

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



ITEM
3.64
(ID # 4757)

MEETING DATE:

Tuesday, July 25, 2017

FROM : TLMA-TRANSPORTATION:

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/ TRANSPORTATION:
Adoption of Resolution No. 2017-142, Modification to Financial Assurance
Mechanism Required by the Surface Mining Reclamation Act. 1st, 3rd, 4th and
5th Districts; [\$0]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve Resolution No. 2017-142, which amends Resolution No. 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.

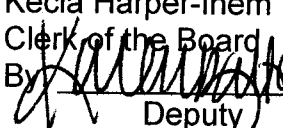
ACTION: Policy


Patricia Romo, Director of Transportation 7/7/2017

MINUTES OF THE BOARD OF SUPERVISORS

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

Ayes: Jeffries, Tavaglione, Washington, Perez and Ashley
Nays: None
Absent: None
Date: July 25, 2017
xc: Transp.

Kecia Harper-Ihem
Clerk of the Board
By 
Deputy

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

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 0	\$ 0	\$ 0	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: There are no General Funds used in this project			Budget Adjustment:	No
			For Fiscal Year:	17/18

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Board of Supervisors 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 County of Riverside (County) Transportation Department (Transportation Department) for road construction and maintenance. Surface Mining and Reclamation Act (SMARA) requires that the Financial Assurances be adjusted annually. The adjustments account for the new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan (PRC2773.1(a)(3)).

The original Resolution No. 97-261 must be modified to adjust for reclamation costs of the individual County sites, as contained in the Pledge of Revenue, from \$1,098,250 to \$1,596,661. The actual reclamation cost for each mining site or borrow pit is shown in Attachment A. Resolution No. 2017-142 supersedes any previously approved modification to Resolution No. 97-261 made by Resolution No. 98-323, Resolution No. 2003-178, Resolution No. 2006-118, Resolution No. 2007-388, Resolution No. 2008-196, Resolution No. 2009-184, Resolution No. 2010-157, Resolution No. 2011-163, Resolution No. 2012-142, Resolution No. 2013-070, Resolution No. 2014-110 and Resolution No. 2015-114 and Resolution No. 2016-108. 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.

Impact on Residents and Businesses

N/A

SUPPLEMENTAL

Additional Fiscal Information

Project No. ZTR 9000

Contract History and Price Reasonableness

N/A

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

ATTACHMENTS:

Resolution No. 2017-142

Attachment A



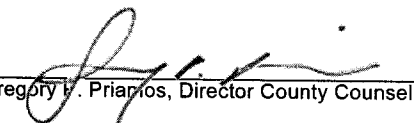
Shellie Clack

7/11/2017



Tina Grande, Principal Management Analyst

7/18/2017



Gregory V. Priantos, Director County Counsel

7/11/2017

1 Board of Supervisors

County of Riverside

2
3 **RESOLUTION NO. 2017-142**
4 **AMENDING RESOLUTION NO. 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 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
25 increased by Resolution No. 2008-196 on June 3, 2008 to reflect adjustments to
26 account for new lands disturbed, inflation and for reclamation of lands accomplished in

FORM APPROVED COUNTY COUNSEL
BY:  7/11/17
DATE
MICHELLE CLACK

1 accordance with the approved reclamation plan; and

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

6 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
7 increased by Resolution No. 2010-157 on June 8, 2010 to reflect adjustments to
8 account for new lands disturbed, inflation and for reclamation of lands accomplished in
9 accordance with the approved reclamation plan; and

10 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
11 increased by Resolution No. 2011-163 on June 28, 2011 to reflect adjustments to
12 account for new lands disturbed, inflation and for reclamation of lands accomplished in
13 accordance with the approved reclamation plan; and

14 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
15 increased by Resolution No. 2012-142 on June 26, 2012 to reflect adjustments to
16 account for new lands disturbed, inflation and for reclamation of lands accomplished in
17 accordance with the approved reclamation plan; and

