

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

905



FROM: TLMA - Transportation Department

SUBMITTAL DATE:
May 26, 2010

SUBJECT: Modification of Financial Assurance Mechanism Required by the Surface Mining and Reclamation Act (SMARA).

RECOMMENDED MOTION: That the Board of Supervisors approve Resolution 2010-157, which amends Resolution 97-261 that established a Pledge of Revenue to satisfy requirements of Section 2773.1 of the Public Resources Code for Financial Assurance to Reclaim Open Pit Mines.

BACKGROUND: The Board previously established a Pledge of Revenue as a Financial Assurance Mechanism to Reclaim Surface Mining Operations, as required by the Public Resources Code for County-operated mining sites or borrow pits used by the Transportation Department for road construction and maintenance. SMARA requires that the Financial

Juan C. Perez
Director of Transportation

JCP:dkd
(Continued On Attached Page)

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	N/A
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2009/2010

SOURCE OF FUNDS: Road Funds (100%)	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION:

APPROVE

BY:
Tina Grande

County Executive Office Signature

FORM APPROVED COUNTY COUNSEL
 BY:
 DATE: 5/13/10
 Departmental Concurrence
 DAVID H.K. HUFF

Dept't Recomm.: Consent Policy
 Per Exec. Ofc.: Consent Policy

Prev. Agn. Ref. 3.46 of 6/23/09 | District: 1,3,4,5 | Agenda Number:

3.65

The Honorable Board of Supervisors

RE: Modification of Financial Assurance Mechanism Required by the Surface Mining and Reclamation Act (SMARA).

May 26, 2010

Page 2 of 2

Assurances be adjusted annually. The adjustments account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan (PRC 2773.1(a)(3)).

The original Resolution 97-261 must be modified to adjust the reclamation costs of the individual County's sites, as contained in the Pledge of Revenue, from \$1,022,625.00 to \$994,000.00. The actual reclamation cost for each mining site or borrow pit is shown on Attachment A. Resolution 2010-157 supersedes any previously approved modification to Resolution 97-261 made by Resolution 98-323, Resolution 2003-178, Resolution 2006-118, Resolution 2007-388, Resolution 2008-196 and Resolution 2009-184. There is no current fiscal year cost associated with the future reclamation. A future expense would be incurred at the point that existing mining sites are closed. Currently, no estimated date is known or projected for the closure of any of the County's existing mining sites.

Project No. ZTR 9000

2
3 **RESOLUTION NO. 2010-157**
4 **AMMENDING RESOLUTION 97-261**
5 **ESTABLISHING A PLEDGE OF REVENUE**
6 **FOR RECLAMATION OF COUNTY MINED LANDS**
7

8 **WHEREAS**, the Board of Supervisors on November 4, 1997 adopted Resolution
9 No. 97-261, which established a pledge of revenue for reclaiming County mined lands;
10 and

11 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261, was
12 increased by Resolution No. 98-323 on November 11, 1998 for the reclamation of two
13 additional mining sites; and

14 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
15 increased by Resolution No. 2003-178 on April 29, 2003 for the reclamation of two
16 additional mining sites, and for the removal of two former mining sites; and

17 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
18 increased by Resolution No. 2006-118 on August 15, 2006 for the reclamation of the
19 expansion of one current mining site; and

20 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
21 increased by Resolution No. 2007-388 on September 4, 2007 to reflect adjustments to
22 account for new lands disturbed, inflation and for reclamation of lands accomplished in
23 accordance with the approved reclamation plan; and
24
25

APPROVED COUNTY COUNSEL
David H.K. Huff
DATE 5/13/10
DAVID H.K. HUFF

1 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
2 increased by Resolution No. 2008-196 on June 3, 2008 to reflect adjustments to
3 account for new lands disturbed, inflation and for reclamation of lands accomplished in
4 accordance with the approved reclamation plan; and

5 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
6 increased by Resolution No. 2009-184 on June 23, 2009 to reflect adjustments to
7 account for new lands disturbed, inflation and for reclamation of lands accomplished in
8 accordance with the approved reclamation plan; and

9 **WHEREAS**, the pledge of revenue needs to be modified to reflect annual
10 adjustments to account for new lands disturbed, inflation and for reclamation of lands
11 accomplished in accordance with the approved reclamation plan.

12
13 **NOW THEREFORE, BE IT RESOLVED, FOUND, DETERMINED AND**
14 **ORDERED** by the Board of Supervisors of the County of Riverside, State of California,
15 in regular session assembled on _____, 2010, that:

16
17 1. Section 1 of Resolution No. 97-261 is hereby amended to read:
18 Road Fund revenue, located in an account known as Transportation
19 Department Fund 20000, Department ID 3130100000 in the amount of
20 \$994,000.00 is hereby pledged to reclaim each mine site identified in
21 Attachment A, dated April 30, 2010, which is incorporated herein by this
22 reference.

