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





FROM: TLMA - Transportation Department

SUBMITTAL DATE: June 16, 2011

SUBJECT:

Modification of Financial Assurance Mechanism Required by the Surface Mining

and Reclamation Act (SMARA).

**RECOMMENDED MOTION:** That the Board of Supervisors approve Resolution 2011-163, 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 Current F.Y. Total Cost:

**Current F.Y. Net County Cost:** 

\$ 0 \$ 0 In Current Year Budget: Budget Adjustment:

N/A N/A

DATA Annual Net

Annual Net County Cost:

\$ 0 For Fiscal Year:

2011/2012 Positions To Be

SOURCE OF FUNDS: Road Funds (100%)

Deleted Per A-30

There are no General Funds used in this project.

Requires 4/5 Vote

**C.E.O. RECOMMENDATION:** 

APPROVE

Tina Gr

County Executive Office Signature

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Buster, seconded by Supervisor Ashley and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:

Buster, Tavaglione, Stone, Benoit and Ashley

Nays:

None

Absent:

None

∫ Date:

June 28, 2011

XC:

Transp.

Prev. Agn. Ref. 3.65 of 6/8/10

**District:** 1.3.4.5

**Agenda Number:** 

3.103

Kecia Harper-Ihem

Clerk of the Boa

BY CANID H.K. HUFF 19 Delatimental Concurren

Policy

X

Consent

Per Exec. Ofc.:

Dep't Recomm.:

The Honorable Board of Supervisors

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

June 16, 2011 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 (PRC2773.1(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 \$994,000.00 to \$994,625.00. The actual reclamation cost for each mining site or borrow pit is shown on Attachment A. Resolution 2011-163 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, Resolution 2009-184 and Resolution 2010-157. There is no current fiscal year cost associated with the future reclamation. A future expense would be incurred at the point the 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

# Board of Supervisors

## County of Riverside

## **RESOLUTION NO. 2011-163**

## **AMENDING RESOLUTION 97-261**

## **ESTABLISHING A PLEDGE OF REVENUE**

## FOR RECLAMATION OF COUNTY MINED LANDS

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

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

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

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

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

1	Attachment A, dated May 25, 2011, which is incorporated herein by this
2	reference.
3	
4	2. Attachment A to Resolution No 97-261 is hereby replaced by said
5	Attachment A, dated May 25, 2011, which is attached and incorporated herein
6	by this reference.
7	
	ROLL CALL:
	Ayes: Buster, Tavaglione, Stone, Benoit, and Ashley Nays: None
	Absent: None  The foregoing is certified to be a true copy of a resolution duly
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:  Deputy
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:  Deputy
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said Boar  By:  Deputy

# County Mining Sites Transportation Department May 25, 2011

Name	California Mine I.D Number	Reclamation Cost Estimates
Bradshaw Pit	91-33-0046	\$55,125.00
Brookside Materials Yard	91-33-0094	\$318,500.00
Bundy Canyon Pit	91-33-0049	\$108,250.00
East Benton Pit	91-33-0052	\$38,250.00
Juniper Flats Pit	91-33-0053	\$77,750.00
Little Lake Pit	91-33-0055	\$53,500.00
Markham Pit	91-33-0054	\$132,250.00
Midland Pit	91-33-0051	\$84,000.00
Mountain View Pit	91-33-0048	\$34,250.00
Terwilliger Pit	91-33-0047	\$37,500.00
Thermal Pit	91-33-0090	\$55,250.00
	TOTAL	\$994,625.00

## **Bradshaw Material Site Financial Assurance Calculations for Reclamation** California Mine I.D Number 91-33-0046 5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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)

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

	H	ourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	195.02	65.13	260.15
Water Truck w/driver	67.19	51.58	118.78
CAT 120G Grader w/operator	121.66	65.46	187.12
5-axle Low Bed Truck & Trailer w/driver	84.59	51.58	136.18
Foreman		100.00	100.00
Laborer		47.36	47.36
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--->>>>

6,100

22,500

say

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	260.15	9	2,341	
Motor Grader w/operator	1	ea	187.12	9	1,684	
Low Bed Truck w/driver	1	ea	131.06	8	1,049	
Water Truck w/driver	1	ea	118.78	9	1,069	
Task 1 Total			-	35	6,143	sa

## 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 --->>>>

No. Man Unit Rate ea 100.00 800 ea 47.36 1,895 ea 118.78 2,376 sf 0.04 17,424 na 22,494

