# Planning Director Staff Report for Hearing on May 4, 2023



### County of Ventura · Resource Management Agency

800 S. Victoria Avenue, Ventura, CA 93009 • (805) 654-2478 • www.vcrma.org/divisions/planning

# Rancho San Cristobal Mining Facility CA Mine ID No. 91-56-0030 Interim Management Plan CASE NO. PL22-0181

#### A. PROJECT INFORMATION

- Request: The applicant requests that an Interim Management Plan be approved to authorize the maintenance of an existing mining facility in idle status without the initiation of site reclamation. (Case No. PL22-0181)
- **2. Applicant/Property Owner:** Santa Clara Valley Agriculture Development Corporation (SCVADC), 1708 Cherry Hill Road, Santa Paula, CA 93060
- **3. Applicant's Representative:** Helen Eloyan, Sespe Consulting, 374 Poli Street, Suite 200, Ventura CA 93001 (805) 275-1515
- **5. Decision-Making Authority:** Pursuant to Section 8107-9.7 of the Ventura County Non-Coastal Zoning Ordinance (NCZO), the Planning Director is the decision-maker for the requested Interim Management Plan.
- 6. Project Site Size, Location, and Parcel Number: The 79.2-acre project site is located at 2100 Grimes Canyon Road in the unincorporated area of Ventura County, near the City of Fillmore. The Tax Assessor's parcel numbers for the lot that constitutes the project site are APNs 500-0-050-070, 500-0-050-090, 500-0-050-440,500-0-050-460, 500-0-050-480, 500-0-050-490. (Exhibits 2)

#### 7. Project Site Land Use and Zoning Designations (Exhibit 2):

- a. <u>Countywide General Plan Land Use Map Designation</u>: Open Space and Agriculture
- b. <u>Zoning Designation</u>: OS-160 (Open Space, 160-acre minimum lot size); AE-40 (Agricultural Exclusive, 40-acre minimum lot size

## 8. Adjacent Zoning and Land Uses/Development (Exhibit 2):

Location in Relation to the Project Site	Zoning	Land Uses/Development
North	Agricultural Exclusive (AE- 40)	Agriculture
East	Open Space (OS-160)	Undeveloped open space

Location in Relation to the Project Site	Zoning	Land Uses/Development
South	Agricultural Exclusive (AE- 40)	Agriculture
West	Open Space (OS-160)	Agriculture and open space

#### 9. History:

The existing mining facility began as an excavation and grading operation for the purpose of stabilizing an active landslide and restoring the property back to agricultural use. The mining site will be reclaimed to either an agricultural use or to an open space area planted with native vegetation. The property was planted as an avocado and citrus orchard in 1953. In 1988, the movement of an active landslide destroyed the orchard including the roots of the trees and the irrigation facilities. The landslide reportedly moved 100 feet, causing Grimes Canyon Road, a major arterial in this area, to be realigned by the California Department of Transportation (Caltrans). The landslide has continuously moved over time and has previously filled the Grimes Canyon drainage channel, flooding the adjacent orchard.

In 1993, SCVADC proposed that the slide be stabilized by removing a large portion of the earthen material. The preparation of a CUP application for mining was initiated at that time. Various technical studies, including a geotechnical report, were prepared. While the studies were being conducted, the County authorized emergency earthwork to be done to address the continuing movement of the landslide. In January 1994, a nine-month Grading Permit was granted by the Ventura County Public Works Agency (PWA) that allowed SCVADC to stabilize a portion of the landslide.

A second nine-month Grading Permit was granted by the PWA in May of 1995 which allowed earthwork on the northernmost part of the slide area. The authorized grading was intended to stabilize the upper portion of the landslide to protect existing oil production facilities and the Grimes Canyon drainage channel on the adjacent property to the north and to clear to onsite channel to alleviate the flooding problem. The clearing of the drainage channel required permits from the California Department of Fish and Wildlife, U. S. Army Corps of Engineers, and the Los Angeles Regional Water Quality Control Board. SCVADC obtained the required agency permits prior to working in drainage channel.

A third nine-month Grading Permit was approved by the PWA in April of 1996 to continue excavating material out of the middle portion of the slide in order to help slow down the movement at the toe of the slope near the Elkins Ranch oil field facilities and the Grimes Canyon drainage.

In October of 1996, SCVADC submitted an application for a CUP and Reclamation Plan to authorize mining activities. The proposed CUP and Reclamation Plan boundary encompassed the 19-acre area disturbed during the authorized grading activities. The proposed Reclamation Plan incorporated the reclamation activities previously required by the terms of the Grading Permits.

A fourth nine-month Grading Permit was granted by the PWA in June of 1997 to again clean out the drainage area, to expose an oil wellhead which had been covered by the landslide, and to allow the repair of a power pole which the slide had moved out of alignment. The CUP and Reclamation Plan application was revised were modified to include this additional Grading Permit.

In 1998, CUP 4913 was granted, and the associated Reclamation Plan was approved, by the County Planning Commission. This action authorized the mining excavation and export for sale of clay material removed from the landslide area. The 80-acre area subject to the CUP and approved Reclamation Plan encompasses all of the lands disturbed under the authority of the County-issued grading permits. The approval of the Reclamation Plan assured that the graded areas will be reclaimed. As authorized by CUP 4913, material export was authorized to occur five days per week (Monday through Friday, 6:00am to sunset) and 180 days per year. Truck traffic was limited to 300 trips (150 loads) per operational day.

On February 29, 2008, the Planning Director approved an 8-year extension of the effective period of CUP 4913 to the year 2014. No major operational changes were authorized by this permit modification.

On October 5, 2017, the Planning Commission granted modified CUP PL14-0086 and approved an amended Reclamation Plan (Exhibit 4) to authorize continued surface mining activities at the facility for a 30-year period ending in the year 2046. Some operational changes are authorized by CUP PL14-0086.

**10.Project Description:** The applicant requests that an Interim Management Plan (Exhibit 3) be approved to authorize the maintenance of an existing mining facility in idle status without the initiation of site reclamation.

#### B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

Pursuant to SMARA Section 2770(h)(1), the review and approval of an Interim Management Plan by the Lead Agency (i.e. the County) "shall not be considered a project for purposes of the California Environmental Quality Act." Thus, the proposed Interim Management Plan is statutorily exempt from CEQA (CEQA Guidelines Section 15378).

#### C. INTERIM MANAGEMENT PLAN REQUIREMENT

Pursuant to the Surface Mining and Reclamation Act (SMARA; PRC 2700 et seq) and Section 8107-9.7.1 of the NCZO, an Interim Management Plan is required to be prepared by the operator of a mine that has become idle. Idle is defined in SMARA Section 2727.1 as follows:

"Idle" means that an operator of a surface mining operation has curtailed production at the surface mining operation, with the intent to resume the surface mining operation at a future date, for a period of one year or more by more than 90 percent of its maximum annual mineral production within any of the last five years during which an interim management plan has not been approved.

Absent an approved Interim Management Plan, the mined lands at a mining facility that has been in "idle" status for more than 90 days are required to be reclaimed in accordance with the applicable Approved Reclamation Plan. Pursuant to Section 8107-9.7.4 of the NCZO, an Interim Management Plan may be in effect for a period not to exceed 5 years. The Planning Director may, however, renew an Interim Management Plan for one additional period not to exceed 5 years.

The Planning Director may, in the alternative, decline to approve an Interim Management Plan. In this circumstance, the mined lands would be required to be reclaimed in accordance with the Approved Reclamation Plan.

#### D. CONSISTENCY WITH THE GENERAL PLAN

The proposed project has been analyzed to and determined to be consistent with all applicable General Plan policies. A consistency analysis which evaluates the project's consistency with the policies of the General Plan is included as Exhibit 5 of this Staff Report.

#### E. ZONING ORDINANCE COMPLIANCE

The proposed Interim Management Plan is subject to the requirements of Section 8107-9.7 of the Ventura County NCZO. The applicable requirements are listed along with an evaluation of compliance in Table 1 below.

NCZO	Interim Management Plan in
	conformance?
8107-9.7.1 The Interim Management Plan	Yes. The Interim Management Plan does not
shall comply with the requirements of	alter the current Approved Reclamation Plan
SMARA, all land use permit conditions,	(ARP) for the subject facility. This ARP was
and provide measures the operator will	determined by the State and County in 2017 to
implement to maintain the site in a stable	be designed in conformance with all applicable
	SMARA statutes, State Mining and Geology

condition, taking into consideration public health and safety.	Board reclamation regulations, and County NCZO requirements. The proposed Interim Management Plan does not alter or violate any of the conditions of CUP PL14-0086. The measures included in the Interim Management Plan are adequate to maintain the site in a stable condition that does not create a public health and safety risk.
<b>8107-9.7.2</b> Financial assurances for idle operations shall be maintained as though the operation were active.	Yes. The Financial Assurance held by the County will not be changed (reduced) with the approval of the Interim Management Plan. It will continue to be reviewed and updated on an annual basis as required by SMARA.
8107-9.7.3 The Planning Director shall forward the Interim Management Plan to the State Department of Conservation for review.	Yes. The Interim Management Plan was provided to the State Department of Conservation, Division of Mine Reclamation (DMR) on February 8, 2023, for review and comment. By email dated March 2, 2023, DMR informed the County that it would not be providing comments on the Interim Management Plan. Thus, the Interim Management Plan was found adequate by DMR as that agency did not identify any needed changes.
8107-9.7.4 The Interim Management Plan may remain in effect for a period not to exceed five years, at which time the Planning Director may renew the Interim Management Plan for one additional period not to exceed five years, or require the surface mining operator and/or property owner to commence reclamation in accordance with its approved reclamation plan.	Yes. Any Interim Management Plan approval by the Planning Director will conform to these term limitations.

The current Approved Reclamation Plan (ARP) is attached to this staff report as Exhibit 4. The ARP includes a detailed listing of SMARA requirements and a description of how each standard is satisfied. The Interim Management Plan (if approved) will become a part of this ARP.

# F. INTERIM MANAGEMENT PLAN / RECLAMATION PLAN FINDINGS AND SUPPORTING EVIDENCE

The Planning Director must make certain findings in order to approve an amendment to an approved Reclamation Plan pursuant to NCZO Section 8107-9.6.9. The proposed Interim Management Plan constitutes such an amendment. The ability to make the required findings is evaluated below.

# 1. The reclamation plan must be consistent with and approved in accordance with:

- The Ventura County Zoning Ordinance;
- The provisions of SMARA (PRC Section 2710 et seq.); .
- PRC Section 2207 (i.e. State Annual Reporting and Fee requirements):
- State mining regulations (14 GGR Section 3500 et.seq');
- The regulations, guidelines and other measures adopted by the State
- Mining and Geology Board;
- Ventura Gounty Public Works Agency standards; and
- Any and all locally adopted resource management goals and policies.

The current Approved Reclamation Plan (Exhibit 4) for the Rancho San Cristobal mining facility was prepared on the County's Reclamation Plan application form. This form lists all applicable County and State reclamation regulations and requires the Reclamation Plan to include documentation of conformance with each regulatory standard. Based on review by County staff and staff of the State Division of Mine Reclamation, the Approved Reclamation Plan (Appendix G of the FEIR; Exhibit 4) includes the required documentation of conformance with the above-listed requirements.

The proposed Interim Management Plan (Exhibit 3) would not alter any provision of the Approved Reclamation Plan as it would only allow the site to remain in idle status without the initiation of site reclamation for a limited period of time.

Based on the above discussion, this finding can be made.

# 2. The reclamation plan must be compatible with the existing geological and topographical features of the area.

The Approved Reclamation Plan (Exhibit 4) includes an engineered excavation plan that accounts for the geological and topographic features of the project area. Upon the completion of mining activities, the mining site will be reclaimed to an Open Space and agricultural use with stable slopes having a maximum gradient of 2:1 (H:V). The site will be re-vegetated and drainage control measures will be installed to minimize erosion and sedimentation. The condition of the reclaimed slopes will be compatible with the undisturbed slopes that will surround the former excavation area.

The proposed Interim Management Plan would not alter the geometry of the final reclaimed surface or any other provision of the Approved Reclamation Plan as it would only allow the site to remain in operationally idle status without the initiation of site reclamation for a limited period of time.

Based on the above discussion, this finding can be made.

# 3. Additional considerations, such as the following, shall be addressed in the reclamation plan and permit:

- The creation of stable slopes and the prevention of subsidence;
- Control of water run-off and erosion;
- Views of the site from surrounding areas;
- Availability of backfill materials;
- Proposed subsequent use of the land which will be consistent with the General Plan and existing and proposed uses in the general area;
- Removal or reuse of all structures and equipment;
- The time frame for completing reclamation;
- The costs of reclamation if the County will need to contract to have it performed;
- Revegetation of the site;
- Phased reclamation of the project area; and
- Provisions of an appropriate financial assurance mechanism to ensure complete implementation of the approved reclamation plan.

Section 2.11 of the Approved Reclamation Plan (Exhibit 4) adequately addresses each of the issues specified above based on review by County staff and the State Division of Mine Reclamation.

The proposed Interim Management Plan would not alter the geometry of the final reclaimed surface or any other provision of the Approved Reclamation Plan as it would only allow the site to remain in operationally idle status without the initiation of site reclamation for a limited period of time.

Based on the above discussion, this finding can be made.

# G. PLANNING DIRECTOR HEARING NOTICE, PUBLIC COMMENTS, AND JURISDICTIONAL COMMENTS

The Planning Division provided public notice regarding the Planning Director hearing in accordance with the Government Code (Section 65091) and Ventura County NCZO (Section 8111-3.1). On April 6, 2023, the Planning Division emailed notice of the May 4, 2023 hearing to the State Department of Conservation, Division of Mine Reclamation pursuant to Public Resources Code, Section 2772.1(b)(6)(A-B). On April 21, 2023, the Planning Division mailed notice to owners of property within 300 feet of the property on which the project site is located. Also on April 21, 2023, the Planning Division placed a legal ad in the *Ventura County Star*.

#### H. RECOMMENDED ACTIONS

Based upon the analysis and information provided above, Planning Division Staff recommends that the Planning Director take the following actions:

- CERTIFY that the Planning Director has reviewed and considered this staff report and all exhibits thereto, including the proposed Interim Management Plan, and has considered all comments received during the public comment process;
- **2. FIND** that this project is statutorily exempt from CEQA pursuant to Section 2770(h)(1) of the Public Resources Code and CEQA Guidelines Section 15378.
- 3. MAKE the required findings to approve an amendment to an Approved Reclamation Plan pursuant to Section 8107-9.6.9 of the Ventura County NCZO, based on the substantial evidence presented in Section F of this staff report and the entire record;
- **4. APPROVE** the proposed Interim Management Plan (Exhibit 3; Case No. PL22-0181);
- **5. SPECIFY** that the Clerk of the Planning Division is the custodian, and 800 S. Victoria Avenue, Ventura, CA 93009 is the location, of the documents and materials that constitute the record of proceedings upon which this decision is based.

The decision of the Planning Director is final unless appealed to the Planning Commission within 10 calendar days after the Interim Management Plan has been approved or denied (or on the following workday if the 10<sup>th</sup> day falls on a weekend or holiday). Any aggrieved person may file an appeal of the decision with the Planning Division. The Planning Division shall then set a hearing date before the Planning Commission to review the matter at the earliest convenient date.

If you have any questions concerning the information presented above, please contact Mindy Fogg at (805) 654-5192 or Mindy Fogg@ventura.org.

Prepared by:

Mindy Fogg, Manager

Commercial and Industrial Permits Ventura County Planning Division

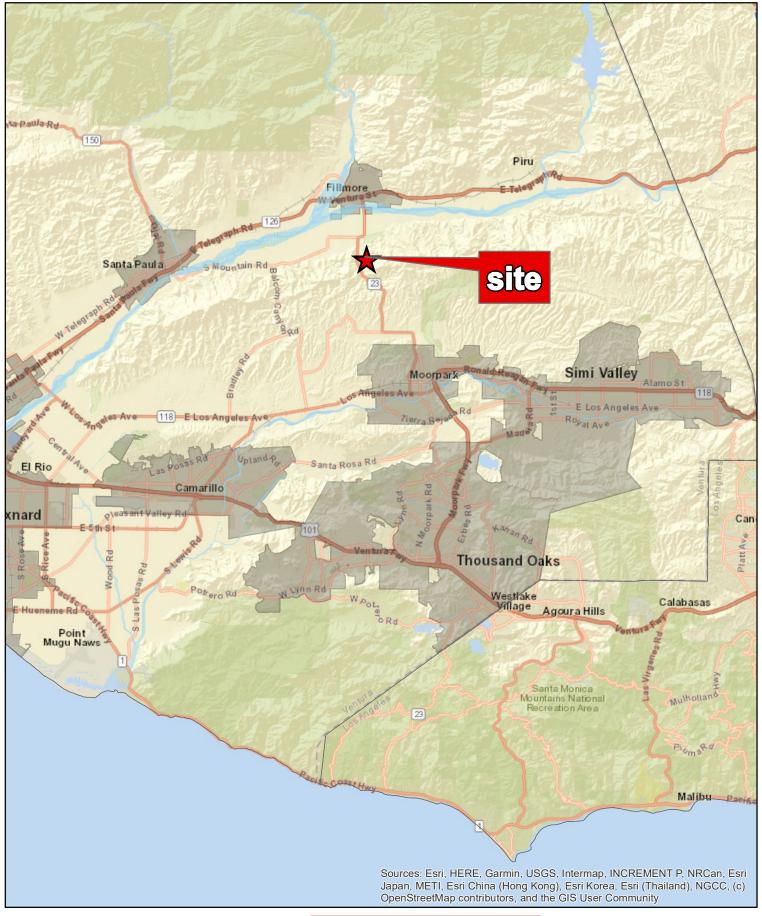
#### **EXHIBITS**

Exhibit 2 Maps (Location, Aerial, and General Plan and Zoning Designations)

Exhibit 3 Proposed Interim Management Plan

Exhibit 4 Approved Reclamation Plan

Exhibit 5 General Plan Consistency Analysis





Ventura County, California Resource Management Agency GIS Development & Mapping Services Map created on 03-28-2023

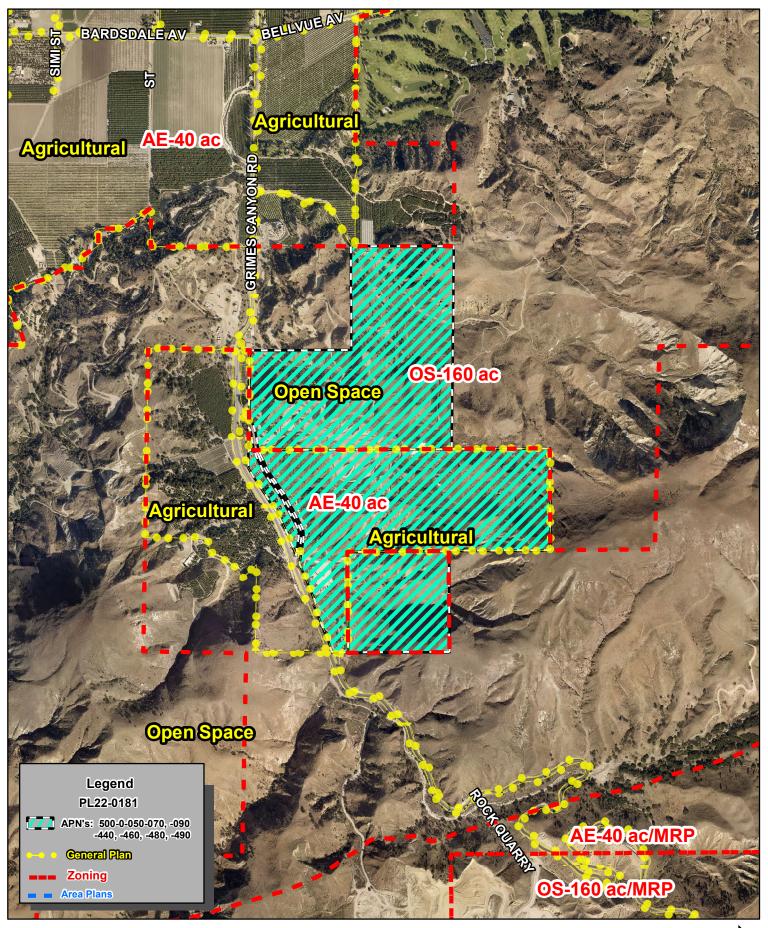


County of Ventura Planning Director Hearing Case No. PL22-0181 Exhibit 2 - Map

10,000 20,000 Feet

Disclaimer: This Map was created by the Ventura County Resourc Management Agency, Mapping Services - GIS which is designed and operated solely for the convenience of the County and related public agencies. The County does no twarrant the accuracy of this magning and or decision involving a risk of economic loss or physical injury should be made in reliance thereon.







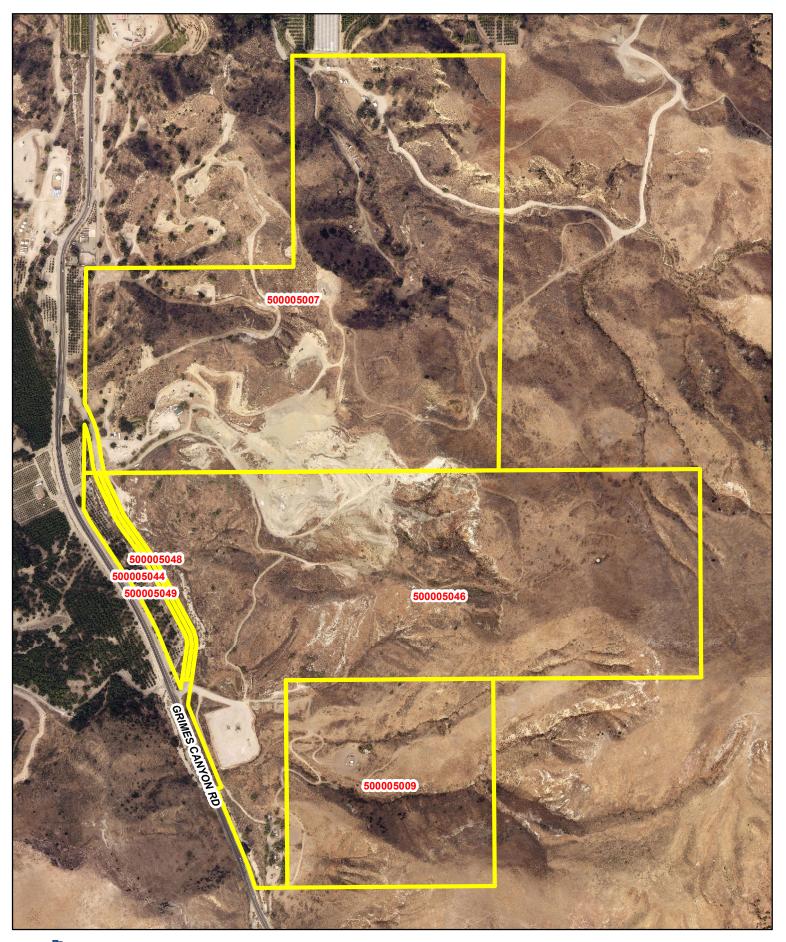
Ventura County, California Resource Management Agency GIS Development & Mapping Services Map Created on 03-28-2023 This aerial imagery is under the copyrights of Pictometry Source: Pictometry, 2019



County of Ventura
Planning Director Hearing
PL22-0181
General Plan & Zoning Map



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Ventura County, California Resource Management Agency GIS Development & Mapping Services Map Created on 03-28-2023 This aerial imagery is under the copyrights of Vexcel 2020



County of Ventura
Planning Director Hearing
PL22-0181





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**A Trinity Consultants Company** 

# **Interim Management Plan**

For

### Santa Clara Valley Agricultural Development Corporation Rancho San Cristobal Clay Mine

2100 Grimes Canyon Road Fillmore, CA CA Mine ID #91-56-0030

December 2022

#### **Prepared for:**

Planning Division County of Ventura 800 S. Victoria Avenue Ventura, CA 93009

#### Operator:

Santa Clara Valley Agricultural Development Corporation 1708 Cherry Hill Road Santa Paula, CA 93060 Contact: Mr. Charles Teague (805) 432-4162

#### **Designated Agent:**

Sespe Consulting, Inc. 374 Poli Street, Suite 200 Ventura, California 93001 (805) 275-1515

County of Ventura
Planning Director Hearing
Case No. PL22-0181
Exhibit 3 - Proposed Interim
Management Plan

### **INTERIM MANAGEMENT PLAN**

#### Rancho San Cristobal Clay Mine Fillmore, California CA Mine ID # 91-56-0030

December 2022

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#### **ATTACHMENTS**

- 1. Interim Management Plan Form
- 2. Approved Site Plans
- 3. Storm Water Pollution Prevention Plan (SWPPP)
- 4. 2021 Financial Assurance Cost Estimate
- 5. Financial Assurance Mechanism
- 6. Conditional Use Permit (PL18-0083)

#### INTERIM MANAGEMENT PLAN

Rancho San Cristobal Clay Mine Fillmore, California CA Mine ID # 91-56-0030

December 2022

#### 1.0 Introduction

Sespe Consulting, Inc. is filing this Interim Management Plan (IMP) for the Site on behalf of Santa Clara Valley Agricultural Development Corporation (SCVADC). This IMP has been prepared for Rancho San Cristobal Clay Mine (Site) located at 2100 Grimes Canyon Road (Highway 23) near the City of Fillmore in the County of Ventura (County), California. This narrative is provided as a supplement to the State Mining and Geology Board *Interim Management Plan Form* completed for the Site (**Attachment 1**).

Section 2770(h)(1) of California's Surface Mining and Reclamation Act (SMARA) requires facilities that meet the definition of "idle" to submit an interim management plan to the Lead Agency (in this case, the County of Ventura). This document has been prepared in accordance with Public Resources Code (PRC) §2770, §2727.1, and §2777.5(b) of SMARA, and the State Mining and Geology Board's *Interim Management Plan Form Guidelines*.

#### 2.0 INTERIM MANAGEMENT PLAN NARRATIVE

The following management plan narrative is provided as a supplement to the State Mining and Geology Board *Interim Management Plan Form* produced for the Site (**Attachment 1**).

#### 2.1 Description of Surface Mining Activities

The Site is located in the central portion of the County, adjacent to Highway 23 and south of the City of Fillmore. The existing 79.2-acre Site (CUP Area) has been in operation since 1998, extracting clay from an active landslide deposit to be loaded into trucks for export off-site. Of the CUP Area, the reclamation area within the permit boundary is approximately 51.3 acres. Based on recent aerial imagery (Google Earth, August 19, 2019), a total of 26.3 acres of disturbed area exists at the mine currently. Please refer to **Attachment 2** for Site Plans. Operations on-site include overburden removal, clay mining, and related support operations such as vehicle fueling and maintenance. The clay mining process includes loading the material into on-road trucks using mobile equipment. There is no fixed or portable processing equipment on-site.

The Site is currently used for surface mining and is generally divided into two areas, the site entrance area and the mining area. The site entrance area is located immediately adjacent to Highway 23 and contains supporting structures/equipment such as a 500-gallon aboveground fuel storage tank and a sea cargo container. The site entrance area also stores mobile equipment used in mining operations. The mining area is located east and upslope of the site entrance area, and consists of the surface mining area, a detention basin, and open space. The current structures, equipment, and mobile equipment associated with mining operations will remain on-site throughout the IMP process.

Although the Site has been in continuous operation since it was originally permitted as a mine in 1998, the site expects to meet the SMARA definition of "idle" by the beginning of the 2023 calendar year due to a reduction in clay material demand.

This IMP will remain in effect for five years from the date approved unless renewed for additional periods per PRC Section 2770. However, if, during the term of the IMP, the total production at this facility exceeds 10% of the Site's previous five-year high, the IMP will be deemed to be null and void and will cease to be in effect.

#### 2.2 Erosion Control Plan

The approved Storm Water Pollution Prevention Plan (SWPPP) will be utilized for erosion control and has been provided in **Attachment 3** for reference.

#### 2.3 Revegetation Plan

SCVADC does not anticipate further revegetation at the Site during its idle status. Erosion control will be maintained as stated in the Site's SWPPP.

#### 2.4 Public Safety

Safety measures are implemented to reduce the potential risk of injury to the public and include the following:

- The mining area is restricted to authorized vehicles and equipment only.
- Entrances are monitored for unauthorized vehicles or persons.
- Property lines to the west are fenced, and the public has not and would not be invited to enter or use the Site without prior authorization.
- Fences and berms are regularly inspected and, if damages are discovered, repairs are made within 48 hours.

#### 2.5 Monitoring and Maintenance Plan

SCVADC employees will monitor slopes and vegetation while the Site is idle. Weeds or other invasive plants, including those identified as noxious weeds by the California Department of Food and Agriculture and species listed on the California Invasive Plant Council's Inventory, will continue to be controlled and eradicated. Weed removal will be conducted during the spring and fall seasons while the site is idle to avoid proliferation of introduced exotic species. Invasive species will be removed to avoid soil erosion and inadvertent scattering of viable weed seeds over the site. Weed removal methods will include a combination of mechanical and chemical means to remove and control invasive plants. Mechanical treatment will involve the use of weed trimmers, mowers, and/or disking, where necessary. The cut stems of these plants will immediately be sprayed with Roundup. This herbicide is non-volatile and the active ingredient quickly biodegrades. Chemical control of herbaceous invasive plants will occur by aerial application of Roundup with portable tank sprayers.

SCVADC will also ensure that all erosion control measures outlined in the Site's SWPPP are maintained throughout the term of the IMP.

#### 2.6 Site Photos

Select photos of the Site are included below.

Figure 1: Google Earth Aerial, dated 02/28/2021.



Figures 2a & 2b: Site Entrance Area Photos, dated 11/9/2020 and 11/17/2019 respectively.





Figure 3a, 3b, 3c, & 3d: Mining Area Photos, dated 11/17/2019.



