition and Removal	$640,923.00	
Subtotal Backfilling and Grading	$555,735.00	
Subtotal Revegetation	$272,424.00	
Direct Costs	$1,469,082.00	
Indirect Costs		
Mob/Demob	$146,908.00	10.0%
Contingency	$73,454.00	5.0%
Engineering Redesign	$36,727.00	2.5%
Main Office Expense	$99,898.00	6.8%
Project Mainagement Fee	$36,727.00	2.5%
Subtotal Indirect Costs	$393,714.00	26.8%
Total Cost	$1,862,796.00	
Escalation factor		0.0282
Number of years		5
Escalation	$277,892.00	
Reclamation Cost Escalated	$2,140,688.00	
Bond Amount (rounded to nearest $1,000)	$2,141,000.00	

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Mine Belt BC-1 No 1																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						62800					CF		62800	CF	15072
	Structure's Vol. Demolished																0.35	814	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											52				TON		52	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 18 ton payload	01590 200 5300	517.66	/day									3.3		DAY		3.3	DAY	1708
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									26		HR		26	HR	991
	Disposal Cost Steel																			
	Subtotal																			17771
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						20					CY		20	CY	271
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													26	CY	34
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													26	CY	80
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													26	CY	164
	Subtotal																			549
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			16320

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Transfer Building No 2																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						104618					CF		104618	CF	25108
	Structure's Vol. Demolished																0.35	1356	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											50				TON		50	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									3.1		DAY		3.1	DAY	1605
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									25		HR		25	HR	953
	Disposal Cost Steel																			
	Subtotal																			27666
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						229					CY		229	CY	3105
	Concrete's Vol. Demolished																1.3	298	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													298	CY	387
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													298	CY	921
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													298	CY	1877
	Subtotal																			6290
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			33956

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Feed Belt BC 2 No3																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						47438					CF		47438	CF	11385
	Structure's Vol. Demolished																0.35	615	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											30				TON		30	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									1.9		DAY		1.9	DAY	964
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									15		HR		15	HR	572
	Disposal Cost Steel																			
	Subtotal																			**12941**
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			**12941**

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Stack Tubes 2 No4																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						158					CY		158	CY	2142
	Concrete's Vol. Demolished																1.3	205	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													205	CY	267
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													205	CY	633
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													205	CY	1292
	Subtotal																			4334
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			4334

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Head House 1 No 5																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						23878					CF		23878	CF	5731
	Structure's Vol. Demolished																0.35	310	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON		10	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.6		DAY		0.6	DAY	311
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									5		HR		5	HR	191
	Disposal Cost Steel																			
	Subtotal																			6233
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			6233

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Transfer Belt BC 2 No 6																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						30000					CF		30000	CF	7200
	Structure's Vol. Demolished																0.35	389	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											20				TON		20	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									1.3		DAY		1.3	DAY	673
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									10		HR		10	HR	381
	Disposal Cost Steel																			
	Subtotal																			8254
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			8254

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Head House 2 No 7																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						4436					CF		4436	CF	1065
	Structure's Vol. Demolished																0.35	58	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON		10	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.6		DAY		0.6	DAY	311
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trftv	$38.10	HR									5		HR		5	HR	191
	Disposal Cost Steel																			
	Subtotal																			1567
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1567

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Reclaim Tunnel No 8																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						18774					CF		18774	CF	4506
	Structure's Vol. Demolished																0.35	243	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											32				TON		32	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									2		DAY		2	DAY	1035
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									16		HR		16	HR	610
	Disposal Cost Steel																			
	Subtotal																			6151
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						1182					CY		1182	CY	16028
	Concrete's Vol. Demolished																1.3	1537	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													1537	CY	1998
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													1537	CY	4749
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													1537	CY	9683
	Subtotal																			32458
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			38609