Task 3 Monitoring

Labor & Equipment

Water Truck w/driver

Seed mix application

Foreman

Task 4 Total

Laborer

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			•			40,100

#### **Bond Amount**

Subtotal	40,100
Supervision (5%)	2,005
Mobilization & Demobilization (lump sum)	5,000
Profit & Overhead (included in Hrly rates for Lahor &	Equipment)

Contingency (10%)	4,010

**Lead Agency Administrative Cost (10%)** 4,010

**Total Bond Amount** 55,125

## **Brookside Material Site Financial Assurance Calculations for Reclamation** California Mine I.D Number 91-33-0094 5/25/2011

This cost estimate is based on the following assumptions:

1) The maximum amount of disturbance (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)

	H	ourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	195.02	65.13	260.15
963 Loader w/operator	106.10	65.13	171.23
Water Truck w/driver	67.19	51.58	118.78
Low Bed Truck w/driver	84.59	46.47	131.06
3-axle End Dump Truck w/driver	67.19	51.58	118.78
Truck mounted crane w/operator	73.69	65.13	138.83
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	260.15	343	89,102		
Water Truck w/driver	1	ea	118.78	171_	20,340		
Task 1 Total					109,442	say	109,400

### 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	100.00	40	4,000	
Laborer	2	ea	47.36	40	3,789	
966 Loader w/operator	1	ea	171.23	40	6,849	
Truck mounted crane w/operator	1	ea	138.83	40	5,553	
Low Bed Truck w/driver	0	ea	131.06	24	0	
3-axle End Dump Truck w/driver	1	ea	118.78	24	2,851	
Task 3 Total					23,042	

23.000

## **Brookside Material Site Financial Assurance Calculations for Reclamation**

<u>Task 4 Broadcast Seeding</u>
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	100.00	24	2,400		
Laborer	2	ea	47.36	40	3,789		
Water Truck w/driver	1	ea	118.78	24	2,851		
Seed mix application	1,298,524	sf	0.04	na	51,941		
Task 4 Total					60,981	say	61,000
Task 5 Monitoring							
Profit & Overhead (included	in Hrly rates for I sh	or & Fauir	nmont)				

<u>Profit & Overhead (included in Hrly rates for Labor & Equipment)</u>
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							250,800
Bond Amount							
Subtotal							250,800
Supervision (5%)							12,540
Mobilization & Demobilization	Mobilization & Demobilization (lump sum)						5,000
Profit & Overhead (included i	n Hrly rates	for Labo	r & Equipn	nent)			
Contingency (10%)							25,080
Lead Agency Administrative (	Cost (10%)						25.080

#### **Bundy Canyon Material Site Financial Assurance Calculations for Reclamation** California Mine I.D Number 91-33-0049 5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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)

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

	н	Hourly Rate				
	Equipment	Labor	Total			
D-8R Dozer w/operator	195.02	65.13	260.15			
Water Truck w/operator	67.19	51.58	118.78			
Motor Grader w/operator	121.66	65.46	187.12			
Low Bed Truck w/driver	84.59	46.47	131.06			
Foreman		100.00	100.00			
Laborer		47.36	47.36			
Seed Mix @ \$35/lb			35.00			

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u>
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

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
D-8R Dozer w/operator	1	ea	260.15	18	4.683
Motor Grader w/operator	1	ea	187.12	18	3.368
Low Bed Truck w/driver	1	ea	131.06	- 4	524
Water Truck w/operator	1	ea	118.78	18	2.138
Task 1 Total	A STATE OF S			58	10 713

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.

22 22

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
Foreman	1	ea	100.00	4	400
Laborer	2	ea	47.36	9	853
Water Truck w/operator	1	ea	118.78	9	1,069
Seed mix application	524600	sf	0.04	na	58,080
Task 4 Total	0		-	22	60,402

60,400

10,700

<u>Task 3 Monitoring</u>
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 Report Preparation	Qty 4	Unit years	Rate 120.00	No. Hrs 24_	Total 11,520	44.500
Task 5 Total  SUBTOTAL					11,520	say11,500 82,600
Bond Amount						
Subtotal						82,600
Supervision (5%)						4,130
Mobilization & Demobili	zation (lum	p sum)				5,000
Profit & Overhead (inclu	ded in Hrly	rates for	Labor & E	quipment)		
Contingency (10%)						8,260
Lead Agency Administra	ative Cost (	10%)				8,260
Total Bond Amount						108,250

#### East Benton Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0052

5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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)