23
24 2. Attachment A to Resolution No 97-261 is hereby replaced by said
25 Attachment A, dated April 30, 2010, which is attached and incorporated herein

1

by this reference.

2

ATTACHMENT A

**County Mining Sites
Transportation Department
April 30, 2010**

Name	California Mine I.D Number	Reclamation Cost Estimates
Bradshaw Pit	91-33-0046	\$55,500.00
Brookside Materials Yard	91-33-0094	\$328,000.00
Bundy Canyon Pit	91-33-0049	\$108,375.00
East Benton Pit	91-33-0052	\$39,250.00
Juniper Flats Pit	91-33-0053	\$78,125.00
Little Lake Pit	91-33-0055	\$33,375.00
Markham Pit	91-33-0054	\$137,875.00
Midland Pit	91-33-0051	\$84,875.00
Mountain View Pit	91-33-0048	\$34,875.00
Terwilliger Pit	91-33-0047	\$37,875.00
Thermal Pit	91-33-0090	\$55,875.00
	TOTAL	\$994,000.00

ATTACHMENT A

**Bradshaw Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0046
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 15
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
CAT 120G Grader w/operator	70.15	82.08	152.23
5-axle Low Bed Truck & Trailer w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 35

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
D-8R Dozer w/operator	1	ea	273.85	9		2,465		
Motor Grader w/operator	1	ea	152.23	9		1,370		
Low Bed Truck w/driver	1	ea	178.20	8		1,426		
Water Truck w/driver	1	ea	131.63	9		1,185		
Task 1 Total				35		6,445	say	6,400

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 48

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
Foreman	1	ea	89.87	8		719		
Laborer	2	ea	42.67	20		1,707		
Water Truck w/driver	1	ea	131.63	20		2,633		
Seed mix application	435,600	sf	0.04		na	17,424		
Task 4 Total	0			48		22,482	say	22,500

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 40,400

Bond Amount

Subtotal 40,400

Supervision (5%) 2,020

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 4,040

Lead Agency Administrative Cost (10%) 4,040

Total Bond Amount 55,500

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0094

4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance 29.81 acres
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
963 Loader w/operator	123.06	71.76	194.82
Water Truck w/driver	62.95	68.68	131.63
Low Bed Truck w/driver	62.95	69.76	132.71
3-axle End Dump Truck w/driver	62.95	69.76	132.71
Truck mounted crane w/operator	81.80	68.68	150.48
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 3:1 (2000 cy/ac)
Estimated time to regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor: 685 hours.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
D-8R Dozer w/operator	2	ea	273.85	343	93,795		
Water Truck w/driver	1	ea	131.63	171	22,541		
Task 1 Total					116,336	say	116,300

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain, install rip rap, install chain link fence and gate.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Interceptor Drain	2,875	LF	5.00	na	14,375		
Down Drain	130	LF	5.00	na	650		
Rip Rap Pad	2	ea	500.00	na	1,000		
Install Chain Link Fence & Gate	3,275	LF	10.00	na	32,750		
Task 2 Total					48,775	say	48,800

Task 3 Remove Mining Equipment

Remove non-mobile mining equipment, processing equipment, equipment boneyard, storage sheds, and other structures or equipment which was not at the site prior to mining.
5 working days are estimated to complete this task.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	89.87	40	3,595		
Laborer	2	ea	42.67	40	3,414		
966 Loader w/operator	1	ea	194.82	40	7,793		
Truck mounted crane w/operator	1	ea	150.48	40	6,019		
Low Bed Truck w/driver	0	ea	132.71	24	0		
End Dump Truck w/driver	1	ea	132.71	24	3,185		
Task 3 Total					24,005	say	24,000

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation

Task 4 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 57 pounds per acre (29.81 acres) by broadcasting with an automatic pressure sprayer. Mix seed into soil by dragging a chain over the area.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	89.87	24	2,157		
Laborer	2	ea	42.67	40	3,414		
Water Truck w/driver	1	ea	131.63	24	3,159		
Seed mix application	1,298,524	sf	0.04	na	51,941		
Task 4 Total					60,671	say	60,700

Task 5 Monitoring

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for three years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	3	years	120.00	24	8,640		
Task 5 Total					8,640	say	8,600

SUBTOTAL 258,400

Bond Amount

Subtotal 258,400

Supervision (5%) 12,920

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 25,840

Lead Agency Administrative Cost (10%) 25,840

Total Bond Amount 328,000

ATTACHMENT A

Bundy Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0049
4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 50
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
 (equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/operator	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>> 58