18 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
19 increased by Resolution No. 2013-070 on April 9, 2013 to reflect adjustments to
20 account for new lands disturbed, inflation and for reclamation of lands accomplished in
21 accordance with the approved reclamation plan; and

22 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
23 increased by Resolution No. 2014-110 on June 17, 2014 to reflect adjustments to
24 account for new lands disturbed, inflation and for reclamation of lands accomplished in
25 accordance with the approved reclamation plan; and

26 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was

1 increased by Resolution No. 2015-114 on June 2, 2015 to reflect adjustments to
2 account for new lands disturbed, inflation and for reclamation of lands accomplished in
3 accordance with the approved reclamation plan; and

4 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
5 increased by Resolution No. 2016-108 on May 3, 2016 to reflect adjustments to
6 account for new lands disturbed, inflation and for reclamation of lands accomplished in
7 accordance with the approved reclamation plan; and

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

11
12 **NOW THEREFORE, BE IT RESOLVED, FOUND, DETERMINED AND**
13 **ORDERED** by the Board of Supervisors of the County of Riverside, State of California,
14 in regular session assembled on July 25, 2017, that:

15
16 1. Section 1 of Resolution No. 97-261 is hereby amended to read:
17 Road Fund revenue, located in an account known as Transportation
18 Department Fund 20000, Department ID 3130100000 in the amount of
19 \$1,596,661.00 is hereby pledged to reclaim each mine site identified in
20 Attachment A, dated June 22, 2017, which is incorporated herein by this
21 reference.

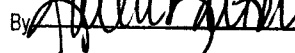
22
23 2. Attachment A to Resolution No 97-261 is hereby replaced by said
24 Attachment A, dated June 22, 2017, which is attached and incorporated herein
25 by this reference.

26 ROLL CALL:

Ayes: Jeffries, Tavaglione, Washington, Perez and Ashley
Nays: None
Absent: None

The foregoing is certified to be a true copy of a
resolution duly adopted by said Board of Super-
visors on the date therein set forth.

KECIV HARPER, Clerk of said Board

By  Deputy

ATTACHMENT A

County Mining Sites
Transportation Department
June 22, 2017

Name	California Mine I.D Number	Reclamation Cost Estimates
Bradshaw Pit	91-33-0046	\$87,337.00
Brookside Materials Yard	91-33-0094	\$68,431.00
Bundy Canyon Pit	91-33-0049	\$208,308.00
East Benton Pit	91-33-0052	\$108,572.00
Juniper Flats Pit	91-33-0053	\$232,146.00
Little Lake Pit	91-33-0055	\$128,163.00
Markham Pit	91-33-0054	\$153,645.00
Midland Pit	91-33-0051	\$209,267.00
Mountain View Pit	91-33-0048	\$84,734.00
Terwilliger Pit	91-33-0047	\$80,898.00
Thermal Pit	91-33-0090	<u>\$235,160.00</u>
	TOTAL	\$1,596,661.00

ATTACHMENT A

Bradshaw Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0046
6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		Total
	Equipment	Labor	
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
CAT 120G Grader w/operator	67.84	79.43	147.27
5-axle Low Bed Truck & Trailer w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 4:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor.

Methods to be used: A CAT D-8 dozer with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 15 acres.