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Reclaim Belt BC 4 No 9																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						35180					CF		35180	CF	8443
	Structure's Vol. Demolished																0.35	456	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											40				TON		40	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									2.5		DAY		2.5	DAY	1294
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									20		HR		20	HR	762
	Disposal Cost Steel																			
	Subtotal																			**10499**
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						39					CY		39	CY	529
	Concrete's Vol. Demolished																1.3	51	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													51	CY	66
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													51	CY	158
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													51	CY	321
	Subtotal																			**1074**
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			**11573**

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Escape Tunnel 60 inch No 10																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF															
	Structure's Vol. Demolished										2827					CF		2827	CF	678
	Rubble's Weight (exclude steel)																0.35	37	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity											4				TON		4	TON	
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day															
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									0.3		DAY		0.3	DAY	155
	Disposal Cost Steel													2		HR		2	HR	76
	Subtotal																			909
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			909

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Crusher Building No 11																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						93305					CF		93305	CF	22393
	Structure's Vol. Demolished																0.35	1210	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											100				TON		100	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									6.3		DAY		6.3	DAY	3261
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									50		HR		50	HR	1905
	Disposal Cost Steel																			
	Subtotal																			27559
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			[illegible]
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						91					CY		91	CY	1234
	Concrete's Vol. Demolished																1.3	118	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													118	CY	153
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													118	CY	365
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													118	CY	743
	Subtotal																			[illegible]
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			[illegible]
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			[illegible]
	Total																			[illegible]0054

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Truck Loadout Belt BC 5 No 12																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						30899					CF		30899	CF	7416
	Structure's Vol. Demolished																0.35	401	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											20				TON		20	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									1.3		DAY		1.3	DAY	673
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									10		HR		10	HR	381
	Disposal Cost Steel																			
	Subtotal																			8470
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						39					CY		39	CY	529
	Concrete's Vol. Demolished																1.3	51	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													51	CY	66
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													51	CY	158
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													51	CY	321
	Subtotal																			1074
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			9544

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Truck Loudout and Scale No 13																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						74976					CF		74976	CF	17994
	Structure's Vol. Demolished																0.35	972	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											50				TON		50	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									3.1		DAY		3.1	DAY	1605
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									25		HR		25	HR	953
	Disposal Cost Steel																			
	Subtotal																			20552
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						159					CY		159	CY	2156
	Concrete's Vol. Demolished																1.3	207	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													207	CY	269
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													207	CY	640
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													207	CY	1304
	Subtotal																			4369
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			24921

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Bathhouse No 14																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						416365					CF		416365	CF	99928
	Structure's Vol. Demolished																0.2	3084	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Services Price	4	/CY													3084	CY	12336
	Steel's Weight											107								
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									6.7		DAY		6.7	DAY	3468
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									54		HR		54	HR	2057
	Disposal Cost Steel																			
	Subtotal																			117789
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						294					CY		294	CY	3987
	Concrete's Vol. Demolished																1.3	382	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													382	CY	497
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													382	CY	1180
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													382	CY	2407
	Subtotal																			8071
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			125860

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Substation No 15																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02220 100 0100	0.26	/CF						4000					CF		4000	CF	1040
	Structure's Vol. Demolished																0.35	52	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Services Price	4	/CY													52	CY	208
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1248
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						24					CY		24	CY	325
	Concrete's Vol. Demolished																1.3	31	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													31	CY	40
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													31	CY	96
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													31	CY	195
	Subtotal																			656
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1904

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Power Lines and Poles No 16																			
	Structure's Demolition Cost	Dugout Powerline	Dugout 1	0.23	/FT	1937										FT		1937	FT	446
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			446
	Power Poles																			
	Equipment 's Disposal Cost	Dugout Power Poles	Dugout 2	126	/EA										12	EA		12	EA	1512
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			1512
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1958