### **ATTACHMENT 1**

### **INTERIM MANAGEMENT PLAN FORM**



# INTERIM MANAGEMENT PLAN FORM THE STATE MINING AND GEOLOGY BOARD



State of California
DEPARTMENT OF CONSERVATION
STATE MINING AND GEOLOGY BOARD
INTERIM MANAGEMENT PLAN FORM

CA MINE ID# 91-56-0030

INTERIM MANAGEMENT PLAN FORM	MINE NA	AME Rancho San Cristobal Clay Mine
Company Operating     Santa Clara Valley Ag. Development Corp.  Street Address/P.O. Box No.  2100 Grimes Canyon Road	Site Contact Person Charles Teague City Fillmore	Telephone (805) 432-4162 State/ZIP Code/County Ventura CA, 93015
2. Designated Agent's Name (Individual must reside in CA Sespe Consulting, Inc.	374 Poli Street, St	
Ventura City	ZIP Code 93001	Telephone (805) 275-1515
O O Constant Minima O Constitu		I Tabahana
3. Owner of Mining Operation Santa Clara Valley Agricultural Developme	ent Corporation	Telephone (805) 432-4162
Mailing Address 1708 Cherry Hill Road		
1	ornia, 93060	Country (If other than U.S.A.)
4. Landowner Santa Clara Valley Agricultural D Mailing Address Charmy Hill Board	evelopment Corporation	Assessor's Parcel # 500-0-050-070, 500-0-050-090, 500-0-050-440, 500-0-050-460, 500-0-050-480, 500-0-050-490  Telephone (805) 432-4162
1708 Cherry Hill Road  City/State/ZIP Code Santa Paula, CA 93060		Country (If other than U.S.A.)
5. Number or description of reclamation plan amended by Approved RP incorporated into CUP PL18-0083	PL14-0086 (CUP 49	<del>913)</del>
Date Approved May 29, 2019 11-17-201	Copy Attached Yes	d? □ No
6.a. Date Mine Became Idle January 1, 2023	b. Date Mining	g Expected to Resume July 12, 2028
7.a. Previous Maximum Annual Production 397,429 to	on/year b. Production	While Idle 39,742.90 ton/year

# INTERIM MANAGEMENT PLAN FORM THE STATE MINING AND GEOLOGY BOARD

			ATTAOU OODY AND DOGGE	S ADDDOVAL	
Amount		Туре	ATTACH COPY AND PROOF O	DF APPROVAL  Date of Annual Review by	Expiration Date or Renewal
192,000.0		Surety Bond	June 10, 2021	Lead Agency June 24, 2021	Date (If applicable) N/A
☐ Yes 🛚	No Propo	osed changes to Financial A	ssurance. X Yes 1	No Financial Assurance Cost Estima	te attached.
				*	
		site in a safe and stable co propriate information is atta		g elements must be attached to this	form. Check the following
Manageme	ent Plan (Att	ach narrative that addresse	s all of the following.)		
a.	□ Descri	ption of Surface Mining Acti	vities		
b.		n Control Plan			
		on will not be used to contro osion control in the previous		rovide an explanation and describe a	n alternative method for
c.	X Reveg	etation Plan			
d.	X Public	Safety			
e.	Monito	oring and Maintenance Plan			
f.	X Site Pl	notos			
g.	🛚 Мар				
	Check the	appropriate boxes and atta	ch a map that clearly depicts the	e relevant information at a legible sca	ile.
	X C	current Topography			
	<b>∑</b> P	ermit Reclamation Plan Bou	undary		
	X A	reas Disturbed by Surface I	Mining Operations		
	□s	tockpiles of Ore, Overburde	en, Waste, etc.		
	□s	edimentation Pond			
		Office, Shop, Scalehouse, or	Other Structures		
		Itilities			
	X S	ite Drainage			
		rosion Control Structures			
	X C	cross Sections			
		dditional Information			
				4	

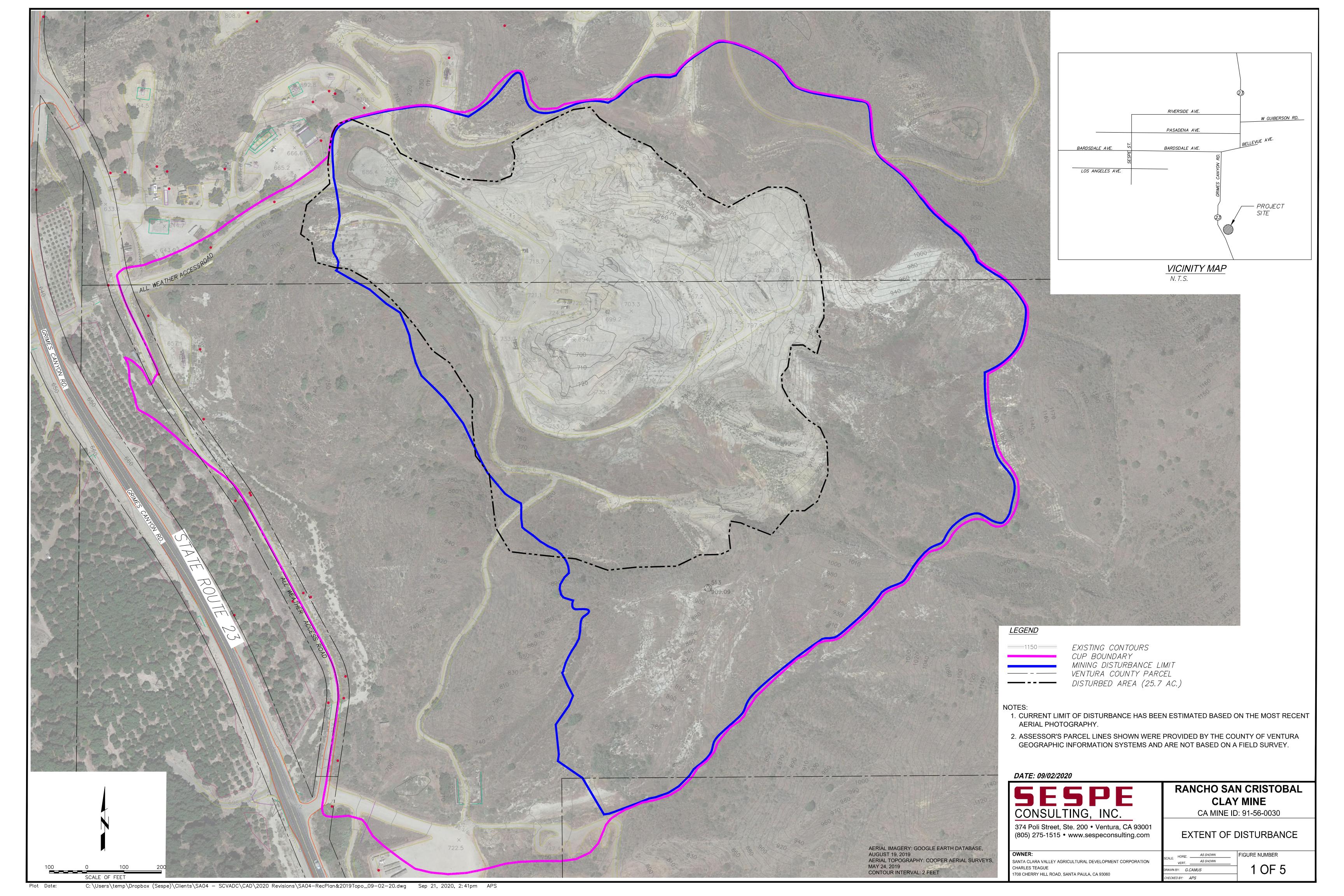
# INTERIM MANAGEMENT PLAN FORM THE STATE MINING AND GEOLOGY BOARD

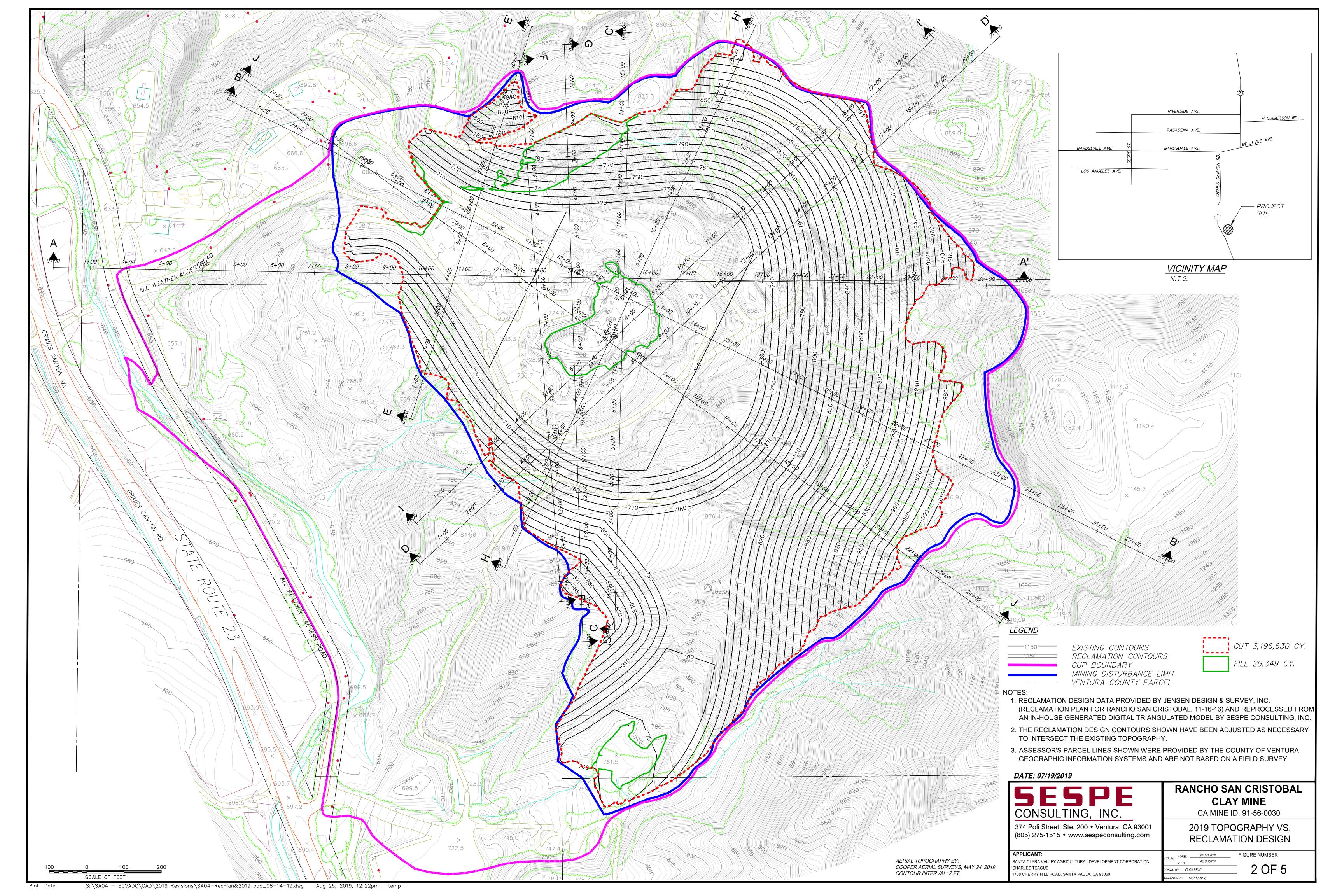
10. Attachments
10. Attachments
Approved reclamation plan (Attach only if there are proposed changes)
Storm Water Pollution and Prevention Plan (Attach only if the SWPPP will be used in lieu of separate erosion control plan)
□ Permit
☐ CEQA Mitigation and Monitoring Plan (Attach if mitigation measures were imposed in approving the reclamation plan)

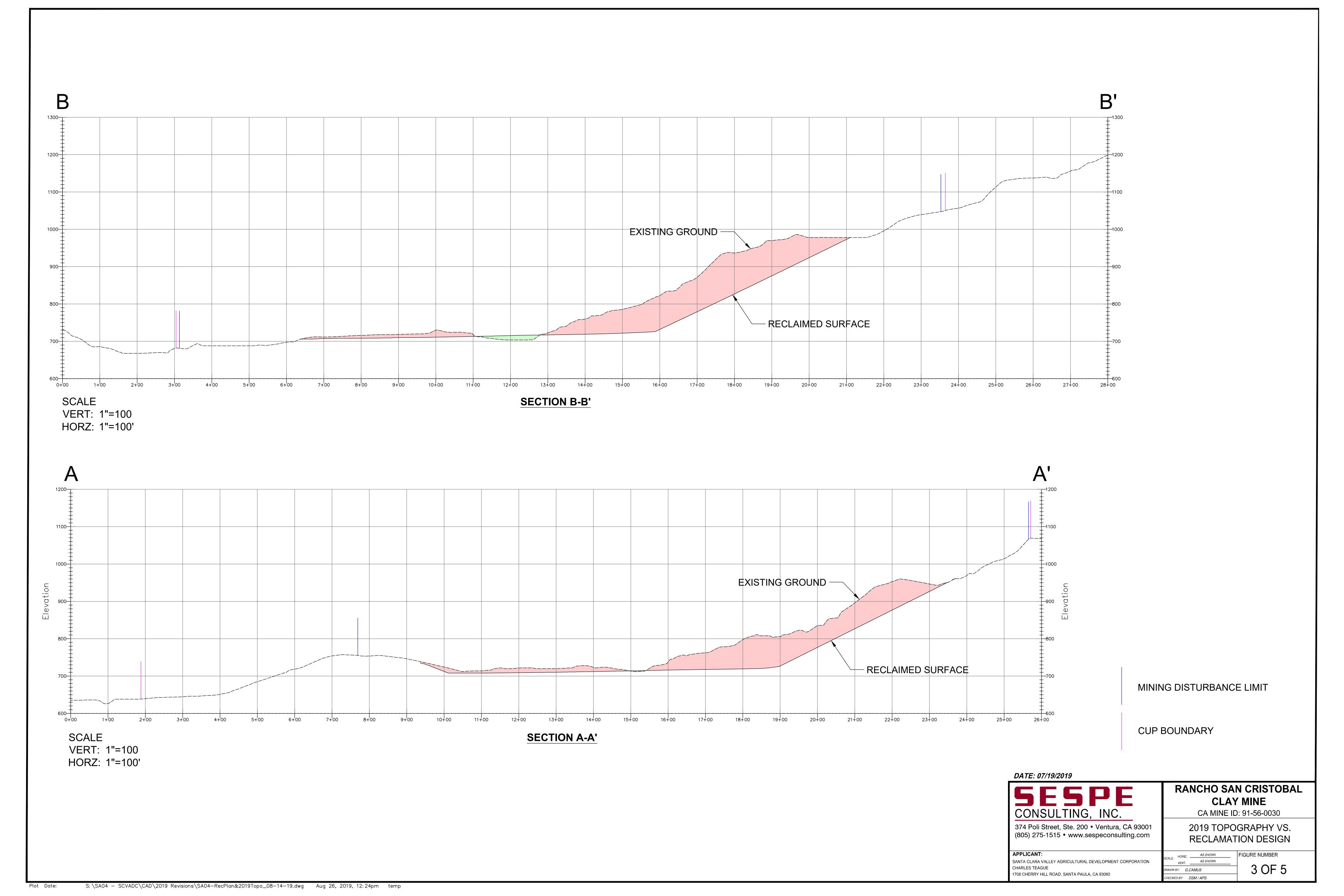
Prepared by Sespe Consulting, Inc.	Date 12-19-22
Submitted by Sespe Consulting, Inc.	Date 12-19-22
Approved by	Date

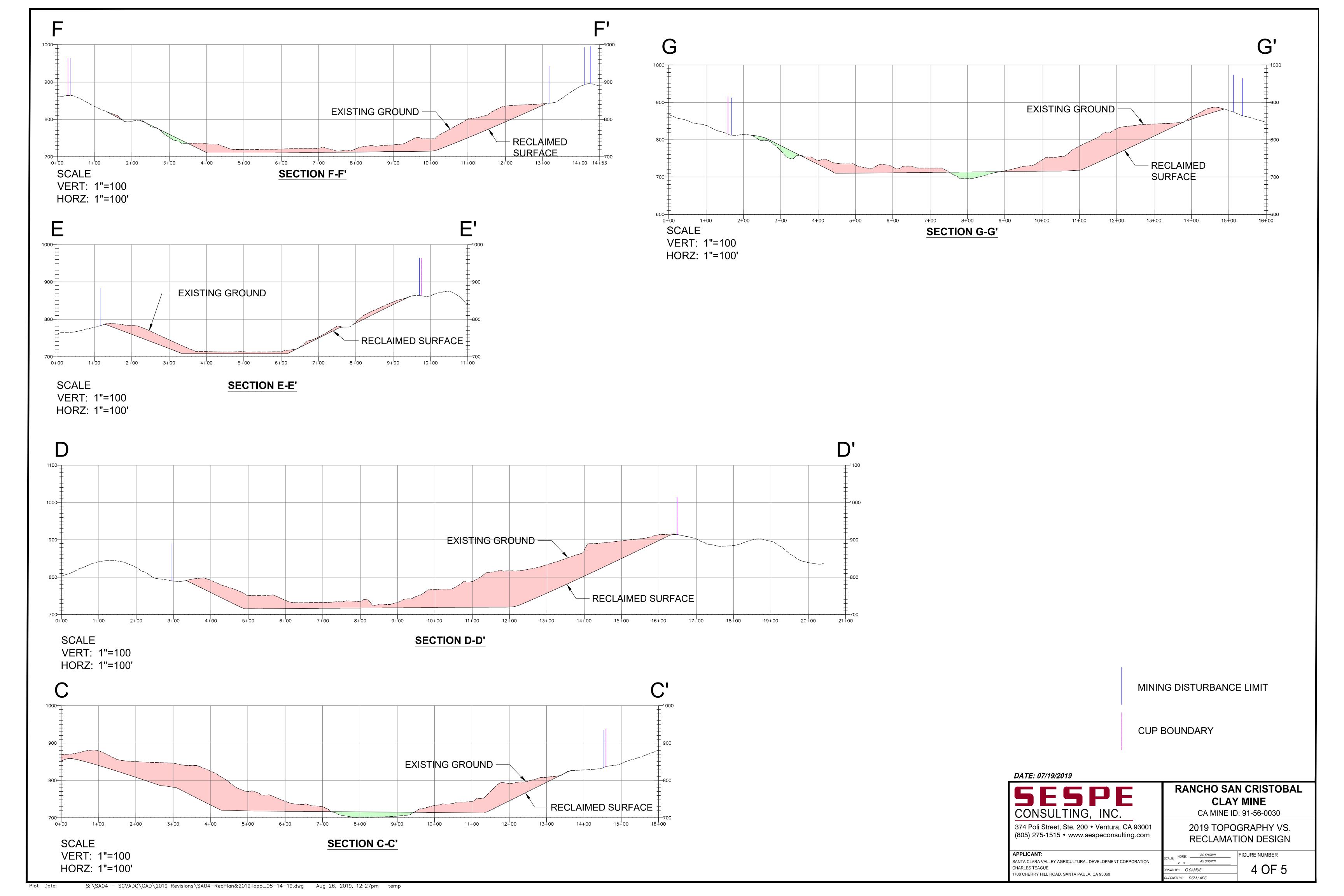
### **ATTACHMENT 2**

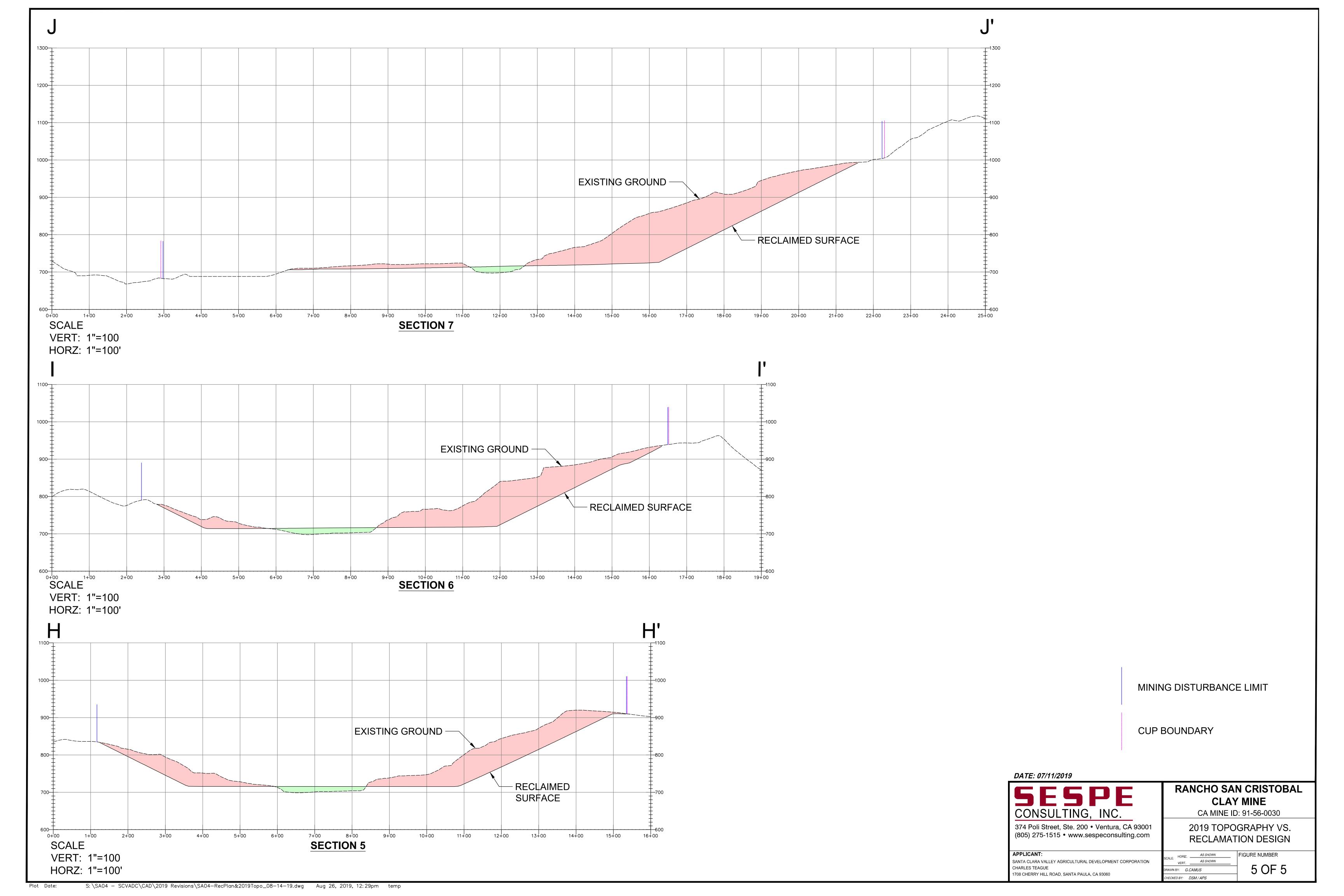
### **APPROVED SITE PLANS**











### **ATTACHMENT 3**

# STORM WATER POLLUTION PREVENTION PLAN (SWPPP)



374 Poli Street, Suite 200 • Ventura, California 93001

# **STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

# Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine

2100 Grimes Canyon Road Fillmore, California

WDID No.: 4 561023550

June 2020

Prepared for: Santa Clara Valley Ag Development Corp.

1708 Cherry Hill Road

Santa Paula, California 93060

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# STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine Fillmore, California

#### June 2020

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- E. Monitoring Implementation Plan Forms
- F. Laboratory Analysis Results / Completed Sampling Logs
- G. Submitted Annual Reports
- H. Industrial Storm Water General Permit

#### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine Fillmore, California

June 2020

CERT	IFICA	TION	ı
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#### **Preparer Certification**

This Storm Water Pollution Prevention Plan was prepared under my direct of the California Industrial General Permit (State Water Resources Contro 2014-0057-DWQ, NPDES General Permit No. CASO00001, as well as the 2	ol Board Water Quality Order
applicable).	09 JUN 2020
Preparer Signature	Date
Benjamin Seaman, QISP	Engineer II
Prenarer Name	Preparer Title

#### **Facility Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Chm	6-18-20
Signature of Legally Responsible Person (LRP) or Duly	Date
Authorized Representative (DAR)	
Charles Teague	President
Name of Legally Responsible Person (LRP) or Duly Authorized	Title
Representative (DAR)	

#### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine Fillmore, California

June 2020

#### 1.0 BASIC FACILITY INFORMATION

The Santa Clara Valley Ag Development Corp., Inc. (SCVADC) Rancho San Cristobal Clay Mine facility is located at 2100 Grimes Canyon Road in Fillmore, California on an approximately 75-acre site (Facility). The Facility is located directly off of California State Route 23 and 2.3 miles south of the Santa Clara River (see figures presented in Appendix A).

The facility is an active clay mine. Operations at the site include overburden removal, clay mining, and related support operations such as vehicle fueling and maintenance. Mined clay is loaded into trucks using mobile equipment. There is no fixed (or portable) processing plant at the site. There is no maintenance shop or hazardous material storage at the site.

The industrial operations that occur at the Facility are presented below. These activities are discussed in more detail in Section 6.

- Mining material using dozers, excavators, and other heavy equipment.
- Loading mined material into haul trucks for delivery to customers.
- Heavy equipment fueling and maintenance.

Potential storm water pollutants at the Facility include:

- Oil and grease (O&G);
- pH; and
- Total suspended solids (TSS).

Storm water that falls on the disturbed mining areas is directed to a series of desilting basins near the Facility entrance. These basins also allow sediment to settle out, improving the quality of storm water discharges that do occur. In large storm events, these basins may overflow and discharge from the Facility.

Storm water that discharges from the site enters a creek near the facility entrance that flows north along the Grimes Canyon Road. The creek empties to the Santa Clara River to the north. The Santa Clara River flows to the Pacific Ocean.

The following SIC Code is applicable to this Facility:

- 1459 (Clay, Ceramic, and Refractory Minerals, not elsewhere classified).

#### 2.0 PURPOSE AND GENERAL REQUIREMENTS OF PLAN

In 1987, Congress enacted the Water Quality Act, amending the Federal Water Pollution Control Act to include regulation of the discharge of storm water from industrial and certain municipal sources. EPA issued final regulations establishing permit application requirements for storm water in the November 16, 1990 Federal Register (55 FR 47990). The regulations provide for individual and group applications and for the issuance of individual and general permits.

In California, the State Water Resources Control Board (SWRCB) elected to issue a statewide general permit that applies to all industrial storm water discharges requiring a permit, except those from construction activities. The Board adopted the Permit and Fact Sheet on November 19, 1991. The Board reissued the Permit and Fact Sheet (Order 97-03-DWQ) on April 17, 1997. On April 1, 2014 the Board adopted an updated Permit and Fact Sheet (Order 2014-0057-DWQ) which takes effect July 1, 2015 ("Permit", "General Permit", or "IGP").

In November 2018, amendments to the IGP were adopted that:

- Implement Total Maximum Daily Load (TMDL) requirements;
- Establish compliance incentives for industrial storm water capture; and
- Incorporate federally-promulgated sufficiently sensitive analytical method requirements.

These amendments become effective on July 1, 2020.

This Storm Water Pollution Prevention Plan addresses the requirements of the 2014 Permit, Order 2014-0057-DWQ, as well as the 2018 amendments, as applicable.

The Permit requires that each facility:

- Eliminate non-storm water discharges;
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); and
- Monitor discharges of storm water.

This Storm Water Pollution Prevention Plan (SWPPP) has been developed as required by the Permit to fulfill the following objectives:

- Identify and evaluate sources of pollutants that may affect the quality of industrial storm water discharges and authorized non-storm water discharges (NSWDs);
- Identify and describe the Minimum Best Management Practices (BMPs) and any Advanced BMPs implemented to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDs. BMPs shall be selected to achieve compliance with the General Permit; and
- Identify and describe conditions or circumstances which may require future revisions to be made to the SWPPP.

The Notice of Intent (NOI) is presented in Appendix B and a copy of the Industrial General Permit is included in Appendix H. A record of revisions to this SWPPP is included in Appendix C.

The Facility's Waste Discharger Identification (WDID) number is noted on the cover of this plan.

#### 3.0 PLANNING AND ORGANIZATION

#### 3.1 Pollution Prevention Team

The management of the Facility has been involved in the preparation and review of this Plan and has provided certification of its accuracy as required by the General Permit. The following individuals comprise the Facility's Pollution Prevention Team and are responsible for the development, implementation, and maintenance of this SWPPP:

#### **Pollution Prevention Team**

#### Team Leader

Name: Charles Teague Title: President 24-hour Phone No.: (805) 432-4162

## SWPPP Responsibilities, Duties, and Activities:

- Administrating and coordinating the storm water program;
- General Permit compliance oversight;
- Specifying appropriate Best Management Practices (BMPs) for operations;
- Ensuring that BMPs are installed and maintained;
- Reviewing and revising storm water compliance documents;
- Conducting employee training;
- Performing visual observations;
- Collecting storm water samples;
- Analyzing storm water samples for pH within 15 minutes of collection;
- Conducting the Annual Comprehensive Facility Compliance Evaluation;
- Preparing and submitting the Annual Report; and
- Submitting documents in SMARTS.

#### 3.2 Other Requirements and Existing Facility Plans

Local, state, and federal requirements that impact, complement, or are consistent with the General Permit were reviewed during the development of this SWPPP. The following plans and permits were reviewed for practices that may help control the discharge of pollutants in storm water:

### Conditional Use Permit No. 4913, Case No. PL14-0083

The Conditional Use Permit (CUP) No. 4913, Case No. PL14-0083 issued to the site by the County of Ventura, includes requirements for how site operations are conducted including the handling of storm water.

### **Reclamation Plan**

The Reclamation Plan for the site (*Reclamation Plan, Grimes Canyon Project*, Revised November 1997) discusses how the site will be reclaimed. Reclamation activities include addressing how storm water are handled.

# 3.3 Scheduled Facility Operating Hours

The Facility's scheduled operating hours are 7:00 AM to 3:30 PM, Monday through Friday.

Please note that on occasion, the Facility may operate during evenings, nights, or weekends if there are large projects that require construction materials to be delivered at these times.

#### 4.0 SITE MAP

Figures are presented in Appendix A. Figure 1 is a Site Location Map that shows the location of the site and nearby water bodies. Figure 2 is a Site Map that shows the drainage area and outfalls and other information about the site.

## 4.1 Description of Drainage Areas and Outfalls

The entire site is approximately 75 acres in size. Nearly the entire site is permeable. Mining areas are graded and vegetated as necessary to minimize erosion and weathering.