Production Rate: 1 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	20	5,304.26
CAT 120G Grader w/operator	1	ea	147.27	20	2,945.38
5-axle Low Bed Truck & Trailer w/driver	1	ea	169.38	8	1,355.05
Water Truck w/driver	1	ea	129.56	20	2,591.13
Task 1 Total				68	12,195.82

say 12,200

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.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	653,400	sf	0.045	na	29,403.00
Task 2 Total				24	32,533.61

say 32,500

ATTACHMENT A

Bradshaw Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0046

6/22/2017

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	32	15,360.00	
Task 3 Total				32	15,360.00	say <u>15,400</u>

SUBTOTAL 60,100

Pledge of Revenue

Subtotal							60,100
Supervision (5%)							3,005
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							7,212
Contingency (10%)							6,010
Lead Agency Administrative Cost (10%)							6,010

Total Pledge of Revenue 87,337

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0094

6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		Total
	Equipment	Labor	
D-8R Dozer w/operator	185.78	79.43	265.21
CAT 120G Grader w/operator	67.84	79.43	147.27
Water Truck w/driver	66.36	63.20	129.56
5-axle Low Bed Truck & Trailer w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.040

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 3:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor. Pit floor to be graded at 1.5% slope for drainage purposes.

Fill in drainage basin.

Methods to be used: A CAT D-8 dozer with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 10 acres.

Slopes will be graded to 3:1 ratio.

Production Rate: 1 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	40	10,608.52
5-axle Low Bed Truck & Trailer w/driver	1	ea	169.38	8	1,355.05
Water Truck w/driver	1	ea	129.56	40	5,182.26

Task 1 Total 88 17,145.83

say 17,100

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.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	435,600	sf	0.040	na	17,424.00

Task 2 Total 24 20,554.61

say 20,600

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation

Task 3 Monitoring

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.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation	3	years	120.00	24	8,640.00	
Task 5 Total					8,640.00	say <u>8,600</u>
					SUBTOTAL	46,300

Pledge of Revenue

Subtotal							46,300
Supervision (5%)							2,315
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							5,556
Contingency (10%)							4,630
Lead Agency Administrative Cost (10%)							4,630
Total Pledge of Revenue							<u>68,431</u>

ATTACHMENT A

Bundy Canyon Material Site Financial Assurance Calculations for Reclamation **California Mine I.D Number 91-33-0049** **6/22/2017**

This cost estimate is based on the following assumptions:

- 1) The existing 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/operator	66.36	63.20	129.56
Motor Grader w/operator	67.84	79.43	147.27
5-axle Low Bed Truck & Trailer w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 2:1, fill in drainage basin, regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor.

Methods to be used: Two (2) CAT D-8 dozers with a ripper attachments will traverse the compacted areas to promote plant growth. Dozers and a grader will grade available soil over the 50 acres. Slopes will be graded to 2:1 ratio.

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	2	ea	265.21	30	15,912.77
Motor Grader w/operator	1	ea	147.27	30	4,418.07
5-axle Low Bed Truck & Trailer w/driver	1	ea	169.38	8	1,355.05
Water Truck w/operator	1	ea	129.56	30	3,886.70
Task 1 Total				42	25,572.59

say 25,600

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.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	24	3,482.64
Laborer	2	ea	58.33	24	2,799.82
Water Truck w/operator	1	ea	129.56	24	3,109.36
Seed mix application	2,178,000	sf	0.045	na	98,010.00
Task 2 Total				72	107,401.82

say 107,400

Bundy Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0049
6/22/2017

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	32	15,360.00
Task 3 Total					15,360.00

say 15,400

SUBTOTAL 148,400

Pledge of Revenue

Subtotal							148,400
Supervision (5%)							7,420
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							17,808
Contingency (10%)							14,840
Lead Agency Administrative Cost (10%)							14,840

Total Pledge of Revenue 208,308

ATTACHMENT A

East Benton Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0052 6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
5-axle Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 2:1, fill in existing drainage basins, regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor.

Methods to be used: A CAT D-8 dozer will push material to create 2:1 slopes on any oversteepened slopes, and stockpiles will be rough graded as needed. A water truck will be available for dust control.

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	40	10,608.52
Low Bed Truck w/driver	1	ea	169.38	4	677.52
Water Truck w/driver	1	ea	129.56	40	5,182.26
Task 1 Total				84	16,468.30

say 16,500

Task 2 Construct Drainage Structures

Construct interceptor drain & install rip rap pads.