Ref.	Description	Materials		Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Retaining Wall No 17																				
	Structure's Demolition Cost																				
	Structure's Vol. Demolished																				
	Rubble's Weight (exclude steel)																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Non Steel Truck																				
	Transportation Cost Non Steel Drive																				
	Disposal Cost Non Steel																				
	Steel's Weight																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Steel Truck																				
	Transportation Cost Steel Truck Drive																				
	Disposal Cost Steel																				
	Subtotal																				
	Equipment 's Disposal Cost																				
	Dismantling Cost																				
	Equipment 's Vol. Demolished																				
	Loading Costs																				
	Transport Costs																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost	Concrete de	emolition	ConcreteDemo1	13.56	/CY						30					CY		30	CY	407
	Concrete's Vol. Demolished																	1.3	39	CY	
	Loading Cost	Front end l	oader 3 CY	02315 400 1300	1.3	/CY													39	CY	51
	Transportation Cost	12 CY (16 T	on) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													39	CY	121
	Disposal Costs	On site dis	posal	02220 875 5550	6.3	/CY													39	CY	246
	Subtotal																				825
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Total																				825

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Gabion Wall No 18																			
	Structures Volume										880					CY				
	Demolition Time 60 CY/ DAY													117		HR				
	Structure's Demolition Cost	Crew B 13	MeansCrewB13	374.41	/HR													117	HR	43806
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)												2			TON/CY		1760	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									14.6		DAY		14.6	DAY	7558
	Transportation Cost Non Steel Drive	Truck Driver, Heavy	Trhv	$38.10	HR									117		HR		117	HR	4458
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			55822
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			55822

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Pump House No 19																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						2219					CF		2219	CF	533
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											5				TON		5	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.3		DAY		0.3	DAY	155
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									2		HR		2	HR	76
	Disposal Cost Steel																			
	Subtotal																			764
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						82					CY		82	CY	1112
	Concrete's Vol. Demolished																1.3	107	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													107	CY	139
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													107	CY	331
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													107	CY	674
	Subtotal																			2256
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			3020

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Paved Road No 20																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Apshalt Demolition																			
	Demolition Cost	Pavement Removal 4-6"	02220 875 1750	6.2	/SY					8448						SY		8448	SY	52378
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs	On site disposal	02220 875 5550	6.8	/CY						156					CY		156	CY	1061
	Subtotal																			53439
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			53439

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Stream Culvert 72 inch No 21																			
	Excavate Culvert	Excavation Bulk Bank 2 CY (322BL)	02315 400 0260	1.71	/CY	2350	12	12								CF		12533	CY	21431
	Backfill Culvert	Backfill Trench Mininal Haul 2 1/4 CY	02315 900 3080	1.55	/CY	2350	12	12								CF		12533	CY	19426
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											94				TON		94	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									5.9		DAY		5.9	DAY	3054
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									47		HR		47	HR	1791
	Disposal Cost Steel																			
	Subtotal																			45702
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			45702

Ref.	Description	Materials		Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Water Tanks No 22																				
	Structure's Demolition Cost	Steel Bld. L	arge	02220 100 0012	0.24	/CF						241					CF		241	CF	58
	Structure's Vol. Demolished																	0.35	3	CY	
	Rubble's Weight (exclude steel)																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Non Steel Truck																				
	Transportation Cost Non Steel Drive																				
	Disposal Cost Non Steel																				
	Steel's Weight												39				TON		39	TON	
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Steel Truck	Truck dump	16 ton payload	01590 200 5300	517.66	/day									2.4		DAY		2.4	DAY	1242
	Transportation Cost Steel Truck Drive	Truck Drive	r, Heavy	Trhv	$38.10	HR									19		HR		19	HR	724
	Disposal Cost Steel																				
	Subtotal																				2024
	Equipment 's Disposal Cost																				
	Dismantling Cost																				
	Equipment 's Vol. Demolished																				
	Loading Costs																				
	Transport Costs																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost	Concrete d	emolition	ConcreteDemo1	13.56	/CY						50					CY		50	CY	678
	Concrete's Vol. Demolished																	1.3	65	CY	
	Loading Cost	Front end l	oader 3 CY	02315 400 1300	1.3	/CY													65	CY	85
	Transportation Cost	12 CY (16	(on) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													65	CY	201
	Disposal Costs	On site dis	posal	02220 875 5550	6.3	/CY													65	CY	410
	Subtotal																				1374
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Total																				3398

