

FINANCIAL ASSURANCE COST ESTIMATE
FOR

Permanente Quarry

(Mine Name)

CA Mine ID # 91-43-0004

Reclamation Plan #/Name Reclamation Plan Amendment for
Permanente Quarry/2250-13-66-10P-10EIR (M1)

Prepared by: (Name & Affiliation):

EnviroMINE, Inc. – Consultant for Lehigh

3511 Camino Del Rio South, Suite 403

San Diego, CA 92108

Date: 1/30/18

This financial assurance cost estimate prepared
and submitted pursuant to (choose one):

☐ A new or amended reclamation plan
approved on (Date):

☐ An annual mine inspection performed on
(Date):

☒ Other: Please Specify:

Annual update on new form

Most Recent Approved Financial Assurance Cost Estimate

Date: July 2016

Amount: \$ 53,854,896

Amount of existing Financial Assurance Mechanism (s)

Date: Various

Amount: \$ 54,723,295

I. SUPPORTING DOCUMENTS

This estimate represents the cost of conducting and completing reclamation in accordance with the Surface Mining and Reclamation Act (SMARA) and the following supporting documents:

Reclamation Plan Approval Date and Number June 26, 2012, 2250-13-66-10P-10EIR (M1) (County of Santa Clara)

Permits and/or Environmental Documents Approved as, or Conditioned upon, the Reclamation Plan

Site is vested.

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

N/A

Wage Rates used in Cost Estimate* *(cost estimates are required to use current 'General prevailing wage determinations made by the director of industrial relations' where applicable (<http://www.dir.ca.gov/OPRL/PWD/index.htm>) with employer labor burden added, or greater)*

Department of Industrial Relations, Prevailing Wage Determinations (2016)

Equipment Rates used in Cost Estimate* *(Use current 'Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)' equipment rates published by Caltrans (<http://www.dot.ca.gov/hq/construc/equipmnt.html>) or other publicly available and verifiable local rates)*

Caltrans, Labor Surcharge & Equipment Rental Rates (4/1/17-3/31/18)

Equipment Production Rates used in Cost Estimate *(Use of current Caterpillar Performance Handbook or equivalent published production rates is required)*

Caterpillar Performance Handbook, 37th Edition

Means Site Work & Landscaping Cost Data, R. S. Means Company, Inc., Kingston, MA, 2013

** Many mine sites are remote projects that require hours of travel (to and from) and sometimes require additional time to prepare for even the simplest of tasks. In accordance with Labor Code Sections 1773.1 and 1773.9, contractors are required to make travel and/or subsistence (per diem) payments to each worker to execute the work. These arrangements can be quite variable and site specific.*

Attachments:

1. Bid from Aggregate Machinery Specialist for Primary Station and conveyor system
 2. Bulldozer production rates
 3. Scraper production rates for capping site with non-limestone material
 4. Seed quote from Pacific Coast Seed for PCRA
 5. Seed quote from Pacific Coast Seed for approximately 500 acres
 6. Bid from Freedlun Hydroseeding, Inc. for applying hydroseed
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II. Description of Current Site Conditions

(i.e., disturbed acres, slope conditions, excavation depths, topsoil and overburden stockpiles, equipment and facilities, reclamation in progress, erosion control status, required corrective actions, etc.)

Current operations at the site include a quarry (Main Pit/North Quarry) that consists of a cut-face with a series of benches and multiple material storage areas – East Material Storage Area (EMSA) and West Material Storage Area (WMSA). Reclamation at the quarry is conducted on an annual basis for areas at final grade and not subject to further disturbance. In 2012, reclamation work commenced in the Permanente Creek Reclamation Area (PCRA), the installation of BMP's and hydroseeding was completed in Subareas 4, 5 and 6. Current grading activities are taking place in Phase 1A of the approved mine plan. The majority of the 639.6-acre RPA footprint is found in a fully disturbed condition with little evidence of vegetative cover. An exception to this includes areas where reclamation has begun or areas that have naturally revegetated. In total, approximately 546 acres are currently disturbed at the site. There is also a rock plant, cement plant, and various pieces of mobile equipment on the site.

III. Description of Anticipated Site Conditions (12 months from date of estimate)

(i.e., increase of disturbed acres, increase of depth, increases in amount of equipment and/or facilities, required corrective actions, etc.)

It is expected that mining will continue to progress in Phase 1 of the Main Pit during the next 12 months.

IV. Description/Justification of Cost Increase/Decrease

The total cost has decreased as a result of lower equipment rental rates and completion of slope repairs during the past year.

(add additional pages as needed)

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(use multiple sheets as needed)*
Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Current Site Condition:

At this time, plant removal would involve demolishing and transporting the Rock Plant, including conveyors, crushers, screens, wash plants, scales, storage tanks, and miscellaneous structures to an offsite location. This also includes the removal of the overland conveyor that extends from the Main Pit to the Cement Plant (approx. 8,900 feet). In addition to demolition and removal of these structures, all foundations must be demolished and removed, and compacted surfaces must be ripped to prepare the site for revegetation.

Reclamation Plan Performance Standard (End Use):

At the conclusion of mining operations, all equipment, structures, and other infrastructure improvements will need to be removed from the site.

Describe tasks:

This estimate assumes the use of a crane, excavators with steel shear and grapple attachments, front-end loaders, trucks with low bed trailers, and dump trucks for dismantling and removing the plant equipment and structures. The steel structures will be cut into manageable pieces with an excavator mounted with a steel shear, with pieces placed on an over-the-road truck for removal to a scrap yard for recycling. It is estimated that there is approximately 1,000 tons of recyclable steel onsite. Current market value of scrap steel is \$160 per ton (Alco Metals, San Jose). Other non-recyclable materials will be put into roll-off dumpsters (CDR Dumpster Rental) and hauled off site. Some structures will be dismantled by shearing, cutting using a cutting torch, or simply unbolting the equipment from the support structures prior to demolition. Also, there are currently 36 pieces of mobile equipment (loaders, dozers, trucks, etc.) that would need to be loaded and hauled off site to a resale dealer. This estimate assumes two (2) hours per piece of equipment. Once the equipment is removed, it will be necessary to demolish all concrete footings and foundations. Concrete will be broken up using an excavator and a hydraulic hammer and hauled to a recycling yard. This estimate assumes that there is approximately 2,950 cubic yards of concrete to be demolished and removed from the site.

Equipment on site wholly owned by operator?: ☒YES ☐NO

(If no, please provide the name/s and contact information for any lien holder)

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL (cont.)

Methods to be used for: **Processing Plant, Conveyor, & Support Structure Removal**

- A. Equipment – List equipment required to complete identified task (for large reclamation project sites or separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
Grove RT 635 40t Crane	\$76.74/HR	108	\$8,288
CAT 330 w/ Steel Shear	\$246.41/HR	93	\$22,916
CAT 330 w/ Grapple	\$155.23/HR	108	\$16,765
Semi-truck w/ end dump	\$72.78/HR	84	\$6,114
Semi-truck w/ 2 axle lowboy trailer	\$83.58/HR	118	\$9,862
CAT 966E Wheel Loader	\$115.53/HR	108	\$12,477
Welding Truck	\$42.54/HR	120	\$5,105
Pickup Truck (2)	\$16.34/HR	112	\$1,830

Total Equipment Cost for this Task = \$83,357

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)
Crane Operator	\$70.82/HR	108	\$7,649
Excavator Operator (2)	\$70.09/HR	201	\$14,088
Dump Truck Driver	\$56.97/HR	84	\$4,785
Lowboy Truck Driver	\$57.32/HR	118	\$6,764
Loader Operator	\$70.09/HR	108	\$7,570
Foreman	\$70.82/HR	140	\$9,915
Laborer (2)	\$51.24/HR	112	\$5,739
Welder (4)	\$51.54/HR	225	\$11,597

Total Labor Cost for this Task = \$68,106

- C. Demolition – List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
Roll-off Trash Containers & Landfill Fees (15)	Mixed	20 CY.	\$585 Ea.	Inc.	\$8,775

Total Materials Cost for this Task = \$8,775

- D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$160,238

- E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$160,000

- F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$238

*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(cont.)*

Methods to be used: for **Concrete Breaking and Rubbish Removal**

- A. Equipment – List equipment required to complete identified task *(for large reclamation project sites or separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 330 Excavator w/ Rock Breaker Attachment	\$163.67/HR	92	\$15,058
CAT 330 Excavator w/ Bucket	\$128.44/HR	58	\$7,450
CAT 966E Wheel Loader	\$115.53/HR	16	\$1,848
Haul Truck (10)	\$72.78/HR	268	\$19,505
Pickup Truck	\$16.34/HR	58	\$948