Labor & Equipment	Qty	Unit	Rate	Total
Interceptor Drain	1,450	LF	15.00	21,750.00
Rip Rap Pad	5	ea	1,000.00	5,000.00
Task 2 Total				26,750.00

say 26,800

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 (9 acres net total) by broadcasting with an automatic pressure sprayer.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	392,040	sf	0.045	na	17,641.80
Task 3 Total				24	20,772.41

say 20,800

ATTACHMENT A

East Benton Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0052

6/22/2017

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
Report Preparation	4	years	120.00	24	11,520.00
Task 4 Total					11,520.00

say 11,500

SUBTOTAL 75,600

Pledge of Revenue

Subtotal							75,600
Supervision (5%)							3,780
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							9,072
Contingency (10%)							7,560
Lead Agency Administrative Cost (10%)							7,560

Total Pledge of Revenue 108,572

ATTACHMENT A

Juniper Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0053 6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 32
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Motor Grader w/operator	67.84	79.43	147.27
5-axle Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 2:1 (or 1.5:1 per reclamation plan) fill in drainage basins, regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor.

Methods to be used: Two (2) CAT D-8 dozers with a ripper attachments will traverse the compacted areas to promote plant growth. Dozers and a grader will grade available soil over the 32 acres. Slopes will be graded to 2:1 ratio (or 1.5:1 per reclamation plan).

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	2	ea	265.21	40	21,217.03
Motor Grader w/operator	1	ea	147.27	40	5,890.76
5-axle Low Bed Truck w/driver	1	ea	169.38	4	677.52
Water Truck w/driver	1	ea	129.56	40	5,182.26

Task 1 Total 124 32,967.58 say 33,000

Task 2 Construct Drainage Structures

Construct interceptor drain & install rip rap pads.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Interceptor Drain	2,300	LF	15.00	na	34,500.00
Rip Rap Pad	3	ea	1,000.00	na	3,000.00

Task 2 Total 37,500.00 say 37,500

Task 3 Install Fencing

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Install 4-strand barb wire fencing	7,200	LF	5.00	na	36,000.00

Task 3 Total 36,000.00 say 36,000

ATTACHMENT A

Juniper Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0053

6/22/2017

Task 4 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 (19 acres net total) by broadcasting with an automatic pressure sprayer.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	16	2,321.76
Laborer	2	ea	58.33	16	1,866.55
Water Truck w/driver	1	ea	129.56	16	2,072.91
Seed mix application	836,352	sf	0.045	na	37,635.84

Task 4 Total 48 43,897.05 say 43,900

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
Report Preparation	4	years	120.00	32	15,360.00

Task 4 Total 15,360.00 say 15,400

SUBTOTAL 165,800

Pledge of Revenue

Subtotal						165,800
Supervision (5%)						8,290
Mobilization & Demobilization (lump sum)						5,000
Profit & Overhead (12%)						19,896
Contingency (10%)						16,580
Lead Agency Administrative Cost (10%)						16,580

Total Pledge of Revenue 232,146

ATTACHMENT A

Little Lake Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0055 6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 16
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient varying from 1.5/1 & 4:1, fill drainage basins, regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor.

Methods to be used: A CAT D-8 dozer will push material to create slopes varying from 1.5:1 and 4:1 in accordance with the reclamation plan. Stockpiles will be rough graded as needed.
A water truck will be available for dust control.