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Rock Dust Bin No 23																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						2265					CF		2265	CF	544
	Structure's Vol. Demolished																0.35	29	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											5				TON		5	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.3		DAY		0.3	DAY	155
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									2		HR		2	HR	76
	Disposal Cost Steel																			
	Subtotal																			775
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						12					CY		12	CY	163
	Concrete's Vol. Demolished																1.3	16	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													16	CY	21
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	02320 200 0320	3.09	/CY													16	CY	49
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													16	CY	101
	Subtotal																			334
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			109

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Fuel Tank and Fuel Station No 24																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						3945					CF		3945	CF	947
	Structure's Vol. Demolished																0.35	51	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											7				TON		7	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.4		DAY		0.4	DAY	207
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									3		HR		3	HR	114
	Disposal Cost Steel																			
	Subtotal																			1268
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						12					CY		12	CY	163
	Concrete's Vol. Demolished																1.3	16	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													16	CY	21
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													16	CY	49
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													16	CY	101
	Subtotal																			334
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1602

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Holding Tank No 25																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	6000 gal. to 8000 gal. tank	02115 200 0310	225	Ea.										1	EA		1	EA	225
	Steel's Weight											2				TON		2	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.1		DAY		0.1	DAY	52
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									1		HR		1	HR	38
	Disposal Cost Steel																			
	Subtotal																			315
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			315

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Ventilation Fan No 26																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						6850					CF		6850	CF	1644
	Structure's Vol. Demolished																0.35	89	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON		10	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.6		DAY		0.6	DAY	311
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									5		HR		5	HR	191
	Disposal Cost Steel																			
	Subtotal																			2146
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2146

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Magnet 27																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						35					CF		35	CF	8
	Structure's Vol. Demolished																0.35	0	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											2				TON		2	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.1		DAY		0.1	DAY	52
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									1		HR		1	HR	38
	Disposal Cost Steel																			
	Subtotal																			98
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						17					CY		17	CY	231
	Concrete's Vol. Demolished																1.3	22	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.23	/CY													22	CY	27
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.29	/CY													22	CY	72
	Disposal Costs	On site disposal	02220 875 5550	6.8	/CY													22	CY	150
	Subtotal																			480
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			670

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Water System 28																			
	Excavate Pipe	Excavating 2-1/2 CY hydraulic backhoe	02315 900 0620	2.58	/CY	8450	2	4								FT		2504	CY	6460
	Pipe Removal	Pipe removal 12 inch	02220 875 2900	6.5	/FT	8450										FT		8450	FT	54925
	Backfill Trench	Backfill Trench Mininal Haul 2 1/4 CY	02315 900 3080	1.55	/CY	8450	2	4								FT		2504	CY	3881
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			65266
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			65266

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Sewage System 29																			
	Excavate Pipe	Excavating 2-1/2 CY hydraulic backhoe	02315 900 0620	2.58	/CY	2832	2	4								FT		839	CY	2165
	Pipe Removal	Pipe removal 12 inch	02220 875 2900	6.5	/FT	2832										FT		2832	FT	18408
	Backfill Trench	Backfill Trench Mininal Haul 2 1/4 CY	02315 900 3080	1.55	/CY	2832	2	4								FT		839	CY	1300
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			21873
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			21673