There are two (2) drainage areas at the site, which are divided by a mountain ridge:

- Drainage Area A (DA-A) comprises the northern portion of the site. Active mining operations are occurring on up to 20 acres of DA-A. DA-A is equipped with two (2) desilting basins that temporarily retain storm water that falls in the draining area, allowing fine solids to settle out before being discharged. In large storm events, the first desilting basin overflows into the second desilting basin. The second basin is equipped with an overflow pipe. When the water in the basin reaches the top of this pipe, water flows into the pipe and is discharged along the access road. The outlet of the pipe is Outfall A; samples will be collected at this location (Sample Point A).
- Drainage Area B (DA-B) comprises the southern portion of the site. Storm water that falls in this drainage area flows southwest and out of the site at Outfall B. There are no Facility operations in this area and no Facility operations are planned for this area. Therefore, storm water samples will not be collected from this outfall.

Storm water leaving the site enters a creek near the facility entrance that flows north along the Grimes Canyon Road. The creek empties to the Santa Clara River to the north. The Santa Clara River flows to the Pacific Ocean.

# 5.0 LIST OF INDUSTRIAL MATERIALS

Table 1 presents a list of significant industrial materials stored or used at the site. The figures in Appendix A show locations of the significant materials listed below.

**Table 1: Significant Materials** 

Material (Potential Pollutants)	Storage Location(s); Typical Quantity Stored; Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; Typical Frequency of Handling
Mined Clay (TSS)	Clay is mined throughout the Facility. A maximum of approximately 4,000 tons is stockpiled on site. Material is stored all year long.	Clay is not received from off site; it is mined from the ground at the Facility.	Mined clay is trucked off site for use. Up to 25 tons can be shipped in a single truck. The frequency of shipping varies based on production rates, but up to 4,000 tons of clay is shipped per day.	Clay is handled throughout the active operational areas. Up to 200,000 tons are handled per year. This material is handled continuously when the Facility is in operation.
Overburden and Topsoil (TSS)	Extracted overburden is moved to different areas within the site. Up to 10,000 tons may be stockpiled at any one time.  Material is stored all year long.	Extracted overburden material is not received from off site; it is mined from the ground at the Facility.	Extracted overburden is trucked off site for use. Up to 25 tons can be shipped in a single truck. The frequency of shipping varies based on production rates, but up to 4,000 tons of material is shipped per day.	Extracted overburden is handled throughout the active operational areas. Up to 20,000 tons can be handled in a single day.
Fuel – Diesel or Gasoline (Oil & Grease)	Fuel is not normally stored at the site. It is delivered via a fueling truck.	The fueling truck comes on site and drives to the location where the equipment is located and fuels the equipment directly. Up to 300 gallons of fuel can be delivered at one time. Fuel is delivered as frequently as daily when the facility is in operation.	Fuel is not normally shipped from the site; it is combusted in on-site equipment.	The fueling truck comes on site and drives to the location where the equipment is located and fuels the equipment directly. Up to 300 gallons of fuel can be delivered at one time. Fuel is delivered as frequently as daily when the facility is in operation.

June 2020

# Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine

Material (Potential Pollutants)	Storage Location(s); Typical Quantity Stored; Typical Frequency of Storage	Receiving Location(s); Typical Quantity Received; Typical Frequency of Receiving	Shipping Location(s); Typical Quantity Shipped; Typical Frequency of Shipping	Handling Location(s); Typical Quantity Handled; Typical Frequency of Handling
Lubricating Oils (Oil & Grease)	Lubricating oils are not normally stored at the site. They are delivered via a fueling truck or a maintenance truck when equipment is serviced.	The fueling or maintenance truck comes on site and drives to the location where the equipment is located and services it. Up to 100 gallons of lube oil can be delivered at one time. Oil is delivered when equipment is serviced, typically monthly.	Waste lubricating oils are removed from the site by the fuel or maintenance truck that delivers them. Oil is hauled away from the facility when equipment is serviced, typically monthly.	The fueling or maintenance truck comes on site and drives to the location where the equipment is located and services it. Up to 100 gallons of lube oil can be handled at one time. Oil is handled when equipment is serviced, typically monthly.

#### 6.0 POTENTIAL POLLUTANT SOURCES

The activities at the Facility described below have the potential to impact storm water.

#### **6.1** Industrial Processes

The following industrial processes are conducted at the site:

- Clay mining operations;
- Mobile equipment operation, fueling, and maintenance; and
- Vehicle and mobile equipment parking.

Each of these processes is discussed in more detail in the following sections. A discussion of the material handling and storage areas associated with these processes is presented in Section 6.2.

# **6.1.1** Clay Mining Operations

## Designation(s) on site map:

Mining occurs throughout the Facility. The current active mining areas are located in the central portion of the site.

#### **Description of process:**

Clay materials are extracted from the ground in the mining area and transported to the truck loading area using heavy mobile equipment. Clay is generally loaded directly into trucks, but may be temporarily piled in the loading area while awaiting trucks.

Overburden (material that does not contain a sufficient amount of clay) is removed from the surface using dozers, loaders or other earthmoving equipment. This material is loaded into trucks and hauled off-site or moved to an area away from the active mining operation and stockpiled for later use in reclamation activities (e.g. backfilling mined areas and creating required surface contours).

After the overburden is removed, clay is mined using earthmoving equipment. Mined clay material is loaded directly into trucks where it is shipped off site.

#### Type of significant materials handled in the process:

The process includes handling clay and overburden material (dirt, soil, and some vegetation).

## Characteristics of significant materials handled in the process:

The overburden and clay materials are naturally-occurring crustal materials that have the potential to contribute suspended solids (TSS) to storm water discharges.

#### Quantity of significant materials handled in the process:

The large earthmoving equipment used in the mining process can handle as much as 1,000 cubic yards per hour. Up to 200,000 tons of clay are loaded into trucks each year. Up to 200,000 tons of overburden are loaded into trucks each year.

## Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

There is no routine cleaning of the clay mining areas or mining equipment.

# 6.1.2 Mobile Equipment Operation, Fueling, and Maintenance

## Designation(s) on site map:

Mobile equipment (dozers, loaders, haul trucks, etc.) is operated throughout the site.

Mobile equipment fueling occurs in the mining area of the site.

Mobile equipment maintenance and repair are usually performed off-site. However, if equipment breaks down and cannot be taken off site, it will be repaired in the field. In addition, minor servicing of equipment occurs in the field.

# Description of process:

Mobile equipment is used to mine and haul the clay and overburden material.

A mobile fueling truck comes on site and fuels the equipment.

Equipment maintenance and repairs consists of maintaining the equipment by servicing it and performing repairs when it breaks down.

#### Type of significant materials handled in the process:

Significant hazardous materials associated with this process includes fuel (diesel, gasoline) and lubricating oils (motor oil, hydraulic oil, transmission fluid, etc.). Small quantities of other materials such as antifreeze, brake cleaner, grease, and battery acid may also be used in the process.

#### Characteristics of significant materials handled in the process:

Significant materials handled in the process are oils and greases. Smaller quantities used, such as battery acids, have a low pH.

# Quantity of significant materials handled in the process:

Up to 300 gallons of fuels may be dispensed into equipment at any time. Smaller quantities of lube oil and other vehicle fluids (typically less than 10 gallons) may be used.

## Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

Mobile equipment is not normally cleaned. However, cleaning operations may be necessary as a part of maintenance and repair operations.

Waste generated from these operations is hauled off site by the mobile fuel truck or mobile repair truck.

## 6.1.3 Vehicle and Mobile Equipment Parking

# Designation(s) on site map:

Passenger vehicles, haul trucks, on-site mobile equipment, and other vehicles may park in various locations throughout the facility based on the current site conditions.

## Description of process:

Haul trucks, mobile equipment, and other vehicles enter and park throughout the Facility.

## Type of significant materials handled in the process:

Fuels, oils, greases, and other vehicle fluids (antifreeze, brake fluid, battery acid, etc.) may be generated by spills or leaks from vehicles.

# Characteristics of significant materials handled in the process:

Fuels, oils, greases, and other vehicle fluids are petroleum products that may contribute oil and grease to storm water discharges. Spilled battery acid is acidic and may contribute pH to storm water discharges.

#### Quantity of significant materials handled in the process:

Limited amounts of fluids (300 gallons or less for fuel, significantly less for other materials) are present in vehicles.

# Manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process:

There is no manufacturing, cleaning, rinsing, recycling, disposal or other activities related to vehicle parking.

## 6.2 Material Handling and Storage Areas

The following section discusses Facility material handling and storage areas.

## 6.2.1 Hazardous Material Handling and Storage

## Designation on site map:

Hazardous materials are handled throughout the site.

## Description of handling / storage area:

There is no fixed hazardous material handling area at the facility. When fuel or repairs are needed, a mobile truck brings the necessary materials on site, performs the fueling or repair operations, and leaves.

## Type of material handled:

Table 2 summarizes the approximate amount, type, and location of hazardous materials that may be handled at the facility.

**Table 2: Hazardous Materials Summary** 

Chemical	Max. Quantity Handled	Location	Potential SW Contaminants
Fuel (Diesel or Gasoline)	300 gallons	Mining Area	O&G
Other vehicle fluids (Oil, Antifreeze, etc.)	100 gallons	Mining Area	O&G pH

### Characteristics of material handled:

The type of storm water contamination that can potentially be caused by each of the hazardous materials handled is summarized in Table 2.

## **Quantity of material handled:**

The approximate quantity of each hazardous material handled is presented in Table 2.

# Description of shipping, receiving and loading procedures:

These materials are delivered to the site by fueling trucks or maintenance and unloaded directly into the equipment.

## Spill or leak prevention and response procedures:

The general spill response procedures are:

- Shut off ignition sources;
- Stop the flow of material;
- Stop the spread of material;
- Notify the appropriate personnel;
- Gather spill information;
- Notify the appropriate authorities; and
- Properly dispose of waste material.

## Containment structures and capacity:

There is no storage at the facility. Therefore, there are no containment structures at the facility.

## 6.3 Dust and Particulate Generating Activities

The following activities at the Facility have the potential to generate dust and particulate matter that may be deposited within the Facility boundary:

## Mining operations:

*Industrial activities that generate dust:* Removing material from the ground and loading it into haul trucks that carry it off site.

Discharge locations: Active mining areas.

Source type: Fugitive emissions of crustal material.

Characteristics: Natural crustal material.

## Vehicle travel over unpaved roads:

Industrial activities that generate dust: Vehicle travel over unpaved roads.

Discharge locations: Unpaved roads.

Source type: Fugitive emissions of crustal material.

Characteristics: Natural crustal material.

## 6.4 Significant Spills and Leaks

The Facility has not experienced a significant spill or leak of industrial materials or hazardous substances in the past five (5) years that resulted in, or had the potential to result in, discharge from the Facility's storm water conveyance system.

#### 6.5 Non-Storm Water Discharges (NSWDs)

This Facility is not expected to cause any <u>authorized</u> non-storm water discharges during normal operations. The incidental leaks and spills associated with normal Facility operations are minor, are effectively mitigated by BMPs, and are not expected to discharge from the site. Normal operations do not cause unauthorized non-storm water discharges.

All <u>unauthorized</u> non-storm water discharges at the Facility have been eliminated. Water line breaks or tank and equipment leaks and spills may cause unauthorized non-storm water discharges. A discharge from the Facility could occur if there was a very large spill.

#### 6.6 Erodible Surfaces

Nearly the entire site is unpaved. Therefore, there is the potential for soil erosion by contact with storm water. Areas where mining has been completed have been revegetated to minimize the potential for erosion. Storm water that falls on the active mining area flows to the detention basins that collect eroded soil and minimize the potential for it being discharged from the site.

#### 6.7 Offsite Run On

The Facility is located in a hilly area, away from industrial and commercial operations. Offsite run-on will occur, but the run-on is from natural areas and is not expected to negatively impact storm water discharges.

# 6.8 Summary of Potential Pollutant Sources and Best Management Practices

The following table summarizes potential pollutant sources present at the Facility. Section 8 contains narrative descriptions of the BMPs implemented at the site.

**Table 3: Summary of Potential Pollutant Sources and Best Management Practices** 

Activity	Area	Pollutant Source(s)	Potential Pollutant(s)	Best Management Practices
Clay Mining	Throughout the site. Mining primarily occurs on the central portion of the site.	Mining operations	O&G TSS	Discharge prevention (detention basins).  Watering unpaved roads / mining areas.  Preventative maintenance to minimize leaks.  Revegetating areas when mining is completed.  Good housekeeping.  Prompt spill clean-up.  Routine inspections.  Employee training.
Mobile Equipment Operation, Fueling, and Maintenance	Throughout the Facility, primarily in the active mining area.	Spills and leaks from equipment	O&G pH	Discharge prevention (detention basins).  Vehicle maintenance to minimize leaks.  Loading and unloading procedures.  Prompt spill clean-up.  Properly dispose of waste materials.  Maintaining spill control/cleanup material.  Good housekeeping.  Routine inspections.  Employee training.
Vehicle and Mobile Equipment Parking	Vehicles and mobile equipment	Spills and leaks from equipment	O&G pH	Discharge prevention (detention basins). Vehicle maintenance to minimize leaks. Prompt spill clean-up. Good housekeeping. Routine inspections. Employee training.

Activity	Area	Pollutant Source(s)	Potential Pollutant(s)	Best Management Practices
Hazardous Material Handling and Storage	Throughout the Facility, primarily in the active mining area.	See Table 2	pH O&G	Discharge prevention (detention basins). Preventive maintenance to minimize leaks. Prompt spill clean-up. Properly dispose of waste materials. Maintaining spill control/cleanup material. Good housekeeping. Routine inspections. Employee training.
Dust and Particulate Generating Activities	Throughout Facility	Mining operations, unpaved areas.	TSS	Watering unpaved roads / mining areas. Good housekeeping. Employee training.
Soil Erosion	Throughout Facility	Exposed surfaces	TSS	Revegetating areas when mining is completed.  Maintaining detention basins in good condition.  Employee training.

#### 7.0 ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

Areas of the Facility that are most likely to contribute pollutants to storm water discharges and authorized non-storm water discharges include the following:

- **Clay Mining:** Mining activities occur outdoors and are a potential source of storm water pollutants. Contamination of storm water could occur from:
  - o Spills or leaks from mining equipment.
  - Unpaved areas.
  - Dust and particulate generating activities.
- **Mobile Equipment Operation, Fueling, and Maintenance:** The operations have the potential to contribute pollutants to storm water discharges. This includes:
  - Spills from fueling operations.
  - Spills from equipment failures.
  - Waste materials generated during maintenance activities.
- Vehicle and Mobile Equipment Parking: Vehicle parking is conducted outdoors and may
  contribute pollutants to storm water. The quantity and type of contamination are expected to
  be minimal. However, this source could contribute pollutants to storm water discharges if there
  is a spill or leak that is not properly cleaned up.
- **Hazardous Material Storage:** Hazardous materials stored and used at the site have the potential to adversely impact storm water. This includes:
  - o Spills from material storage, transfer, and use.
  - o Spills from loading / unloading operations.
- **Soil Erosion:** Unpaved areas have the potential to contribute sediment to storm water discharges.

Pollutants that are likely to be present in storm water discharges include:

- Oil and grease (from equipment fluids: fuel, oil, grease);
- pH (from vehicles); and
- Total suspended solids (from mining operations, material storage, and unpaved areas at the site).

Each of these pollutants is readily mobilized by contact with storm water.

Pathways in which these pollutants may be exposed to storm water:

- Precipitation that falls on outdoor storage areas and equipment;
- Dust and particulate emissions that are deposited within facility boundaries; and
- Spills and leaks.

Sampling, visual observation, and inspection records are presented in Section 10.

In general, existing BMPs are effective in reducing or preventing pollutants in industrial storm water discharges. It is expected that implementing the Minimum BMPs presented in Section 8.1, to the extent feasible, will reduce or prevent pollutants in industrial storm water discharges.

Industrial pollutants generated at this facility are not expected to cause or contribute to an exceedance of a water quality standard in receiving waters that are 303(d) listed or that have approved TMDLs.

Table 4 is a summary of the Facility's likely storm water contamination sources and the associated pollutants.

**Table 4: Summary of Likely Sources of Pollutants and Corresponding Pollutants** 

Pollutant Source	Pollutant
Clay Mining	Oil and Grease Total Suspended Solids (TSS)
Mobile Equipment Operation, Fueling, and Maintenance	Oil and Grease pH
Vehicle and Mobile Equipment Parking	Oil and Grease pH
Hazardous Material Handling and Storage	Oil and Grease pH
Dust and Particulate Generating Activities	TSS
Soil Erosion	TSS

### 8.0 STORM WATER BEST MANAGEMENT PRACTICES (BMPS)

Best Management Practices (BMPs) to reduce the impact of Facility operations on storm water are presented in the following sections. These sections include two different categories of BMPs: Minimum BMPs and Advanced BMPs.

#### 8.1 Minimum BMPs

Minimum BMPs are BMPs that require mandatory implementation (to the extent feasible) and maintenance. The Minimum BMPs listed below are in place at the Facility.

#### 8.1.1 Pollution Prevention Team

The Pollution Prevention Team presented in Section 3.1 has the primary responsibility for storm water pollution prevention. The following BMPs are implemented at the site to ensure adequate implementation of this SWPPP and compliance with the General Permit:

#### Team Leader

The Storm Water Pollution Prevention Team Leader is responsible for implementing the following BMPs:

- Ensure that BMPs are properly implemented and maintained. BMPs that are installed incorrectly or not properly maintained may not achieve the desired pollution prevention goals. The Team Leader is responsible for ensuring that BMPs are functioning properly.
- Visual observations. The General Permit requires a number of inspections. If an inadequate BMP is noted during an inspection, the Team Leader is responsible for ensuring that the BMP is repaired.
- SWPPP review and update. At least once each year, the Team Leader will review this SWPPP and site operations to determine if the SWPPP needs updating (including determining if any additional BMPs are necessary). The Team Leader is responsible for ensuring that this SWPPP is updated as appropriate.
- Employee training. Employee training (discussed below) is one of the most important BMPs because it informs employees of the potential impacts of Facility operations and their actions on storm water discharges. The Team Leader is responsible for conducting routine training for employees as well as refresher training when deemed necessary (e.g., when employees are observed acting in a manner that does not comply with this SWPPP).
- Storm water sampling. Analysis of storm water runoff can provide information regarding the effectiveness of BMPs. The Team Leader is responsible for the implementation of the storm water Monitoring Implementation Program outlined in Section 10 of this document.

#### 8.1.2 Good Housekeeping BMPs

Good housekeeping (maintaining a clean and orderly facility) is important in minimizing pollutants in storm water. The following good housekeeping BMPs are implemented at the site:

- The Facility is observed monthly to determine housekeeping needs (see Section 10.2). This is a review of outdoor areas associated with industrial activity, storm water discharge locations,

drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on. Identified debris, waste, spills, tracked materials, or leaked materials are cleaned and disposed of properly.

- Minimizing or preventing material tracking. This includes:
  - o Sweeping material that is tracked out onto paved roads.
- Minimizing the generation of dust from industrial materials and activities. This includes:
  - Watering roads as necessary to limit dust generated by vehicle travel.
- Where feasible, covering stored industrial materials that can be readily mobilized by contact with storm water (see Section 8.2.1).
- Preventing disposal of industrial materials into the storm water conveyance system.
- Minimizing storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the facility.
- Minimizing authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.
- Maintaining storage areas in an organized fashion.
- Equipping portable toilets used onsite with drip trays that provide secondary containment.

### 8.1.3 Preventive Maintenance BMPs

Maintaining equipment and vehicles in good working order minimizes the potential for spills and leaks that can contribute pollutants to storm water. The following preventive maintenance procedures are implemented at the site:

- Identifying the equipment or systems that may spill or leak and observing them regularly (as applicable).
- Maintaining vehicles and equipment in accordance with the manufacturers' recommendation or standard industry practices to minimize the potential for failure.
- Establishing an appropriate schedule and procedures for prompt maintenance and repair of equipment and systems.
- Conducting vehicle maintenance activities offsite (when feasible).
- Inspection practices as discussed in Section 10.

## 8.1.4 Spill and Leak Prevention and Response BMPs

Spill and leak prevention and response BMPs in place at the Facility include:

- Establishing procedures and/or controls to minimize spills and leaks.
- Developing and implementing spill and leak response procedures to prevent industrial materials
  from discharging through the storm water conveyance system. These procedures identify and
  describe necessary and appropriate spill and leak response equipment, location(s) of spill and
  leak response equipment, and spill or leak response equipment maintenance procedures.
- Promptly responding to spills and leaks including: stopping the spill / leak, containing spilled material on site when possible; prompt cleanup of spilled material; and regulatory notification and reporting.
- Maintaining an adequate supply of spill control and spill clean-up equipment.
- Ensuring that loading and unloading BMPs are followed (see Section 8.1.5).
- Maintaining vehicles and equipment in good condition to minimize the potential for a release (see Section 8.1.3).
- Training personnel in spill prevention and response (see Section 8.1.7).

# 8.1.5 Material Handling and Waste Management BMPs

Procedures to ensure the proper storage and handling of materials and waste are implemented at the Facility to minimize the potential for storm water impacts. The following BMPs are in place at this Facility:

- Preventing or minimizing handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event.
- When possible, covering waste disposal containers and storage containers when not in use. Note: it is not always possible to obtain large waste containers (e.g., roll off bins) that have covers from the waste disposal company. When possible and available, containers with lids will be used.
- Where feasible, diverting run-on and storm water generated from within the facility away from all stockpiled materials. Note: this is not always feasible as the Facility contains large stockpiles of clay and overburden material and it is not always possible to divert storm water around these piles. Other BMPs (e.g., detention basins) are in place to limit the amount of eroded material in storm water discharges.
- Observing and, as appropriate, cleaning outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

- Ensuring that an employee monitors hazardous material and waste loading and unloading activities in order to respond promptly to spills. Spills or wastes that occur during handling will be cleaned promptly (see Section 8.1.4).
- Utilizing a drip pan under tank connection points during hazardous material and waste loading and unloading activities. Material in these pans should be properly disposed and the pans should be cleaned when they are full and at the end of each day.
- Only using containers that are in good condition and compatible with the material they hold.

### 8.1.6 Erosion and Sediment Control BMPs

Erosion and sediment control BMPs in place at the Facility include:

- Implementing effective wind erosion controls.
- Providing effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event.

Due to the nature of the operations at the site (surface mining), it is not possible to completely stabilize every erodible surface to eliminate all possibility of erosion. Surface mining covers large areas and includes constantly changing landscapes and elevations, frequent movement of stockpiles, and variance in location of materials. Therefore, it is not feasible (nor does it reflect best industry practice for surface mines) to implement stabilization controls throughout the entire facility. Other BMPs (e.g., detention basins) are in place to limit the amount of eroded material in storm water discharges.

- Revegetating areas where mining has been completed or will not be mined for an extended period to prevent erosion.
- Diverting run-on and storm water generated from within the facility away from erodible materials. Due to the nature of the operations at the site (surface mining), it is not possible to divert run-on and storm water away from erodible surfaces. Surface mining covers large areas and includes constantly changing landscapes and elevations, frequent movement of stockpiles, and variance in location of materials. Therefore, it is not feasible (nor does it reflect best industry practice for surface mines to divert water during storm events. Other BMPs (e.g., detention basins) are in place to limit the amount of eroded material in storm water discharges.
- Maintaining the detention basins in good condition and removing excess sediment to maximize capacity.

# 8.1.7 Employee Training BMP

In order to effectively manage storm water, Facility staff must be trained to be aware of storm water issues, the General Permit, and site activities and conditions that may adversely affect storm water. Affected employees will be trained in the storm water program at the time of hire and refresher training will be given as needed. Training consists of a review of the SWPPP as it relates to the area in which the employee works and the employee's job function. Storm water training will include the following:

- Requirements of the SWPPP;

- Spill response and reporting procedures; and
- BMP implementation, evaluation, observations, and monitoring for BMPs outlined in this SWPPP.

In addition, employees who will be conducting monitoring and sampling will be trained in those tasks.

If the Facility is in Baseline status for all parameters (see Section 11), Facility personnel can conduct the training. If the Facility enters Level 1 status (see Section 11), appropriate team members must be trained by a Qualified Industrial Storm Water Practitioner (QISP).

Records of training will be maintained. The forms presented in Appendix D can be used to conduct and document storm water training activities.

## 8.1.8 Quality Assurance and Recordkeeping BMPs

At least once each year, this plan and current operations will be reviewed to ensure that this SWPPP is adequate for the site and it is being properly implemented. See Section 10.7 for more information.

Quality Assurance, record keeping, and internal reporting practices related to storm water sampling are presented in Section 10.

#### 8.2 Advanced BMPs

Advanced BMPs are additional BMPs that must be implemented (to the extent feasible) as necessary to reduce or prevent discharges of pollutants in storm water in a manner that reflects best industry practice. The Advanced BMPs listed below are in place at the Facility.

### 8.2.1 Exposure Minimization BMPs

Due to the nature of the operations at the site (surface mining), it is not possible to cover all of the equipment used or areas where industrial activity occurs. Surface mining covers large areas and includes constantly changing landscapes and elevations, frequent movement of stockpiles, and variance in location of materials. Therefore, it is not feasible (nor does it reflect best industry practice for surface mines) to implement the installation of storm resistant shelters to prevent the contact of storm water with the identified industrial materials or areas of industrial activity.

## 8.2.2 Storm Water Containment and Discharge Reduction BMPs

Containment and discharge reduction BMPs installed at the Facility include:

- Most of the site is unpaved. This allows storm water that falls on the site to infiltrate.
- This site contains detention basins that collect storm water. These basins are unlined, allowing storm water to infiltrate, and limit the frequency and volume of storm water discharges from the site.

Any new basins installed after July 1, 2015 must meet the volume and flow specifications presented in the General Permit. All hydrologic calculations must be certified by a California licensed Professional Engineer.

#### 8.2.3 Treatment Control BMPs

No treatment control BMPs have been installed at the site. The site has few storm water discharges and there is no sampling data to indicate that treatment control is necessary. If future sampling results indicate the need for treatment control, this BMP will be revisited.

#### 8.2.4 Other Advanced BMPs

No other Advanced BMPs were identified as being practical or necessary for this site.

Table 5 summarizes the BMPs implemented to prevent discharge of pollutants in storm water runoff; potential pollutants; implementation timing, location, personnel, procedures, and materials / equipment. Descriptions of the specific BMPs being implemented were provided in previous subsections.

**Table 5: BMP Description Table** 

ВМР	Pollutants Designed to Control	When to Implement BMP	Locations to Implement BMP	Person Responsible for Implementing	Procedures to Implement BMP	Equipment and Tools to Implement BMP	Additional Observation Needed?
Pollution Prevention Team	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	See Section 8.1.1	None	No
Good Housekeeping	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Use proper trash containers; keep closed when not in use. Sweep tracked material outside entrance driveway. Keep storage areas neat. Keep vehicles and equipment clean. Place trays under portable toilets.	· · · · · · · · · · · · · · · · · · ·	No
Preventive Maintenance	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain equipment in good working order. Use drip pans when conducting activities outdoors.	Wrenches, screwdrivers, and other tools. Drip pans.	No
Spill and Leak Prevention and Response	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Promptly respond to spills and leaks.	Heavy equipment. Brooms, rags, spill response kits.	No
Material Handling and Waste Management	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Oversee unloading operations.  Use drip pans when conducting activities outdoors.  Use containers in good condition.	Drip pans, containers.	No

ВМР	Pollutants Designed to Control	When to Implement BMP	Locations to Implement BMP	Person Responsible for Implementing	Procedures to Implement BMP	Equipment and Tools to Implement BMP	Additional Observation Needed?
Erosion and Sediment Control	TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Revegetate mined areas. Preserve existing vegetation. Maintain basins in good condition, remove built up sediment.	Shovels, heavy equipment.	No
Employee Training	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Train employees in storm water, hazardous materials, and spill prevention/response requirements and practices.	SWPPP, General Permit	No
Quality Assurance and Recordkeeping	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Review storm water documents in accordance with the SWPPP. Maintain records.	Pens, paper, binders, filing cabinets.	No
Storm Water Containment and Reduction	O&G pH TSS	All year	Throughout Facility	Pollution Prevention Team Leader	Maintain basins in good condition, remove accumulated sediment.	Shovels, heavy equipment.	No

# 8.3 BMP Implementation Tracking

The Permit requires that facilities track the implementation of BMPs. The following table will be used to track the implementation of BMPs. Existing BMPs are shown. As new BMPs are installed or used at the Facility, this table must be updated.

**Table 6: BMP Table** 

BMP Category	ВМР	Date Implemented	Comments
Pollution Prevention Team	Pollution Prevention Team	Existing	
	Trash disposal	Existing	
	Cleaning tracked material	Existing	
	Dust generation	Existing	
Good Housekeeping	Storage areas	Existing	
	Spill response	Existing	
	Keeping equipment clean	Existing	
	Trays for portable toilets	Existing	
	Equipment observations	Existing	_
Preventive Maintenance	Maintaining equipment	Existing	
	Maintaining vehicles	Existing	
Spill and Leak Prevention	Spill response	Existing	
and Response	Maintaining spill response supplies	Existing	
	Monitoring un/loading operations	Existing	
Material Handling and	Using drip pans	Existing	
Waste Management	Using appropriate containers	Existing	
	Closing disposal containers	Existing	
	Paved entrance	Existing	
	Clean tracked material	Existing	
<b>Erosion and Sediment Control</b>	Detention basins	Existing	
	Revegetate mined areas	Existing	
	Preserve existing vegetation	Existing	
Employee Training	Employee training	Existing	
Quality Assurance and Recordkeeping	Quality assurance and recordkeeping	Existing	
Storm Water Containment	Maintain basins	Existing	
and Reduction	Clean out built up sediment	Existing	

## 8.4 Temporary Suspension of Industrial Activities

The Permit allows facilities to discontinue monitoring activities in certain situations if the Facility suspends industrial activities for ten (10) or more consecutive days. In order to be eligible for this, additional BMPs must be implemented to ensure that Facility operations do not adversely impact storm water.

The following facility stabilization BMPs are required to be implemented in order to stabilize the Facility and to maintain compliance with the IGP:

- Cover trash enclosures;
- Place drip pans under oil-containing equipment;
- Ensure sediment basins have adequate capacity;
- Clean up and organize materials, equipment, and boneyard areas and cover industrial materials as applicable.

The General Permit also allows the suspension of monitoring if it is infeasible to do so (e.g., the Facility is not staffed). Since no personnel will be onsite while the industrial activities are suspended, the Facility is not required to the following once the above BMPs are implemented:

- Perform monthly visual observations; or
- Perform sampling and analysis.