Production Rate: 1 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator		ea	265.21	40	10,608.52
Low Bed Truck w/driver		ea	169.38	4	677.52
Water Truck w/driver		ea	129.56	40	5,182.26
Task 1 Total				84	16,468.30

say 16,500

Task 2 Install Fencing

	Qty	Unit	Rate	No. Hrs	Total
Install 4-strand barb wire fencing	4,800	LF	5.00	42	24,000.00
				40	24,000.00

say 24,000

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 by broadcasting with an automatic pressure sprayer.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	1	ea	58.33	8	466.64
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	696,960	sf	0.045	na	31,363.20
Task 3 Total				24	34,027.17

say 34,000

ATTACHMENT A

Little Lake Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0055

6/22/2017

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
Report Preparation	4	years	120.00	32	15,360.00
Task 4 Total					15,360.00

say 15,400

SUBTOTAL 89,900

Pledge of Revenue

Subtotal							89,900
Supervision (5%)							4,495
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							10,788
Contingency (10%)							8,990
Lead Agency Administrative Cost (10%)							8,990

Total Bond Amount 128,163

ATTACHMENT A

Markham Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0054 6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 37
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Motor Grader w/operator	67.84	79.43	147.27
Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area using stockpiled topsoil & fill in existing drainage basins. Regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor.

Methods to be used: A CAT D-8 dozer with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 6 acres of the expanded area of the pit. Slopes will be graded to 2:1 ratio.

Production Rate: 1 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	40	10,608.52
Motor Grader w/operator	1	ea	147.27	20	2,945.38
Low Bed Truck w/driver	1	ea	169.38	8	1,355.05
Water Truck w/driver	1	ea	129.56	40	5,182.26
Task 1 Total				108	20,091.21

say 20,100

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain & install rip rap.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Interceptor Drain	1,500	LF	15.00	na	22,500.00
Down Drain	60	LF	15.00	na	900.00
Rip Rap Pad	3	ea	1,000.00	na	3,000.00
Task 2 Total					26,400.00

say 26,400

ATTACHMENT A

Markham Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0054

6/22/2017

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 (22 net acres total) by broadcasting with an automatic pressure sprayer. Area to be hydroseeded includes both new and old sections of pit.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	967,032	sf	0.045	na	43,516.44
Task 3 Total				24	46,647.05

say 46,600

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
Report Preparation	4	years	120.00	32	15,360.00
Task 4 Total					15,360.00

say 15,400

SUBTOTAL 108,500

Pledge of Revenue

Subtotal							108,500
Supervision (5%)							5,425
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							13,020
Contingency (10%)							10,850
Lead Agency Administrative Cost (10%)							10,850

Total Pledge of Revenue 153,645

ATTACHMENT A

Midland Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0051

6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 57
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Motor Grader w/operator	67.84	79.43	147.27
Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 4:1
Regrade and finish slopes to blend with surrounding area.

Methods to be used: A CAT D-8 dozer with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 15 acres.

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	40	10,608.52
Motor Grader w/operator	1	ea	147.27	20	2,945.38
Low Bed Truck w/driver	1	ea	169.38	8	1,355.05
Water Truck w/driver	1	ea	129.56	30	3,886.70

Task 1 Total 98 18,795.64 say 18,800

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be dist
of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	2,482,920	sf	0.045	na	111,731.40

Task 2 Total 24 114,862.01 say 114,900

Total Pledge of Revenue	209,267
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ATTACHMENT A

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

6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 7
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.050

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour area to a gradient no steeper than 2:1 & and finish slopes to blend with surrounding area.

Methods to be used: A CAT D-8 dozer will push material to create 2:1 slopes on any oversteepened slopes, and stockpiles will be rough graded as needed. A water truck will be available for dust control.

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	8	2,121.70
Low Bed Truck w/driver	1	ea	169.38	4	677.52
Water Truck w/driver	1	ea	129.56	8	1,036.45

Task 1 Total 20 3,835.68 say 3,800

Task 2 Construct Drainage Structures

Construct interceptor drain & install rip rap pads.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Interceptor Drain	1,500	LF	15.00	42	22,500.00
Rip Rap Pad	2	ea	1,000.00	40	2,000.00

Task 2 Total 82 24,500.00 say 24,500

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 by broadcasting with an automatic pressure sprayer.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Water Truck w/driver	1	ea	129.56	8	1,036.45
Seed mix application	304,920	sf	0.050	na	15,246.00