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	AM01J Nov. 28, 2001																			
	Trailers 30																			
	Trailers N0 1																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02220 100 0100	0.26	/CF	28	70	10								FT		19600	CF	5096
	Structure's Vol. Demolished																0.35	254	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Services Price	4	/CY													254	CY	1016
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			**6112**
	Trailers N0 1																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02220 100 0100	0.26	/CF	14	70	10							2	FT		19600	CF	5096
	Structure's Vol. Demolished																0.35	254	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Services Price	4	/CY													254	CY	1016
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			**6112**
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			**12224**

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	AM01J Nov. 28, 2001																			
	Storage Containers 31																			
	Trailers N0 1																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02220 100 0100	0.26	/CF	40	10	10							8	FT		32000	CF	8320
	Structure's Vol. Demolished																0.35			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	ECDC	ECDC	35	/TON							24						24	TON	840
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			9160
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			9160

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Gilson Well No 32																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						800					CF		800	CF	192
	Structure's Vol. Demolished																0.35	10	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											0.5				TON		0.5	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.03		DAY		0.03	DAY	16
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									0.2		HR		0.2	HR	8
	Disposal Cost Steel																			
	Subtotal																			216
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			-
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						55					CY		55	CY	746
	Concrete's Vol. Demolished																1.3	72	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													72	CY	94
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													72	CY	222
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													72	CY	454
	Subtotal																			1516
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1732

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shop Building No 33																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						14400					CF		14400	CF	3456
	Structure's Vol. Demolished																0.35	187	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											0.5				TON		0.5	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.03		DAY		0.03	DAY	16
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									0.2		HR		0.2	HR	8
	Disposal Cost Steel																			
	Subtotal																			3480
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						55					CY		55	CY	746
	Concrete's Vol. Demolished																1.3	72	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													72	CY	94
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													72	CY	222
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													72	CY	454
	Subtotal																			1516
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			4996

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Switch House No 34																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											16				TON		16	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									1		DAY		1	DAY	518
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									8		HR		8	HR	305
	Disposal Cost Steel																			
	Subtotal																			823
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						11					CY		11	CY	149
	Concrete's Vol. Demolished																1.3	14	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													14	CY	18
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	02320 200 0320	3.09	/CY													14	CY	43
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													14	CY	88
	Subtotal																			298
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			121

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Portals No 35																			
	Structure's Demolition Cost	Seal Portals	AML1	5200	EA.										5	EA		5	EA	26000
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			26000
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			26000

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Storage Building No 36																			
	Structure's Demolition Cost	Steel Bld. Large	02220 100 0012	0.24	/CF						2284					CF		2284	CF	548
	Structure's Vol. Demolished																0.35	30	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											6				TON		6	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									0.4		DAY		0.4	DAY	207
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									3		HR		3	HR	114
	Disposal Cost Steel																			
	Subtotal																			669
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						38.4					CY		38.4	CY	521
	Concrete's Vol. Demolished																1.3	50	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													50	CY	65
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													50	CY	155
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													50	CY	315
	Subtotal																			1056
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1725

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Sampling System No 37																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											18				TON		18	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01590 200 5300	517.66	/day									1.1		DAY		1.1	DAY	569
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	$38.10	HR									9		HR		9	HR	343
	Disposal Cost Steel																			
	Subtotal																			912
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	13.56	/CY						19.84					CY		19.84	CY	269
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader 3 CY	02315 400 1300	1.3	/CY													26	CY	34
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02320 200 0320	3.09	/CY													26	CY	80
	Disposal Costs	On site disposal	02220 875 5550	6.3	/CY													26	CY	164
	Subtotal																			547
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1,150