Total Equipment Cost for this Task = \$44,808

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)
Excavator Operators (2)	\$70.09/HR	150	\$10,514
Loader Operator	\$70.09/HR	16	\$1,121
Haul Truck Driver (10)	\$56.97/HR	268	\$15,268
Laborer (2)	\$51.24/HR	116	\$5,944

Total Labor Cost for this Task = \$32,847

- C. Demolition – List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
Recycling Fee	Concrete	175 Loads	\$80/Load		\$14,000

Total Materials Cost for this Task = \$ 14,000

- D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$91,655

- E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$0

- F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$91,655

*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(cont.)*

Methods to be used: for **Mobile Equipment Removal**

- A. Equipment – List equipment required to complete identified task *(for large reclamation project sites or separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)
Semi-Truck w/ 3 axle lowboy to remove the following:	\$87.87/HR	28	\$2,460
CAT 963 Loader, 216 Skid Steer, 226 Skid Steer, 16G			
Grader, Nobel R80 Forklift, Euclid R35 Truck, Miller 600D			
Welder, CAT IT14 Loader, Ingersol-Rand WL 440 Loader,			
JLG Aerial Lift, Allmand 695 Lite Towers, Water Trucks			
Semi-Truck w/ 5 axle lowboy & two pilot cars to remove:	\$2,661*/Trip	13	\$34,593
CAT 988 Loader, 992 Loader, D10 Dozer, 824 Dozer, 773			
Truck, 777 Truck			

* Based on a lump sum estimate that includes driver.

Total Equipment Cost for this Task = \$37,053

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)
Semi-Truck Driver	\$57.32/HR	28	\$1,605

Total Labor Cost for this Task = \$1,605

- C. Demolition – List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
N/A					

Total Materials Cost for this Task = \$0

- D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$38,658

- E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$0

- F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$38,658

*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

VI. PRIMARY RECLAMATION ACTIVITY (Backfilling the Main Pit)

Describe Reclamation Activity Being Estimated

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

Current Site Conditions:

This estimate's restoration scenario incorporates backfilling of the Main Pit to buttress past instabilities. To accomplish this, the West Materials Storage Area (WMSA) will be used as the primary source of backfill material, since mining byproducts (unused mined material) will not be available. A stockpile located west of the Rock Plant, that contains approximately 300,000 tons of crushed rock, will also be relocated to the main pit. Material used for backfilling is to be amended with organic matter (approximately 63,000 tons). Measures to protect surface water quality during reclamation activities consist of isolating runoff from limestone materials in the Main Pit backfill, WMSA, and EMSA. This will be accomplished during reclamation by capping reclaimed areas with a 1-foot thick layer of run-of-mine non-limestone rock (i.e., greywacke, chert, and greenstone).

Reclamation Plan Performance Standard (End Use):

Reclamation requirements for the site include the development of a benched quarry face with an overall slope gradient of 1H:1V (horizontal: vertical), while the overburden fill slopes will be reclaimed at a maximum overall slope inclination between 2.5H:1V to 2.6H:1V. The proposed end use for the quarry after reclamation is complete is open space.

Describe tasks, methods, equipment, etc.:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary.

A conveyor system will be utilized to transport backfill material from the WMSA to the Main Pit and place material directly into the pit. Oversized material will be reduced by a jaw crusher to six (6) inch minus prior to loading onto the conveyor. This estimate assumes the purchase of a crusher, conveyor, and stacking system (See Attachment 1 for cost estimate). Operation and maintenance costs to run the system have been included in the tables below. Stockpiled material near the Rock Plant will be relocated to the Main Pit by using haul trucks that are loaded with a front-end loader. Organic material would be delivered to the WMSA from an offsite source and added to backfill material with a loader. Distribution of non-limestone material for capping will utilize a variety of equipment. A combination of dozers, scrapers, loaders, and haul trucks will be utilized to distribute the non-limestone capping material.

Provide quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distances (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

After analyzing the existing and proposed topography, the total volume required for backfilling the Main Pit is estimated at 31,426,375 cubic yards. The conveyor system would extend approximately 10,000 feet to the WMSA. Backfilling of the Main Pit will also include grading of approximately 6,700,000 cubic yards of non-limestone material that has been identified as the "Main Slide." Materials originating from the Main Slide will be removed using a D10 bull dozer (See Attachment 2 for production rates). To optimize production from the dozers, the conveyor system will be relocated as grading progresses; average push distances will be kept at approximately 300 feet. For stockpiled material near the Rock Plant, a Cat 992 front-end-loader will load the material into haul trucks while a water truck and grader will be utilized to maintain the road network and suppress dust. It is estimated that there is 200,000 cubic yards of stockpiled material (using 1.5 tons per CY). Organic material would be delivered by trucks to the WMSA, near the hopper for the portable conveyor system, and a 938 loader will feed the material into the hopper. Approximately 710,000 cubic yards of non-limestone material will be used for capping reclaimed areas of the site. Caterpillar production rates for a 651 Scraper are provided in Attachment 3.

VI. PRIMARY RECLAMATION ACTIVITY (Backfilling Main Pit) (Cont.)

Describe Reclamation Activity Being Estimated

Acres:		Overburden (cy):	31,426,375
Push Distance (ft):	300 ft.	Topsoil (cy):	
Production Rate (cy/hr):	1,380 cy/hr (conveyor)		

Methods to be used:

- A. Equipment – List equipment required to complete identified task (for large reclamation jobs separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
Grove RT 525 Crane (for conveyor install)	\$59.72/HR	200	\$11,944
CAT 938G Loader (for conveyor install)	\$83.01/HR	200	\$16,602
CAT 315L Excavator (for conveyor install)	\$53.30/HR	200	\$10,660
Pickup Truck (2) (for conveyor install)	\$16.34/HR	400	\$6,536
42" Conveyor System Over 10,000'	L.S.*		\$8,657,700
CAT D10N Dozers (3)	\$267.32/HR	68,318	\$18,262,768
CAT D11N Dozer	\$420.62/HR	7,646	\$3,216,061
Water Truck	\$42.54/HR	7,646	\$325,261
Conveyor Operation/Maintenance	\$45.91/HR	21,503	\$987,203
Electricity	\$27.60/HR	21,503	\$593,483
CAT 325L Excavator (for relocating conveyor)	\$97.44/HR	80	\$7,795
CAT 988 Loader (for relocating conveyor)	\$142.86/HR	80	\$11,429

* Quote from Aggregate Machinery Specialist (Attachment 1 – note that \$59,275 was subtracted from the total because it was counted twice in the AMS quote).

Total Equipment Cost for this Task = \$32,107,442

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Crane Operator	\$70.82/HR	200	\$14,164
Loader Operators (2)	\$70.09/HR	280	\$19,625
Excavator Operators (2)	\$70.09/HR	280	\$19,625
Foreman	\$70.82/HR	200	\$14,164
Laborers (2)	\$51.24/HR	400	\$20,496
Dozer Operators (4)	\$70.09/HR	75,964	\$5,324,317
Water Truck Driver	\$56.67/HR	7,646	\$433,299

Total Labor Cost for this Task = \$5,845,690

C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax)	Cost (\$)

D. Total Direct Cost for this Task

Total Materials Cost for this Task = \$0

Equipment Costs + Labor Cost + Materials Cost = \$37,953,132

VI. PRIMARY RECLAMATION ACTIVITY (Stockpile Relocation, Organic Material, Capping)

Describe Reclamation Activity Being Estimated

Acres:	440	Overburden (cy):	910,000
Push Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):	454 (scraper), 520 (truck)		

Methods to be used:

- A. Equipment – List equipment required to complete identified task *(for large reclamation jobs separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 992C Loader (for stockpile relocation)	\$409.03/HR	195	\$79,761
CAT 777D Haul Trucks (11) (for stockpile reloc., capping)	\$231.02/HR	2,254	\$520,719
CAT 12H Blade (for stockpile relocation)	\$73.46/HR	98	\$7,199
CAT 938F Loader (for organic material mixing)	\$73.57/HR	600	\$44,142
CAT 992B Loader (2) (for non-limestone capping)	\$257.29/HR	314	\$80,789
CAT 651B Scraper (4) (for capping)	\$237.18/HR	608	\$144,205
CAT D10N Dozer (2) (for capping)	\$267.32/HR	238	\$63,622
Water Truck (for stockpile relocation & capping)	\$42.54/HR	492	\$20,930

Total Equipment Cost for this Task = \$961,367

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Loader Operators (4)	\$70.09/HR	1,109	\$77,730
Haul Truck Drivers (11)	\$57.67/HR	2,254	\$129,988
Blade Operator	\$70.09/HR	98	\$6,869
Scraper Operators (4)	\$70.09/HR	608	\$42,615
Dozer Operators (2)	\$70.09/HR	238	\$16,681
Water Truck Driver	\$56.67/HR	492	\$27,882

Total Labor Cost for this Task = \$301,765

- C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax)	Cost (\$)
Organic Material *	63,000 (Tons)	\$33.41	\$2,104,830
* Cost from material supplier in Gilroy, CA, plus shipping, CPI.			