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	18	4,929		
Motor Grader w/operator	1	ea	152.23	18	2,740		
Low Bed Truck w/driver	1	ea	178.20	4	713		
Water Truck w/operator	1	ea	131.63	18	2,369		
Task 1 Total				58	10,752	say	10,800

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ----->>>>>> 22

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
Foreman	1	ea	89.87	4	359		
Laborer	2	ea	42.67	9	768		
Water Truck w/operator	1	ea	131.63	9	1,185		
Seed mix application	1,452,000	sf	0.04	na	58,080		
Task 4 Total	0			22	60,392	say	60,400

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation	4	years	120.00	24	11,520	
Task 5 Total					11,520	say <u>11,500</u>

SUBTOTAL 82,700

Bond Amount

Subtotal 82,700

Supervision (5%) 4,135

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 8,270

Lead Agency Administrative Cost (10%) 8,270

Total Bond Amount 108,375

ATTACHMENT A

East Benton Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0052
4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 4
- 2) Slopes will be *recontoured* and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be *furrowed* to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		89.87	89.87
Seed Mix @ \$35/lb		42.67	35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 31

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	273.85	9	2,465			
Motor Grader w/operator	1	ea	152.23	9	1,370			
Low Bed Truck w/driver	1	ea	178.20	4	713			
Water Truck w/driver	1	ea	131.63	9	1,185			
Task 1 Total				31	5,732	say		5,700

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	89.87	8	719			
Laborer	2	ea	89.87	8	1,438			
Water Truck w/driver	1	ea	131.63	8	1,053			
Seed mix application	174,240	sf	0.04	na	6,970			
Task 4 Total				24	10,180	say		10,200

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 27,400

Bond Amount

Subtotal 27,400

Supervision (5%) 1,370

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 2,740

Lead Agency Administrative Cost (10%) 2,740

Total Bond Amount 39,250

ATTACHMENT A

**Juniper Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0053
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 30
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor. Estimated manhours---->>>>>> 48

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	273.85	20	5,477			
Motor Grader w/operator	1	ea	152.23	10	1,522			
Low Bed Truck w/driver	1	ea	178.20	8	1,426			
Water Truck w/driver	1	ea	131.63	10	1,316			
Task 1 Total				48	9,741	say	9,700	

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	89.87	8	719			
Laborer	2	ea	42.67	8	683			
Water Truck w/driver	1	ea	131.63	8	1,053			
Seed mix application	871,200	sf	0.04	na	34,848			
Task 4 Total	0			24	37,303	say	37,300	

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Task 5 Total					11,520		

SUBTOTAL 58,500

Bond Amount

Subtotal 58,500

Supervision (5%) 2,925

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 5,850

Lead Agency Administrative Cost (10%) 5,850

Total Bond Amount 78,125

ATTACHMENT A

Little Lake Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0055
4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 2
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on *current* general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor. Estimated manhours---->>>>>>>>>> 31

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	273.85	9	2,465			
Motor Grader w/operator	1	ea	152.23	9	1,370			
Low Bed Truck w/driver	1	ea	178.20	4	713			
Water Truck w/driver	1	ea	131.63	9	1,185			
Task 1 Total				31	5,732	say		5,700

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>>>>>> 20

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	89.87	4	359			
Laborer	2	ea	42.67	9	768			
Water Truck w/driver	1	ea	131.63	7	921			
Seed mix application	87,120	sf	0.04	na	3,485			
Task 4 Total	0			20	5,534	say		5,500

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 22,700

Bond Amount

Subtotal	22,700
Supervision (5%)	1,135
Mobilization & Demobilization (lump sum)	5,000
Profit & Overhead (included in Hrlly rates for Labor & Equipment)	
Contingency (10%)	2,270
Lead Agency Administrative Cost (10%)	2,270
Total Bond Amount	<u>33,375</u>

ATTACHMENT A

**Markham Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0054
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 11.8
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		89.87	89.87
Seed Mix @ \$35/lb		42.67	35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 233

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	2	ea	273.85	120	32,862			
Motor Grader w/operator	1	ea	152.23	40	6,089			
Low Bed Truck w/driver	1	ea	178.20	8	1,426			
Water Truck w/driver	1	ea	131.63	65	8,556			
Task 1 Total				233	48,933		say	48,900

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain & install rip rap.