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Mine Belt BC-1 No 1																			18320
	Transfer Building No 2																			33956
	Feed Belt BC 2 No3																			12941
	Stack Tubes 2 No4																			4334
	Head House 1 No 5																			6233
	Transfer Belt BC 2 No 6																			8254
	Head House 2 No 7																			1567
	Reclaim Belt BC 4 No 9																			11573
	Escape Tunnel 60 inch No 10																			909
	Crusher Building No 11																			30054
	Truck Loadout Belt BC 5 No 12																			9544
	Truck Loudout and Scale No 13																			24921
	Bathhouse No 14																			125860
	Substation No 15																			1904
	Power Lines and Poles No 16																			1958
	Retaining Wall No 17																			825
	Gabion Wall No 18																			55822
	Pump House No 19																			3020
	Paved Road No 20																			53439
	Stream Culvert 72 inch No 21																			45702
	Water Tanks No 22																			3398
	Rock Dust Bin No 23																			1109
	Fuel Tank and Fuel Station No 24																			1602
	Holding Tank No 25																			315
	Ventilation Fan No 26																			2146
	Magnet 27																			578
	Water System 28																			65266
	Sewage System 29																			21873
	Trailers 30																			12224
	Storage Containers 31																			9160
	Gilson Well No 32																			1732
	Shop Building No 33																			4996
	Switch House No 34																			1121
	Portals No 35																			26000
	Storage Building No 36																			1925
	Sampling System No 37																			1459
	Proposed Amendment																			
	Methane Degas Wells 38																			13228
	Refuse Pile 39																			21655
	Total																			640923

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	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
Dugout Mine															
Facilities Area 01															
Cut and Fill at Mine Site															
Equipment															
Rough Grading															
D9R Semi-U EROPS (9-41) (3Q00)	17590	70	0.1	47.15	234.09	1	234.09	$/HR	118169	CY	184	CY/HR	642.2	HR	150333
Finished Grading															
D9R Semi-U EROPS (9-41) (3Q00)	17590	70	0.1	47.15	234.09	1	234.09	$/HR	19926	CY	680	CY/HR	29.3	HR	6859
815F ((6-5) (4Q00))	9065	31.85	0.1	47.15	138.84	1	138.84	$/HR	58490	CY	876	CY/HR	66.8	HR	9275
CAT 345BL (10-7)(3Q00)	15130	53.15	0.1	47.15	200.18	1	200.18	$/HR	10000	CY	308	CY/HR	32.5	HR	6506
966G EROPS (9-26) (3Q01)	7095	29.05	0.1	47.15	123.45	1	123.45	$/HR	8342	CY	204	CY/HR	40.9	HR	5049
Support Personel and Labor															
CLAB					37.03	1	37.03	$/HR					642.2	HR	23781
5,000 gal H2O truck Diesel (20-6) (2Q00)	5010	25.7	0.1	38.1	97.68	1	97.68	$/HR					642.2	HR	62730
Pickup Truck Crew 4x4 1 ton (20-6) (2Q00)	785	7.4	0.1	0	13.05	1	13.05	$/HR					642.2	HR	8381
Foreman Average, Outside					50	1	50	$/HR					642.2	HR	32110
Subtotal															305024

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	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
Dugout Mine Facilities Area 02 Topsoil Disturbution															
Move topsoil															
D9R Semi-U EROPS (9-41) (3Q00)	17590	70	0.1	47.15	234.09	1	234.09	$/HR	21460	CY	184	CY/HR	116.6	HR	27295
Pocking Handled in Vegetation Section															
966G EROPS (9-26) (3Q01)	7095	29.05	0.1	47.15	123.45	1	123.45	$/HR	21460	CY	204	CY/HR	105.2	HR	12987
6X4 75,000lbs 12-18 CY (20-1) (2Q00)	3580	25.05	0.1	38.1	88.03	6	528.18	$/HR	21460	CY	204	CY/HR	105.2	HR	55565
Support Personel and Labor															
CLAB					37.03	1	37.03	$/HR					116.6	HR	4318
5,000 gal H2O truck Diesel (20-6) (2Q00)	5010	25.7	0.1	38.1	97.68	1	97.68	$/HR					116.6	HR	11389
Pickup Truck Crew 4x4 1 ton (20-6) (2Q00)	785	7.4	0.1	0	13.05	1	13.05	$/HR					116.6	HR	1522
Foreman Average, Outside					50	1	50	$/HR					116.6	HR	5830
Subtotal															118906