Total Materials Cost for this Task = \$2,104,830

- D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$3,367,962

VI. PRIMARY RECLAMATION ACTIVITY (Ripping, Finish Grading, BMP Installation) (Cont.)

Describe Reclamation Activity Being Estimated

Acres:	498	Overburden (cy):	
Haul Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):	1 ac/hr		

Methods to be used:

- A. Equipment – List equipment required to complete identified task *(for large reclamation jobs separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)
Grading with a CAT D8R Dozer	\$161.55/HR	498	\$80,452
Ripping with a CAT D8R Dozer	\$177.33/HR	7	\$1,241
Desiltation Basin Installation (Lump Sum est. plus CPI)	\$22,299/Basin	3	\$66,897

Total Equipment Cost for this Task = \$148,590

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Dozer Operator (2)	\$72.09/HR	505	\$36,405

Total Labor Cost for this Task = \$36,405

- C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax)	Cost (\$)

Total Materials Cost for this Task = \$0

- D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$184,995

VI. PRIMARY RECLAMATION ACTIVITY (Permanente Creek Reclamation Area)

Describe Reclamation Activity Being Estimated

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

Current Site Conditions:

This section describes the reclamation costs of historic mining disturbance adjacent to Permanente Creek, described as the Permanente Creek Reclamation Area ("PCRA"). The PCRA is divided into seven different subareas (numbered one through seven) with customized reclamation treatments for each subarea. In 2012, after approval of the RPA, reclamation work commenced in Subareas 4, 5 and 6 and was completed in late October. Work completed included installation of BMPs as well as hydroseeding of disturbed areas. In total, approximately nine (9) acres in the PCRA was reclaimed in 2012. In 2016, the application for permitting the restoration work with ACOE and CDFW was submitted and is in process.

Reclamation Plan Performance Standard (End Use):

Removing a concrete half culvert located in the proposed restored stream channel is one aspect of the Permanente Creek Restoration. The concrete half culvert is located just downstream from Pond 13 and covers a length of approximately 375 feet. The reclamation plan also calls for restoration of about 2,500 linear feet of Permanente Creek. Material from historic mining has collected in the creek channel. The reclamation plan calls for removal of this material and creation of a reconfigured creek channel that is roughly 50 feet wide with a 10-foot bottom and 3:1 side slopes. A number of limestone boulders have found their way into Permanente Creek as a result of historic mining operations. These boulders range in size from approximately 10" to 3' in diameter. Once removed from the creek, boulders will be loaded onto off-road haul trucks and hauled to the North Quarry for final placement. After grading work has been completed and prior to revegetating the site temporary and permanent BMPs will be installed to manage stormwater runoff. Lastly, slopes located in Subareas 2 and 3 of the PCRA are comprised of loose unconsolidated fill material. In an effort to reduce erosion from these slopes and to provide more favorable surfaces for seed propagation, the slopes will be compacted.

Describe tasks, methods, equipment, etc.:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary.

According to the CAT Handbook, an H120c hydraulic hammer attached to a 315L excavator can demolish approximately 230 cubic yards of reinforced concrete within 8 hours. Once the concrete culvert has been broken into pieces 2-feet in diameter or smaller, the excavator will be used to load the material into haul trucks. Material will be removed from the creek with an excavator, loader, and articulated haul trucks. Small boulders will be removed using hand labor, while larger boulders will be removed with an excavator and/or loader. Construction laborers will

install straw waddles and silt fencing to manage stormwater runoff. Slopes located within Subareas 2 and 3 will be compacted with a D8 dozer, towing a sheep's foot, that is moved up and down the slopes by a winch.

Provide quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distances (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

It is estimated that approximately 130 cubic yards of concrete will need to be demolished and removed to complete removing the concrete half culvert. There is an estimated 17,500 cubic yards of material that will be removed from the channel to create the reconfigured channel. This estimate also assumes that 200 boulders are located within the inundation limits of Permanente Creek.

VI. PRIMARY RECLAMATION ACTIVITY (PCRA Culvert/Boulder Removal, Grading, BMPs)

Describe Reclamation Activity Being Estimated

Acres:		Overburden (cy):	17,500 (in PC Channel)
Push Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):			

Methods to be used:

- A. Equipment – List equipment required to complete identified task *(for large reclamation jobs separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)
315L Excavator w/ Rock Breaker Attach. (culvert removal)	\$74.98/HR	6	\$450
315L Excavator w/ bucket (culvert removal)	\$53.30/HR	2	\$107
Haul Truck (4) (culvert removal)	\$72.78/HR	12	\$873
CAT 330 Excavator (channel restoration/boulder removal)	\$128.44/HR	174	\$22,349
CAT 966F Loader (channel restoration/boulder removal)	\$118.14/HR	148	\$17,485
CAT 740 Articulated Haul Truck (channel/boulder removal)	\$103.55/HR	154	\$15,947
Desiltation Basin Installation (Lump Sum est. plus CPI)	\$22,299/Basin	2	\$44,598
CAT D8R Dozer w/ Winch (for slope treatment)	\$161.55/HR	16	\$2,585
Sheep's Foot Attachment (for slope treatment)	\$13.34/HR	16	\$213
Pick Up	\$16.34/HR	40	\$654

Total Equipment Cost for this Task = \$105,260

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Excavator Operators (4)	\$70.09/HR	182	\$12,756
Haul Truck Drivers (4)	\$56.97/HR	12	\$684
Loader Operators (2)	\$70.09/HR	148	\$10,373
Articulated Haul Truck Drivers (3)	\$57.32/HR	154	\$8,827
Dozer Operator	\$70.09/HR	16	\$1,121
Foreman	\$70.82/HR	8	\$567
Laborers (7)	\$51.24/HR	284	\$14,552

Total Labor Cost for this Task = \$48,881

C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax)	Cost (\$)
Concrete Recycling Fee	8 Loads	\$80/Load	\$640
Straw Waddles	37,600 L.F.	\$5.02/L.F.	\$188,752
Silt Fencing	3,450 L.F.	\$4.46/L.F.	\$15,387

Total Materials Cost for this Task = \$204,779

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost =
\$358,920

VII. REVEGETATION *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Current Site Condition:

After final grading is completed, disturbed areas of the site will be revegetated with seed mixes and container stock to achieve the goals of the reclamation plan. Previous restoration planting at the Quarry has been used as a guide for revegetation planning. Revegetated areas now dominated by native species serve as a basis for anticipated revegetation success. Native species common in revegetated areas include California buckwheat, coyote brush, buckbrush and sagebrush. At this time, 13.7 acres of hydroseeding would be necessary within the PCRA and 502 acres of hydroseeding would be required on the remaining areas of the site. An additional 1.5 acres of the PCRA and 28 of the remaining reclamation area will require hand planting of container stock.

Reclamation Plan Performance Standard (End Use):

The goal for revegetation efforts is native community restoration. This refers to the reclamation of disturbed lands to a self-sustaining community of native species which would visually integrate with surrounding lands. Revegetation is designed to control erosion and stabilize slopes against long-term erosion using plant materials capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer.

Describe tasks:

Prior to revegetation, growth medium will be applied to approximately 498 acres of the site. Of the 498 acres that will receive growth medium, a thickness of six inches of topsoil will be distributed over 28 acres of the site and a thickness of three inches of topsoil will be distributed over 470 acres for a total volume of 212,152 CY. To transport the material around the site, a team of off-road haul trucks will be utilized and D8 dozer will be used to spread the material. A dozer is preferred to distribute the topsoil over a wheel type tractor because its track impressions will imprint final slopes to retain seeds and increase water retention and infiltration, thereby increasing the potential for revegetative success. Using mechanical hydroseeding equipment, areas will be seeded, mulched, and composted in a single application. A hydromulch mix will contain compost, organic mulch, fertilizer and the seed mix. See Attachments 4 and 5 for seed quotes from Pacific Coast Seed. Freedlun Hydroseeding provided a conservative cost quote for the hydroseed applications (Attachment 6). This cost has been updated according to CPI. Planting shrubs and trees will require the efforts of four common laborers and two pickup trucks along with the oversight of a revegetation specialist.

VII. REVEGETATION (Cont.)

Methods to be used:

- A. Equipment – List equipment required to complete identified task. For large reclamation jobs separate mine areas.

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 988 Loader (for topsoil placement)	\$142.86/HR	422	\$60,287
CAT 740 Haul Truck (2) (for topsoil placement)	\$103.55/HR	844	\$87,396
Water Truck (for topsoil placement)	\$42.54/HR	422	\$17,952
CAT D8R Dozer (for topsoil placement)	\$161.55/HR	422	\$68,174
Pickup Truck (2) (for planting)	\$16.34/HR	240	\$3,922
Materials & Labor for planting in PCRA	\$13.94/Plant	2,500	\$34,850

Total Equipment Cost for this Task = \$272,581

- B. Labor – List all labor categories to complete identified task.