The Facility must upload via SMARTS at least seven (7) calendar days prior to the planned temporary suspension of industrial activities:

- Any SWPPP revisions specifically addressing the facility stabilization BMPs;
- The justification for why monitoring is infeasible at the facility during the period of temporary suspension;
- The date the facility is fully stabilized for temporary suspension of the industrial activities; and
- The projected date that industrial activities will resume at the facility.

Upon resumption of industrial activities, the Facility will confirm and / or update the date that the industrial activities have resumed in SMARTS.

## 9.0 SWPPP GENERAL REQUIREMENTS

## 9.1 Plan Availability

This SWPPP will be kept at the site and made available to a representative of the Regional Water Quality Control Board (RWQCB) or a representative of the local storm water management agency upon request.

#### 9.2 Plan Revision

This plan must be updated:

- When the Regional Water Quality Control Board or a representative of the local storm water management agency notifies the Facility that it does not meet one or more of the minimum requirements of the regulations.
- 2. Prior to implementing changes at the Facility that:
  - i. May significantly increase the quantities and pollutants in storm water discharges;
  - ii. May cause a new area of industrial activity at the Facility to be exposed to storm water; or
  - iii. Begin an industrial activity which would introduce a new pollutant source at the Facility.
- 3. When determined necessary by the Qualified Industrial Storm Water Practitioner (QISP) based on the results of an Exceedance Response Action (ERA) Evaluation or Report
- 4. When determined to be necessary based on a review of storm water compliance records including:
  - i. Monthly Visual Observations;
  - ii. Sample Event Visual Observations;
  - iii. Storm water sample results;
  - iv. Annual Comprehensive Facility Compliance Evaluation; and
  - v. Annual Reports.

Significant plan revisions must be uploaded and certified via SMARTS within 30 days. Significant revisions include any of the items discussed above.

Non-significant revisions must be certified and submitted via SMARTS once every 3 months.

## 10.0 STORM WATER MONITORING IMPLEMENTATION PLAN (MIP)

Completion of the tasks outlined in this section is the responsibility of the Pollution Prevention Team Leader (see Section 3.1).

## 10.1 Monitoring Implementation Plan Objectives

This Monitoring Implementation Plan (MIP) has been developed as part of the SWPPP to:

- Ensure that storm water discharges are in compliance with discharge prohibitions, Numeric Action Levels (NALs), and receiving water limitations specified in the General Permit.
- Ensure practices at the Facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.
- Aid in the implementation and revision of this SWPPP.
- Measure the effectiveness of BMPs to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges.

## 10.2 Monthly Visual Observations

Visual observations must be made at least once per calendar month. Each drainage area must be visually observed for the following:

- The presence or indication of prior, current, or potential unauthorized non-storm water discharges (NSWDs);
- Authorized NSWDs, sources, and associated BMPs; and
- Outdoor industrial equipment and storage areas, outdoor industrial activities, BMPs, and all other potential sources of industrial pollutants.

Observations will be conducted during daylight hours of the scheduled Facility operating hours (see Section 3.3) on days without precipitation. An explanation for uncompleted monthly visual observations must be included in the Annual Report.

The inspections will be documented. Documentation must include the following information:

- Date;
- Approximate time;
- Locations observed;
- Presence and probable source of any observed pollutants;
- Name of person(s) that conducted the observation; and
- Any response actions and/or additional SWPPP revisions necessary in response to the observations.

Monthly Visual Observations will be recorded using the *Monthly Visual Observation Form* in Appendix E or some other form that documents the same information.

BMPs must be revised as necessary when the observations indicate pollutant sources have not been adequately addressed in the SWPPP.

### 10.3 Sample Event Visual Observations

Visual observations will be conducted at the same time sampling occurs at each discharge location where a sample is obtained (see Section 10.4).

The General Permit also requires that observations be made of all stored or contained storm water at the time discharge is sampled. This Facility does not routinely discharge (i.e., pump out) stored or contained storm water through the Facility outfalls so these observations may not be necessary. If contained storm water is pumped out of one of the basins (or some other location) and discharged from the site, these discharges must be observed using the procedures outlined in this section.

No volume-based or flow-based BMPs will be employed at the Facility. If these BMPs are employed in the future, visual observations and sampling will be required for any storm water discharges that bypass the system.

The inspections will look for evidence of floating and suspended materials, oil and grease, discolorations, turbidity, odor, trash/debris, and source(s) of any pollutants.

The inspections will be documented including the following information:

- Date;
- Approximate time;
- Locations observed;
- Presence and probable source of any observed pollutants;
- Name of person(s) that conducted the observation; and
- Any response actions and/or additional SWPPP revisions necessary in response to the observations.

BMPs will be revised as necessary when the observations indicate pollutant sources have not been adequately addressed in the SWPPP.

The inspections will be recorded on the *Sampling Event Visual Observation Form* presented in Appendix E or using some other form that documents the same information.

### **10.4** Sampling Program

The General Permit requires that during each storm water year (July 1 through June 30), four (4) storm water discharge samples must be collected. Two (2) samples must be collected within the first half of the reporting year (July 1 to December 31), and two samples must be collected within the second half of the reporting year (January 1 to June 30).

Samples must be obtained from storm events that produce a discharge from at least one drainage area and are preceded by 48 hours with no discharge from any drainage area. Samples from each discharge location must be collected within four (4) hours of the start of discharge or the start of facility operations if the discharge began within the previous 12-hour period.

### 10.4.1 Sampling Locations

Samples will be collected at Outfall A described in Section 4.1 and presented on the figure in Appendix A.

# 10.4.2 Sampling Methods

Sampling consists of collecting grab samples from a storm event that produces discharge from at least one drainage area and is preceded by 48 hours with no discharge from any drainage area.

Samples collected must be representative of all storm water associated with industrial activities.

**Procedure for Obtaining a Grab Sample:** Only use the sample containers provided by the analytical laboratory to collect storm water samples. (The use of any other type of container may contaminate the sample.)

All sample bottles will be prepared by the test lab prior to performing the following sample procedures.

- 1. Collect grab samples from each outfall that is discharging using the appropriate container (see Section 10.4.3). Ensure that the sample is free of excess debris (i.e., leaves, paper fragments, etc.). Fill the container to the top.
- Some sample containers may contain a small amount of preservative. Be sure not to lose the
  preservative when filling the container. To prevent contamination, do not touch the inside of
  the sample container or cap or put anything into the sample containers before collecting storm
  water samples.
- 3. Do not overfill sample containers. Overfilling can change the analytical results.
- 4. Tightly screw on the cap of each sample container without stripping the threads of the cap.
- 5. Complete and attach a label for each sample container. Label samples with the following information:

Date and time of sample collection.

The name of the person collecting the sample.

The sample collection location or discharge point.

The preservative used.

- 6. Carefully pack the sample containers into the shipping container to prevent breakage and maintain temperature during shipment. Place frozen ice packs (or bags of ice) into the shipping container. Samples should be kept as close as to 4°C (39°F) as possible until arriving at the laboratory. Do not freeze the samples.
- 7. Complete a Chain-of-Custody form for each set of samples. The Chain-of-Custody form must include the Facility's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container. Chain-of-Custody forms will be furnished by the test lab. (A sample Chain-of-Custody form is presented in Appendix E.)
- 8. Upon shipping the sample containers, obtain the signature of the person relinquishing the sample containers.

9. Send the samples to the laboratory for analysis. This may be accomplished by delivering the samples to the laboratory, calling the laboratory for a pick up, or using pre-printed overnight shipping label that came with the sample kit. The laboratory should receive sampling within 48 hours of the physical sampling.

Use the *Sampling Log* in Appendix E to document sampling activities. Store completed *Sampling Logs* in Appendix F.

### 10.4.3 Analytical Methods

Storm water samples will be analyzed for the parameters listed in Table 7 which were selected based on the requirements in the General Permit and a review of site operations. All laboratory analysis must be conducted by a laboratory certified by the State Department of Health Services.

The Facility is classified as the following SIC Code:

SIC Code 1459 – Clay, Ceramic, and Refractory Minerals, not elsewhere classified. The General Permit does not identify any additional parameters that storm water samples from this Facility must be analyzed for.

**Table 7: Sampling Requirements for All Outfalls** 

Potential Pollutant	Sample Type	Sample Container	Preservative	Other	Analytical Method	Type <sup>1</sup>	Min. NAL <sup>2</sup> (mg/L)
Oil and Grease (O&G)	Grab	1 liter amber glass	H <sub>2</sub> SO <sub>4</sub>	Cool to 4°C (40°F)	EPA 1664A	IGP	15
Total Suspended Solids (TSS)	Grab	1 liter plastic	None	Cool to 4°C (40°F)	SM 2540-D	IGP	100
рН	Grab	See Section 10	.4.3.1			IGP	N/A

<sup>&</sup>lt;sup>1</sup> "Type" indicates the reason for sampling. "IGP" = minimum parameter required by the IGP, "SIC" = SIC Code required parameter.

The IGP requires dischargers to use "sufficiently sensitive" analytical test methods when analyzing storm water samples. This entails using U.S. EPA-approved analytical methods that are capable of detecting and measuring the pollutants at, or below, the applicable water quality criteria or permit limits.

When storm water samples are sent to a laboratory for analysis, the laboratory test method must have a method minimum level (also referred to as the "Method Detection Limit" or "MDL") as well as a "Reporting Limit" or "RL" at least as low as the Minimum NAL in Table 7 above for that parameter to be considered a sufficiently sensitive test method.

## 303(d) Listed Water Bodies

The Facility does not directly discharge to a receiving water body listed on the SWRCB's 303(d) list of impaired water bodies sourced from the 2014-2016 Integrated Report. Storm water that leaves the site flows to the north until ultimately reaching the Santa Clara River which is approximately 2 miles away.

<sup>&</sup>lt;sup>2</sup> "Min. NAL" is the Minimum NAL, the lowest NAL for that parameter. See discussion below and Section 11 for more information.

The IGP requires dischargers to identify in their assessment of potential pollutant sources applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs. Subsequently, the SWRCB has instructed facilities to identify in their assessment of potential pollutant sources all 303(d) listed impairments within a facility's Hydrologic Unit Code Ten (HUC-10) watershed. Table 8 identifies the 303(d) listed pollutants within the facility's HUC-10 watershed ([Middle Santa Clara River, # 1807010208]) for which it is impaired (as populated by SMARTS).

Table 7: 303(d) Listed Pollutants in HUC-10 Watershed

Parameter	Pollutant
Nitrate, Nitrite and total Nitrogen	Nitrate and Nitrite
Sulfates	Sulfates
Total Dissolved Solids	Total Dissolved Solids

The pollutants listed in Table 7 are not expected to be present in the facility's industrial storm water discharges; therefore storm water samples will not be analyzed for any additional constituents.

#### **TMDLs**

This facility is located in an area that is subject to the Santa Clara River Bacteria TMDL. The discharges from this facility can flow to Santa Clara River Reach 3, which has a TMDL for E. coli. Based on the pollutant source assessment in Section 7, E. coli is not expected to be present in industrial storm water discharges; therefore, storm water samples will not be analyzed for additional parameters to meet TMDL requirements.

This facility is also located in an area that is subject to the Santa Clara River Chloride TMDL. The discharges from this facility can flow to Santa Clara River Reach 3, which has a TMDL for chloride. Based on the pollutant source assessment in Section 7, chloride is not expected to be present in industrial storm water discharges; therefore, storm water samples will not be analyzed for additional parameters to meet TMDL requirements.

This facility is also located in an area that is subject to the Santa Clara River Nitrogen TMDL. The discharges from this facility can flow to Santa Clara River Reach 3, which has a TMDL for ammonia as nitrogen. Based on the pollutant source assessment in Section 7, ammonia as nitrogen is not expected to be present in industrial storm water discharges; therefore, storm water samples will not be analyzed for additional parameters to meet TMDL requirements.

#### **Effluent Limitations**

This facility is not subject to the effluent limitations in 40 Code of Federal Regulations, Chapter I, Subchapter N. Therefore, no additional sampling is necessary to meet those requirements.

#### 10.4.3.1 pH Method

Storm water samples must be analyzed for pH as soon as practicable, but no later than 15 minutes after the sample is collected.

The General Permit allows facilities that have never entered Level 1 status for pH to screen for pH using wide range litmus pH paper or other equivalent test kits. This facility has never entered Level 1 status for

pH; therefore, it is eligible to screen pH using these tests. If pH paper is used, the person performing the analysis must be properly trained in how to use it.

If the Facility enters Level 1 for pH, pH analysis will have to be conducted using a properly calibrated field meter. If a field meter is used to measure pH levels in storm water discharges, the meter must be calibrated and the analysis must be performed using the manufacturer's instructions.

pH analytical results (and information about sample collection) will be documented on the *Sampling Log Form* presented in Appendix E. Completed *Sampling Logs* will be kept in Appendix F.

## 10.4.4 Data Analysis

Analytical results from each storm water sample must be submitted via SMARTS within 30 days of obtaining results for each sampling event. Laboratory reports will be kept in Appendix F.

## 10.4.5 Quality Assurance/Quality Control (QA/QC)

All samples must be submitted to a laboratory that is certified by the State of California Department of Health Services.

Field and laboratory quality assurance procedures are required in order to produce accurate and valid storm water monitoring results. As part of the QA/QC protocol, Chain-of-Custody forms will be prepared for all samples collected during the storm water event. The Chain-of-Custody forms document the possession and the responsibility for the sample from sample collection through sample analysis. All personnel responsible for the sample will sign, date and retain one copy of the form. The test laboratory will receive the original form along with the sample. A sample chain of custody form is presented in Appendix E.

# 10.4.6 Exceptions

If performing visual inspections or collecting the required samples is rendered impossible due to adverse climatic conditions or because the discharge occurs outside of scheduled facility operating hours, a description of why the sampling or visual inspections could not be conducted, including the documentation of all significant storm water discharge events must be submitted with the annual report.

## 10.4.7 Representative Sampling Reduction

The General Permit allows facilities to reduce the number of locations to be sampled in each drainage area if the industrial activities and BMPs in the area are similar. As this site has one discharge point for each drainage area, this option will not be used. If the Facility has multiple discharge locations in the future and wishes to use this option, this plan will need to be updated.

#### 10.4.8 Qualified Combined Samples

The Permit allows an analytical laboratory to combine samples from multiple drainage areas if the industrial activities and BMPs in the areas are similar. This option will not be used. If the Facility has multiple drainage areas in the future and wishes to use this option, this plan will need to be updated.

## 10.5 Record Keeping

This Facility must maintain either a paper or electronic copy of all storm water monitoring information,

records, data, and reports required by the General Permit for a period of at least five (5) years. Copies will be available for review by the Water Board's staff at the facility during scheduled operating hours.

## 10.6 Storm Water Multiple Application and Report Tracking System (SMARTS)

The following documents must be certified and submitted in the Storm Water Multiple Application and Report Tracking System (SMARTS):

- Notice of Intent (NOI);
- Storm Water Pollution Prevention Plan (SWPPP);
- Annual Reports;
- Sample results;
- Any Level 1 or Level 2 documents prepared to address NAL Exceedances (see Section 11.3); and
- Notice of Termination (NOT).

## 10.7 Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation)

The General Permit requires that an Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) of the Facility be conducted every reporting year (July 1 to June 30). If the Annual Evaluation is conducted fewer than eight (8) months or more than 16 months after the previous Annual Evaluation, the justification must be documented. If an Annual Evaluation determines that this SWPPP needs to be updated, revisions will be made within 90 days of the Annual Evaluation.

The Annual Evaluation must include:

- A review of all visual observation records, inspection records, and sampling and analysis results from the previous reporting year.
- A visual inspection of areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants to enter the storm water conveyance system.
- An inspection of all drainage areas identified as having no exposure to industrial activities.
- A review and evaluation of BMPs and equipment needed to implement BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed.

The Annual Evaluation will be documented on the *Annual Comprehensive Facility Compliance Evaluation Form* in Appendix E or some other form that documents the same information.

### 10.8 Annual Report

An annual report must be prepared by July 15 of each year and submitted using the standardized format and checklists in SMARTS. The report must include the following:

- A Compliance Checklist that indicates whether or not the facility is in compliance with all applicable requirements of the Permit;
- An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist;
- An identification, including page numbers/sections, of all revisions made to the SWPPP within the reporting year; and
- The date(s) of the Annual Evaluation.

A copy of the completed Annual Report should be printed out of SMARTS and stored in Appendix G.

## 11.0 NUMERIC ACTION LEVELS / EXCEEDANCE RESPONSE ACTIONS

#### 11.1 Numeric Action Levels (NALs)

The Numeric Action Levels (NALs) that are applicable to the operations at this Facility are presented in the following table.

**Table 9: Numeric Action Levels** 

Pollutant	Units	Annual NAL	Instantaneous Maximum NAL
рН	pH Units	(None)	Less than 6.0, or Greater than 9.0
Total Suspended Solids	mg/L	100	400
Oil and Grease	mg/L	15	25

#### 11.2 NAL Exceedances

The Facility must compare the results of the samples collected to the NALs in the table above. An NAL Exceedance occurs (and additional actions must be taken) when either of the following occurs:

#### Annual NAL Exceedance:

- Determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire Facility for the reporting year (from July 1 through June 30).
- Compare the average concentration for each parameter to the corresponding Annual NAL value in Table 9.
- An Annual NAL Exceedance occurs when the average of all the analytical results for the parameter exceeds the Annual NAL value for that parameter listed in Table 9.

#### **Instantaneous Maximum NAL Exceedance:**

- Compare all sampling and analytical results from each distinct sample collected at the Facility during the reporting year (from July 1 through June 30) to the corresponding Instantaneous Maximum NAL values in Table 9.
- An Instantaneous Maximum NAL Exceedance occurs when two (2) or more analytical results from samples taken for any single parameter within a reporting year (July 1 through June 30):
  - o Exceed the instantaneous maximum NAL value (for TSS and O&G); or
  - Are outside of the instantaneous maximum NAL range for pH (<6.0 or >9.0).

<u>If an Annual NAL Exceedance or Instantaneous Maximum NAL Exceedance occurs, additional action</u> <u>must be taken.</u> See Section 11.3 for more information.

## 11.3 Compliance Status / Exceedance Response Actions

There are three levels of status under the Permit:

- Baseline Status;
- Level 1 Status; and
- Level 2 Status.

Status is determined for each individual parameter. For example, it is possible that a facility is Baseline Status for one pollutant, Level 1 status for another pollutant, and Level 2 status for the third parameter.

## **Baseline Status**

If the facility has not had an NAL exceedance for a parameter, it is in Baseline status for that parameter.

## **Level 1 Status**

Baseline status for any given parameter elevates to Level 1 status if sampling results indicate an NAL Exceedance for that parameter. Therefore, if the sampling results indicate that either an Annual NAL Exceedance or an Instantaneous Maximum NAL Exceedance has occurred, the Facility will change to Level 1 status for that parameter on July 1 following the reporting year.

If the Facility enters Level 1 status, the following actions must be completed:

- By October 1 following the start of Level 1 status for any parameter:
  - Complete an evaluation, with the assistance of a Qualified Industrial Storm Water Practitioner (QISP), of the industrial pollutant sources at the Facility that are or may be related to the NAL Exceedance; and
  - Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL Exceedances and to comply with the requirements of the Permit.
- Based upon the above evaluation, as soon as practicable but no later than January 1 following the start of Level 1 status:
  - Revise this SWPPP as necessary and implement any additional BMPs identified in the evaluation;
  - Certify and submit via SMARTS a Level 1 ERA Report prepared by a QISP that includes the following:
    - A summary of the Level 1 ERA Evaluation; and
    - A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL.
  - Certify and submit via SMARTS the QISP's identification number, name, and contact information (telephone number, e-mail address).

The Facility will return to Baseline status once a Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs that were sampled subsequent to BMP implementation indicate no additional NAL Exceedances for that parameter.

#### Level 2 Status

Level 1 status for any given parameter changes to Level 2 status if sampling results indicate an NAL Exceedance for that same parameter while in Level 1 status. Therefore, if the sampling results indicate that either an Annual NAL Exceedance or an Instantaneous Maximum NAL Exceedance has occurred while in Level 1 status, the Facility will change to Level 2 status for that parameter on July 1 following the reporting year.

If the Facility enters Level 2 status, the following actions must be completed:

- By January 1 following the start of Level 2 status for any parameter:
  - Certify and submit via SMARTS a Level 2 ERA Action Plan prepared by a QISP that addresses each new Level 2 NAL Exceedance. For each new Level 2 NAL Exceedance, the Level 2 Action Plan must identify which of the technical demonstration reports will be performed. (Contact a QISP to determine which report is appropriate for this Facility.)
  - Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL Exceedances and to comply with the requirements of the Permit.
- Certify and submit (via SMARTS) the QISP's identification number, name, and contact information (telephone number, e-mail address).
- The Level 2 ERA Action Plan must, at a minimum, address the drainage areas with corresponding Level 2 NAL Exceedances.
- All elements of the Level 2 ERA Action Plan must be implemented as soon as practicable and completed no later than 1 year after submitting the Level 2 ERA Action Plan.
- The Level 2 ERA Action Plan shall include a schedule and a detailed description of the tasks required to complete the Discharger's selected technical demonstration(s). This will include preparing and submitting a technical demonstration report. This activity must be coordinated with the QISP.

### 12.0 SUMMARY OF COMPLIANCE REQUIREMENTS

The following list summarizes the storm water compliance requirements for the Facility:

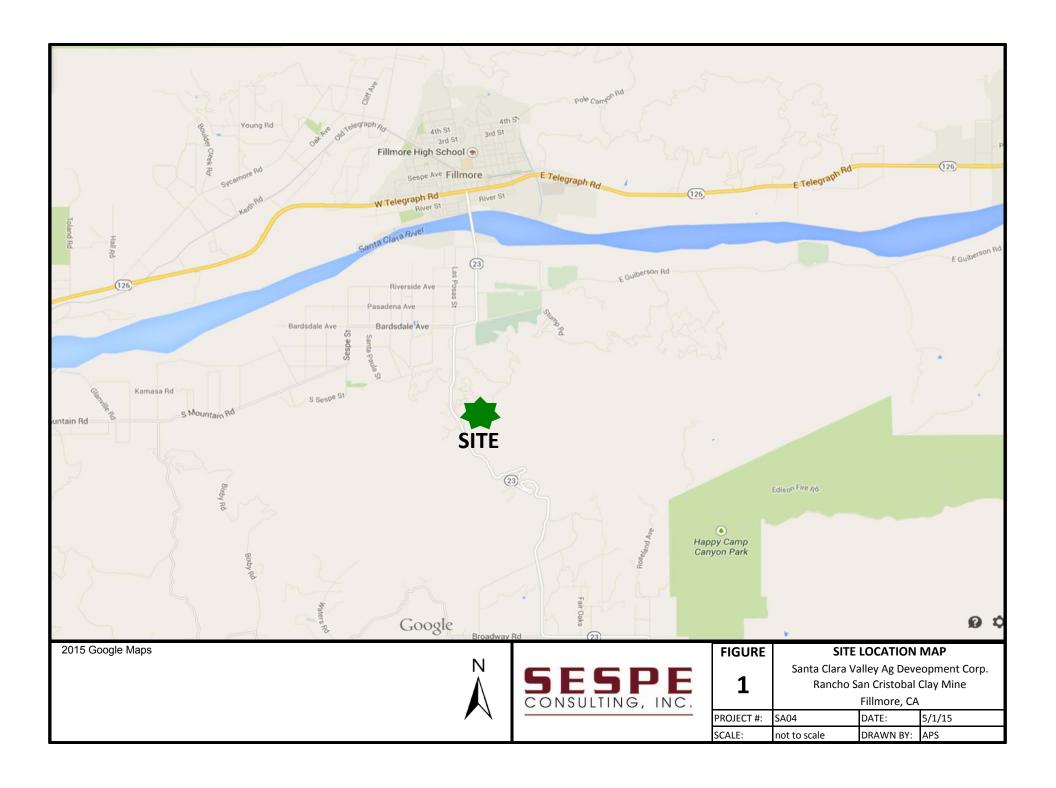
- Implement and maintain Best Management Practices (BMPs) as outlined in Section 8 to reduce the amount of pollutants in storm water discharges and authorized non-storm water discharges.
- During the storm water compliance year (July 1 June 30), conduct visual observations once per calendar month during daylight hours of dry weather. Record the observations using the *Monthly Visual Observation Form* in Appendix E. Refer to Section 10.2 for more information.
- Conduct Sampling Event Visual Observations at all discharge locations when storm water samples are collected. Record the observations using the *Sampling Event Visual Observation Form* in Appendix E. Refer to Section 10.3 for more information.
- Collect samples from two (2) Qualifying Storm Events (QSEs) in the first half of the compliance year (July 1 to December 31) and collect samples from two (2) QSEs during the second half of the compliance year (January 1 to June 30). Samples must be collected from Outfall A.

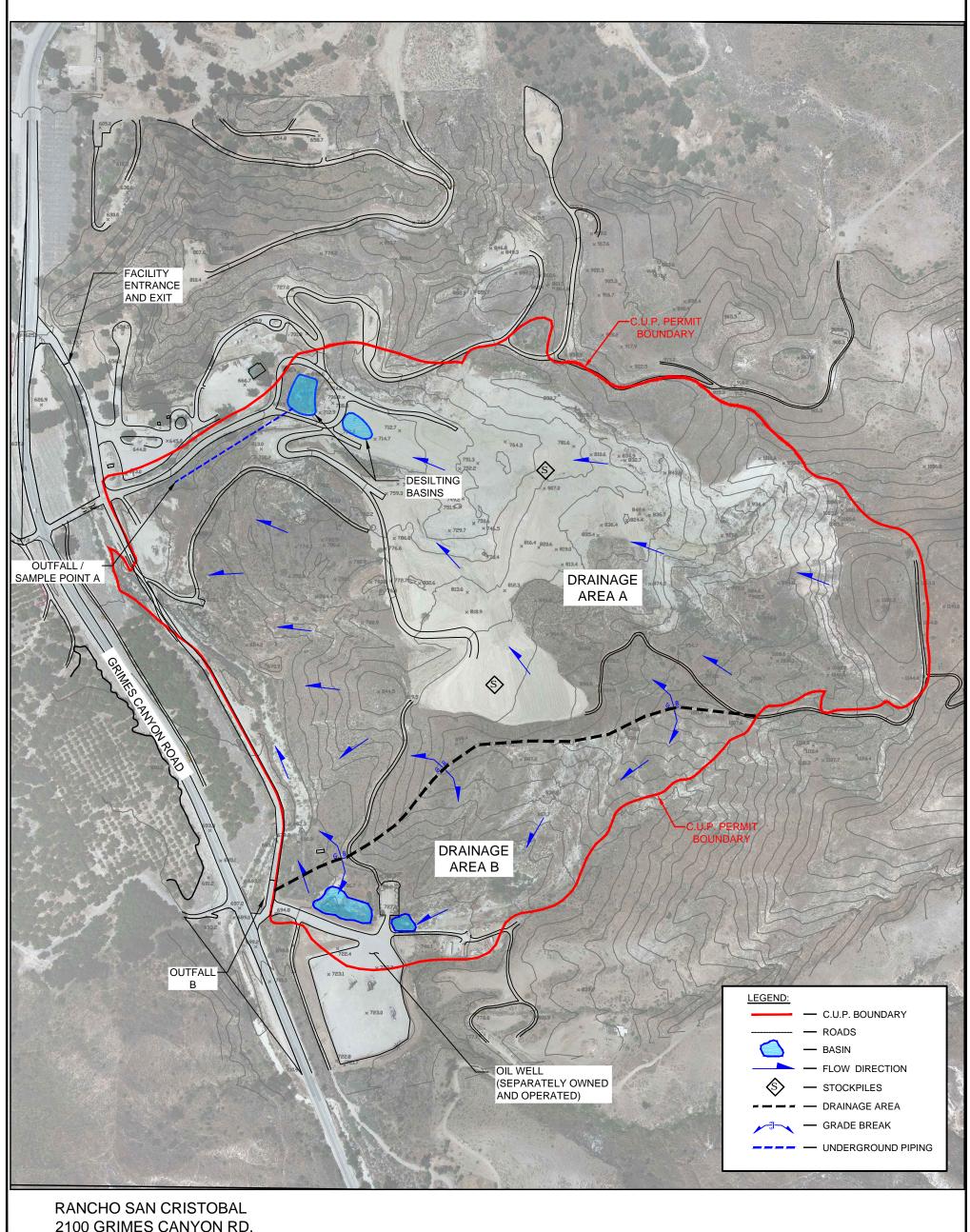
QSEs are defined as a precipitation event that produces a discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. Samples must be collected during the first four (4) hours of the start of discharge or the start of Scheduled Facility Operating Hours (see Section 3.3) if the discharge began within the previous 12 hours. Refer to Section 10.4 for more information.

- Analyze storm water samples for pH within 15 minutes of collecting them.
- Report all sample results in SMARTS within 30 days of obtaining them.
- Compare sample results to the Numeric Action Levels (NALs) to see if there have been any NAL Exceedances. Refer to Section 11 for more information.
- If there has been an NAL Exceedance, contact a Qualified Industrial Storm Water Practitioner (QISP) and work with him/her to prepare and submit he required reports. Refer to Section 11 for more information.
- Review this SWPPP and conduct an Annual Comprehensive Facility Compliance Evaluation (ACFCE) at least once per reporting year. Document the evaluation using the *Annual Comprehensive Facility Compliance Evaluation Form* in Appendix E. Refer to Section 10.7 for more information.
- Submit an Annual Report by July 15 of each year via SMARTS. Refer to Section 10.8 for more information.
- Train affected employees in storm water requirements, this SWPPP, and their duties to ensure compliance with the Permit. Refer to Section 8.1.7 for more information.

**APPENDIX A** 

**FIGURES** 





2100 GRIMES CANYON RD. FILLMORE, CA

### NOTES:

- ENTIRE SITE, EXCLUDING THE ENTRANCE DRIVEWAY, IS PERVIOUS. SOIL EROSION MAY OCCUR IN ALL ACTIVE MINING AREAS. OFF-SITE RUN-ON FROM NON-INDUSTRIAL AREAS IS EXPECTED.