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	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
Dugout Mine Facilities Area 03 Restore Stream Channel															
CAT 330BL (10-7)(3Q00)	11235	40.9	0.1	47.15	162.36	1	162.36	$/HR	0	CY	309	CY/HR	0	HR	0
CLAB					37.03	0.5	18.52	$/HR					0	HR	0
928G EROPS (9-25) (3Q00)	3455	15	0.1	47.15	85.24	1	85.24	$/HR	0	CY	296	CY/HR	0	HR	0
CLAB					37.03	0.5	18.52	$/HR					0	HR	0
426C (4WD) Extendable EROPS (9-15) (3Q00)	3540	14.05	0.1	47.15	84.73	1	84.73	$/HR	0	CY	101	CY/HR	0	HR	0
CLAB					37.03	0.5	18.52	$/HR					0	HR	0
6X4 75,000lbs 12-18 CY (20-1) (2Q00)	3580	25.05	0.1	38.1	88.03	1	88.03	$/HR	0	CY	12	CY/HR	0	HR	0
CLAB					37.03	0.5	18.52	$/HR					0	HR	0
Support															
Foreman Average, Outside					50	1	50	$/HR					0	HR	0
5,000 gal H2O truck Diesel (20-6) (2Q00)	5010	25.7	0.1	38.1	97.68	1	97.68	$/HR					0	HR	0
Pickup Truck Crew 4x4 1 ton (20-6) (2Q00)	785	7.4	0.1	0	13.05	1	13.05	$/HR					0	HR	0
Subtotal															0

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	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
Dugout Mine															
Main Channel 04															
Remove Culvert and Restore Channel															
CAT 330BL (10-7)(3Q00)	11235	40.9	0.1	47.15	162.36	1	162.36	$/HR	14400	CY	310	CY/HR	46.5	HR	7550
CLAB					37.03	0.5	18.52	$/HR					46.5	HR	861
928G EROPS (9-25) (3Q00)	3455	15	0.1	47.15	85.24	1	85.24	$/HR	1500	CY	204	CY/HR	7.4	HR	631
CLAB					37.03	0.5	18.52	$/HR					7.4	HR	137
426C (4WD) Extendable EROPS (9-15) (3Q00)	3540	14.05	0.1	47.15	84.73	1	84.73	$/HR	2500	CY	100	CY/HR	25	HR	2118
CLAB					37.03	0.5	18.52	$/HR					25	HR	463
6X4 75,000lbs 12-18 CY (20-1) (2Q00)	3580	25.05	0.1	38.1	88.03	1	88.03	$/HR	7000	CY	50	CY/HR	140	HR	12324
CLAB					37.03	0.5	18.52	$/HR					140	HR	2593
Support															
Foreman Average, Outside					50	1	50	$/HR					46	HR	2300
5,000 gal H2O truck Diesel (20-6) (2Q00)	5010	25.7	0.1	38.1	97.68	1	97.68	$/HR					46	HR	4493
Pickup Truck Crew 4x4 1 ton (20-6) (2Q00)	785	7.4	0.1	0	13.05	1	13.05	$/HR					46	HR	600
Subtotal															34070

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	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
Facilities Area 01															305024
Facilities Area 02															118906
Facilities Area 03															0
Main Channel 04															34070
Proposed Amedments															
Methane Degas Well 05															3677
Refuse Pile 06															94058
Subtotal															555735