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Loader Operator	\$70.09/HR	422	\$29,578
Haul Truck Drivers (2)	\$57.32/HR	844	\$48,378
Water Truck Driver	\$56.67/HR	422	\$23,915
Dozer Operator	\$70.09/HR	422	\$29,578
Laborer (4)	\$51.24/HR	480	\$24,595
Revegetation Specialist	\$92.00/HR	120	\$11,040

Total Labor Cost for this Task = \$167,084

- C. Materials – List all materials required to complete identified task

Item/Plant Species	Unit of measure	Quantity	\$/unit (incl sales tax)	Cost (\$)
Pacific madrone	container	798	\$2.13	\$1,700
Grey pine	container	8,990	\$2.54	\$22,835
Coast live oak	container	824	\$2.54	\$2,093
Canyon live oak	container	824	\$2.54	\$2,093
Blue oak	container	824	\$2.54	\$2,093
Valley oak	container	824	\$2.54	\$2,093
Interior live oak	container	824	\$2.54	\$2,093
Mountain mahogany	container	3,976	\$3.10	\$12,326
Toyon	container	3,976	\$1.32	\$5,248
Scrub oak	container	3,976	\$2.13	\$8,469
California coffeeberry	container	3,976	\$1.71	\$6,799
Redberry	container	3,976	\$1.71	\$6,799
Hillside gooseberry	container	3,976	\$1.71	\$6,799

Chaparral currant	container	3,976	\$1.71	\$6,799
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Total Materials Cost for this Task = \$88,284

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$527,949

VII. REVEGETATION (Cont.)

Methods to be used:

- a. Equipment – List equipment required to complete identified task. For large reclamation jobs separate mine areas.

Equipment	\$/Unit	# of Units	Cost (\$)
Hydroseeding Equipment & Labor(PCRA)(excl. seed cost)*	\$5,599/Acre	13.7	\$76,706
Hydroseeding Equipment & Labor (remaining areas)	\$1,552/Acre	502	\$779,104
* Hydroseeding quote from Freedlun Hydroseeding plus CPI.			

Total Equipment Cost for this Task = \$855,810

- b. Labor – List all labor categories to complete identified task.

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)

Total Labor Cost for this Task = \$0

- c. Materials – List all materials required to complete identified task

Item/Plant Species	Unit of measure	Quantity	\$/unit (incl sales tax)	Cost (\$)
Artemisia californica	Pounds	8,169	\$36.00	\$294,084
Baccharis pilularis	Pounds	10,122.2	\$28.00	\$283,422
Eriogonum fasciculatum	Pounds	10,259.2	\$9.50	\$97,462
Salvia leucophylla	Pounds	1,004	\$80.00	\$80,320
Salvia mellifera	Pounds	1,564.9	\$48.00	\$75,115
Achillea millefolium	Pounds	1,031.4	\$36.00	\$37,130
Artemisia douglasiana	Pounds	530	\$64.00	\$33,920
Bromus carinatus	Pounds	3,094.2	\$6.50	\$20,112
Elymus glaucus	Pounds	3,094.2	\$15.00	\$46,413
Eschscholzia californica	Pounds	1,004	\$18.00	\$18,072
Heterotheca grandiflora	Pounds	515.7	\$60.00	\$30,942
Lotus purshianus	Pounds	551.3	\$75.00	\$41,348
Lotus scoparius	Pounds	1,004	\$36.00	\$36,144
Lupinus nanus	Pounds	502	\$40.00	\$20,080
Melica californica	Pounds	1,004	\$36.00	\$36,144
Nassella pulchra	Pounds	2,008	\$42.00	\$84,336
Poa secunda	Pounds	1,004	\$30.00	\$30,120
Trifolium willdenovii	Pounds	1,004	\$38.00	\$38,152
Plantago erecta	Pounds	41.4	\$40.00	\$1,656

Sisyrinchium bellum	Pounds	19.2	\$75.00	\$1,440
Vulpia microstachys	Pounds	137	\$24.00	\$3,288
Carex barbarae	Pounds	3	\$400.00	\$1,200
Carex praegracilis	Pounds	3	\$95.00	\$285
Cyperus eragrostis	Pounds	6	\$90.00	\$540
Hordeum brachyantherum	Pounds	18	\$24.00	\$432
Juncus effusus	Pounds	1	\$120.00	\$120
Juncus patens	Pounds	1	\$135.00	\$135
Leymus triticoides	Pounds	6	\$64.00	\$384

Total Materials Cost for this Task = \$1,312,796

d. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$2,168,606

VIII. MISCELLANEOUS COSTS *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Examples of this type of cost may include temporary storage of equipment and materials off site, special one-time permits (i.e. transportation permits for extra wide overweight loads, etc.), decommissioning a process mill (i.e. decontamination of equipment), disposal of warehouse inventories, well abandonment, remediation of fueling and waste oil storage sites, septic system removal, costs to prepare closure and monitoring reports, site security, preserving potable water and maintaining utilities, etc.

Item / Task	Quantity	\$/Unit	Cost (\$)
Water Line Construction	6,000 Ft.	\$15.64/Ft.	\$93,820
Power Line Construction	20 Poles	\$2,140/Pole	\$42,799
Removal of Power Lines and Poles	20 Poles	\$354/Pole	\$7,080
Geotechnical Oversight During Backfilling			
Geotechnical Monitoring (Technician)	5,600 Hrs.	\$90.00/Hr.	\$504,000
Geotechnical Monitoring (Supervision)	280 Hrs.	\$155.00/Hr	\$43,400
Final Geotechnical Report	80 Hrs.	\$155.00/Hr	\$12,400
Permitting Costs for PCRA		L.S.	\$23,361
Wetland Delineation		L.S.	\$5,631

Total Miscellaneous Costs = \$732,491

VIII. MONITORING COSTS

Monitoring Task	\$/Visit	# Visits/Year	# of Monitoring Years	Cost (\$)
Creek Restoration Monitoring (PCRA – 1 year)	\$105/Hr.	100 Hrs.	1	\$10,500
Geologic Monitoring (PCRA – 1 year)	\$155/Hr.	120 Hrs.	1	\$18,600
Annual Monitoring (Scientist/Tech)	\$14,984	1	5	\$74,920
Annual Monitoring (Project Manager)	\$1,640	1	5	\$8,200
Geologic Monitoring (Geologist)	\$5,467	1	5	\$27,335
Water Quality Monitoring (QSP)	\$13,800	1	5	\$69,000
Water Quality Monitoring (QSD)	\$5,480	1	5	\$27,400
Report Preparation (Scientist/Tech)	\$5,750	1	5	\$28,750
Report Preparation (Project Manager)	\$1,370	1	5	\$6,850
Annual Weed Control and General Maintenance	\$65,713	2	5	\$657,130

Total Monitoring Costs = \$928,685

IX.SUMMARY OF COSTS

This section shall be used to summarize all the cost sheets in one place.

(V) Total of all Plant Structures & Equipment Removal Costs	\$130,551
(VI) Total of all Primary Reclamation Activities Costs	\$41,865,009
(VII) Total of all Revegetation Costs	\$2,696,555
(VIII) Total of all Miscellaneous Costs	\$732,491
(IX) Total of all Monitoring Costs	<u>\$928,685</u>

Total of Direct Costs \$46,353,291

X. Supervision / Profit & Overhead / Contingencies / Mobilization

(A) Supervision (<u>2.4%</u>)	\$1,112,479
(B) Profit/Overhead (<u>4.0%</u>)	\$1,854,132
(C) Contingencies (<u>4.0%</u>)	\$1,854,132
(D) Mobilization (<u>1.9%</u>)	<u>\$ 880,713</u>
Total of Indirect Costs	\$5,701,456
Total of Direct and Indirect Costs	\$52,054,747
(E) Lead Agency and/or Dept. of Conservation Administrative Costs	<u>\$2,602,737</u>

Total Estimated Cost of Reclamation **\$54,657,484**

Attachment 1



924 Calle Negocio • Unit A
San Clemente, CA 92673
Phone: (949) 366-3070 • Fax: (949) 366-3069
www.aggregatemachineryspecialist.net

July 12, 2016

Mr. Damien Galford
Project Manager
ENVIROMINE, INC.
135 Camino Dorado, Suite 11
Napa, CA 94558

SUBJECT: Lehigh Hanson Permanente
QUOTE #: 1607-1074-JFM

Dear Mr. Galford,

We are pleased to forward BUDGET prices and specifications for the Primary Station at Lehigh Hanson Permanente. Final prices may vary dependent upon when and if an order is placed. These prices are valid until December 30, 2017.