#### 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	195.02	65.13	260.15			
Water Truck w/driver	67.19	51.58	118.78			
Motor Grader w/operator	121.66	65.46	187.12			
Low Bed Truck w/driver	84.59	46.47	131.06			
Foreman		100.00	100.00			
Laborer		47.36	47.36			
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--->>>>>

Labor & Equipment	Qty	Unit	Rate	Hrs	Total
D-8R Dozer w/operator	1	ea	260.15	9	2,341
Motor Grader w/operator	1	ea	187.12	9	1,684
Low Bed Truck w/driver	1	ea	131.06	. 4	524
Water Truck w/driver	1	ea	118.78	. 9	1.069
Task 1 Total	V			31	5 610

<u>Task 2 Broadcast Seeding</u>
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 --->>>>

				No. Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
Foreman	1	ea	100.00	8	800		
Laborer	<b>2</b>	ea	47.36	8	758		
Water Truck w/driver	1	ea	118.78	8	950		
Seed mix application	57420	sf	0.04	na	6,970		
Task 4 Total			-	24	9,478	say	9,500
	Δ.				•	•	

say

24

5.600

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 Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120.00	No. Hrs 24_	Total 11,520 11,520	say <u>11,500</u>
SUBTOTAL						26,600
<b>Bond Amount</b>						
Subtotal						26,600
Supervision (5%)						1,330
Mobilization & Demobili	zation (lum	np sum)				. 5,000
Profit & Overhead (inclu	ıded in Hrly	rates for	Labor & E	quipment)		
Contingency (10%)						2,660
Lead Agency Administra	ative Cost	(10%)				2,660
Total Bond Amount						38,250

#### Juniper Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0053 5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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)

#### 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	195.02	65.13	260.15			
Water Truck w/driver	67.19	51.58	118.78			
Motor Grader w/operator	121.66	65.46	187.12			
Low Bed Truck w/driver	84.59	46.47	131.06			
Foreman		100.00	100.00			
Laborer		47.36	47.36			
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
----

37,400

Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	1	ea	260.15	20	5,203		
Motor Grader w/operator	1	ea	187.12	10	1,871		
Low Bed Truck w/driver	1	ea	131.06	8	1.049		
Water Truck w/driver	1	ea	118.78	10	1,188		
Task 1 Total	\$1.1, march 100 (1) (1)			48	9.310	sav	9.30

<u>Task 2 Broadcast Seeding</u>
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 -

	No. Man						
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
Foreman	1	ea	100.00	8	800		
Laborer	2	ea	47.36	8	758		
Water Truck w/driver	1	ea	118.78	8	950		
Seed mix application	33737200	sf	0.04	na	34,848		
Task 4 Total	0			24	37.356	sav	

<u>Task 3 Monitoring</u>
Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place

for up to four years following r	eciamation to	venty the s	uccess stand	ards are beir	ng met.	
Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation Task 5 Total	4	years	120.00	24_	11,520	41 500
Task 5 Total					11,520	say <u>11,500</u>
SUBTOTAL						58,200
Bond Amount						
Subtotal	•					58,200
Supervision (5%)						2,910
Mobilization & Demobili	zation (lur	np sum)				5,000
Profit & Overhead (inclu	ıded in Hri	y rates for	Labor & E	Equipment	)	
Contingency (10%)			•			5,820
Lead Agency Administra	ative Cost	(10%)				5,820
Total Bond Amount						77,750

#### Little Lake Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0055 5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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)

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

		_	
Ha	urlv	D-	ŧ٠

	Equipment	Labor	Total
D-8R Dozer w/operator	195.02	65.13	260.15
Water Truck w/driver	67.19	51.58	118.78
Motor Grader w/operator	121.66	65.46	187.12
Low Bed Truck w/driver	84.59	46.47	131.06
Foreman		100.00	100.00
Laborer		47.36	47.36
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--->>>>>

14,700

12.600

Labor & Equipment				No. Man		
	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	260.15	.25	6,504	
Motor Grader w/operator	1	ea	187.12	25	4,678	
Low Bed Truck w/driver	1	ea	131.06	. 4	524	
Water Truck w/driver	1	ea	118.78	25	2.969	
Task 1 Total				79	14.675	

<u>Task 2 Broadcast Seeding</u>
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 --->>>>