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Dugout Mine Vegetation 01																			
	Soil Preparation																			
	Pocking	Excavation Bulk Bank 2 CY (322BL)	M023154000260	1.71	/CY					14.56						AC		23490	CY	40168
	Subtotal																			40168
	Fence																			
	Silt Fence	Silt fence	M023705501100	0.93	LF	6800										FT		6800	FT	6324
	Chicken Wire	Fence Chicken Wire	M028205000100	6.55	LF	3400										FT		3400	FT	22270
	Subtotal																			28594
	Seed Mix No 1																			
	Hydroseed Equipment and Labor	Hydro Spreader (equip. & labor) B-81	Reveg005	19.85	/MSF					13.9						AC		605	MSF	12009
	Hydroseed Material	Dugout Seed Mix No 1	Dugout 07391	394.75	/AC					13.9						AC		13.9	AC	5487
	Transplant Area No 1																			
	Area									13.9										
	Transplant Materials		Snowberry	$0.68	EA										75	/AC		1043	EA	688
			Utah Serviceberry L	$0.68	EA										75	/AC		1043	EA	688
			Pinyon Pine	$0.59	EA										200	/AC		2780	EA	1640
			Utah Juniper	$0.65	EA										200	/AC		2780	EA	1835
	Transplant Labor	Bare root seedlings 6 to 10 inch heavy soil	M0291203500711	$1.15	EA													7646	EA	8793
	Seed Mix No 2																			
	Hydroseed Equipment and Labor	Hydro Spreader (equip. & labor) B-81	Reveg005	19.85	/MSF					2.45						AC		107	MSF	2124
	Hydroseed Material	Dugout Seed Mix No 2	Dugout 07392	362.25	/AC					2.45						AC		2.45	AC	888
	Transplant Area No 2																			
	Area									2.45										
	Transplants Riparian																			
	Area									2.45										
	Transplant Materials		Narrowleaf Cottonw	$0.83	EA										250	/AC		613	EA	509
			Rocky Mountain Ma	$1.00	EA										250	/AC		613	EA	613
			Willow	$0.84	EA										4000	/AC		9800	EA	8232
			Woods Rose	$0.55	EA										1000	/AC		2450	EA	1348
			Snowberry	$0.66	EA										250	/AC		613	EA	405
			Utah Serviceberry L	$0.66	EA										250	/AC		613	EA	405
			Blue Elderberry	$8.95	EA										250	/AC		613	EA	5486
			Chokecherry Lone F	$0.73	EA										250	/AC		613	EA	447
			Golden Current	$0.66	EA										250	/AC		613	EA	405
			Carex Spp.	$0.75	EA										500	/AC		1225	EA	919
			Horsetail	$0.75	EA										500	/AC		1225	EA	919
	Transplant Labor	Bare root seedlings 6 to 10 inch heavy soil	M0291203500711	$1.15	EA													18991	EA	21840
	Subtotal																			75680
	Direct Vegetation																			144442
	Reseeding																			
	Assume 25% reveg rate																			36111
	Total																			180553

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Methane Degas Wells 02																			
	Seed Mix No 1																			
	Hydroseed Equipment and Labor	Hydro Spreader (equip. & labor) B-81	Reveg005	19.85	/MSF					1.61						AC		70	MSF	1390
	Hydroseed Material	Dugout Seed Mix No 1	Dugout 07391	394.75	/AC					1.61						AC		1.61	AC	636
	Transplant Area No 1																			
	Area									1.61										
	Transplant Materials		Snowberry	$0.66	EA										125	/AC		201	EA	133
			Woods Rose	$0.55	EA										125	/AC		201	EA	111
			Oregon Grape	$0.55	EA										125	/AC		201	EA	111
			Serviceberry	$3.95	EA										125	/AC		201	EA	794
	Transplant Labor	Bare root seedlings 6 to 10 inch heavy soil	M0291203500711	$1.15	EA													804	EA	925
	Subtotal																			4100
	Reseeding																			
	Assume 25% reseeding																			1025
	Total																			5125

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Dugout Mine Vegetation 01																			180553
	Proposed Amendments																			
	Methane Degas Wells 02																			5125
	Dugout Mine Refuse Pile 03																			86746
	Total																			272424