Prices and deliveries are all over the place. In general factories are somewhat busy with reduced staff, handling one project at a time. There is no consistency in the market. This being said we realize this is a long term project; currently complete shipment would be accomplished in a 6 – 8 month period.

Our invoice EQ16118 for services in relation to this project is attached.

We trust this meets your requirements and that you will not hesitate in contacting us if you need additional information.

Very truly yours,

AGGREGATE MACHINERY SPECIALIST

John F. Mulligan

Cc: J.C. Mulligan
T. O'Neill

ENVIROMINE
Lehigh Hanson Permanente Reclamation

July 12, 2016

ITEM 1 Primary Station**1. New Telsmith 3858 PP-VGF Portable Primary Plant** consisting of the following:

Structural steel chassis with blocking supports, crusher discharge hopper, chutes, and all necessary supporting structures.

Telsmith 60" x 24' Heavy Duty Vibrating Grizzly Feeder complete with mild steel pan, 1/2" thick AR steel pan liner, 10' long step deck AR steel grizzly bar section, and heavy duty coil support springs with pads.

- Dual shaft gear driven vibrating unit with adjustable counterweights, 140 mm oil lubricated bearings, 1/2 HP oil lube system with electric circulating pump and oil reservoir, and drive sheave.
- Variable Frequency, 60 HP, 1800 RPM, totally enclosed, fan cooled, high torque, ball bearing, squirrel cage motor with V-belt drive for motor including motor sheave, bushing for motor sheave, v-belts for standard drive centers, and pivotal motor base

Telsmith Model 38" x 58" Roller Bearing Jaw Crusher complete with fabricated steel frames, manganese steel jaw dies, AR cheek plates, hydraulic locking and unlocking wedge lock mechanism with manual hand pump, toggle beam, fly wheel and crusher sheave.

- Automatic pressure oil lubrication system including 2 HP electric oil pump, oil tank, filter, pressure regulator, by-pass valve, pressure gauge, alarm system.
- Hydraulic toggle relief cylinders controlled by a hydraulic power unit with 20 HP electric driven pump, reservoir, filter, water to oil cooler, relief valve and hydraulic controls.
- V-belt drive for 1200 RPM motor including motor sheave, bushing for motor sheave and v-belts for standard drive centers. (Shaft diameter, length and keyway details must be provided if motor supplied by Customer.)
- V-belt drive guard consisting of guard with mounting bracket for attachment to standard foundations. Guards comply with most safety codes, but may require field modifications to meet specific codes.
- Quad axles and highway towing kit including axles, axle support, air brakes, wheels, tires, kingpin, mud-flaps, and lights with reflectors.
- 250 HP, 1200 RPM, TEFC electric motor with slide-rails.
- 54" x 32'-3" End Discharge Conveyor complete with V-belt and torque arm reducer drive, 20 HP, 1800 RPM, TEFC, 3/60/460 electric motor, drive guard, nip guards, idlers, 3-ply 3/16" x 1/16" conveyor belting, lagged head pulley, self-cleaning tail pulley, skirting with rubber flashing, belt scraper, and backstop.

PRICE:	ExWorks Mequon, WI	\$1,068,000.00
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OPTIONS/ACCESSORIES

- A. Self-contained gas engine powered 4-point hydraulic leveling system including 6" bore hydraulic rams with 36" stroke, control valves, hoses, and mounting brackets. Plant must be blocked for operation.

ADD: \$ 30,450.00

- B. Lift off motor starter panel with wiring to plant motors and variable speed control.

ADD: \$ 59,250.00

ITEM 2 Dust Collector**A. DCE Model DLMV 60/15 Type F (H + K11- 15 Hp Integral Fan) Base Model**

- Finish cost: standard finish
- Seal frame assembly (tube sheet): standard –mild steel
- Inserts: mild steel
- Filter bags: Dura-Life™ Polyester
- Control Box with Timer: with solenoids (NEMA 4 ENCL)
- Pressure gauge: Magnehelic
- Motor options: fan rotation
- Compressed air components: piggyback filter and regulator
- Housing assembly (upstands): vertical, unmounted
- Clamp assembly: standard

PRICE: fob Louisville, KY \$ 40,700.00

B. Mounting

Designed to be installed on the discharge conveyor, removed when traveling.

Vertical mounting support, corrugated metal conveyor covers, discharge head box for conveyor.

PRICE: fob Factory \$ 18,575.00

TOTAL: \$ 59,275.00

SUMMARY – Item 1

Primary	\$1,068,000.00
Leveling Jacks	\$ 30,450.00
Motor Control	\$ 59,250.00
Dust Collector with Mounting	\$ 59,275.00
Subtotal	\$1,216,975.00
Sales Tax (4.81%) – <i>Special Rate</i>	\$ 58,536.00
Freight, estimated	\$ 85,189.00
TOTAL	\$1,360,700.00

ITEM 3 Masaba 42" x 2375' Overland Conveyor

- **Frame** – 8" channel, bolt in cross members
- **Supports** – 2' tall intermediate supports on 20' spacing, head end supports for 8' discharge height
- **Drive** – Falk V-Class shaft mounted right-angle gear reducer assembly with cooling fan and L.S. Hindon emergency brake
- **Motor** – 300hp electric with VFD control package
- **V-Belt Drive** – with drive guard
- **Capacity** – 2000 TPH based on 100# per cu/ft of material
- **Belt Speed** – 511 FPM @ 212' decline
- **Pulleys** – **ENGINEERED CLASS PULLEYS**
- **Take Up** – Gravity take up tower on tail end
- **Belting** – Quoted Separately
- **Primary Belt Scraper** – Martin Pit Viper Primary with Twist Tensioner
- **Secondary Belt Scraper** – Martin Secondary Scraper with tungsten-carbide blade
- **V-Plow** – On return side
- **Transition Idlers** – CEMA D, PPI, 20 degree sealed 5" diameter trough idlers
- **Troughing Idlers** – CEMA D, PPI, 35 degree sealed 5" diameter trough idlers, 3.5' spacing
- **Return Idlers** – CEMA D, PPI, sealed 5" return idlers, 10' spacing
- **Self-Aligning Idlers** – CEMA D, PPI 50' from ends, then 100' spacing
- **Hopper** – 6ft long with adjustable rubber flashing
- **Switchgear** – **NOT INCLUDED**
- **Guards** – Tail pulley guard, v-belt guard and nip guard on head pulley. We do not warrant that our guards will meet all local codes. It is the responsibility of the end user to have them checked by a local inspector
- **Steel Shot Blasted**
- **Primer** – (1) coat of 2 part urethane primer
- **Paint** – (1) coat of 2 part urethane paint
- **Owner's Manual** – (2) copies for maintenance and parts

PRICE:	fob, South Dakota	\$ 985,000.00 each
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OPTIONS/ACCESSORIES

A. Safety Cut-off switch with cable	ADD: \$ 9,875.00
B. Discharge Hood with replaceable AR liners	ADD: \$ 3,000.00
C. Fenner-Dunlop 42" PSR 3-1200 Granite 3/8 x 1/4 covers	ADD: \$ 490,000.00
D. Dust collector, Model DLVM-2010, 7½ Hp, vertical mounting, support legs	ADD: \$ 28,125.00

Total for one (1) conveyor:	\$1,516,000.00
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Lot of four (4) conveyors:	\$6,064,000.00
Sales Tax (4.81%) – <i>Special Rate</i>	\$ 291,070.00
Freight, estimated	\$ 303,230.00
TOTAL:	\$6,717,575.00