No. Man

Qty	Unit	Rate	Hrs	Total
1	ea	100.00	4	400
2	ea	47.36	18	1,705
1	ea	118.78	15	1,782
ELECT FOR	sf	0.04	na	8,712
0		-	37	12,599
	Qty 1 2 1 1 0	1 ea 2 ea 1 ea	1 ea 100.00 2 ea 47.36 1 ea 118.78	Qty         Unit         Rate         Hrs           1         ea         100.00         4           2         ea         47.36         18           1         ea         118.78         15           sf         0.04         na

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								38,800

#### **Bond Amount**

Subtotal	38,800
Subtotal	38,800

Supervision (5%) 1,940

Mobilization & Demobilization (lump sum) 5,000

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

Contingency (10%) 3,880

Lead Agency Administrative Cost (10%) 3,880

**Total Bond Amount** 53,500

### Markham Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0054

5/25/2011

This cost estimate is based on the following assumptions:

1) The maximum amount of disturbance (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)

#### 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	195.02	65.13	260.15		
Water Truck w/driver	67.19	51.58	118.78		
Motor Grader w/operator	121.66	65.46	187.12		
Low Bed Truck w/driver	84.59	46.47	131.06		
Foreman		100.00	100.00		
Laborer		47.36	47.36		
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—>>>>>

233

47,500

13,600

29,200

10.180

say

say

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	2	ea	260.15	120	31,218	
Motor Grader w/operator	1	ea	187.12	40	7,485	
Low Bed Truck w/driver	1	ea	131.06	8	1.049	
Water Truck w/driver	1	ea	118.78	65	7,720	
Task 1 Total				233	47 472	

## Task 2 Construct Drainage Structures

Construct interceptor drain, down drain & install rip rap.

				No. Man	)
Labor & Equipment	Qty	Unit	Rate	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

### 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 —>>>>

			No. Man					
Labor & Equipment	Qty	Unit	Rate	Hrs	Total			
Foreman	1	ea	100.00	24	2,400			
Laborer	2	ea	47,36	36	3,410			
Water Truck w/driver	1	ea	118.78	24	2.851			
Seed mix application		sf	0.04	na	20,560			
Task 4 Total			_	84	29,221			

0

<u>Task 4 Monitoring</u>
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						101,800

#### **Bond Amount**

Contingency (10%)

Subtotal	101,800
Supervision (5%)	5,090
Mobilization & Demobilization (lump sum)	5,000
Profit & Overhead (included in Hrby rates for Labor & Equipment)	

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

Lead Agency Administrative Cost (10%) 10,180

**Total Bond Amount** 132,250

#### Midland Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0051 5/25/2011

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (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
- 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	195.02	65.13	260.15		
Water Truck w/driver	67.19	51.58	118.78		
Motor Grader w/operator	121.66	65.46	187.12		
Low Bed Truck w/driver	84.59	46.47	131.06		
Foreman		100.00	100.00		
Laborer		47.36	47.36		
Seed Mix @ \$35/lb			35.00		

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u>
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

38,700

	No. Man									
Labor & Equipment	Qty	Unit	Rate	Hrs	Total					
D-8R Dozer w/operator	1	ea	260.15	27	7,024					
Motor Grader w/operator	1	ea	187.12	9	1,684					
Low Bed Truck w/driver	1	ea	131.06		1,049					
Water Truck w/driver	1	ea	118.78	27	3,207					
Task 1 Total				71	12,964	say	13,000			

#### 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 ---->>>>

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
Foreman	1	ea .	100.00 🖔	8	800
Laborer	2	ea	47.36	8	758
Water Truck w/driver	1	ea	118.78	8	950
Seed mix application	33.6 040	sf	0.04	na	36,242
Task 4 Total	7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-		_	24	38,750

#### 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						63,200
Bond Amount						
Subtotal						63,200
Supervision (5%)						3,160
Mobilization & Demobilization	zation (lun	np sum)				5,000
Profit & Overhead (inclu	ded in Hrly	rates for	Labor & E	Equipment	)	
Contingency (10%)						6,320
Lead Agency Administra	tive Cost	(10%)				6,320
<b>Total Bond Amount</b>						84,000

## Mountain View Road Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0048

5/25/2011

This cost estimate is based on the following assumptions:

1) The maximum amount of disturbance (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)

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

	H	Hourly Rate				
	Equipment	Labor	Total			
D-8R Dozer w/operator	195.02	65.13	260.15			
Water Truck w/driver	67.19	51.58	118.78			
Motor Grader w/operator	121.66	65.46	187.12			
Low Bed Truck w/driver	84.59	46.47	131.06			
Foreman		100.00	100.00			
Laborer		47.36	47.36			
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