SCALE IN FEET

SCALE: 1"=300'

300

600

DATUM: HORZ= NAD83, CALIFORNIA ZONE 5, US FOOT VERT=NAVD88



RANCHO	SAN CF	RISTOBAL
SWPF	P SITE	PLAN

	SCALE: HORIZ.		AS SHOWN	FIGL	FIGURE NUMBER				
)1	SCALE:	VERT.	AS SHOWN		2				
	DRAWN	BY: G.	CAMUS						
	CHECKE	D BY:	APS	DATE:	MAY 2015				

**APPENDIX B** 

**NOTICE OF INTENT** 



### State Water Resources Control Board

### NOTICE OF INTENT



# GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY (WQ ORDER No. 2014-0057-DWQ)

(Excluding Construction Activities)

9	JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

WDID: 4 56	023550		Status: Active					
Operator Info	ormation		Ty	ype: Private Business				
Name:	anta Clara Valley	Ag. Development Corporation	Contact Name: _	Charles Teague				
Address:	170	8 Cherry Hill Rd	Title: _					
Address 2:			Phone Number: _	805-432-4162				
City/State/Zip:	Santa	Paula CA 93060	Email Address: _	charlesteague61@gmail.com				
ederal Tax ID:								
Facility Infor	mation		Le	evel:				
ontact Name:	C	narles Teague	Title: _					
Site Name:	Rancho San Cri	stobal Clay Mine						
Address:	2100 Grimes Ca	nyon Rd						
City/State/Zip:	Filli	more CA 93015	Site Phone #: _	805-432-4162				
County:		Ventura	Email Address: _	charlesteague61@gmail.com				
Latitude:	34.356081	Longitude: -118.916531	Site Size: _	75 Acres				
		Industrial Area Expos	sed to Storm Water: _	18 Acres				
2				rals, NEC				
Additional Ir								
Receiving Storm Drain S Compliance	system:	Santa Clara		Flow: Indirectly				
RWQCB Juris Phone:	diction: Region	-	Email: _	r4_stormwater@waterboards.ca.gov				
Certification								
Name:	Charles Teague		Date: .l	une 24, 2015				
rtarrio.			Date. <u>•</u>	4110 2 1, 2010				

**APPENDIX C** 

**REVISION RECORD** 

June 2020

### STORM WATER POLLUTION PREVENTION PLAN **REVISION AND AMENDMENTS RECORD**

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine

Record all additions, changes or deletions made to the SWPPP as a result of changes in equipment, policy or regulatory agency requirements. The SWPPP must be amended in accordance with the procedures in Section 9.2.

Section Amended	Comments				
All Sections	Original Plan				
All Sections	New SWPPP created to reflect new General Permit.				
Section 10.4.3	Updated SWPPP to assess 303(d) impairments within HUC-10				
Section 2, 10.4.3, 11.3	Updated to reflect 2018 IGP Amendments				
	All Sections All Sections Section 10.4.3				

**APPENDIX D** 

TRAINING PROGRAM AND RECORDS

# STORM WATER POLLUTION PREVENTION PLAN EMPLOYEE TRAINING OUTLINE

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine

Purpose: To familiarize employees responsible for storm water compliance with on-site sources of potential pollutants, Best Management Practices, and requirements associated with the Facility's storm water program.

Topics to be covered during training include the following:

- 1. The General Permit and its requirements.
- 2. The purpose of the SWPPP.
- 3. Drainage area and outfall location (Section 4).
- 4. Facility activities that have the potential to impact storm water discharges (Section 6).
- 5. Potential pollutant sources at the Facility (Section 7).
- 6. Facility Best Management Practices (BMPs) as outlined in the SWPPP (Section 8).
- 7. Spill response procedures regarding:
  - Notification of supervisory personnel
  - Spill control
  - On-site spill response equipment
- 8. Past spill events, failures of the plan, malfunctioning components discovered during inspections, and any recently developed or implemented spill measures.
- 9. For personnel who will be conducting inspections: Inspection procedures (Section 10).
- 10. For personnel who will be collecting storm water samples: Sampling procedures (Section 10).
- 11. For personnel who will be analyzing samples for pH:
  - How to use the pH paper; or
  - How to calibrate and use the pH meter in accordance with manufacturer's specifications.
- 12. Record keeping requirements.

Date

# STORM WATER POLLUTION PREVENTION PLAN EMPLOYEE TRAINING LOG

Santa Clara Valley Ag Development Corp. Rancho San Cristobal Clay Mine

Employees charged with responsibilities in the Facility Storm Water Pollution Prevention Plan have been trained in the following areas of this program.

- Program purpose and requirements.
- Potential pollutant sources at the Facility.
- Facility drainage and outfalls.
- Spill response procedures.
- Facility Best Management Practices (BMPs).

Signature

• Inspection requirements.

**Instructor Name** 

- Storm water sampling requirements.
- Recordkeeping requirements.

h	and Turining in the Channe	aton Dellution Duranting Plan (CM/DDD) Lond
	outlined in and requirements o	ater Pollution Prevention Plan (SWPPP). I am of the Plan.
Employee Name	Signature	Date
,		
		·
		<del></del>

### **APPENDIX E**

#### MONITORING IMPLEMENTATION PLAN FORMS

Monthly Visual Observation Form
Sampling Event Visual Observation Form
Sampling Log
Annual Comprehensive Facility Compliance Evaluation Form
Sample Chain of Custody Form

Monthly Visual Observation Form							
	nust be conducted at least once per calend						
scheduled Faci	lity operating hours, on days without precip	pitation.					
Date of Observation:	Time of Obs	ervation:					
	Site Information						
Site Name:	Rancho San Cristobal Clay Mine						
Site Address: 2100 Grimes Canyon Road, Fillmore, California							
WDID Number:	4 561023550						
	Observations						
Locations Observed:							
☐ Mining Areas							
☐ Site Entrance / Exit							
□ Detention Basins							
☐ Equipment and Vehi	cles $\Box$						
Review each drainage	area for the presence or indication of prior,	, current, or potential <u>unauthorized</u> non-					
storm water discharge	s (NSWDs).						
<ul> <li>Are unauthorize</li> </ul>	zed NSWDs observed: Yes 🗆 No 🗆						
- If yes, identify	probable source and necessary corrective a	actions.					
Review <i>authorized</i> non-storm water discharges (NSWDs) and their associated Best Management Practices.							
·	I NSWDs observed: Yes □ No □						
- If yes, are associated BMPs in place? Yes □ No □							
(Note: there are no authorized non-storm water discharges at this time. If they are discovered, the SWPPP							
must be updated.)							
,	ved in non-storm water discharges, identify	the source of the pollutants.					
Review the following:							
□ Outdoor industrial e	quinment - Qutdoor indust	trial activities areas					
	• •	tial sources of industrial pollutants					
-	·	·					
FII	ndings / Necessary Response Actions / SW	PPP Revisions Needed					
	This Observation was Perforn	ned by:					
Name:		Title:					
Signature:		Date:					

Storm Water Pollution Prevention Plan June 2020

	Sampling Event Visual Observation Form					
taken during the first fou	performed when storm water samples are collected. (Samples must be hours of discharge or during the first four hours of scheduled facility ge began in the previous twelve hours.)					
Date of Observation:	Time of Observation:					
Date of Observation.						
	Site Information					
Site Name: Rancho	an Cristobal Clay Mine					
Site Address: 2100 Gri	nes Canyon Road, Fillmore, California					
WDID Number: 4 561023	50					
	Discharge Observations					
Discharge Location(s):						
Observe storm water discharge a storm water discharge.	each discharge location. Note if the following is present or absent in					
Floating Material	Present   Absent					
Suspended Material	Present □ Absent □					
Oil and Grease	Present □ Absent □					
Discolorations	Present □ Absent □					
Turbidity	Present □ Absent □					
Odors	Present □ Absent □					
Trash / Debris	Present □ Absent □					
If the above pollutants are noted	identify the source of the pollutant.					
Findings / N	cessary Response Actions / SWPPP Revisions Needed					
	This Observation was Performed by:					
Name:	Title:					
Signature:	Date:					

Storm Water Pollution Prevention Plan June 2020

Sampling Log								
Sampling Date:		Time Discharge Began:						
Site Name:	Site Name: Rancho San Cristobal Clay Mine							
Site Address:	2100 Grimes Canyon Roa	nd, Fillmore, California						
WDID Number:	4 561023550							
Sampler Name:								
		eter Calibration						
pH Meter ID No./Descr	iption:							
Calibration Date/Time:								
	Field pH	Measurements						
Discharge Loc	cation Identifier	рН	Time					
	Samp	les Collected						
Discharge Location Identifier	Constitue	ent	Time					
Outfall A	Oil and Grease							
Outfall A	Total Suspended Solids							
Additional Sampling No	otes:							

Annual Comprehensive Facility Compliance Evaluation Form							
•	nce each reporting year (July 1 to June 30). The Annual nths, but no more than 16 months, since the last Annual						
Date of Evaluation:							
Site Ir	formation						
Site Name: Rancho San Cristobal Clay I	Mine						
Site Address: 2100 Grimes Canyon Road,	Fillmore, California						
WDID Number: <b>4 561023550</b>							
Annua	Evaluation						
Evaluate	the following:						
<ul> <li>Review all sampling, visual observation, and inspection year</li> </ul>	pection records conducted during the previous reporting						
<ul> <li>Inspect all areas of industrial activity and associal potential for, pollutants entering the storm water</li> </ul>	ated potential pollutant sources for evidence of, or the er conveyance system						
	□ Inspect all drainage areas previously identified as having no exposure to industrial activities in						
☐ Inspect the equipment needed to implement the							
□ Inspect BMPs implemented							
<ul> <li>Review and assess the effectiveness of BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial storm water discharges</li> </ul>							
☐ Any other factors needed to comply with the Ge	neral Permit						
□ Review all changes to the SWPPP during the rep	orting year						
Findings / Corrective Actions Identified (note if SWPPP change is needed)							
Inspecto	r Information						
Evaluator Name:	Evaluator Title:						
Signature: Date:							

# Sample Chain-of-Custody Form

(The analytical lab will provide the actual chain-of-custody form to complete.)

CHAIN-OF-CUSTODY					DATE:			Lab				
DESTINATION LAB:							REQ! ANAL	JESTE YSIS	D		Notes:	
	ATTN:											
ADDRESS:							∂	40-D				
Office Phone:							1664,	SM25				
Cell Phone:							Ā	S) SI				
SAMPLED BY:	[Enter Sampler's N	ame]					e (E	Solic				
Contact:	[Enter Samplers Ph	none Number]					eas	led				
	Project Name						Oil and Grease (EPA 1664A)	Total Suspended Solids (SM2540-D)				
				,	·		ō	al S				
Client Sample ID	Sample	Sample	Sample		Container			Tot				
	Date	Time	Matrix	#	Туре	Pres.						
Outfall A	03/14/2020	9:00 AM	Water	1	Amber	Acid	Х					
Outfall A	03/14/2020	9:00 AM	Water	1	Plastic	None		Х				
SENDER COMMENTS:							T	R	ELIN	QUISI	HED BY	
						Signature:						
						Print:						
						Company:						
						Date:					TIME:	
LABORATORY COMMEN	TS:						1		REC	EIVE	D BY	
						Signature:						
						Print:						
						Company:						
						Date:					TIME	

**APPENDIX F** 

LABORATORY ANALYSIS RESULTS COMPLETED SAMPLING LOGS

A copy of the Industrial Storm Water General Permit will be maintained onsite with the hard copy of the

June 2020

An electronic version of the Permit can be downloaded from the following website: http://www.swrcb.ca.gov/water\_issues/programs/stormwater/industrial.shtml

www.sespeconsulting.comSA04-SWPPP-2020-fnl.docx

### **ATTACHMENT 4**

### **2021 FINANCIAL ASSURANCE COST ESTIMATE**

# FINANCIAL ASSURANCE COST ESTIMATE

### FOR

Santa Clara Valley Agricultur	al Development Corporation's						
Rancho San Cri	stobal Clay Mine						
(Mine Name)							
CA Mine ID # 91- <u>56-0030</u>							
Reclamation Plan #/Name Pl	L14-0086						
Prepared by: (Name & Affiliation)  Sespe Consulting, Inc.  374 Poli Street, Suite 200  Ventura, California 93001	This financial assurance cost estimate prepared and submitted pursuant to <i>(choose one)</i> :  A new or amended reclamation plan approved on (Date):  An annual mine inspection performed on						
(805) 275 - 1515	☐ Other: Please Specify:						
Date: September 23, 2021							
Most Recent Approved Financial Assurance Cost Es  September 21, 2020;  Date: Revised November 20, 2020	timate						
Amount: \$ 187,961	_						
Amount of existing Financial Assurance Mechansim( Date: June 10, 2021  Amount: \$ 192,000	s) -						

# State of California DEPARTMENT OF CONSERVATION DIVISION OF MINE RECLAMATION FACE-1 (06-18) Page 2 of 23

#### 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**

Reclamation Plan No. PL14-0086; Approved June 11, 1998; Addendum Approved May 15, 2017.

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

Conditional Use Permit 4913 Interim Management Plan (to be submitted in late 2021).

#### Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

None.			

**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)

State Prevailing Wage Rates (SPWR) (General Prevailing Wage Determination Made by the Director of Industrial Relations, Pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773, and 1773.1), effective through mid-2021 or until superceded.

**Equipment Rates used in Cost Estimates**\* (use current 'Labor Surchage 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 Equipment Rates (*Labor Surcharge and Equipment Rental Rates (Cost of Equipment and Ownership)*), effective April 1, 2021 through March 31, 2022.

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

Caterpillar Handbook (*Caterpillar Performance Handbook, Edition 48*) to determine equipment capacity and cycle times.

#### Other Sources used in Cost Estimate:

RS Means Heavy Construction Cost Data, 35th Annual Edition, 2021 (Means); Third party cost estimates.

\*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. Figure
- 2. Supporting Information

#### 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.)

The Rancho San Cristobal Clay Mine site is located at 2100 Grimes Canyon Road (Highway 23) near the City of Fillmore, California. The site is located approximately two miles north, northwest of the intersection of Grimes Canyon Road and Skyline Road. The site address corresponds with an entrance located near the site's southern boundary, however site access is typically made from an entrance located approximately 2,000 feet to the north via an all-weather access road (see Attachment 1, Figure 1). The internal access roads connect the site entrances and the active mining area. A sediment basin is constructed at the northwest corner of the Mining Disturbance Limit shown in Figure 1.

Equipment on-site includes one (1) CAT 345 Excavator, one (1) CAT 245 Excavator, one (1) John Deere 210 LJ Skip Loader, one (1) fuel trailer, one (1) above ground metal tank, one (1) sea cargo container, one (1) portable chemical toilet, and one (1) historic water tank used by the farming operation prior to the 1988 landslide. One (1) CAT D9 Dozer is rented from JKM Equipment, Inc. on a seasonal basis and is not currently on-site. There are no buildings or offices on-site. Overhead power lines cross the northwest corner of the Mining Disturbance Limit and traverse along the western site boundary and are not owned by SCVADC.

In May 2017, a modified Reclamation Plan and CUP were approved by the County of Ventura. All subsequent appeals have been withdrawn and the amended Reclamation Plan approval is complete. This FACE is based off of the reclamation requirements listed in the approved amended Reclamation Plan (dated September 19, 2016).

[Continued on next page.]

#### 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.)

The site may become idle over the next twelve months due to a reduction in clay demand, and no new disturbance is anticipated during this period. Thus, the operator is currently in the process of preparing an Interim Management Plan (IMP) for submittal to the County of Ventura for review and approval.

### IV. Description/Justification of Cost Increase/Decrease

The reclamation cost estimate for the site is: \$ 188,247
The previous reclamation cost estimate was: \$ 187,961

The slight increase in reclamation cost is mainly due to a correction of labor costs listed in Task V.4, which offset a cost decrease realized from lower CalTrans equipment rental rates and RS Means rates.

(add additional pages as needed)

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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.)

[Continued from previous page.]

The site is a clay mining operation; the material is a mixture of silt, clay, sand and bedrock blocks. Operations at the site include overburden removal, clay mining, and related support operations such as vehicle fueling and maintenance. The clay mining process includes loading the material into trucks using mobile equipment. There is no fixed (or portable) processing plant at the site.

In the past year, the operator has continued exporting clay and overburden material offsite. The total Conditional Use Permit (CUP) area is approximately 79.2 acres. Of this area, the reclamation area within the permit boundary is approximately 51.3 acres. Based on the most recent aerial images available (Google Earth, February, 2021), a total of 26.3 acres of disturbed area exist at the mine currently.

The mining project has two primary objectives: 1) reduce the hazard of an active landslide, and 2) restore a viable agricultural use to the property which will reduce future landslide movement potential in this area.

Figure 1 in Attachment 1 includes 2-foot contour intervals based on May 24, 2019 data from Cooper Aerial Surveys. These topographic contours overlay Google Earth aerial imagery from February, 2021.

#### 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.)

[See previous page.]							
IV. Description/Justification of Cost Increase/Decrease							
IV. Description/Justific	cation of Cost Increase/Decrease	9					
[See previous page.]	cation of Cost Increase/Decrease						
	cation of Cost Increase/Decrease						
	cation of Cost Increase/Decrease						

(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:
Current site conditions are described in Section II. On-site equipment includes: one (1) 500-gallon aboveground fuel storage tank, one (1) historic 20,000-gallon aboveground water storage tank, one (1) sea cargo container, and one (1) portable chemical toilet. There are no processing equipment or structures on-site.
On-site heavy equipment includes: one (1) CAT 345 Excavator, one (1) CAT 245 Excavator, one (1) John Deere 210 LJ Skip Loader, and one (1) fuel trailer. One (1) CAT D9 Dozer is seasonally rented from JKM Equipment, Inc. and is not currently on-site.
Reclamation Plan Performance Standard (End Use):
The mining project has two primary objectives: 1) reduce the hazard of an active landslide, and 2) restore a viable agricultural use to the property which will reduce future landslide movement potential in this area.  The end use for the reclaimed land is two-fold: "open space" on those portions of the site which will not be able to support agriculture and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control. The proposed end use is consistent with the
General Plan Designation A-E (agricultural exclusive).
Describe tasks:
Plant structure and ancillary equipment removal tasks are described on the following sheets.
Equipment on site wholly owned by operator?:  (if no, please provide the name/s and contact information for any lien holder)
All equipment on-site is owned by SCVADC, except the following:

- CAT D9 Dozer; seasonally rented from JKM Equipment, Inc.; 1404 Birchmont Drive, Anaheim, CA 92801; (714) 943-0468.
- Portable Chemical Toilet; rented and serviced from Fence Factory Conejo Valley; 14110 Princeton Ave, Moorpark, CA 93021; (818) 889-2240.

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V. PLANT STRUCTURES & EQUIPMEN	IT REMOVAL				
		(1	Describe Reclama	tion Activity Being Estin	nated)
Methods to be used:					
A. Equipment - List equipment to complete ide	entified task. For	_	tion jobs, sepa	arate mine areas	<b>;.</b>
Equipment		Unit of Measure	\$/Unit	# of Units	Cost (\$)
See following sheets (Tasks V.1 - V.4)		- modes and	·		
<u> </u>					
		Total	Equipment Cos	t for this Task =	\$7,048
				-	
B. Labor - List all labor categories to complete	e identified task		Labor		
			Surcharge/Hr (where applicable)		
		\$/Hour	(enter % of wage)	1	
Labor Category		(prevailing wage)	0.0%	# of Hours	Cost (\$)
See following sheets (Tasks V.1 - V.4)					
		-	Total Labor Cos	t for this Task =	\$8,796
				-	ΨΟ,100
C. Demolition - List all structures and equipme	ent to be dismant	led or demolis	hed and remo	ved from site	
	Type of	Volume/	Unit Cost	Disposal	
Structure/Equipment to be removed	Material	Quantity	Basis	Cost	Cost (\$)
See following sheets (Tasks V.1 - V.4)					
	'		Total Materials C	act for this Tack -	\$2,620
D. Total Direct Cost of Structure and Equipme	ant Removal (Tota		Total Materials C	ost for this Task =	\$2,629
D. Total Direct Cost of Structure and Equipme	,	,			
	• •	nt Cost + Labo		-	\$18,473
E. Net Salvage Value* (Supported by properly	prepared third p	arty estimate,	bid, or cost ca	alculation)	
			Net Sal	vage Value = \$	0.00

NOTE: Above **Total Cost** will display \$0.00 if net of entered removal costs and salvage value is negative.

Total Cost of Structure and Equipment Removal =

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

\$18,473

<sup>\*</sup>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.

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### Task V.1 - Aboveground Storage Tank (AST) Removal

Storage tanks will be treated, loaded, and hauled offsite for disposal. Means construction cost data was used to estimate the decontamination and removal of one (1) aboveground, 500-gallon fuel tank. No other hazardous material storage tanks exist onsite.

Means cost data was used to estimate costs related to AST removal and disposal. Cost data was selected for the nearest tank capacity data available in Means.

#### **Task Cost Summary**

Item	Cost
Equipment Cost	\$ 589
Labor Cost	\$ 776
Material Costs	\$ 837
Total Cost:	\$ 2,202

#### **Equipment Cost**

Activity	Equipment	Quantity	Unit	Unit Cost	Cost
Storage Tank Demo	550 - 2,000 Gal Tank	1	Each	\$ 535.00	\$ 535
				Location Factor	110.1%
				Total:	\$ 589

Source: RS Means Heavy Construction Cost Data: 130505.75-0520

#### **Labor Cost**

Activity	Labor Category	Quantity	Unit Unit Cost		Unit Cost		Cost
Storage Tank Demo	550 - 2,000 Gal Tank	1	Each	\$	705.00	\$	705
	·			Loca	tion Factor		110.1%
					Total:	Ś	776

Source: RS Means Heavy Construction Cost Data: 130505.75-0520

#### **Material Costs**

Activity	Category	Quantity	Unit Unit Cost			Cost
Tank Disposal	3,000 - 5,000 Gal Tank	1	Each	\$ 760.00	\$	760
		•	•	Location Factor		110.1%
				Total:	Ś	836.76

Source: RS Means Heavy Construction Cost Data: 026510.30-1023

#### **Assumptions and Calculations**

None.

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#### Task V.2 - Remove Heavy Equipment

Heavy mining equipment used at the site will be removed during reclamation. It is assumed that the mining equipment will be in good repair and can be loaded directly onto a lowboy trailer and removed from the site. Removing equipment will require a three-axle lowboy trailer. It is estimated that two (2) hours will be required for each piece of equipment.

A majority of the vehicles and excavation machinery have a salvage value that exceeds the costs incurred in their removal; however, to remain conservative no salvage value was assumed in this estimate. Rental equipment (CAT D9 Dozer) used at the site will be removed by the rental company (JKM Equipment, Inc.; 1404 Birchmont Drive, Anaheim, CA 92801).

#### **Task Cost Summary**

Item	Cost
Equipment	\$ 1,115
Labor	\$ 1,522
Other Costs	\$ -
Total Cost:	\$ 2,637

#### **Equipment Cost**

Activity	Equipment	Quantity	Hours	!	\$/Hour		Cost
Haul Truck	Semi Truck	1	8	\$	73.97	\$	592
Haul Equipment	6-axle Lowbed Trailer	1	8	\$	65.46	\$	524
Pilot Cars	Cars or light trucks	2	8	\$	25.14	\$	402
					Total:	Ś	1.115

Source: CalTrans Labor Surcharge and Equipment Rental Rates

#### **Labor Cost**

Activity	Labor Category	Quantity	Hours	1	\$/Hour		\$/Hour		\$/Hour		\$/Hour		Cost
Haul Truck	Teamster - Group VI	1	8	\$	66.16	\$	529						
Labor-loading, pilot cars	Laborer - Group 1	2	8	\$	62.03	\$	992						
					Total:	\$	1,522						

Source: State of California Prevailing Wage Rate Determinations - Southern California

#### **Other Costs**

Activity	Description	Quantity	Unit	Unit Cost	Cost	
					\$ -	-
				Total:	\$ -	

#### **Assumptions and Calculations**

Equipment

- 1 CAT 345 Excavator
- 1 CAT 245 Excavator
- 1 John Deere 210 LJ Skip Loader
- 1 Fuel trailer
- 2 Time / Piece of Equipment (Hours)
- 8 Total Time (Hours)

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### Task V.3 - Miscellaneous Equipment Removal

A steel sea cargo container and historic 20,000-gallons water tank are on-site and will be removed during reclamation. It is assumed that the equipment can be loaded directly onto a lowboy trailer and removed from the site. Removing equipment will require a three-axle lowboy trailer. It is estimated that two (2) hours will be required for each piece of equipment.

#### **Task Cost Summary**

Item	Cost
Equipment	\$ 558
Labor	\$ 761
Other Costs	\$ 407
Total Cost:	\$ 1,726

#### **Equipment Cost**

Activity	Equipment	Quantity	Hours	\$/Hour		Cost
Demo/Load	Grove RT 525 25t Crane	1	4	\$ 65.68	\$	263
Haul Truck	Semi Truck	1	4	\$ 73.97	\$	296
Haul Equipment	6-axle Lowbed Trailer	1	4	\$ 65.46	\$	262
		•		Total:	Ś	558

Source: CalTrans Labor Surcharge and Equipment Rental Rates

#### **Labor Cost**

Activity	Labor Category	Quantity	Hours	\$/Hour		Cost
Haul Truck	Crane Operating Engineer - Group 8	1	4	\$ 82.87	\$	331
Haul Truck	Teamster - Group VI	1	4	\$ 66.16	\$	265
Labor-loading, pilot cars	Laborer - Group 1	2	4	\$ 62.03	\$	496
				Total:	Ś	761

Source: State of California Prevailing Wage Rate Determinations - Southern California

#### **Other Costs**

Activity	Category	Quantity	Units \$/Unit		\$/Unit		Cost
Waste Hauling	Dump Fees	5	Tons	\$	74.00	\$	370
				Locat	tion Factor		110.1%
						Ċ	407

Source: RSMeans Heavy Construction Cost Data: 024119.20-0100

#### **Assumptions and Calculations**

Equipment

- 1 Sea Cargo Container
- 1 Historic Water Tank
- 2 Time / Piece of Equipment (Hours)
- 4 Total Time (Hours)
- 5 Estimated Weight (Tons)

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#### **Task V.4 - Basin Modifications**

The existing sediment basins will be converted to permanent storm water retention basins. For this, it will be necessary to excavate and remove 36" diameter corrugated metal pipes (CMP) from the existing sediment basins. These underground pipes must be unearthed prior to removal. A Caterpillar 315 Excavator will be used to unearth the pipe and maneuver the sections of pipe onto a flatbed truck. A Caterpillar 938 Loader will be used to assist in loading the CMP and back filling the trench. A laborer will help load the flatbed truck and a teamster will haul the pipe to the local landfill. The same Excavator and Loader will be used to "notch" an outlet for each sediment basin. Notches would allow the basins to slowly discharge accumulated storm water until a desired water surface elevation is reached.

#### **Task Cost Summary**

Item	Cost
Equipment	\$ 4,786
Labor	\$ 5,737
Other Costs	\$ 1,385
Total Cost:	\$ 11,908

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#### **Task V.4 - Basin Modifications**

#### **Equipment Cost**

Activity	Equipment	Quantity	Hours	\$/Hour		Cost
Expose / Load Pipe	CAT 315L Excavator	1	27	\$ 57.90	\$	1,563
Load Pipe / Fill Trench	CAT 938G Loader	1	27	\$ 93.25	\$	2,518
Haul Material	4-axle On-highway Dump Truck	1	7	\$ 75.98	\$	513
Transportation	Pickup Truck	1	7	\$ 28.46	\$	192
				Total	¢	1 786

Source: CalTrans Labor Surcharge and Equipment Rental Rates

#### **Labor Cost**

Activity	Labor Category	Quantity	Hours	:	\$/Hour		Cost
Expose / Load Pipe	Operating Engineer - Group 6	1	27	\$	82.47	\$	2,227
Load Pipe / Fill Trench	Operating Engineer - Group 6	1	27	\$	82.47	\$	2,227
Haul Material	Teamster - Group V	1	7	\$	66.13	\$	446
Load Pipe	Laborer - Group 1	2	7	\$	62.03	\$	837
		•			Total	Ċ	E 727

Source: State of California Prevailing Wage Rate Determinations - Southern California

#### **Other Costs**

Activity	Description	Quantity	Unit	Unit Cost	Cost
Disposal	Landfill Fee	17	Tons	\$ 74.00	\$ 1,258
	•	•	•	Location Factor	110.1%
				Total:	\$ 1.385

Source: RSMeans Heavy Construction Cost Data: 024119.20-0100

#### **Assumptions and Calculations**

Caterpillar 315 Excavation Rate

600 Approximate Length of CMP (Feet), observed

6 Average CMP depth (Feet), assumed

0.68 315 Excavator Bucket (CY), Caterpillar Performance Handbook

0.23 Distance per Cycle (Linear Feet), calculated

0.24 315 Excavator Total Cycle Time (Minutes), Caterpillar Performance Handbook

0.96 Excavation rate (Feet/Minute), calculated

58 Excavation rate (Feet/Hour), calculated

11 Total excavation time (Hours), calculated

4 Total notch construction time (Hours), estimated

Removal of 36" Corrugated Metal Pipe (CMP)

50 CMP removal and loading rate (Feet/Hour), estimated

12 Total Removal Time (Hours), calculated

56 CMP weight (Pounds/Foot), https://www.txcorr.com

Totals

27 Total expose, load, and notch construction time (Hours), calculated

6.75 Total Haul and Transport Time (Hours), assumed to be one-quarter of the total above

17 Total CMP weight for disposal (Tons), calculated

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#### VI. PRIMARY RECLAMATION ACTIVITY

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

#### **Current Site Conditions:**

Currently, the site has its boundaries staked for mining limits within the Conditional Use Permit (CUP) area for each phase and setbacks are maintained within the CUP boundary. Excavation is within the limits shown on the approved Reclamation Plan dated July 2015 and updated September 2016. Backfilling is undertaken in stages throughout the life of the project, as needed, and pursuant to requirements for groundwater protection. Erosion and sediment controls are maintained. Mining avoids on-site drainage to the extent practicable. Slopes are per plan and no stream diversions occur.

Figure 1 in Attachment 1 includes 2-foot contour intervals based on May 24, 2019 data from Cooper Aerial Surveys. These topographic contours overlay Google Earth aerial imagery from February, 2021.

Additional description of the current site condition is located in Section II.

#### Reclamation Plan Performance Standard (End Use):

The end use for the reclaimed land is two-fold: "open space" on those portions of the site which will not be able to support agriculture and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control. The proposed end use is consistent with the General Plan Designation A-E (agricultural exclusive). The Reclamation Plan also requires that slopes greater than a 2:1 (H:V) ratio be reduced to less than a 2:1 ratio for the final end use, and run-off from the site be collected in sediment retention basins to ensure there is no significant degradation of surface water hydrology or quality. The desilting basins will be notched and any existing pipes will be removed. No undrained depressions will be left on site. If other drainage features are required, they will be installed as the project progresses and as the roads are built. The Reclamation Plan allows for over excavation and backfill.