ITEM 4 Masaba 42" x 190' Pit Portable Magnum Telescoping StackerConveyor Frame**Main Frame** – 84" Deep engineered truss**Extra Chord Angle** – From tail end to head end undercarriage pinning point.**Counterweight** – On-board design installed in the main frame tail**Stinger Frame** – 66" Deep engineered truss**Stinger Drive** – **MASABA TRACK TECHNOLOGY**. Eliminates danger of cable breakage and uncontrolled roll back - No winch or cable. Conveyor extends to 190' lengthRoad Portability**Tubular Undercarriage** – Hydraulic raise & lower with 30 hp pumping unit**Swing Axle** – Pit portable tandem walking beam axle with dual (8) 385/65D-19.5 tires and wheel**Axle Jacks** – Jacks hydraulically lift conveyor to allow swing axle deployment**Power Travel** – (1) hydraulic drive with #100 chain and sprockets**Towing Eye** – For pit transport**Anchor Pivot Plate** - Maintains tail end during radial travel.Main & Stinger Components**Drives** – Class II head end**Motors** – (2) 60 hp/(2) 50 hp**Gear Reducers** – Dodge TAIL shaft mount with backstop**Capacity** – 1500 TPH based on 100# per cu/ft of material at 18 degrees**Belt Speed** – 450/600 FPM**Head Pulley** – Heavy Duty 18" diameter drum pulley with 3/8" herringbone lagging**Tail Pulley** – Heavy Duty 16" diameter self-cleaning wing type pulley**Take Ups** – Screw type**Belting** – 3-ply 3/16" x 1/16" 330 PIW**Belt Splice** – Flexco mechanical steel fasteners**Belt Scraper** – Martin Pit Viper with Twist Tensioner**Transition Idlers (main)** – CEMA C, Precision, 20 degree, sealed 5" diameter idlers**Troughing Idlers** – CEMA C, Precision, 35 degree, sealed 5" diameter, 4' spacing**Return Idlers** – CEMA C, Precision, sealed 5" return idlers, 10' spacing**Self-Aligning (main)** – (1) CEMA C, Precision, self-aligning idler**Self-Aligning Return (stinger)** – ASGCO Tru-Trainer Return Roll**Hopper** – 6' long hopper with adjustable rubber flashing, radial receiving hopper and rock ledgeControls**Complete Switchgear** - manual operation for extend/retract, raise/lower, axle jacks, start/stop conveyors and main disconnect**PLC** – Manual – electric buttons control. Power travel, conveyor raise and conveyor extension.**Material Flow Sensor** – pauses conveyor movement when material is not presentGeneral Specifications**Guards** – Tail pulley guard, v-belt guard and nip guard on head pulley. We do not warrant that our guards will meet all local codes. It is the responsibility of the end user to have them checked by a local inspector**Steel Shot Blasted****Primer** – (1) coat of 2 part urethane primer**Paint** – (1) coat of 2 part urethane paint**Owner's Manual** – (2) copies for maintenance and parts

PRICE:	fob, South Dakota	\$ 563,650.00
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OPTIONS/ACCESSORIES

A. Remote grease bank for pulley bearings	ADD: \$ 2,750.00
B. Wireless remote control for all manual conveyor functions 1,000 ft. range	ADD: \$ 4,295.00
C. Impact idlers in lieu of steel rolls in load area	ADD: \$ 1,190.00
D. Safety switch, radial travel safety switches	ADD: \$ 1,315.00
E. Dual power travel, 4-wheel drive	ADD: \$ 8,500.00

Total with options:	\$ 581,700.00
Sales Tax (4.81%) – <i>Special rate</i>	\$ 27,920.00
Freight, estimated	\$ 29,080.00
TOTAL:	\$ 638,700.00

Delivery currently:

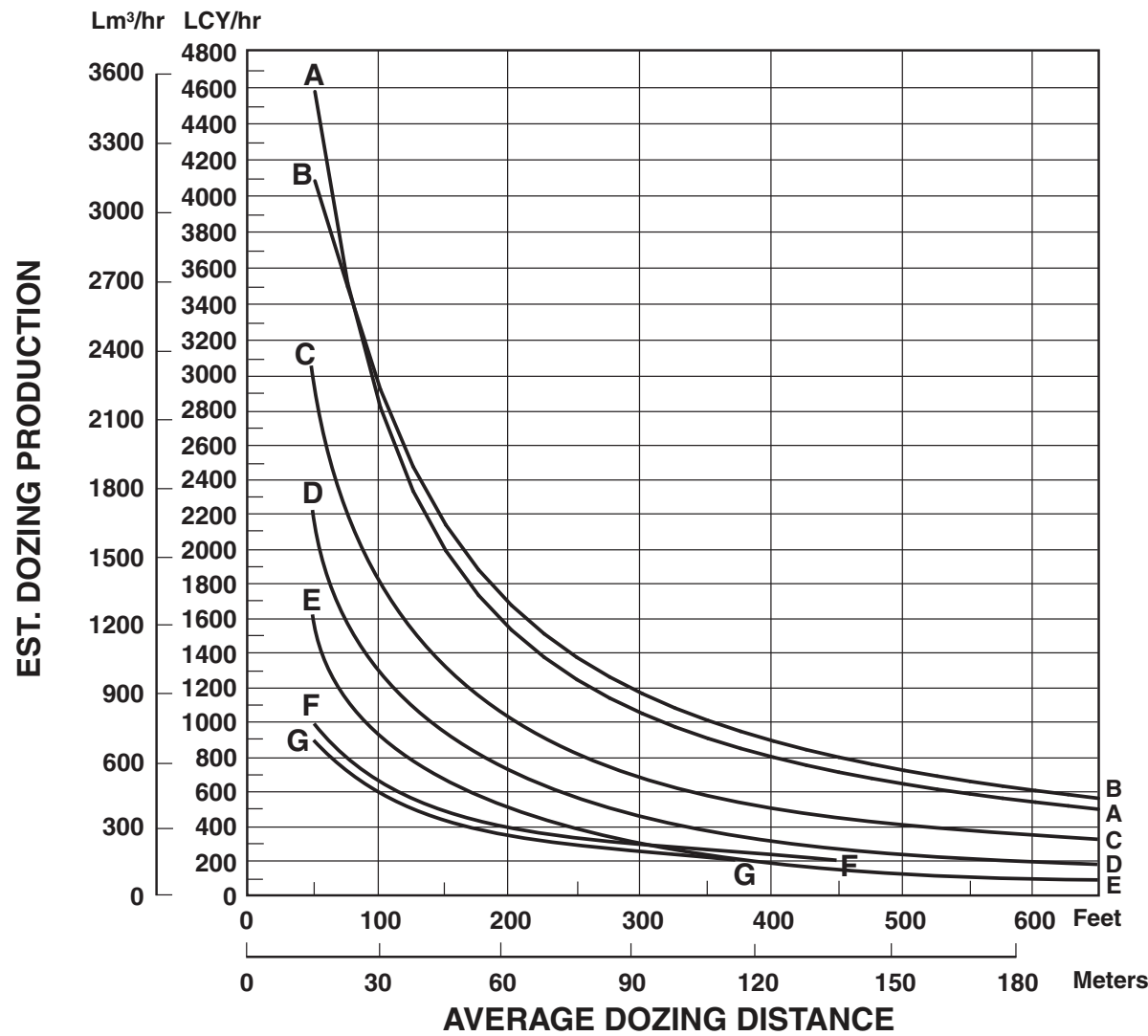
Primary	16 – 20 weeks
Dust Collector	14 – 16 weeks
Overland Conveyor	16 – 20 weeks
Telescoping Conveyor	14 – 16 weeks

Freights are based on current freight estimates and would be invoiced at our actual cost. Sales tax is quoted at current rate and would be adjusted to appropriate rate at time of invoice. Terms to be agreed upon.

J.F. Mulligan
July 12, 2016

Attachment 2

ESTIMATED DOZING PRODUCTION ● Universal Blades ● D7G through D11T



- KEY
- A — D11T-11U
 - B — D11T CD
 - C — D10T-10U
 - D — D9R/D9T-9U
 - E — D8R/D8T-8U
 - F — D7R Series 2-7U
 - G — D7G-7U

NOTE: This chart is based on numerous field studies made under varying job conditions. Refer to correction factors following these charts.

Bulldozers

Job Factors Estimating Production Off-The-Job ● Example Problem

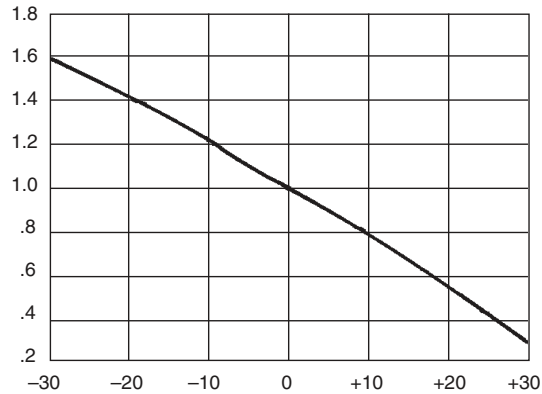
JOB CONDITION CORRECTION FACTORS

	TRACK- TYPE TRACTOR	WHEEL- TYPE TRACTOR
OPERATOR —		
Excellent	1.00	1.00
Average	0.75	0.60
Poor	0.60	0.50
MATERIAL —		
Loose stockpile	1.20	1.20
Hard to cut; frozen —		
with tilt cylinder	0.80	0.75
without tilt cylinder	0.70	—
Hard to drift; “dead” (dry, non-cohesive material) or very sticky material	0.80	0.80
Rock, ripped or blasted	0.60-0.80	—
SLOT DOZING	1.20	1.20
SIDE BY SIDE DOZING	1.15-1.25	1.15-1.25
VISIBILITY —		
Dust, rain, snow, fog or darkness	0.80	0.70
JOB EFFICIENCY —		
50 min/hr	0.83	0.83
40 min/hr	0.67	0.67
BULLDOZER*		
Adjust based on SAE capacity relative to the base blade used in the Estimated Dozing Production graphs.		
GRADES — See following graph.		