5,600

6,300

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	260.15	9	2,341	
Motor Grader w/operator	1	ea	187.12	9	1,684	
Low Bed Truck w/driver	1	ea	131.06	4	524	
Water Truck w/driver	1	ea	118.78	9	1.069	
Task 1 Total			•	31	5.619	

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

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
Foreman	1	ea	100.00	2	200
Laborer	2	ea	47.36	4	379
Water Truck w/driver	1	ea	118.78	4	475
Seed mix application	3517630	sf	0.04	na	5,227
Task 4 Total			-	10	6,281

<u>Task 3 Monitoring</u>
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 Report Preparation Task 5 Total	Qty	4	Unit years	Rate 120.00	No. Hrs 24	Total 11,520 11,520	say 11,500
SUBTOTAL						11,020	23,400
<b>Bond Amount</b>							
Subtotal							23,400
Supervision (5%)							1,170
Mobilization & Demobili	zation (	lum	p sum)				5,000
Profit & Overhead (inclu	ded in I	Hrly	rates for	r Labor & E	quipment)	1	
Contingency (10%)							2,340
Lead Agency Administra	ative Co	st (	10%)				2,340
Total Bond Amount							34,250

#### Terwilliger Road Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0047 5/25/2011

This cost estimate is based on the following assumptions:

1) The maximum amount of disturbance (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)

#### 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	195.02	65.13	260.15		
Water Truck w/driver	67.19	51.58	118.78		
Motor Grader w/operator	121.66	65.46	187.12		
Low Bed Truck w/driver	84.59	46.47	131.06		
Foreman		100.00	100.00		
Laborer		47.36	47.36		
Seed Mix @ \$35/lb			35.00		

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u> 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

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	260.15	9	2,341	
Motor Grader w/operator	1	ea	187.12	4	748	
Low Bed Truck w/driver	1	ea	131.06	4	524	
Water Truck w/driver	1	ea	118.78	9	1,069	
Task 1 Total			•	26	4,683	

sav

4.700

9,800

37,500

<u>Task 2 Broadcast Seeding</u>
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 -

		No. Man				
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
Foreman	1	ea	100.00	2	200	
Laborer	2	ea	47.36	4	379	
Water Truck w/driver	. 1	ea	118.78	4	475	
Seed mix application	247 900	sf	0.04	na	8.712	
Task 4 Total	0		_	10	9.766	

<u>Task 3 Monitoring</u>
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						26,000
<b>Bond Amount</b>						
Subtotal						26,000
Supervision (5%)						1,300
Mobilization & Demobilization	zation (lum	p sum)				5,000
Profit & Overhead (inclu	dad in Helv	rates for	richer 9 E	:i		

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

Contingency (10%)		2,600
1 and America Administratives	4 (400)	

Lead Agency Administrative Cost (10%)	2,600
Total Bond Amount	37 500

#### New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0090 5/25/2011

This cost estimate is based on the following assumptions:

- The maximum amount of disturbance (acres) =
   Slopes will be recontoured and graded to blend with the surrounding area.
   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	195.02	65.13	260.15		
Water Truck w/driver	67.19	51.58	118.78		
Motor Grader w/operator	121.66	65.46	187.12		
Low Bed Truck w/driver	84.59	46.47	131.06		
Foreman		100.00	100.00		
Laborer		47.36	47.36		
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

14,600

14,100

			No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Tctal
D-8R Dozer w/operator	1	ea	260.15	27	7,024
Motor Grader w/operator	1	ea	187.12	18	3,368
Low Bed Truck w/driver	1	ea	131.06	8	1,049
Water Truck w/driver	1	ea	118.78	27	3.207
Task 1 Total				80	14,648

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

			No. Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
Foreman	1	ea	100.00	8	800	
Laborer	. 2	ea	47.36	8	758	
Water Truck w/driver	1	ea	118.78	8	950	
Seed mix application	290,400	sf	0.04	na	11.616	
Task 4 Total	0			24	14 124	

#### 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 Report Preparation	Qty 4	Unit years	Rate 120.00	No. Hrs 24_	Total 11,520	
Task 5 Total					11,520	say <u>11,500</u>
SUBTOTAL						40,200
Bond Amount						
Subtotal						40,200
Supervision (5%)						2,010
Mobilization & Demobi	lization (lum	p sum)				5,000
Profit & Overhead (incl	uded in Hrly	rates for	Labor & E	quipment	)	
Contingency (10%)						4,020
Lead Agency Administr	rative Cost (	10%)				4,020
Total Bond Amount						55,250