#### 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.

Primary reclamation tasks, methods, and equipment are described on the following sheets.								

#### **Provide Quantities:**

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

See following sheets.		

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VI. PRIMARY RECLAMA			(4)	Describe Reclamatic	on Activity Poing Fot	imatod
			· .	Describe Necialitation	The curry being Lsu	
Acres:		Overburd	en (cy):			
Haul Distance (ft):		Topsoil (c	y):			
Production Rate (cy/hr):			(NOTE: no auton	natic calculations occ	ur to data in this upp	er table)
Methods to be used:  A. Equipment - List equipme  Equipment	ent to complete identified tas	k. For lar	ge reclamation Unit of Measure	on jobs, separa \$/Unit	ate mine areas	Cost (\$)
See following sheets (Task \	/I.1 to VI.2)			,, <u> </u>		0 (+)
	·					
			Total E	quipment Cost fo	or this Task =	\$22,022
B. Labor - List all labor cate्	gories to complete identified	tasks		Labor Surcharge/Hr (where applicable) (enter % of wage)	7	
Labor Category			\$/Hour (prevailing wage)	0.0%	# of Hours	Cost (\$)
See following sheets (Task \	/I.1 to VI.2)					

Labor Category	\$/Hour (prevailing wage)	0.0%	# of Hours	Cost (\$)
See following sheets (Task VI.1 to VI.2)				
	To	tal Labor Cost	for this Task =	\$10,291

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

Item	\$/Unit	(enter local rate in %) 0.0%	Quantity	Cost (\$)
See following sheets (Task VI.1 to VI.2)				

Total Materials Cost for this Task =

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost =

Sales tax

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#### Task VI.1 - Slopework

Based on conditions noted during site visits and recent topographic survey data, an estimated 65,000 cubic yards of material would have to be moved to create the final slopes and backfill low areas. Please note that the Reclamation Plan allows for over excavation and backfill.

A Caterpillar D9 Dozer will be used to push this amount of material into place. A D9 dozer can move approximately 896 cubic yards per hour. This production rate takes into account operator efficiency (75%), job efficiency (50 minutes / hour), average grade (10% downhill), and push distance (100 feet).

To control dust emissions, a water truck will be utilized for 25% of the dozer time. The Caterpillar Handbook was used to determine the operating capacity of the dozer (see Attachment 2).

#### **Task Cost Summary**

Item	Cost
Equipment	\$ 18,317
Labor	\$ 7,285
Other Costs	\$ -
Total Cost:	\$ 25,602

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## Task VI.1 - Slopework

#### **Equipment Cost**

Activity	Equipment	Quantity	Hours	\$/Hour		Cost	
Slopework	CAT D9 Dozer	1	73	\$	239.31	\$	17,470
Dust Control	3,000-gallon Water Truck	1	19	\$	44.60	\$	847
•	-	•	•		Total:	Ġ	18 317

Source: CalTrans Labor Surcharge and Equipment Rental Rates

#### **Labor Cost**

Activity	Labor Category	Quantity	Hours	\$/Hour		Cost
Slopework	Operating Engineer - Group 8 (dozer)	1	73	\$ 82.58	\$	6,028
Dust Control	Teamster - Group V	1	19	\$ 66.13	\$	1,256
	-	•		Total	¢	7.285

Source: State of California Prevailing Wage Rate Determinations - Southern California

#### **Other Costs**

Activity	Description	Quantity	Unit	Unit Cost	C	ost
					\$	-
Total:						

#### **Assumptions and Calculations**

Earthwork

30,000 Backfill Low Area (CY)

35,000 Reduce Oversteepened Slopes (CY)

65,000 Total Earthwork (CY)

CAT D9 Dozer

0.75 Operator Efficiency (Average)
0.83 Job Efficiency (50 min/hr)
1.2 Grade (-10% Grade [Downhill])
1,200 Production, 100 ft push (CY/hour)
896 Adjusted Production (CY/hour)

73 Total Dozer Time (Hours)

Water Truck

25% Percent of Dozer Time 19 Water Truck Time

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### Task VI.2 - Finish Grading

Once slopes have been reduced to 2:1 (H:V), disturbed areas of the site will be finish graded. Finish grading will level out any stockpiles and create natural-looking contours as well as prepare the site for revegetation.

The entire disturbed surface will be graded to even contours. A Caterpillar 160 Motor Grader can contour 2.5 acres in one hour. This rate takes into account the typical operating speed of heavy blading (3 mph), the effective blade length of the grader (10.4 feet), the typical pass overlap of a grader (2 feet), and typical work efficiency (0.83).

The compacted portion of disturbed area will be scarified before revegetation. A Caterpillar 160 Grader with a ripper attachement can decompact and scarify 0.8 acres per hour. This rate takes into account the typical operating speed ripping (1.5 mph), the effective blade length of the grader (7.6 feet), the typical pass overlap of a grader (2 feet), and typical work efficiency (0.83).

To control dust emissions, a water truck will be utilized 25% of the total task time for both operations. The Caterpillar Handbook was used to determine the operating capacity of the grader (see Attachment 2).

Pursuant to the Reclamation Plan and Conditional Use Permit (CUP 4913), "... the final graded surface will be checked by a Registered Professional Engineer who will submit a report to the County of Ventura Planning Department assuring that the final graded contours are consistent with the Reclamation Plan." Costs for a Professional Engineer to check the final grade are included in VIII - Miscellaneous Costs.

### **Task Cost Summary**

Item	Cost
Equipment	\$ 3,705
Labor	\$ 3,006
Other Costs	\$ -
Total Cost:	\$ 6,711

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### Task VI.2 - Finish Grading

### **Equipment Cost**

Activity	Equipment	Quantity	Hours	\$/Hour		Cost
Ripping	CAT 160H Motor Grader	1	18	\$ 101.61	\$	1,829
Ripping	Ripper Attachment	1	18	\$ 16.63	\$	299
Grading	CAT 160H Motor Grader	1	12	\$ 101.61	\$	1,219
Dust Control	3,000-gallon Water Truck	1	8	\$ 44.60	\$	357
				Total	Ġ	3 705

Source: CalTrans Labor Surcharge and Equipment Rental Rates

### **Labor Cost**

Activity	Labor Category	Quantity	Hours	\$/Hour		Cost
Ripping	Operating Engineer - Group 8 (grader)	1	18	\$ 82.58	\$	1,486
Grading	Operating Engineer - Group 8 (grader)	1	12	\$ 82.58	\$	991
Dust Control	Teamster - Group V	1	8	\$ 66.13	\$	529
				Total:	Ś	3,006

 $Source: \textit{State of California Prevailing Wage Rate Determinations} - \textit{Southern California} \; .$ 

### **Other Costs**

Activity	Description	Quantity	Unit	Unit Cost	Cost
				Total:	\$ -

### **Assumptions and Calculations**

25.7 Existing Disturbed Area (acres)

4.0 Potential Future Disturbance (acres)

29.7 Total Area for Finish Grading and Seeding (acres)

Ripping (15 acres)

CAT 160H Motor Grader

1.5 Speed (Miles/Hour)

7.6 Effective Length (Feet)

2.0 Overlap (Feet)

83% Efficiency (%)

36,850 Production Rate (Square Feet/Hour)

0.8 Production Rate (Acres/Hour)

18 Total Grader Time (Hours)

Grading

CAT 160H Motor Grader

3.0 Speed (Miles/Hour)

10.3 Effective Length (Feet)

2.0 Overlap (Feet)

83% Efficiency (%)

110,000 Production Rate (SF/Hour)

2.5 Production Rate (Acres/Hour)

12 Total Grader Time (Hours)

Water Truck

25% Percent of Dozer Time

8 Water Truck Time

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

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

### Current Site Condition:

Recent, on-site observations concluded the following:

- Revegetation on finished slopes controls erosion.
- No discharges or conditions that could affect off-site streams or wetlands were observed.
- Approximately 25.7 acres of disturbance currently exist on-site, and approximately 4 acres of potential future disturbance may occur in the next 12 months. Therefore, approximately 29.7 acres will require revegetation.

Additional descriptions of current site conditions are described in Section I
---

### Reclamation Plan Performance Standard (End Use):

The Reclamation Plan consists of two revegetation alternatives depending on the analysis of the stability of the site as the grading effort proceeds.

**Option 1:** The Agricultural Revegetation Plan will be utilized in any portion of the site which is disturbed and deemed stable enough to be reclaimed to agriculture. This includes disturbed acreage within the excavation area, access road areas outside the roads and desilting basins. The revegetation plan calls for the planting of grasses for forage production and erosion control.

[Continued on next page.]

### Describe Tasks:

It is assumed that the slope grading, ripping, and finish contour grading will be sufficient to decompact any compacted areas and prepare the soil for in revegetation. Section VI details how these costs were calculated.

Revegetation tasks are described on the following sheets.

State of California					
DEPARTMENT OF C	ONSERVA <sup>*</sup>	ΓΙΟN			
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### $\pmb{\textbf{VII. REVEGETATION}} \ (\textit{use multiple sheets as needed})$

Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department.  Current Site Condition:
[See previous page.]
Reclamation Plan Performance Standard (End Use):
[Continued from previous page.]  Option 2: The Native Revegetation Plan will be utilized in any portion of the site which is not stable enough to be reclaimed to agriculture. The revegetation plan calls for the planting of fescue and native seed for the purposes of erosion control and to reclaim the unstable landslide surface to open space (coastal sage scrub).  Option 2 is the failsafe method of reclamation, as Option 1 requires a slope stability qualification. Therefore, the financial assurance calculations will be based on the Option 2 revegetation plan.
Describe Tasks:
[See previous page.]

State of California DEPARTMENT OF CONSERVATION DIVISION OF MINE RECLAMATION					
FACE-1 (06-18) Page 20 of 23					
VII. REVEGETATION (use multiple sheets as needed)					
Methods to be used:		(个 Describ	e Revegetation Activit	y Being Estimated)	
A. Equipment - List equipment to complete identifie	d task. For la	_	ion projects, se	parate mine are	as.
Equipment		Unit of Measure	\$/Unit	# of Units	Cost (\$)
See following sheets (Task VII.1)					
		Total	Equipment Cost	for this Task =	\$7,337
B. Labor - List all labor categories to complete iden	tified task.		Labor Surcharge /HR (where applicable)		
		\$/Hour	(enter % of wage)	I	
Labor Category		(prevailing wage)	0.0%	# of Hours	Cost (\$)
See following sheets (Task VII.1)					COSt (φ)
					Cost (\$)
				,, -, -, -, -, -, -, -, -, -, -, -, -, -	Cost (\$)
					COST (\$)
					COST (\$)
					COST (\$)
			Total Labor Cost		\$12,181
C. Materials - List all materials required to complete	e identified ta		Total Labor Cost		
C. Materials - List all materials required to complete			Total Labor Cost  Sales tax (enter local rate in %)		
C. Materials - List all materials required to complete	e identified ta		Sales tax		
	Unit of	ask	Sales tax (enter local rate in %)	for this Task =	\$12,181
Item/Plant Species	Unit of	ask	Sales tax (enter local rate in %)	for this Task =	\$12,181
Item/Plant Species	Unit of	ask	Sales tax (enter local rate in %)	for this Task =	\$12,181
Item/Plant Species	Unit of	ask	Sales tax (enter local rate in %)	for this Task =	\$12,181

Total Materials Cost for this Task = \$43,970

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost = \$63,489

# State of California DEPARTMENT OF CONSERVATION

DIVISION OF MINE RECLAMATION

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### Task VII.1 - Reseeding

The entire disturbed surface will be seeded with a native seed mix. Given that the purpose of this FACE is to estimate the cost necessary to reclaim the site if the operator becomes insolvent, it is assumed that if it was necessary for the lead agency to reclaim the site, they would revegetate the site using native plants (i.e., the lead agency would not likely reclaim the land for agricultural uses).

Means costs for tractor seed dispersal was used to determine the equipment and labor costs for this task. Seed costs were obtained from S&S Seeds in Carpinteria, California.

### **Task Cost Summary**

Item	Cost
Equipment Cost	\$ 7,337
Labor Cost	\$ 12,181
Material Costs	\$ 43,970
Total Cost:	\$ 63,489

### **Equipment Cost**

Activity	Equipment	Quantity	Unit	Unit Cost	Cost
Reseeding	Tractor spreader	1,294	MSF	\$ 5.15	\$ 6,664
				Location Factor	110.1%

Source: RS Means Heavy Construction Cost Data: 329219.14-5700 - Tractor spreader

Total: \$ 7,337

#### **Labor Cost**

Activity	Labor Category	Quantity	Unit	Unit Unit Cost		Cost
Reseeding	Tractor spreader	1,294	MSF	\$ 8.55	\$	11,064
•				Location Factor		110.1%
				Total:	Ś	12 181

Source: RS Means Heavy Construction Cost Data: 329219.14-5700 - Tractor spreader

### **Material Costs**

Material	Description	Quantity	Unit	Unit Cost	Cost
Fertilizer	Fertilizer	1,294	MSF	\$ 1.63	\$ 2,109
Seed	S&S Seeds Quote#: 32238	25.7	Acre	\$ 1,511	\$ 38,833
	•	•	•	Location Factor	110.1%
			Filmore, CA	7.25% Sales Tax	\$ 2,815
				Total:	\$ 43,970

Sources: RS Means Heavy Construction Cost Data: 329219.14-5700 - Tractor spreader (location factor applied); S&S Seeds cost estimate dated 8/28/2020.

### **Assumptions and Calculations**

25.7 Existing Disturbed Area (acres)

4.0 Potential Future Disturbance (acres)

29.7 Total Area for Finish Grading and Seeding (acres)

43,560 Square Feet / Acre

1,293,732 Total Area (Square Feet)

1,294 Total Area (Thousand Square Feet[MSF])

### 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 costs 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 abandonnment, 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 (\$)
Please see Task V.3 Miscellaneous Equipment Removal	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0

Total Miscellaneous Costs = \$0

### IX. MONITORING COSTS

Monitoring Task	\$/Visit	# Visits/Year	# of Monitoring Years	Cost (\$)
Prepare for and conduct annual site visit (Biologist, 8 hours at \$155 / hour)	\$1,240.00	1.0	3.0	\$3,720
Prepare annual report (Biologist, 8 hours at \$155 / hour)	\$1,240.00	1.0	3.0	\$3,720
Final slope certification (Aerial Topographic Survey, \$5,000 flat rate; Professional Engineer visit and report, 12 hours at \$175 / hour)	\$7,100.00	1.0	1.0	\$7,100

Total Monitoring Costs = \$14,540

# State of California DEPARTMENT OF CONSERVATION

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### X. 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	\$	18,473
(VI) Total of all Primary Reclamation Activities Costs	\$	32,313
(VII) Total of all Revegetation Costs	\$	63,489
(VIII) Total of all Miscellaneous Costs	\$	0
(IX) Total of all Monitoring Costs	\$	14,540
Total of Direct Cost	s \$	128,815

### XI. SUPERVISION / PROFIT & OVERHEAD / CONTINGENCIES / MOBILIZATION

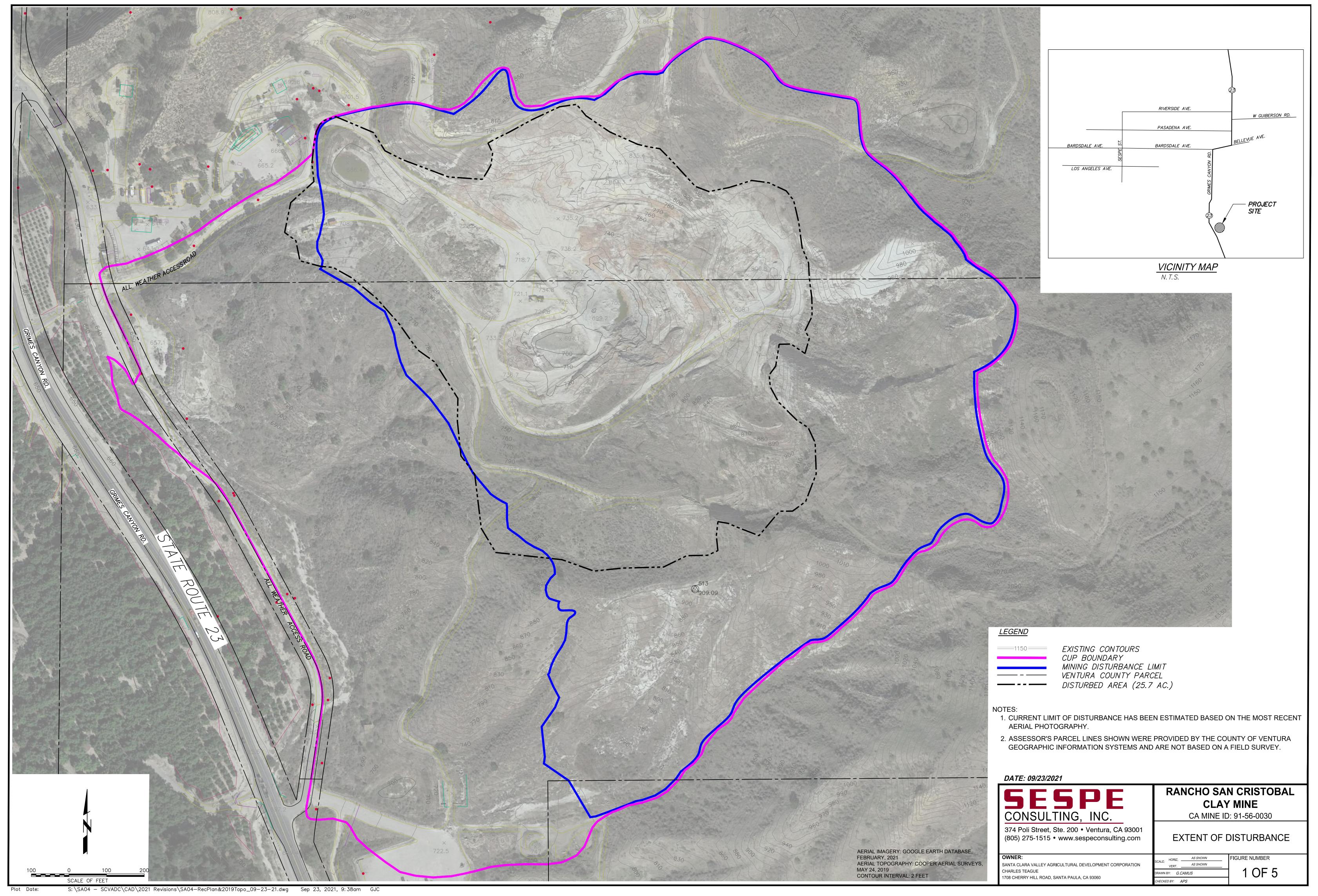
(A) Supervision ( 5.7 %)	\$	7,	334
(B) Profit/Overhead ( 11.8 %)	\$	15	,183
(C) Contingencies ( 10.0 %)	\$	12	,882
(D) Mobilization ( 3.0 %)	\$	3,	864
	Total of Indirect Costs \$	39	,263
-	Total of Direct and Indirect Costs \$	168	3,078
(E) Lead Agency and/or Dept. of Conservation	Administrative Costs 12% \$	20	,169

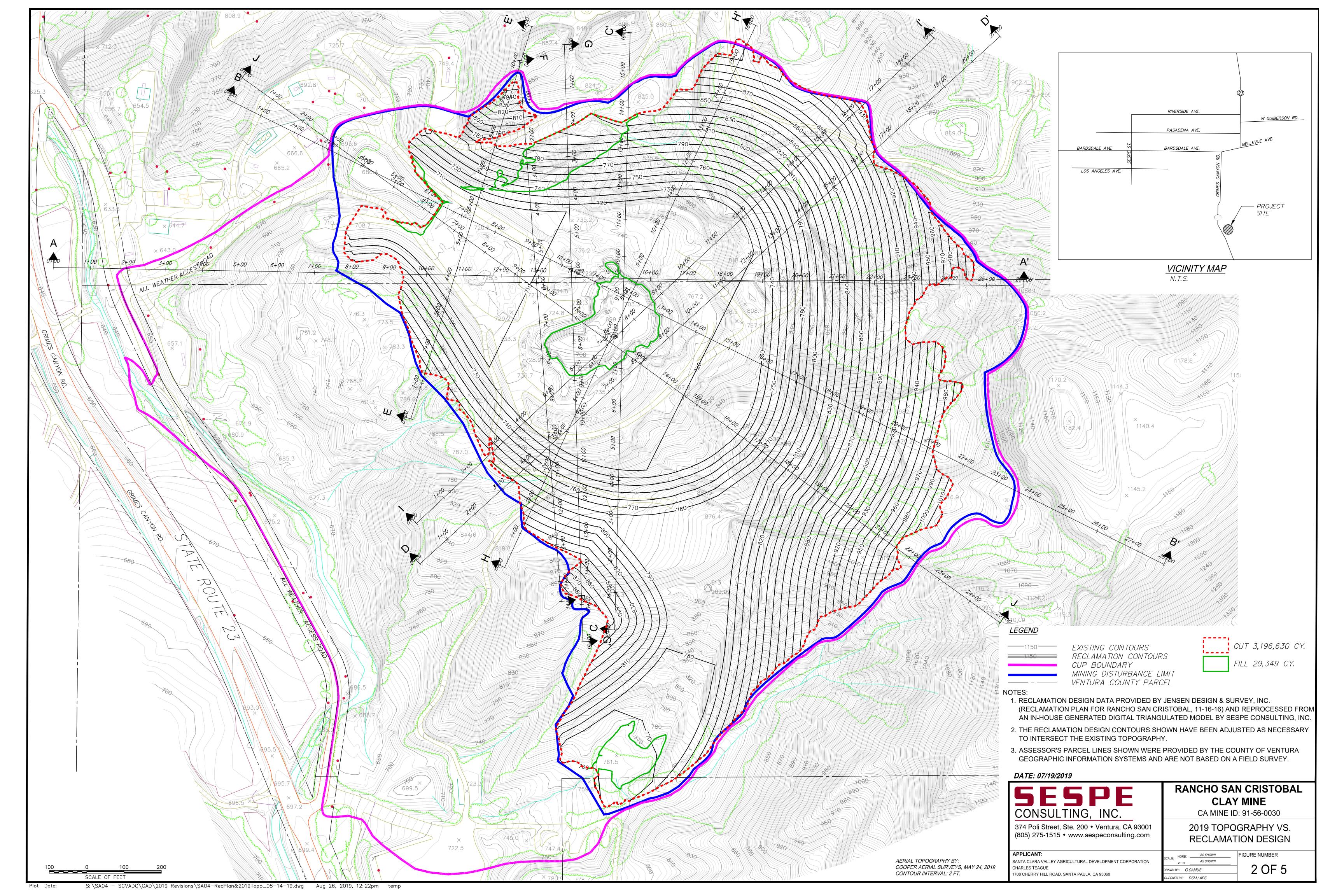
Total Estimated Cost of Reclamation \$ 188,247

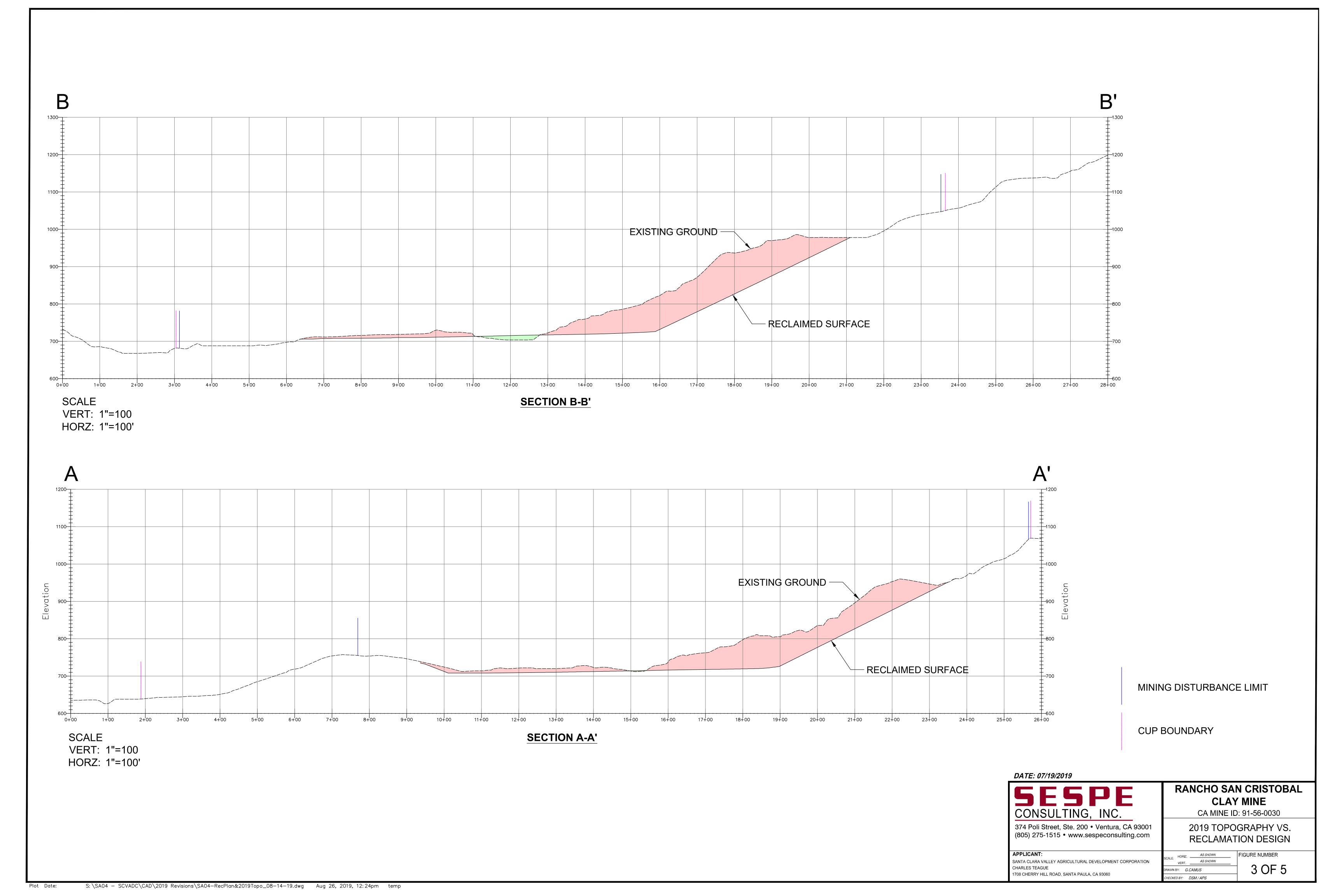
# ATTACHMENT 1

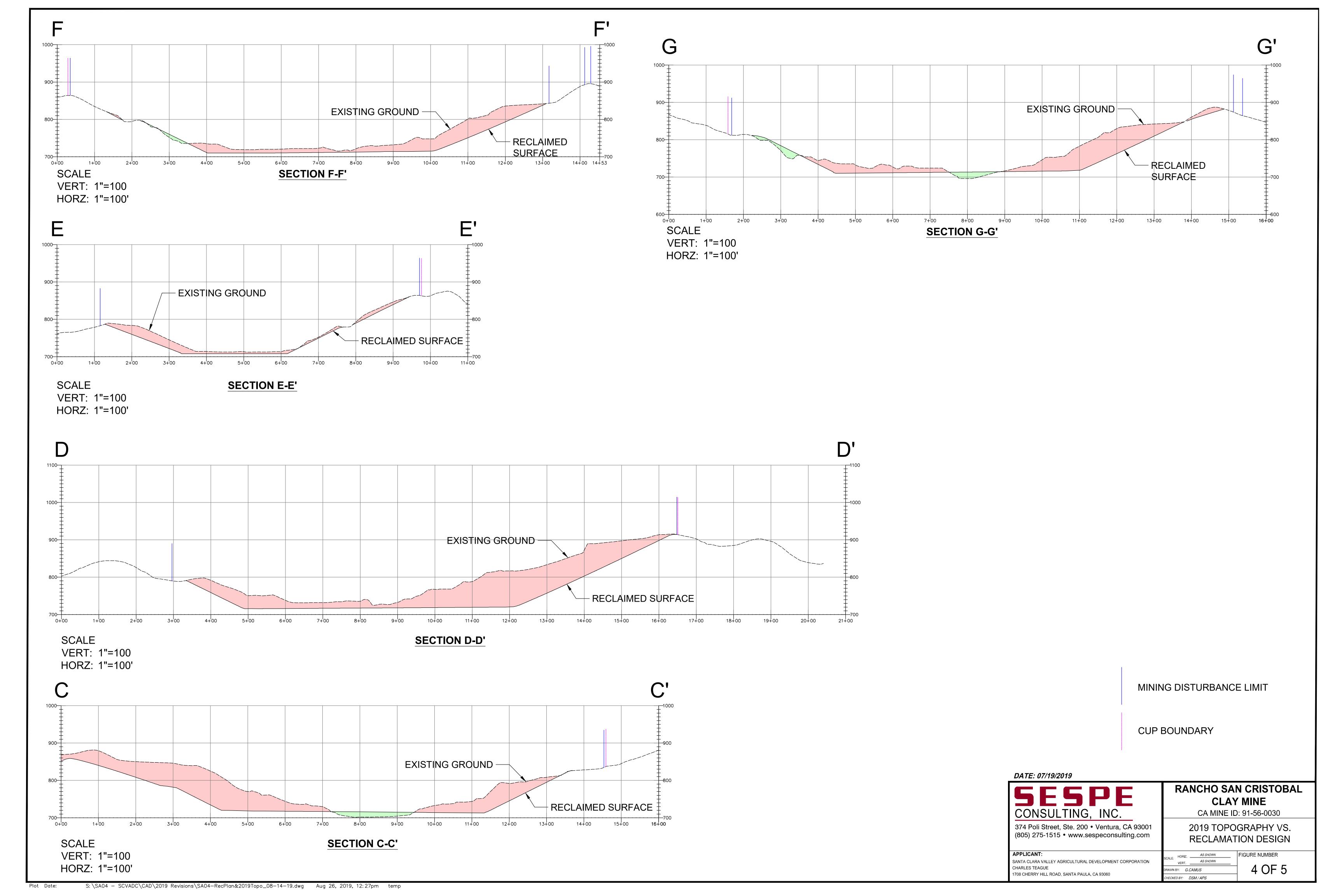
**FIGURES** 

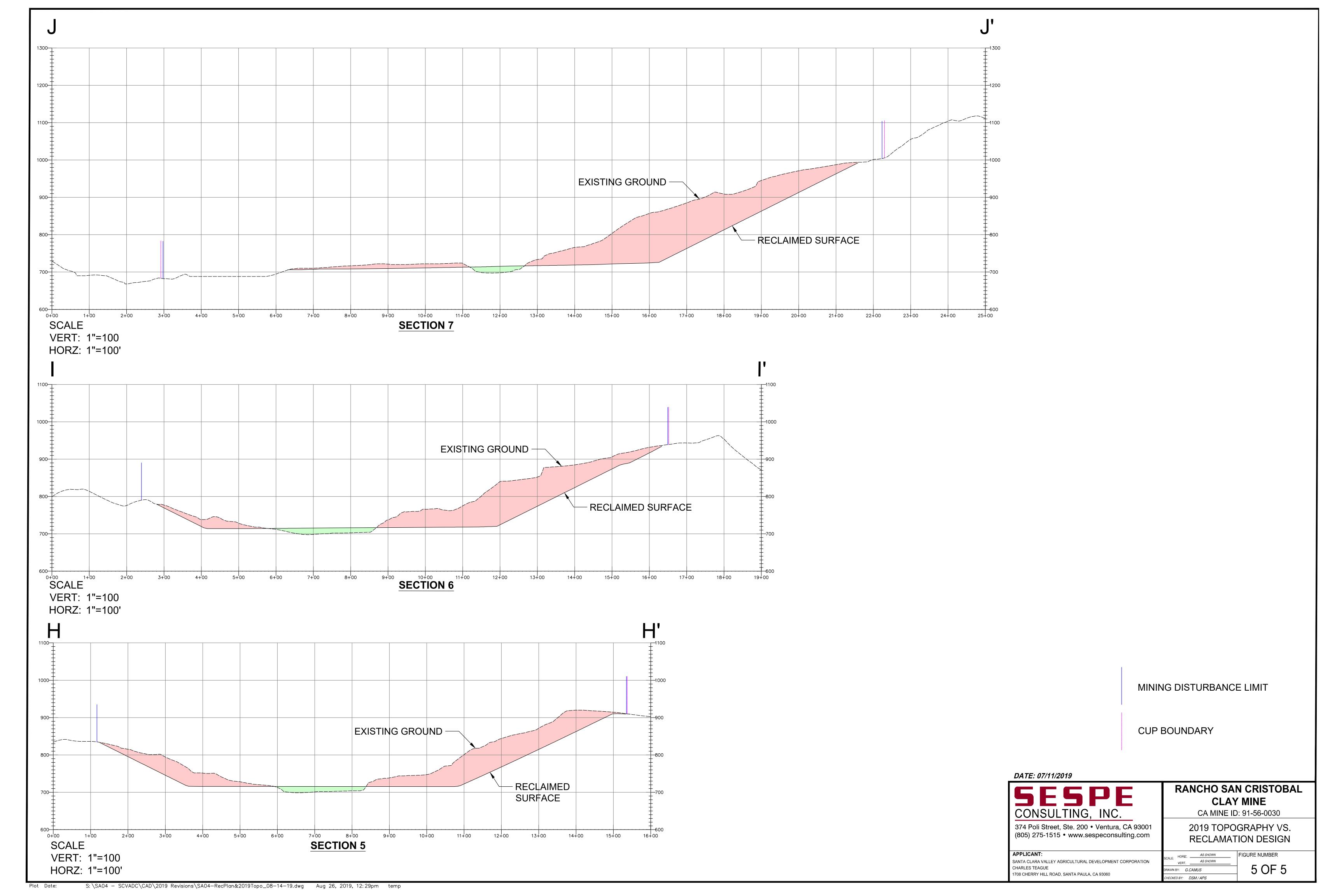
AttachmentCovers.docx www.sespeconsulting.com