Task 3 Total 24 18,376.61 say 18,400

ATTACHMENT A

Terwilliger Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0047
6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 9
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

Unit Costs for Labor & Equipment & Materials	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	185.78	79.43	265.21
Water Truck w/driver	66.36	63.20	129.56
Motor Grader w/operator	67.84	79.43	147.27
Low Bed Truck w/driver	106.18	63.20	169.38
Foreman		145.11	145.11
Laborer		58.33	58.33
Seed Mix @ \$/sf			0.045

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour slopes to a gradient between 1.5:1 and 2:1, regrade and finish slopes, fill drainage basin, furrowing slopes and ripping pit floor.

Methods to be used: A CAT D-8 dozer with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 9 acres.
 Slopes will be graded to between 1.5:1 and 2:1 in accordance with the reclamation plan.

Production Rate: 1 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	1	ea	265.21	30	7,956.39
Motor Grader w/operator	1	ea	147.27	30	4,418.07
Low Bed Truck w/driver	1	ea	169.38	4	677.52
Water Truck w/driver	1	ea	129.56	30	3,886.70

Task 1 Total 94 16,938.68 say 16,900

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain & install rip rap.

42

40

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Interceptor Drain	200	LF	15.00	na	3,000.00
Down Drain	10	LF	15.00	na	150.00
Rip Rap Pad	1	ea	1,000.00	na	1,000.00

Task 2 Total 4,150.00 say 4,200

Terwilliger Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0047
6/22/2017

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.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	2	290.22
Laborer	2	ea	58.33	4	466.64
Water Truck w/driver	1	ea	129.56	4	518.23
Seed mix application	392,040	sf	0.045	na	17,641.80
Task 3 Total	0			10	18,916.88

say 18,900

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	32	15,360.00
Task 4 Total					15,360.00

say 15,400

SUBTOTAL 55,400

Pledge of Revenue

Subtotal							55,400
Supervision (5%)							2,770
Mobilization & Demobilization (lump sum)							5,000
Profit & Overhead (12%)							6,648
Contingency (10%)							5,540
Lead Agency Administrative Cost (10%)							5,540

Total Pledge of Revenue	80,898
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ATTACHMENT A

New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0090 6/22/2017

This cost estimate is based on the following assumptions:

- 1) The existing amount of disturbance (acres) = 32
- 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 for 2017.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 42)

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		185.78	79.43	265.21
Water Truck w/driver		66.36	63.20	129.56
Motor Grader w/operator		67.84	79.43	147.27
Low Bed Truck w/driver		106.18	63.20	169.38
Foreman			145.11	145.11
Laborer			58.33	58.33
Seed Mix @ \$/sf				0.079

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Task description: Regrade and recontour slopes to a gradient no steeper than 4:1. Grade pit floor to 2% grade.

Methods to be used: Two (2) CAT D-8 dozers with a ripper attachment will traverse the compacted areas to promote plant growth. A dozer and grader will grade available soil over the 32 acres.

Production Rate: 2 acres/hour

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
D-8R Dozer w/operator	2	ea	265.21	42	22,277.88
Motor Grader w/operator	1	ea	147.27	40	5,890.76
Low Bed Truck w/driver	1	ea	169.38	8	1,355.05
Water Truck w/driver	1	ea	129.56	40	5,182.26

Task 1 Total 130 34,705.95 say 34,700

Task 2 Remove Structure in Compound Area

Disassemble wooden building within compound area.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total
Foreman	1	ea	145.11	8	1,160.88
Laborer	2	ea	58.33	8	933.27
Remove Concrete Foundation	1	ea	2,500.00	na	2,500.00

Task 2 Total 4,594.15 say 4,600

New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0090
6/22/2017

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.

say 113,300

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.

say 15,400

Total Pledge of Revenue	235,160
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