*NOTE: Angling blades and cushion blades are not considered production dozing tools. Depending on job conditions, the A-blade and C-blade will average 50-75% of straight blade production.

% Grade vs. Dozing Factor

(-) Downhill
(+) Uphill



ESTIMATING DOZER PRODUCTION OFF-THE-JOB

Example problem:

Determine average hourly production of a D8T/8SU (with tilt cylinder) moving hard-packed clay an average distance of 45 m (150 feet) down a 15% grade, using a slot dozing technique.

Estimated material weight is 1600 kg/Lm³ (2650 lb/LCY). Operator is average. Job efficiency is estimated at 50 min/hr.

Uncorrected Maximum Production — 458 Lm³/h (600 LCY/hr) (example only)

Applicable Correction Factors:

Hard-packed clay is “hard to cut” material -0.80
 Grade correction (from graph)-1.30
 Slot dozing-1.20
 Average operator-0.75
 Job efficiency (50 min/hr)-0.83
 Weight correction(2300/2650)-0.87

Production = Maximum Production × Correction Factors

$$= (600 \text{ LCY/hr}) (0.80) (1.30) (1.20) (0.75) (0.83) (0.87) = 405.5 \text{ LCY/hr}$$

To obtain production in metric units, the same procedure is used substituting maximum uncorrected production in Lm³.

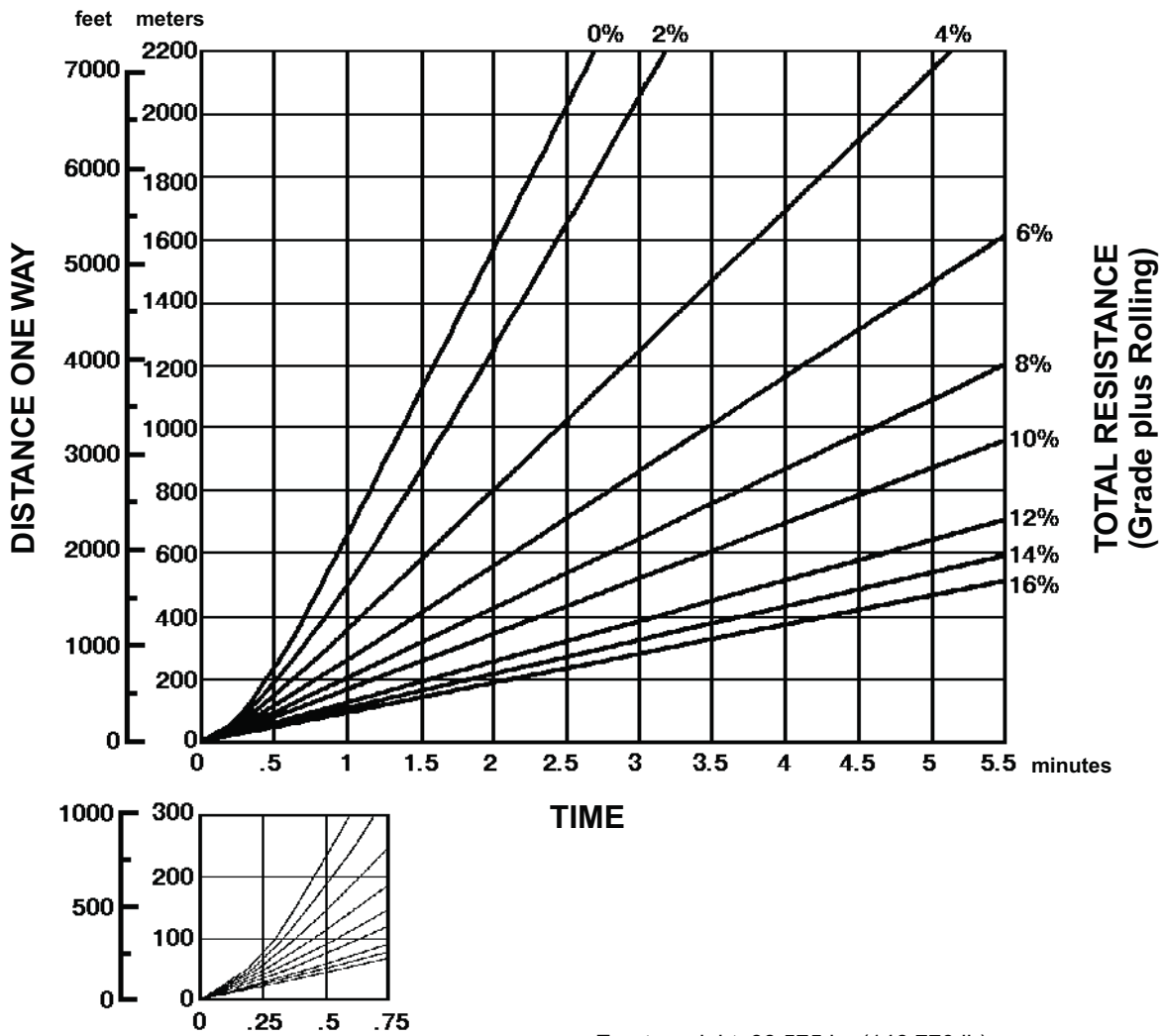
$$= 458 \text{ Lm}^3/\text{h} \times \text{Factors} = 309.6 \text{ Lm}^3/\text{h}$$

Attachment 3

651E Auger Travel Time — Loaded
 • 40.5/75R39 Tires

Wheel Tractor-Scrapers

LOADED

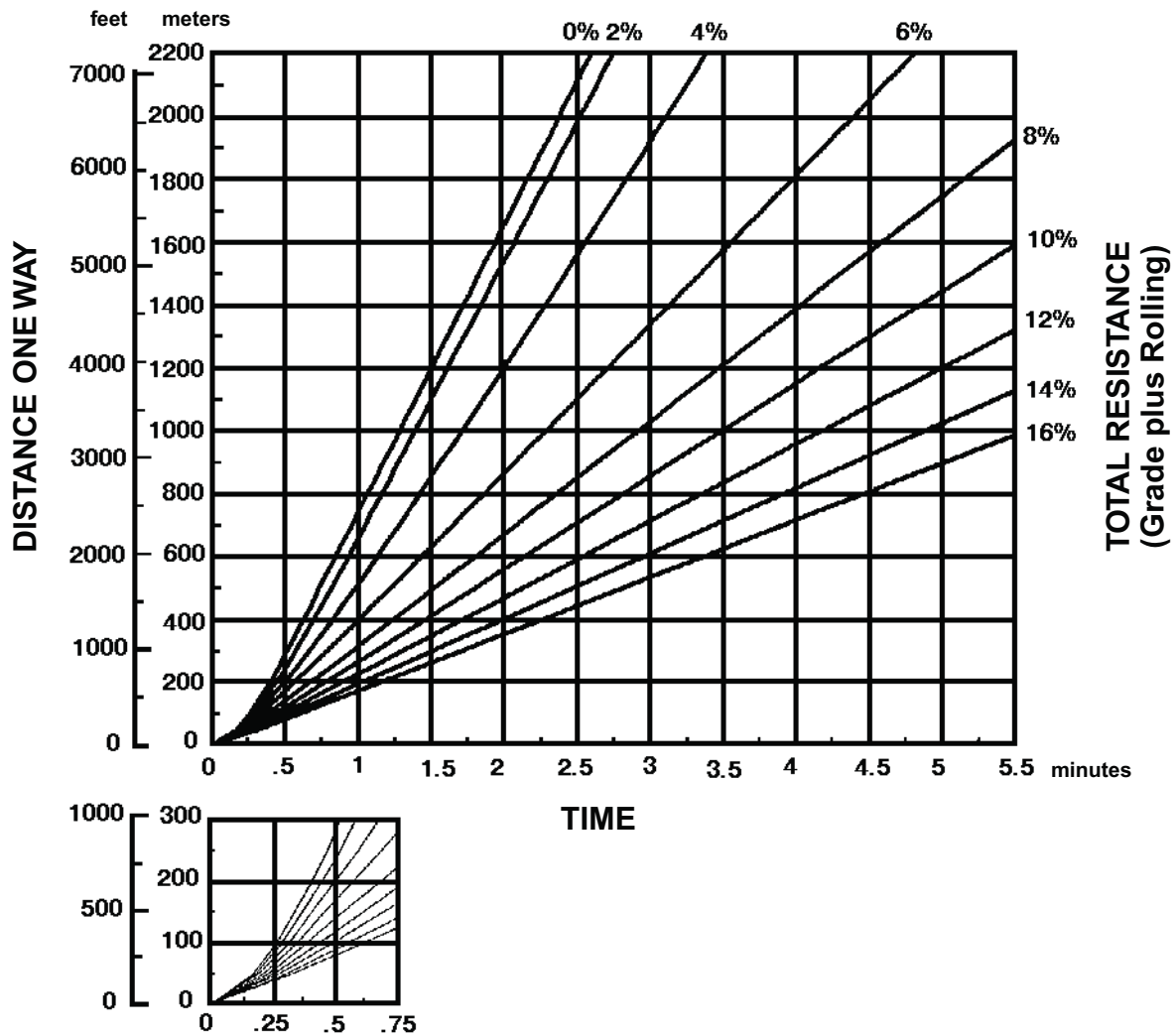


Empty weight: 66 575 kg (146,770 lb)
 Payload: 47 175 kg (104,000 lb)