# ATTACHMENT 2 SUPPORTING INFORMATION

AttachmentCovers.docx www.sespeconsulting.com

### **ATTACHMENT 5**

### **FINANCIAL ASSURANCE MECHANISM**

California Mine ID No.	91-56-0030	Reclamation Bond Increase/Decrease Rider
Bond No.	1091283	Page 1 of 3
Permit No.	CUP 4913	
Reclamation Plan Name/No.	PL14-0086	

# DEPARTMENT OF CONSERVATION DIVISION OF MINE RECLAMATION and

County of Ventura	
(Name of LEAD AGENCY)	CHARLES OF THE PARTY OF THE PAR

# RECLAMATION PERFORMANCE BOND INCREASE/DECREASE RIDER

INCREASE/DECREASE RIDER
(Public Resources Code §2773.1)
To be attached to and form a part of Surety Company Bond number 1091283
written by Lexon Insurance Company
as SURETY, on behalf of Santa Clara Valley AG Development Corp
as PRINCIPAL, in the penal sum of One Hundred Seventy Five Thousand & 00/100
DOLLARS (\$ 175,000.00 ), in favor of County of Ventura
(Name of LEAD AGENCY)
and the Department of Conservation, Division of Mine Reclamation and executed on 12/04/2013
Whereas the above named Bringing has a permit of a surface mining appearing
Whereas, the above-named Principal has a permit of a surface mining operation,
number CUP 4913 , approved by the County (select one) of Ventura dated on 06/11/1998 and revisions
, and remains and remains
numbered and dated 05/29/2019 pursuant to the application of the Principal, and/or
claims a vested right,
and/or
Whereas, the County of (select one) Ventura or, in
the alternative, the State Mining and Geology Board approved reclamation plan number
PL14-0086 , dated 06/11/1998 , and renewals and
amendments numbered and dated 05/29/2019 pursuant to the
application of the Principal;
and
Whereas, said bond and rider shall cover any and all mined lands affected or to be affected by
the surface mining operation under the above-mentioned permit and/or the reclamation plan, and
renewals and amendments respectively, since the date of the issuance of the permit and/or the
reclamation plan,
Now, therefore, the amount of this bond is increased (select one) by:
One Hundred Sevety Five Thousand & 00/100 Dollars
(\$ <u>175,000.00</u> ), to a total penal sum of
One Hundred Ninety Two Thousand & 00/100 Dollars
(\$192,000.00 ), to cover the Additional (select one) cost of reclaiming all
affected mined lands for the payment of which sum we hereby jointly and severally bind ourselves,
our successors and assigns. It is further understood and agreed that all other terms and conditions of
this bond shall remain unchanged.

California Mine ID No.	91-56-0030	Reclamation Bond Increase/Decre	ease Rider
Bond No.	1091283		Page 2 of 3
Permit No.	CUP 4913		age E or o
Reclamation Plan Name/No.	PL14-0086		
IN WITNESS THE seals as of the dates se	HEREOF, the Princip of forth below.	al and Surety have hereunto set their signatures a	and
		RINCIPAL	
Date: 6-10-	2021	Santa Clara Valley AG Development Co	rp
		(Company - Permittee [Principal])	
		By: (Carporato Officer/Defease/Sale Brassistes)	
(Seal)		(Corporate Officer/Paytners/Sole Proprietor)	
		CHARLES M TEAGUE Typed or Printed Name	to the control of the
		Title: PRESIDENT	
			see 19
		SURETY	C
I declare, under penalty foregoing rider under a		e laws of the State of California, that I have execu of Attorney.	ted the
		Lexon Insurance Company	
		(Surety Company)	
		11. Day It	)
		By: Kathupe Myst	
(Seal)		(Signature of Attorney-in-Fact for Surety)	
(000)		Kathryn D White	
		Typed or Printed Name	
		Title: Attorney-In-Fact	
Executed in Mesa, AZ		on 05/26/2021	
(Ci	ty and State)	(Date)	
under the laws of the S	state of California.		
Where one signs by vi Attorney must be filed		torney for a Surety Company, such fully executed	Power of
Section As Ave. Section Makes			
Please identify the age documents, if applicab		f the surety who will accept notices, papers, and o	other
		Title:	one and the second second second
Address:			
Phone Number:	Email Address:		



## POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that Endurance Assurance Corporation, a Delaware corporation, Endurance American Insurance Company, a Delaware corporation, Lexon Insurance Company, a Texas corporation, and/or Bond Safeguard Insurance Company, a South Dakota corporation, each, a "Company" and collectively, "Sompo International," do hereby constitute and appoint: Kathryn D. White as true and lawful Attorney(s)-In-Fact to make, execute, seal, and deliver for, and on its behalf as surety or co-surety; bonds and undertakings given for any and all purposes, also to execute and deliver on its behalf as aforesaid renewals, extensions, agreements, waivers, consents or stipulations relating to such bonds or undertakings provided, however, that no single bond or undertaking so made, executed and delivered shall obligate the Company for any portion of the penal sum thereof in excess of the sum of ONE HUNDRED MILLION Dollars (\$100,000,000,000.00).

Such bonds and undertakings for said purposes, when duly executed by said attorney(s)-in-fact, shall be binding upon the Company as fully and to the same extent as if signed by the President of the Company under its corporate seal attested by its Corporate Secretary.

This appointment is made under and by authority of certain resolutions adopted by the sole shareholder of each Company by unanimous written consent effective the 15th day of June, 2019, a copy of which appears below under the heading entitled "Certificate"

This Power of Attorney is signed and sealed by facsimile under and by authority of the following resolution adopted by the sole shareholder of each Company by unanimous written consent effective the 15th day of June, 2019 and said resolution has not since been revoked, amended or repealed:

RESOLVED, that the signature of an individual named above and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signature or seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, each Company has caused this instrument to be signed by the following officers, and its corporate seal to be affixed this 15th day of June 2019

**Endurance Assurance Corporation** 

Richard Appel; SVR & Senior Counsel surance

SEAL

2002

Endurance American Insurance Company

Richard Appel: SVP-8, Senior Counsel rican Insu

SEAL

1996 DELAWARE Lexon Insurance Company

Richard Appel; SVP.& Senior Counsel

**Bond Safeguard** Insurance Company

Richard Appel; SVP & Senior Counsel SURP INSURA

SOUTH

DAKOTA

COMPANY

**ACKNOWLEDGEMENT** 

On this 15th day of June, 2019, before me, personally came the above signatories known to me, who being duly sworn, did depose and say that he/they is all officer of each of the Companies; and that he executed said instrument on behalf of each Company by authority of his office under the by-laws of each Company.

Amy Taylor, Notary Public

My Commission Expires 5/9/23

CERTIFICATE

I, the undersigned Officer of each Company, DO HEREBY CERTIFY that:

- 1. That the original power of attorney of which the foregoing is a copy was duly executed on behalf of each Company and has not since been revoked amended or modified; that the undersigned has compared the foregoing copy thereof with the original power of attorney, and that the same is a true and correct copy of the original power of attorney and of the whole thereof
- 2. The following are resolutions which were adopted by the sole shareholder of each Company by unanimous written consent effective June 15, 2019 and said resolutions have not since been revoked, amended or modified:

"RESOLVED, that each of the individuals named below is authorized to make, execute, seal and deliver for and on behalf of the Company and all bonds, undertakings or obligations in surety or co-surety with others: RICHARD M. APPEL, BRIAN J. BEGGS, CHRISTOPHER DONELAN, SHARON L. SIMS, CHRISTOPHER L. SPARRO, MARIANNE L. WILBERT

; and be it further

RESOLVED, that each of the individuals named above is authorized to appoint attorneys-in-fact for the purpose of making, executing, sealing and delivering bonds, undertakings or obligations in surety or co-surety for and on behalf of the Company."

3. The undersigned further certifies that the above resolutions are true and correct copies of the resolutions as so recorded and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal this 26th

Daniel S. Lurie. Secretary

NOTICE: U. S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL (OFAC)

No coverage is provided by this Notice nor can it be construed to replace any provisions of any surety bond or other surety coverage provided. This Notice provides information concerning possible impact on your surety coverage due to directives issued by OFAC. Please read this Notice carefully.

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous foreign agents, front organizations, terrorists, terrorists organizations, and narcotics traffickers as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's website - https://www.treasury.gov/resource-center/sanctions/SDN-List.

In accordance with OFAC regulations, if it is determined that you or any other person or entity claiming the benefits of any coverage has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, any coverage will be considered a blocked or frozen contract and all provisions of any coverage provided are immediately subject to OFAC. When a surety bond or other form of surety coverage is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments may also apply.

Telephone: 615-553-9500 Mailing Address: Sompo International; 12890 Lebanon Road; Mount Juliet, TN 37122-2870

California Mine ID No.	91-56-0030	Reclamation Bond Increase/Decrease Rider
Bond No.	1091283	Page 3 of 3
Permit No.	CUP 4913	1 496 0 01 0
Reclamation Plan Name/No.	PL14-0086	

# COMPLETED NOTORIZED ACKNOWLEDGMENT OF PERMITTEE [PRINCIPAL] [Attach loose notarial certificate]

COMPLETED NOTARIZED ACKNOWLEDGMENT OF SURETY
[Attach loose notarial certificate]

### CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

A notary public or other officer completing this certificate document to which this certificate is attached, and not the	verifies only the identity of the individual who signed the truthfulness, accuracy, or validity of that document.			
State of Arizona )				
County of MARICOPA )				
On05/26/2021 before me,	HELEN M. WHITE			
Date	Here Insert Name and Title of the Officer			
personally appeared KATHRYN D. WHITE				
	Name(s) of Signer(s)			
addaction to the within instrument and acknowled	vidence to be the person(s) whose name(s) is/are dged to me that he/she/they executed the same in /her/their signature(s) on the instrument the person(s), ed, executed the instrument.			
I certify under PENALTY OF PERJURY under the law of the State of California that the foregoing paragraph is true and correct.  WITNESS my hand and official seal.  Witness my hand and official seal.  Signature of Notary Public				
Place Notary Seal Above	0.1.4.			
Though this section is optional, completing this in	ONAL  formation can deter alteration of the document or			
Description of Attached Document				
Title or Type of Document: Bond Rider  Document Date:	Number of Pages:			
Signer(s) Other Than Named Above:	Number of Pages:			
Capacity(ies) Claimed by Signer(s)  Signer's Name:  Corporate Officer — Title(s):  Partner — Limited General Individual Attorney in Fact  Trustee Guardian or Conservator  Other:  Signer Is Representing: Lexon Insurance Company	Signer's Name: Corporate Officer — Title(s): Partner —			

## CALIFORNIA NOTARY ACKNOWLEDGEMENT (INDIVIDUAL)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of Ventura

2021 before me, <u>Alyssa Briana Romero, Notary Public</u> personally appeared Charles M. Terrave who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. ALYSSA BRIANA ROMERO 8 COMM. # 2327050 NOTARY PUBLIC-CALIFORNIA WITNESS my hand and official seal. **VENTURA COUNTY** My Commission Expires MAY 1, 2024 Signature

(Seal)

### **ATTACHMENT 6**

**CONDITIONAL USE PERMIT (PL18-0083)** 

### RANCHO SAN CRISTOBAL CLAY MINE CA Mine ID #91-56-0030

# Conditions of Approval for CONDITIONAL USE PERMIT PL18-0083

(A Permit Adjustment to CUP 4913, Case No. PL14-0086)

APNs 500-0-050-07, 500-0-050-09, 500-0-050-044,

500-0-050-46, 500-0-050-48, and 500-0-050-49

The conditions of approval presented in this document comprise modified Conditional Use Permit (CUP) PL14-0086 granted by the County of Ventura to authorize the operation of the Rancho San Cristobal Surface Mining Facility. These Conditions of Approval supersede the previous Conditions of Approval included in the previous permits granted by the County for this mining facility. This modified permit does not authorize any mining activities that are inconsistent with the amended Reclamation Plan for this facility approved by the County pursuant to the California Surface Mining and Reclamation Act (SMARA).

Consistent with SMARA, mining operations are prohibited unless the operator has been granted a valid Conditional Use Permit (as effectuated through the issuance of a Zoning Clearance), has obtained an approved Reclamation Plan, and has posted a Financial Assurance deemed adequate by the State and the County to ensure reclamation of the site in conformance with State regulations.

**Condition of Approval Index** 

No.	Condition of Approval	No.	Condition of Approval
1	Project Description	25	Enhanced dust control
2	Compliance with standards	26	APCD Regulations
3	Annual Compliance Report	27	Material spillage
4	Days and Hours of Operation	28	Stormwater permit
5	Site Maintenance	29	Flood Control
6	CUP Modification	30	NCZO compliance
7	Acceptance of Conditions	31	Financial Assurance
8	Time Limits	32	Exception to conditions
9	Consolidation of Exhibits	33	Interim Management Plans
10	Notice of CUP requirements	34	Copy of Rec. Plan
11	Notice of Land Use Entitlement	35	MRRC-2 Form
12	Condition Compliance	36	Aerial Photograph
13	Defense and Indemnity	37	Responsibility to Reclaim
14	Invalidation of conditions	38	Proprietary information
15	Consultant Review	39	Engine braking
16	Other laws and Permits	40	Hazardous materials
17	Contact Person	41	Waste disposal
18	Resolution of Complaints	42	Access gates
19	Major Incidents	43	Inspection authority
20	Change of Owner	44	Fair Share
21	Sign Plan	45	Truck Trip Limits
22	Limit on Peak-Hour Trips		
23	Traffic mitigation fees		
24	Permit Revocation		
25	Traffic Mitigation Fees		

### 1. Permitted Land Uses (Project Description):

This condition of approval describes the components and operational limits of the authorized mining project and reflects or incorporates the reclamation requirements of the associated November 17, 2016 amended Reclamation Plan that has been approved in accordance with SMARA for the surface mining activities authorized by this Conditional Use Permit. All of the requirements of the amended Reclamation Plan are hereby incorporated into this condition of approval by this reference. All surface mining activities must be conducted in conformance with this Conditional Use Permit and the Reclamation Plan that is currently in effect for the Rancho San Cristobal facility.

The Project description is as follows:

This permit authorizes the continued operation of the existing Rancho San Cristobal surface mining facility. The approved project includes the following components:

- Surface mining activities for a 30-year period ending on May 15, 2046.
- A total post-2015 volume of mineral material produced at and exported from the mining site of 4,274,795 cubic yards.
- Surface mining activities over a 79.2-acre area.
- A maximum daily haul truck traffic volume of 300 trips (150 truckloads) per authorized material transport day.
- Maximum annual material production and export of 975,000 tons per year.
- Truck transport of mined material on a maximum of 260 days per year.
- Mining excavation and site reclamation in accordance with the approved Reclamation Plan. (No excavation below the final reclaimed surface or outside the limits of the excavation area is authorized.)
- Operation of the facility 6 days (Monday-Saturday) per week as indicated in the following table:

		Authorized activities		
Days of Week	Hours	Truck transport of Mined Materials	Mining excavation and material stockpiling	Site Maintenance
Monday through Friday	6:00am to Sunset	Yes	Yes	Yes
Saturday	6:00am to Sunset but no later than 7:00pm	No	Yes	Yes
Sunday	Closed	No	No	No

The hours of material trucking operations shall be limited on certain days to avoid the generation of any new truck trips during peak traffic periods (6:00am to 8:00am and 3:00pm to 6:00pm on weekdays). Peak traffic period haul truck traffic shall be limited to a maximum of 38 peak hour trips (PHTs) per day over 180 authorized truck transport days per year. The following table describes the annual days of authorized truck transport operations.

Time Period	Maximum daily truck traffic (One-way trips)	Number of Material Trucking Days	PHT per day limit
Sundays	0	0	N/A
Saturdays	0	0	N/A
Weekdays	300	180	38
Weekdays	300	80	0
Total =		260	

### Mining Operations

The excavation methods historically utilized at the subject facility will continue to be employed. Clay material will be excavated from the active landslide deposit with the use of bulldozers, excavators and loaders. This material will be temporarily stockpiled in a staging area for subsequent loading into heavy trucks for export from the site. In undisturbed areas, the surface layer (topsoil) will be removed with a bulldozer and stockpiled for later use in site reclamation. A water truck will be used to spray water on unpaved haul roads to minimize dust generation.

The configuration of the authorized mining excavation (i.e. the geometry of the final reclaimed surface) is delineated in the approved amended Reclamation Plan for this facility.

### Reclamation

The site shall be reclaimed in accordance with the approved amended Reclamation Plan for this facility. The mined lands will be reclaimed to end uses of open space or agriculture as described below:

- Open space: Portions of the site (i.e. unstable landslide areas) which will not be able to support agriculture will be planted with native seeds to control erosion and establish coastal Sage scrub habitat.
- Agriculture: Areas not reclaimed to open space will be planted with grasses and used for cattle and equine grazing. This planting will also control erosion of the mined lands.

The decision to reclaim areas of the site to agriculture or native open space will be based on geotechnical studies conducted at the time each area of the mine reaches the final reclaimed surface specified in the amended Reclamation Plan.

As illustrated in the approved amended Reclamation Plan, a total of approximately 4.274,795 cubic yards of material (5,900,000 million tons) is present (as of 2015) above the final reclaimed surface. This material is authorized to be excavated and exported as product from the mining site. A maximum of 975,000 tons of material per year is authorized to be exported from the site.

### 2. Compliance with Mining and Reclamation Standards

**Purpose:** In order to assure compliance with applicable mining and reclamation standards.

**Requirement:** The Permittee shall operate and reclaim the Rancho San Cristobal mining facility in conformance with the mining and reclamation standards of Section 8107-9 of the Ventura County Non-Coastal Zoning Ordinance (NCZO), as may be amended, the California Surface Mining and Reclamation Act (Public Resources Code 2710 et. seq.; SMARA), and the State Mining and Geology Board reclamation regulations (Title 14 CCR Section 3500 et.seq.). These requirements include but are not limited to the following:

- a. Reclamation of the site shall be completed in accordance with the approved Reclamation Plan.
- b. All surface mining operations shall be conducted in conformance with the phasing and other requirements of the Reclamation Plan.

- c. Removal of equipment and facilities shall be accomplished in accordance with the Reclamation Plan and Section 8107-9.6.10 of the NCZO, as may be amended.
- d. The Permittee shall maintain liability insurance for the effective period of this permit with limits of not less than \$1,000,000 per occurrence and \$2,000,000 per annum. The County Planning Division may subsequently require Permittee to procure liability insurance with higher limits in the event the County determines that such limits are consistent with industry standards or risk factors associated with the permitted surface mining activities.
- e. No excavation of the site shall occur below the final reclaimed surface or outside of the mapped limits of excavation specified in the Reclamation Plan.
- f. A Financial Assurance for reclamation shall be posted by the Permittee (mine operator) with the County of Ventura and California Department of Conservation in accordance with Section 8107-9.6.20 of the NCZO, as may be amended, and Section 2773.1 of SMARA.
- g. All surface mining operations shall be conducted in conformance with the minimum acceptable practices described in Section 3503 of the State Mining and Geology Board reclamation regulations.
- h. The Permittee shall provide access to the site to County personnel upon receiving reasonable notice of an upcoming inspection. ("Reasonable notice" shall mean notification at least 2 days in advance.)

**Documentation:** The Permittee shall annually provide evidence to the County Planning Division for review and approval that liability insurance consistent with ordinance standards has been obtained. The Permittee shall also annually provide a Financial Assurance Cost Estimate (FACE) and post a Financial Assurance Mechanism (FAM) that meets SMARA standards as determined by the Planning Director. Surface mining inspection reports prepared by County staff will document the physical condition of the mining site and its conformance with the Reclamation Plan and the conditions of approval of this conditional use permit. The Annual Compliance Report prepared by the Permittee under Condition No. 3 will also document the condition of the site. All reports and documentation must be submitted in electronic format.

**Timing:** The Permittee shall provide all required information or documentation to demonstrate compliance with this condition, annually by July 1<sup>st</sup>. The updated FACE and FAM shall be submitted, concurrently, 90 days after the annual inspection of the site by the County.

**Monitoring:** The Planning Division will monitor compliance with this condition through the annual site inspections required by SMARA and through enforcement actions authorized by §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

### 3. Annual Compliance Report

The Permittee shall submit an Annual Compliance Report (ACR) to the County Planning Division that describes the current area and depth of mining excavation and the extent of any reclamation activities that have occurred in the past operational year. This information must be delineated on a copy of the map(s) and cross sections included in the Reclamation Plan. This report must describe the conformance of the mining activities with the conditions of approval of this conditional use permit and the Reclamation Plan. The volume of any over-excavation must be estimated in this report. The ACR must be consistent with the information provided in the Financial Assurance Cost Estimate and the Financial Assurance Mechanism submitted for the facility. The adequacy of the ACR to meet this condition will be determined by the Planning Director. The report is to be submitted annually by July 1st.

### 4. Days and Hours of Operation

**Purpose:** In order to assure consistency with the project description stated in Condition No. 1, it is necessary to limit the days and hours of operation of the approved use.

**Requirement:** The operation of the mining facility shall be limited as follows:

		Authorized activities			
Days of Week	Hours	Truck transport of Mined Materials	Mining excavation and material stockpiling	Site Maintenance	
Monday through Friday	6:00am to Sunset	Yes	Yes	Yes	
Saturday	6:00am to Sunset but no later than 7:00pm	No	Yes	Yes	
Sunday	Closed	No	No	No	

The Permittee shall post the hours of operation in an obvious location that can be seen by all customers, employees, vendors, and haul truck drivers. The signage must be made of weatherproof and permanent material, and conform with the standards set forth in Article 10 of the Ventura County Non-Coastal Zoning Ordinance, as may be amended.

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**Documentation:** The Permittee shall provide the Planning Division with photographic documentation that the required signage that lists the hours of operation has been installed.

**Timing:** The Permittee shall post the hours of operation prior to the issuance of Zoning Clearance for use inauguration. The Permittee shall maintain the required signage and operate in conformance with the approved hours of operation for the effective period of this permit.

**Monitoring and Reporting:** The Planning Division has the authority to conduct periodic site inspections to ensure ongoing compliance by the Permittee with this condition consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

### 5. Site Maintenance

**Purpose:** To ensure that the CUP area is maintained in a neat and orderly manner so as not to create any hazardous conditions or unsightly conditions which are visible from outside the CUP area.

**Requirement:** The Permittee shall maintain the project site in compliance with the described uses outlined in Condition No. 1 (Permitted Land Uses). Only equipment and materials used in the operations described in Condition No. 1 or which the Planning Director determines to be otherwise substantially in conformance with Condition No. 1 (Permitted Land Uses), or which are authorized by any subsequent amendments to this CUP, shall be stored on the property during the life of this CUP.

**Documentation:** The allowed uses shall be comprised of those items listed in Condition No. 1 (Permitted Land Uses) of this CUP and any amendments thereto.

**Timing:** The site shall be maintained in a neat and orderly manner during the effective period of this permit.

**Monitoring and Reporting:** The County Building Inspector, Public Works Grading Inspector, Fire Marshall, and Planning Division staff have the authority to conduct periodic site inspections to ensure the Permittee's ongoing compliance with this condition consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

### 6. **CUP Modification**

Prior to undertaking any operational or construction-related activity which is not expressly described in these conditions of approval, including Condition No. 1, the Permittee shall first contact the Planning Director to determine if the proposed activity

requires a modification of this CUP. The Planning Director may, at the Planning Director's sole discretion, require the Permittee to file a written and/or mapped description of the proposed activity in order to determine if a CUP modification is required. If a CUP modification is required, the modification shall be subject to:

- The modification approval standards of the Ventura County Ordinance Code in effect at the time the modification application is acted on by the applicable County decision-making authority; and,
- Environmental review, as required pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code, §21000-21178) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §15000-15387), as amended from time to time.

### 7. Acceptance of Conditions and Schedule of Enforcement Responses

The Permittee's acceptance of this CUP, or commencement of construction or operations under this CUP, shall constitute the Permittee's formal agreement to comply with all conditions of approval of this CUP. Failure to abide by and comply with any condition of approval of this CUP shall constitute grounds for enforcement action to be taken in accordance with the provisions of the Ventura County Non-Coastal Zoning Ordinance, as may be amended, which shall include, but not be limited to, the following:

- a. Public reporting of violations to the Planning Commission or Board of Supervisors;
- b. Suspension of the permitted land uses (Condition No. 1);
- c. Modification of the CUP conditions listed herein:
- d. Recordation of a "Notice of Noncompliance" on title to the subject property;
- e. The imposition of civil administrative penalties; and/or
- f. Revocation of this CUP.

The Permittee is responsible for being aware of, and complying with, the CUP conditions and all applicable federal, state and local laws and regulations.

### 8. Time Limits

### a. Use inauguration:

 The decision to grant this CUP becomes effective upon the expiration of the 10-day appeal period following the date of decision, or when any appeals of the decision are finally resolved. Once the CUP becomes effective, the Permittee must obtain a Zoning Clearance for use inauguration in order to initiate the authorized land uses specified in Condition of Approval No. 1 (Project Description).

- 2. This CUP shall expire and become null and void if the Permittee fails to obtain a Zoning Clearance for use inauguration within one year from the granting or approval of this CUP. The Planning Director may grant a one-year extension of the deadline for the Permittee to obtain the Zoning Clearance for use inauguration if the Permittee can demonstrate to the satisfaction of the Planning Director that the Permittee has made a diligent effort to inaugurate the permitted land use, and the Permittee has requested the time extension in writing prior to the expiration date.
- 3. Prior to the issuance of the Zoning Clearance for use inauguration, all fees and charges billed to that date by any County agency, as well as any fines, penalties, and sureties, must be paid in full. After issuance of the Zoning Clearance for use inauguration, any final billed processing fees must be paid within 30 days of the billing date or the County may revoke this CUP.

### b. Permit Life or Operations Period:

This CUP shall expire on May 15, 2046. The lack of additional notification of the expiration date provided by the County to the Permittee shall not constitute grounds to continue the uses that are authorized by this CUP after the CUP expiration date. The uses authorized by this CUP may continue after the CUP expiration date to the extent authorized by applicable provisions of the Ventura County Non-Coastal Zoning Ordinance, as may be amended.

(Note: Reclamation activities in accordance with the Reclamation Plan would continue for up to 5 years after the cessation of mineral extraction. This time period reflects post-mineral extraction re-contouring and re-vegetation of the site.)

### 9. Consolidation of All Approved Exhibits and Permits

**Purpose:** To ensure compliance with and notification of requirements of other federal, state or local government regulatory agencies and the completion of the Mitigation and Monitoring Reporting Program.