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Interceptor Drain	1,150	LF	10.00	na	11,500			
Down Drain	60	LF	10.00	na	600			
Rip Rap Pad	3	ea	500.00	na	1,500			
Task 2 Total					13,600		say	13,600

Task 3 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre (6.8 acres total) by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>> 84

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	89.87	24	2,157			
Laborer	2	ea	89.87	36	6,471			
Water Truck w/driver	1	ea	131.63	24	3,159			
Seed mix application	514,008	sf	0.04	na	20,560			
Task 4 Total				84	32,347		say	32,300

Task 4 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Task 5 Total					11,520		say 11,500

SUBTOTAL 106,300

Bond Amount

Subtotal 106,300

Supervision (5%) 5,315

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrlly rates for Labor & Equipment)

Contingency (10%) 10,630

Lead Agency Administrative Cost (10%) 10,630

Total Bond Amount 137,875

ATTACHMENT A

**Midland Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0051
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 52
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor. Estimated manhours---->>>>>>> 71

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs			
D-8R Dozer w/operator	1	ea	273.85	27		7,394	
Motor Grader w/operator	1	ea	152.23	9		1,370	
Low Bed Truck w/driver	1	ea	178.20	8		1,426	
Water Truck w/driver	1	ea	131.63	27		3,554	
Task 1 Total				71		13,744	say 13,700

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs			
Foreman	1	ea	89.87	8		719	
Laborer	2	ea	42.67	8		683	
Water Truck w/driver	1	ea	131.63	8		1,053	
Seed mix application	906,048	sf	0.04	na		36,242	
Task 4 Total				24		38,697	say 38,700

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Task 5 Total					11,520	say 11,500

SUBTOTAL 63,900

Bond Amount

Subtotal 63,900

Supervision (5%) 3,195

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrlly rates for Labor & Equipment)

Contingency (10%) 6,390

Lead Agency Administrative Cost (10%) 6,390

Total Bond Amount 84,875

ATTACHMENT A

**Mountain View Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0048
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 3
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		89.87	89.87
Seed Mix @ \$35/lb		42.67	35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>> 31

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	9	2,465		
Motor Grader w/operator	1	ea	152.23	9	1,370		
Low Bed Truck w/driver	1	ea	178.20	4	713		
Water Truck w/driver	1	ea	131.63	9	1,185		
Task 1 Total				31	5,732		say 5,700

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ----->>>>>> 10

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
Foreman	1	ea	89.87	2	180		
Laborer	2	ea	89.87	4	719		
Water truck	1	ea	131.63	4	527		
Seed mix application	130,680	sf	0.04	na	5,227		
Task 4 Total				10	6,652		say 6,700
	0						

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation	4	years	120.00	24	11,520	
Task 5 Total					11,520	say 11,500

SUBTOTAL 23,900

Bond Amount

Subtotal	23,900
Supervision (5%)	1,195
Mobilization & Demobilization (lump sum)	5,000
Profit & Overhead (included in Hrly rates for Labor & Equipment)	
Contingency (10%)	2,390
Lead Agency Administrative Cost (10%)	2,390
Total Bond Amount	<u>34,875</u>

ATTACHMENT A

**Terwilliger Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0047
4/30/2010**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 10
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 26

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	273.85	9	2,465			
Motor Grader w/operator	1	ea	152.23	4	609			
Low Bed Truck w/driver	1	ea	178.20	4	713			
Water Truck w/driver	1	ea	131.63	9	1,185			
Task 1 Total				26	4,971	say	5,000	

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours---->>>>>> 10

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	89.87	2	180			
Laborer	2	ea	42.67	4	341			
Water Truck w/driver	1	ea	131.63	4	527			
Seed mix application	217,800	sf	0.04	na	8,712			
Task 4 Total	0			10	9,760	say	9,800	

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520	say	11,500
Task 5 Total					11,520		

SUBTOTAL 26,300

Bond Amount

Subtotal 26,300

Supervision (5%) 1,315

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 2,630

Lead Agency Administrative Cost (10%) 2,630

Total Bond Amount 37,875

ATTACHMENT A

New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0090
4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 10
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 80

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs			
D-8R Dozer w/operator	1	ea	273.85	27		7,394	
Motor Grader w/operator	1	ea	152.23	18		2,740	
Low Bed Truck w/driver	1	ea	178.20	8		1,426	
Water Truck w/driver	1	ea	131.63	27		3,554	
Task 1 Total				80		15,114	say 15,100

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs			
Foreman	1	ea	89.87	8		719	
Laborer	2	ea	42.67	8		683	
Water Truck w/driver	1	ea	131.63	8		1,053	
Seed mix application	290,400	sf	0.04	na		11,616	
Task 4 Total	0			24		14,071	say 14,100

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Task 5 Total					11,520	say 11,500

SUBTOTAL 40,700

Bond Amount

Subtotal 40,700

Supervision (5%) 2,035

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 4,070

Lead Agency Administrative Cost (10%) 4,070

Total Bond Amount 55,875