Wheel Tractor-Scrapers

651E Auger Travel Time — Empty
● 40.5/75R39 Tires

EMPTY



Empty weight: 66 575 kg (146,770 lb)

Attachment 4



Warren Coalson
 Enviromine, Inc.
 135 Camino Dorado, Suite 11
 Napa, CA 94558

July 20, 2017

Re: Permanente Quarry Cupertino

Dear Mr. Galford:

Thank you for contacting Pacific Coast Seed, Inc. as your seed supplier for the above referenced project. We anticipate that we will have the below listed seed in sufficient quantities to seed the ~13.70 acres located in Cupertino, CA. The below items have been priced assuming the seed is provided on a Standard Commercial Quality basis. These items will be mixed and labeled in accordance with California and Federal Seed Laws and consist of the following:

Table 1:

SCIENTIFIC NAME	COMMON NAME	Pounds Per Acre Bulk Seed	Cost Per Pound Bulk Seed
SHRUBS			
<i>Artemisia californica</i>	coastal sagebrush	10	\$36.00
<i>Baccharis pilularis</i>	coyotebrush	6	\$28.00
<i>Eriogonum fasciculatum</i>	Eastern Mojave buckwheat	16	\$9.50
<i>Lotus scoparius</i> (now known as <i>Acmispon glaber</i>)	deer weed	2	\$36.00
<i>Salvia mellifera</i>	black sage	4.3	\$48.00
GRASSES AND HERBS			
<i>Achillea millefolium</i>	common yarrow	2	\$36.00
<i>Artemisia douglasiana</i>	Douglas' sagewort	1.9	\$64.00
<i>Bromus carinatus</i>	California brome	10	\$6.50
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	winecup clarkia	1	\$75.00
<i>Elymus glaucus</i>	blue wildrye	6	\$15.00
<i>Heterotheca grandiflora</i>	telegraph weed	1	\$60.00
<i>Lotus purshianus</i> (now known as <i>Acmispon americanus</i>)	Spanish Clover	3.6	\$75.00
<i>Plantago erecta</i>	dotseed plantain	3	\$40.00

<i>Sisyrinchium bellum</i>	western blue-eyed grass	1.4	\$75.00
<i>Vulpia microstachys</i>	small fescue	10	\$24.00

Table 2:

Scientific Name	Common Name	Lb/Acre	Price/Lb
<i>Artemisia douglasiana</i>	mugwort	2	\$64.00
<i>Carex barbarae</i>	valley sedge	3	\$400.00
<i>Carex praegracilis</i>	field sedge	3	\$95.00
<i>Cyperus eragrostis</i>	tall flatsedge	6	\$90.00
<i>Hordeum brachyantherum</i>	meadow barley	18	\$24.00
<i>Juncus effusus</i>	bog rush	1	\$120.00
<i>Juncus patens</i>	common rush	1	\$135.00
<i>Leymus triticoides</i>	creeping wildrye	6	\$64.00
Total		40	

Please provide a purchase order by June 1st on the year preceding that in which the seed purchase is intended. Some items may require extra collections be made in advance to assume supply of the quantities requested.

Thank you again for consulting Pacific Coast Seed, Inc. as your seed supplier for this project. We look forward to working with you on future projects.

Sincerely,

Pacific Coast Seed, Inc



Kitty Luckert
Office Manager

Attachment 5



Warren Coalson
 Enviromine, Inc.
 135 Camino Dorado, Suite 11
 Napa, CA 94558

July 20, 2017

Re: Permanente Quarry Cupertino

Dear Mr. Galford:

Thank you for contacting Pacific Coast Seed, Inc. as your seed supplier for the above referenced project. We anticipate that we will have the below listed seed in sufficient quantities to seed the ~517 acres located in Cupertino, CA. The below items have been priced assuming the seed is provided on a Standard Commercial Quality basis. These items will be mixed and labeled in accordance with California and Federal Seed Laws and consist of the following:

Table 1:

SCIENTIFIC NAME	COMMON NAME	Pounds Per Acre Bulk Seed	Cost Per Pound Bulk Seed
SHRUBS			
<i>Artemisia californica</i>	coastal sagebrush	16 (8) *	\$36.00
<i>Baccharis pilularis</i>	coyotebrush	20 (6) *	\$28.00
		20 (10) *	
<i>Eriogonum fasciculatum</i>	California buckwheat		\$9.50
<i>Salvia leucophylla</i>	Purple sage	2 *	\$80.00
<i>Salvia mellifera</i>	black sage	3	\$48.00
GRASSES AND HERBS			
<i>Achillea millefolium</i>	common yarrow	1	\$36.00
		1 (2) *	
<i>Artemisia douglasiana</i>	Douglas' sagewort		\$64.00
<i>Bromus carinatus</i>	California brome	6 (8)	\$6.50
		6 (8)	
<i>Elymus glaucus</i>	blue wildrye		\$15.00
<i>Eschscholzia californica</i>	California Poppy	2 (1.5)	\$18.00
<i>Heterotheca grandiflora</i>	telegraph weed	1 *	\$60.00
		1 (1.5)	
<i>Lotus purshianus</i>	Spanish Clover		\$75.00
<i>Lotus scoparius</i>	Deerweed	2	\$36.00
<i>Lupinus nanus</i>	Sky lupine	1 (2)	\$40.00
<i>Melica californica</i>	Californica melic	2	\$36.00

<i>Nasella pulchra</i>	Purple needlegrass	4	\$42.00
<i>Poa secunda</i>	One-sided bluegrass	2	\$30.00
<i>Trifolium wildenovii</i>	Tomcat clover	2	\$38.00
Total		93	

Please provide a purchase order by June 1st on the year preceding that in which the seed purchase is intended. Some items may require extra collections be made in advance to assume supply of the quantities requested and are noted with a *. Numbers in () show the more usual seeding rates for these seeds.

Thank you again for consulting Pacific Coast Seed, Inc. as your seed supplier for this project. We look forward to working with you on future projects.

Sincerely,

Pacific Coast Seed, Inc



Kitty Luckert
Office Manager

Attachment 6

FREEDLUN HYDROSEEDING INC
518 BAYWOOD CT, VACAVILLE, CA 95688

LICENSE #740810

800-300-9423 707-448-9423

FAX 707-446-8146

DEAN@FREEDLUN.NET OR TERRI@FREEDLUN.NET

Price Quote

July 21, 2016

Damien L. Galford

EnviroMine, Inc.

RE: Reclamation Cost Estimate 2016

Hello Damien

Please find our updated pricing for the following BFM products:

Hydroseed using Flexterra: 20+ acres @ \$5,500.00 per acre

Hydroseed using HydroBlanket: 20 + acres @ \$4,500.00 per acre

Both products shall be applied @ 4,000 lbs/acre

This quote is for one application. Should more applications be required, additional charges will apply. Full payment of the quoted price is due within 30 days of application. Late payments will incur an additional fee of 1.5% per month.

This quote assumes customer will provide legal access to the property and to an ample water supply. If no water is available, let us know. This quote excludes any soil prep, soil amendments, any guarantee of growth, watering, weeding, or maintenance. The seed we purchase is determined by the details you have provided and authorized above, and is State inspected for germination percentages.

If a payment & performance bond is required, our rate is 3%. Unless we have been notified of such requirement in writing, the cost of any bond is not included in our quote, and will be added to the final quoted price. Our company is SB/MICRO certified through the State of California. **Init. _____**

Due to the changing prices of seed, the quoted price is good for 60 days. Let us know if you want to 'Lock-in' a price for a date more than 2 months away.

To accept this proposal, initial where indicated, sign and date below & fax back to 707-446-8146. Once accepted, this quote will become a contract.

In any legal action undertaken to enforce its terms, the successful party will be entitled to any and all attorney fees and legal costs incurred in connection with such an enforcement action.

x_____ Date_____ **Initial Required Above**

Printed name_____ Title_____

PHONE: 707-448-9423 • FAX: 707-446-8146

DEAN@FREEDLUN.NET OR TERRI@FREEDLUN.NET