**Requirement:** Upon the request of the Planning Director, the Permittee shall provide the Planning Division with documentation to verify that the Permittee has obtained or satisfied all applicable federal, state and local entitlements and conditions.

**Documentation:** The Permittee shall provide this documentation to the County Planning Division in the form that is acceptable to the agency issuing the entitlement or clearance for the project file.

**Timing:** The documentation shall be submitted to the Planning Division prior to the issuance of the Zoning Clearance for use inauguration or as dictated by the respective agency.

**Monitoring and Reporting:** The Planning Division maintains the documentation provided by the Permittee in the respective project file. In the event that the permit is modified or changes are made by any other respective agency, the Permittee shall submit any revised documentation within 30 days of the modification.

### 10. Notice of CUP Requirements and Retention of CUP Conditions On-Site

**Purpose:** To ensure full and proper notice of permit requirements and conditions affecting the use of the subject property.

**Requirement:** Unless otherwise required by the Planning Director, the Permittee shall notify, in writing, the Property Owner(s) of record, contractors, and all other parties and vendors regularly dealing with the daily operation of the proposed activities, of the pertinent conditions of this CUP.

**Documentation:** The Permittee shall maintain a current set of CUP conditions and the approved Reclamation Plan on the project site during facility operations.

**Timing:** A copy of the CUP conditions of approval shall be available on the project site prior to issuance of a Zoning Clearance for use inauguration and shall be maintained on the site during the effective term of this permit.

**Monitoring and Reporting:** The Planning Division has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

### 11. Recorded Notice of Land Use Entitlement

**Purpose:** In order to comply with §8111-8.3 of the Ventura County Non-Coastal Zoning Ordinance, a notice shall be recorded on the deed of the subject property that describes the responsibilities of the Property Owner and Permittee for compliance with applicable permit conditions and regulations.

**Requirement:** The Permittee and Property Owner of record shall sign, have notarized, and record with the Office of the County Recorder, a Notice of Land Use Entitlement form furnished by the Planning Division, for the tax assessor's parcels that are subject to this CUP.

**Documentation:** The Permittee shall provide a copy for the recorded Notice of Land Use Entitlement to the County Planning Division.

**Timing:** The recorded Notice of Land Use Entitlement shall be submitted to the County Planning Division prior to the issuance of a Zoning Clearance for use inauguration.

**Monitoring and Reporting:** The County Planning Division shall receive the recorded Notice and incorporate it into the CUP file for the project.

### 12. Condition Compliance, Enforcement, and Other Responsibilities

- a. Cost Responsibilities: The Permittee shall bear the full costs of all staff time, material costs, or consultant costs associated with the approval of studies, generation of studies or reports, on-going permit compliance, enforcement and monitoring as described below in Section 12.c. Specifically, the Permittee shall bear the full costs of the following:
  - condition compliance costs which include, but are not limited to, staff time, material costs, or consultant costs associated with the approval of studies, generation of studies or reports, ongoing permit condition compliance review, and CEQA Mitigation Monitoring/other monitoring programs; and,
  - 2. monitoring and enforcement costs required by the Ventura County Non-Coastal Zoning Ordinance (§8114-3). The Permittee, or the Permittee's successors-in-interest, shall bear the full costs incurred by the County or its contractors for inspection and monitoring, and for enforcement activities related to the resolution of confirmed violations. Enforcement activities shall be in response to confirmed violations and may include such measures as inspections, public reports, penalty hearings, forfeiture of securities, and suspension of this CUP. Costs will be billed at the contract rates in effect at the time enforcement actions are required. The Permittee shall be billed for said costs and penalties pursuant to the Ventura County Non-Coastal Zoning Ordinance (§8114-3.4).
- b. Establishment of Revolving Compliance Accounts: Within 10 calendar days of the effective date of the decision on this CUP, the Permittee, or the Permittee's successors-in-interest, shall submit the following deposit and reimbursement agreement to the Planning Director:
  - a payment of \$500.00 for deposit into a revolving condition compliance and enforcement account to be used by the Planning Division to cover costs incurred for Condition Compliance review (Condition No. 12.a, above), monitoring and enforcement (Condition No. 12.c, below). The \$500.00 deposit may be modified to a higher amount by mutual agreement between the Permittee and the Planning Director; and,
  - 2. a signed and fully executed County RMA reimbursement agreement, which is subject to the Permittee's right to challenge any charges obligating the Permittee to pay all Condition Compliance review, monitoring, and enforcement costs.

- c. Monitoring and Enforcement Costs: The \$500.00 deposit and reimbursement agreement (Condition No. 12.b, above) are required to ensure that funds are available for legitimate and anticipated costs incurred for Condition Compliance. All permits issued by the Planning Division may be reviewed and the sites inspected no less than once every three years, unless the terms of the permit require more frequent inspections. These funds shall cover costs for any regular compliance inspections or the resolution of confirmed violations of the conditions of this CUP and/or the Ventura County Non-Coastal Zoning Ordinance that may occur.
- d. *Billing Process:* The Permittee shall pay any written invoices from the Planning Division within 30 days of receipt of the request. Failure to pay the invoice shall be grounds for suspension, modification, or revocation of this CUP. The Permittee shall have the right to challenge any charge prior to payment.

### 13. Defense and Indemnity

- a. The Permittee shall defend, at the Permittee's sole expense with legal counsel acceptable to County, against any and all claims, actions or proceedings against the County, any other public agency with a governing body consisting of the members of the County Board of Supervisors, or any of their respective board members, officials, employees and agents (collectively, "Indemnified Parties") arising out of or in any way related to the County's issuance, administration or enforcement of this CUP. The County shall promptly notify the Permittee of any such claim, action or proceeding and shall cooperate fully in the defense.
- b. The Permittee shall also indemnify and hold harmless the Indemnified Parties from and against any and all losses, damages, awards, fines, expenses, penalties, judgments, settlements or liabilities of whatever nature, including but not limited to court costs and attorney fees (collectively, "Liabilities"), arising out of or in any way related to any claim, action or proceeding subject to subpart (a) above, regardless of how a court apportions any such Liabilities as between the Permittee, the County and/or third parties.
- c. Except with respect to claims, actions, proceedings and Liabilities resulting from an Indemnified Party's sole active negligence or intentional misconduct, the Permittee shall also indemnify, defend (at Permittee's sole expense with legal counsel acceptable to County) and hold harmless the Indemnified Parties from and against any and all claims, actions, proceedings and Liabilities arising out of or in any way related to the construction, maintenance, land use or operations conducted pursuant to this CUP, regardless of how a court apportions any such Liabilities as between the Permittee, the County and/or third parties. The County shall

- promptly notify the Permittee of any such claim, action or proceeding and shall cooperate fully in the defense.
- d. Neither the issuance of this CUP, nor compliance with the conditions hereof, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property; nor shall the issuance of this CUP serve to impose any liability upon the Indemnified Parties for injury or damage to persons or property.

### 14. Invalidation of Condition(s)

If any of the conditions or limitations of this CUP are held to be invalid, that holding shall not invalidate any of the remaining CUP conditions or limitations. In the event the Planning Director determines that any condition contained herein is in conflict with any other condition contained herein, then where principles of law do not provide to the contrary, the conditions most protective of public health and safety and natural environmental resources shall prevail to the extent feasible.

In the event that any condition imposing a fee, exaction, dedication, or other mitigation measure is challenged by the Permittee in an action filed in a court of law, or threatened to be filed therein, this CUP shall be allowed to continue in full force and effect, unless otherwise ruled by a court of competent jurisdiction, until final resolution of such action, provided the Permittee has, in the interim, fully complied with the fee, exaction, dedication, or other mitigation measure being challenged.

If a court of law invalidates any condition, and the invalidation would change the findings and/or the mitigation measures associated with the approval of this CUP, at the discretion of the Planning Director, the Planning Commission may review the project and impose substitute feasible conditions/mitigation measures to adequately address the subject matter of the invalidated condition. The Planning Commission shall make the determination of adequacy. If the Planning Commission cannot identify substitute feasible conditions/mitigation measures to replace the invalidated condition, and cannot identify overriding considerations for the significant impacts that are not mitigated to a level of insignificance as a result of the invalidation of the condition, then this CUP may be revoked.

### 15. Consultant Review of Information and Consultant Work

The County and all other County permitting agencies for this land use have the option of referring any and all special studies that these conditions require to an independent and qualified consultant for review and evaluation of issues beyond the expertise or manpower of County staff.

Prior to the County engaging any independent consultants or contractors pursuant to the conditions of this CUP, the County shall confer in writing with the Permittee

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regarding the necessary work to be contracted, as well as the costs of such work. Whenever feasible, the County will use the lowest-cost, qualified consultant. Any decisions made by County staff in reliance on consultant or contractor work may be appealed pursuant to the appeal procedures contained in the Ventura County Zoning Ordinance Code then in effect.

The Permittee may hire private consultants to conduct work required by the County, but only if the consultant and the consultant's proposed scope-of-work are first reviewed and approved by the County. The County retains the right to hire its own consultants to evaluate any work that the Permittee or a contractor of the Permittee undertakes. In accordance with Condition No. 12 above, if the County hires a consultant to review any work undertaken by the Permittee, or hires a consultant to review the work undertaken by a contractor of the Permittee, the hiring of the consultant will be at the Permittee's expense.

## 16. Relationship of CUP Conditions, Laws and Other Permits

The Permittee shall design, maintain, and operate the CUP area and any facilities thereon in compliance with all applicable requirements and enactments of federal, State, and County law. In the event of conflict between various requirements, the more restrictive requirements shall apply. In the event the Planning Director determines that any CUP condition contained herein is in conflict with any other CUP condition contained herein, when principles of law do not provide to the contrary, the CUP condition most protective of public health and safety and environmental resources shall prevail to the extent feasible.

No condition of this CUP for uses allowed by the Ventura County Ordinance Code shall be interpreted as permitting or requiring any violation of law, lawful rules or regulations, or orders of an authorized governmental agency. Neither the issuance of this CUP, nor compliance with the conditions of this CUP, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property.

A business tax certificate shall be obtained for operation of the mining facility.

#### 17. Contact Person

**Purpose:** To designate a person responsible for responding to complaints.

**Requirement:** The Permittee shall designate a contact person(s) to respond to complaints from third parties and the County which are related to the permitted uses authorized by this CUP. The designated contact person shall be available by telephone during the authorized hours of operation.

**Documentation:** The Permittee shall provide the Planning Director with the contact information (including the name and position/title, address, business and cell phone

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numbers, and email addresses) of the Permittee's field agent who shall be authorized to receive all orders, notices, and communications regarding matters of condition and code compliance at the mining site on a 24-hour per day, seven days per week basis.

**Timing:** Prior to the issuance of a Zoning Clearance for use inauguration, the Permittee shall provide the Planning Division the contact information of the Permittee's field agent(s) for the project file. If the address or phone number of the Permittee's field agent(s) should change, or the responsibility is assigned to another person, the Permittee shall provide the Planning Division with the new information in writing within five (5) business days of the change in the Permittee's field agent.

**Monitoring and Reporting:** The Planning Division maintains the contact information provided by the Permittee in the project file. The Planning Division has the authority to periodically confirm the contact information consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

## 18. Resolution of Complaints

The following process shall be used to resolve complaints related to the project:

- a. The Permittee shall post the telephone number for the designated Contact Person as identified pursuant to Condition No. 17 in a visible location on the site. The Contact Person shall be available via telephone during all operating hours of the facility. Persons with concerns about an activity as it is occurring may directly contact the Contact Person;
- b. If a written complaint about this project is received by the County, Planning staff will contact the Permittee's Contact Person or the Permittee to request information regarding the alleged violation; and,
- c. If, following a complaint investigation by County staff, a violation of Ventura County Code or a condition of this permit is confirmed, County enforcement actions pursuant to §8114-3 of the Non-Coastal Zoning Ordinance may be initiated.

## 19. Reporting of Major Incidents

**Purpose:** To ensure that the Planning Director is notified of major incidents that occur in connection with the permitted uses.

**Requirement:** The Permittee shall immediately notify the Planning Director by telephone, email, FAX, and/or voicemail upon obtaining knowledge of any incidents related to the mining operation, such as fires, explosions, spills, landslides, or slope failures, that could pose a hazard to life or property inside or outside the CUP area.

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**Documentation:** Upon request of any County agency, the Permittee shall provide a written report of any incident that shall include, but is not limited to: a description of the facts of the incident; the corrective measures used, if any; and, the steps taken to prevent a recurrence of the incident.

**Timing:** The Permittee shall provide the written report to the requesting County agency and Planning Division within seven days of the request.

**Monitoring and Reporting:** The Planning Division maintains any documentation provided by the Permittee related to major incidents in the CUP file.

## 20. Change of Owner and/or Permittee

**Purpose:** To ensure that the Planning Division is properly and promptly notified of any change of ownership or change of Permittee affecting the CUP site.

**Requirement:** The Permittee shall file, as an initial notice with the Planning Director, the new name(s), address(es), telephone/FAX number(s), and email addresses of the new owner(s), lessee(s), operator(s) of the permitted uses, and the company officer(s). The Permittee shall provide the Planning Director with a final notice once the transfer of ownership and/or operational control has occurred.

**Documentation:** The initial notice must be submitted with the new Property Owner's and/or Permittee's contact information. The final notice of transfer must include the effective date and time of the transfer and a letter signed by the new Property Owner(s), lessee(s), and/or operator(s) of the permitted uses acknowledging and agreeing to comply with all conditions of this CUP.

**Timing:** The Permittee shall provide written notice to the Planning Director 10 calendar days prior to the change of ownership or change of Permittee. The Permittee shall provide the final notice to the Planning Director within 15 calendar days of the effective date of the transfer.

**Monitoring and Reporting:** The Planning Division maintains notices submitted by the Permittee in the project file and has the authority to periodically confirm the information consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

#### 21. Sign Plan

**Purpose:** To ensure signage on the property is designed and installed in conformance with Chapter 1, Article 10 of the Ventura County Non-Coastal Ordinance, as may be amended.

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**Requirement:** The Permittee shall prepare a sign plan for the entrance(s) to the facility that describes the proposed size, colors, materials, and lighting details. Each sign must provide information on the hours of operation and telephone numbers for the contact person(s) as described in Condition No. 17 above. The Permittee shall bear the total cost of such review and approval.

**Documentation:** The Permittee shall submit two copies of a sign plan for the proposed facility entrance(s) to the Planning Division for review and approval.

**Timing:** The Permittee shall obtain approval of the sign plan and install the subject signs prior to the issuance of a Zoning Clearance for use inauguration.

**Monitoring and Reporting:** The Planning Division maintains a stamped copy of the approved sign plan in the project file. The Permittee shall be responsible for obtaining a Zoning Clearance for any new or replacement sign to assure that the signage for the project continues to conform with the approved sign plan and Chapter 1, Article 10 of the Ventura County Non-Coastal Ordinance. The Planning Division has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of §8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

## 22. Limit on peak-hour truck trips

**Intent:** In order to avoid increased peak-hour traffic congestion on State Route 23 and other roadways, heavy truck traffic shall be limited.

Requirement: The daily number of material hauling truck trips generated by the Rancho San Cristobal mining facility shall be limited in accordance with Condition of Approval No. 1 of this CUP. Material hauling is limited to weekdays (Monday through Friday) only. In addition, material hauling truck traffic shall be limited to a maximum of 38 one-way trips during peak traffic periods (6:00am to 8:00am and 3:00pm to 6:00 pm) on 180 operational days per year. On the remaining 80 operational weekdays in each calendar year, no project-related traffic involving material hauling trucks shall occur during the peak traffic periods. The Permittee shall maintain a record of truck arrivals and departures.

**Documentation:** The Permittee shall maintain a complete record of truck arrivals and departures and make this record available to the Planning Division and other government agencies within 3 working days (Monday through Friday) following a request. The record shall be maintained in paper and electronic form. In addition to retaining all weigh tickets, the trip generation record shall be compiled in an Excel spreadsheet table format that discloses the AM and PM Peak Traffic Period truck trips and total truck trips for each operational day.

**Timing:** The requirement to maintain a record of truck arrivals and departures is an ongoing operational requirement mandated by this CUP and is in effect upon issuance of a Zoning Clearance for Use Inauguration of the continued mining operation.

**Monitoring:** County staff may periodically check of the truck arrival and departure record to evaluate the compliance of the Permittee with the truck traffic limits specified in this condition.

## 23. Traffic Impact Mitigation Fees

**Intent:** In order to collect funds for regional road improvements to address the project's contribution to cumulative increases in traffic volume, the Permittee shall pay traffic mitigation fees.

**Requirement:** The Permittee shall pay the following required Traffic Impact Mitigation Fees (TIMF) pursuant to the terms and conditions of the Traffic Impact Mitigation Fees for Maintenance and Improvement of Regional Road Network and City Streets, County Ordinance No. 4246 (2014) for each average daily vehicle trip (ADT) above the previously permitted level that is authorized by this CUP:

<u>Jurisdiction</u>	Current Fee(s) per New ADT
	County of Ventura
District 3 (Fillmore)	\$12.84
District 4 (Moorpark)	\$17.29
City of Fillmore (City Reciprocal)	\$63.83

The increase in cumulative traffic due to the proposed project is 66 average daily trips (ADT). [300 trips/day x 80 new operational days/365 days/year = 66 ADT] The traffic associated with the 10 onsite employees would increase by an average of 4 ADT. [10 employees x 2 trips/day x 80 days/365 days/year = 4 ADT]

The amount of any fees required and collected must conform to the applicable reciprocal fee agreement approved by the County of Ventura.

These fees apply only to an approved increase in heavy truck ADTs above the previously permitted volume and an increase in passenger car trips by the facility employees. ADTs for employees are calculated as 2.0 ADT per employee per new operational day. The actual fees to be paid shall be based on the TIMF fees, service areas, and procedures for each jurisdiction in effect at the time increased ADTs are authorized. The TIMF fee may be adjusted for inflation at the time of deposit in accordance with the latest version of the Engineering News Record Construction Cost Index.

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**Documentation:** The Permittee shall provide the County Planning Division with letters from the County Public Works Agency and the City of Fillmore that document that the required TIMF has been paid.

**Timing:** Prior to the issuance of the Zoning Clearance for use inauguration, the required fees shall be paid.

**Monitoring:** County Planning Division staff shall review the documentation submitted by the Permittee to determine if Permittee has made full payment of the respective TIMFs.

#### 24. Permit Revocation for Violations

Any activity or operation of the mining facility conducted in violation of the provisions of the NCZO, the terms and conditions of approval of this permit (CUP PL14-0086), the Reclamation Plan, the Surface Mining and Reclamation Act, or Section 3503 of the State Mining and Geology Board regulations shall constitute grounds for immediate revocation of this permit. The determination that a violation has been committed that warrants revocation of the permit shall be made by the Planning Director at his/her sole discretion. A decision made by the Planning Director to revoke this permit is appealable in accordance with Section 8111-7 of the NCZO, as may be amended.

## 25. Enhanced dust control plan (EDCP)

**Intent:** In order to minimize dust generation from onsite excavation and material transport activities, the Permittee shall implement additional dust control measures.

**Requirement:** The Permittee shall prepare an Enhanced Dust Control Plan (EDCP) for the project site. This plan shall include, but not be limited to, the following measures:

- a. Stabilization of previously disturbed areas that have reached the final reclaimed topography specified in the approved Reclamation Plan through periodic application of environmentally-safe dust control agents or hydroseeding. This action is required until permanent vegetation is established in accordance with the approved Reclamation Plan.
- b. Enforcement of a 15 MPH vehicle speed limit on unpaved surfaces.
- c. Fugitive dust resulting from surface mining activities shall be controlled by the application of water throughout the site by a water truck at least three times per operational day (except during and immediately after rainfall). Water shall be applied to all roads, parking areas, material stockpiles, staging/loading areas and recently active excavation sites. Environmentally-safe dust control agents may be used in lieu of water if approved by the VCAPCD.

- d. Use of misting equipment on conveyor belts.
- e. Wind speed monitoring by a stationary anemometer at a location approved by the APCD. Excavation and other dust-producing activities shall cease when wind speeds exceed 25 miles per hour averaged over one hour.
- f. At any point in time that fugitive dust is observed being blown offsite by wind additional watering of disturbed areas shall be initiated. If watering is not sufficient to prevent substantial fugitive dust, dust-generating activities shall cease until the wind velocity lessens such that substantial fugitive dust is not transmitted off the project site.

**Documentation:** The Permittee shall submit the EDCP to the County Planning Division for review and approval in consultation with the VCAPCD.

**Timing:** The EDCP shall be submitted and approved prior to the issuance of the Zoning Clearance for use inauguration.

**Monitoring:** County Planning Division staff, in consultation with the Ventura County Air Pollution Control District (VCAPCD), shall review, and if found adequate, approve the submitted EDCP. Permittee's use of any chemical dust stabilizer must have prior approval of the VCAPCD. County staff and/or VCAPCD staff may periodically review Permittee's implementation of the EDCP through site inspections to assure compliance with the CUP and approved Reclamation Plan. The VCAPCD has primary responsibility to investigate, respond, and resolve any citizen complaints regarding dust from the project site.

## 26. Air Pollution Control District rules and regulations

All facilities shall be constructed and operated in accordance with the Rules and Regulations of the VCAPCD. These rules include, but are not limited to, the following:

- Rule 10 (Permits Required)
- Rule 50 (Opacity)
- Rule 51 (Nuisance)
- Rule 55 (Fugitive Dust) modified as follows: The operation of the mining facility shall not result in visible track-out (dirt, mud or product debris) to extend 25 feet or more in length from the access road onto <u>SR-23</u>. If trackout occurs due to surface mining operations, it shall be removed as soon as possible, but no later than one hour after it is deposited.
- Rule 55.1 (Paved Roads and Public Unpaved Roads)

Where a VCAPCD rule conflicts with a CUP condition, the more restrictive requirement shall apply.

## 27. Reduction of mined material spillage from haul trucks

Rancho San Cristobal Clay Mine Permit Adjustment No. PL18-0083 Conditions of Approval Page 21 of 28

**Intent:** In order to minimize the spillage or inadvertent escape of dust, debris, and mined material from haul trucks, all loads must be hauled in trucks which conform to applicable State law.

**Requirement:** All transport trucks loaded with aggregate materials shall be in compliance with the requirements of California Vehicle Code Section 23114 (as it pertains to material hauling) prior to departure from the mining site. This section of the Vehicle Code requires loads to be covered or other specific measures to be implemented to minimize spillage of mined materials. The Permittee shall install signage to inform all drivers of this requirement at the entrance and exit of the facility.

**Documentation:** The Permittee shall provide to the County Planning Division with photographs demonstrating that the required signs have been properly installed.

**Timing:** The required signage shall be installed prior to the issuance of the Zoning Clearance for Use Inauguration.

**Monitoring:** County Planning Division staff shall review the submitted photographs to assure proper installation of required signage. The maintenance of the required signage shall be monitored by County staff during site inspections and through response to complaints.

#### 28. General Industrial Stormwater Permit

**Intent:** In order to prevent water pollution, the Permittee shall comply with stormwater regulations.

**Requirement:** The Permittee shall maintain the mining facility in compliance with all water quality provisions set forth in NPDES General Permit No. CAS000001 and State Water Resources Control Board Water Quality Order No. 2017-0057-DWQor the most recent version, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Industrial Activities, including the preparation of a Stormwater Pollution Prevention Plan (SWPPP).

**Documentation:** The Permittee shall provide to the Public Works Agency – Watershed Protection District proof of coverage (compliance) in the form of a current Notice of Intent (NOI) and a copy of the required annual report that includes all water quality monitoring data.

**Timing:** The required documentation shall be provided by July 15<sup>th</sup> of each year.

**Monitoring:** Watershed Protection District staff shall review the submitted reports to determine if the Permittee is in compliance with regulations. County Planning Division

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staff may review required reports as part of ongoing checks of compliance with this CUP.

#### 29. Flood Control Facilities

**Intent:** In order to assure that onsite drainage is conveyed in a non-erosive manner and does not contribute to offsite flooding, a detention basin shall be constructed and maintained in accordance with established standards.

**Requirement:** The Permittee shall cause a drainage facility design and maintenance report and associated plans to be prepared by a Civil Engineer licensed to practice in the State of California. The plans must clearly provide design details (length, width, height, depth of water, outlet works, etc.) on a detention basin that are sufficient for construction. The drainage report must conform to the District's hydrology and hydraulics (design) manuals. At a minimum, the Permittee is required to detain all peak flows over the pre-developed Q10 level. The Permittee shall construct and maintain the improvements described in the drainage facility design and maintenance report ultimately approved.

**Documentation:** The Permittee shall submit the required design report and plans to the Planning Division for Watershed Protection District review and approval. The report and/or plans must include a timing schedule for construction. After construction of the drainage improvements, the Permittee shall provide as-built plans to the Watershed Protection District and Planning Division.

**Timing:** The design report and associated plans shall be submitted to, and approved by, the Watershed Protection District prior to the issuance of the Zoning Clearance for Use Inauguration.

**Monitoring**: Staff of the Watershed Protection District shall review the submitted documentation for compliance with regulatory requirements. County Planning Division staff may review the required reports as part of ongoing checks of compliance with this CUP.

Note: The approved July 1996 Hydrology and Drainage Report prepared by Donald Jensen (RCE# 046404) for this facility is included in the amended Reclamation Plan for this facility. A July 15, 2015 update letter prepared by Mr. Jensen is included in this report and addresses the authorized changes in facility design.

## 30. Compliance with the Non-Coastal Zoning Ordinance

All surface mining activities shall occur in conformance with the standards set forth in

Section 8107-9 of the Ventura County Non-Coastal Zoning Ordinance (NCZO), as may be amended. These standards include, but are not limited to, the following:

Standard	NCZO Section
Setbacks	8107-9.6.2
Control of Light Emanation	8108-9.6.6
Civil Penalties	8107-9.6.19
Insurance	8107-9.6.21
Noise	8107-9.6.22
Interim Management Plans	8107-9.7

#### 31. Financial Assurance

**Purpose:** In order to ensure that adequate funds are available to reclaim the mined lands, the Permittee shall post a Financial Assurance.

Requirement: The Permittee (mine operator) shall annually prepare an updated Financial Assurance Cost Estimate (FACE). The FACE shall be prepared based on the Financial Assurance Guidelines prepared by the California Department of Conservation and the requirements set forth in Section 2773.1 of the Surface Mining and Reclamation Act (SMARA). At the time the FACE is submitted to the County Planning Division, the mine operator shall post a Financial Assurance Mechanism (FAM) in the amount specified in the proposed FACE. The FAM may be in the form of surety bond, irrevocable letter of credit, cash deposit or other form of financial assurances found acceptable by the Department of Conservation, State Mining and Geology Board and the Planning Director.

**Documentation:** The Permittee shall submit the updated Financial Assurance Cost Estimate (FACE) to the Planning Division for review and approval, in consultation with the Division of Mine Reclamation.

**Timing:** Within 90 days following the County annual inspection of the mining site, the Permittee shall submit the updated FACE and a FAM that reflects the estimated cost of reclamation specified in the updated FACE. The Permittee shall have a Financial Assurance posted with the County and State that those agencies have deemed adequate to ensure reclamation of the mined lands until the mining facility has closed and all mined lands have been reclaimed.

**Monitoring:** The County will conduct annual inspections of the mining facility and review the submitted FACE for adequacy to ensure the reclamation of the mined lands in their current condition.

#### 32. Exceptions to Permit Conditions

Pursuant to Section 8107-9.6.12 of the Ventura County Non-Coastal Zoning Ordinance,

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the Planning Director may grant temporary exceptions to the noise standards, hours of operation, and the conditions of approval provided that the Planning Director finds that it is necessary because of a declared public emergency or the off-hours scheduling of a public works project where a formal contract to conduct the work in question has been issued.

## 33. Interim Management Plans

As required by Section 2770(h) of SMARA, the operator shall submit an Interim Management Plan to the County of Ventura within 90 days of the mine becoming idle. The term "idle" is defined in Section 2727.1 of SMARA. The time period in which a mine is subject to an Interim Management Plan or considered idle does not alter the expiration date of this permit or the requirements of the Reclamation Plan.

## 34. Copy of Approved Reclamation Plan

A copy of the Reclamation Plan shall be maintained on the mining site at all times. This copy shall be available for review by Federal, State and County inspectors, other agency staff, and the general public.

## 35. Mining Operation Annual Report (MRRC-2)

Pursuant to Public Resources Code Section 2207(a), the Permittee shall submit a Mining Operation Annual Report form (MRRC-2) to the Department of Conservation, Division of Mine Reclamation and to the Ventura County Planning Division. The MRRC-2 form shall be submitted by July 1<sup>st</sup> of each year.

## 36. Aerial Photography

At any time during the life of this permit, the Planning Director may require the Permittee to provide a current aerial photograph or topographic map of the project site.

## 37. Responsibility to Reclaim:

By acceptance of this permit, the Permittee accepts responsibility for reclaiming the mined lands in accordance with the approved Reclamation Plan, the Non-Coastal Zoning Ordinance, the State Mining and Geology Board reclamation regulations, and the Surface Mining and Reclamation Act.

## 38. Proprietary Information

Information considered by the Permittee to be proprietary in nature that is required to be submitted to the County shall be so identified by the Permittee and submitted in

separate form. To the extent allowed by law, this information shall be maintained in a confidential file and not released for public review.

## 39. Restricted Use of Engine Braking

**Intent:** In order to minimize noise generated by material hauling trucks, the use of engine braking shall be restricted to the extent feasible and within transportation safety rules.

**Requirement:** The Permittee shall inform all drivers of project-related heavy trucks to avoid use of engine braking on any road between SR-126 and SR-118 with the following exceptions:

- a. On SR-23 between the northern access road to the Grimes Rock (CUP PL12-0159) mining facility and access road to the Wayne J (CUP PL13-0116) mining facilities.
- b. If the Planning Director approves such braking for specific makes and years of trucks if it is demonstrated to the satisfaction of the Planning Director that such braking does not result in significant noise.
- c. During emergency situations involving the subject vehicle that necessitate the use of engine braking to prevent potential injury to persons or damage to property.

The Permittee shall install signage at the project site that informs truck drivers of this requirement.

**Documentation:** The Permittee shall provide to the County Planning Division photographs that demonstrate that the required signage has been installed.

**Timing:** Prior to the issuance of the Zoning Clearance for Use Inauguration under this permit, the signage shall be installed.

**Monitoring:** County Planning Division compliance staff shall review the submitted documentation regarding signage for compliance with the terms of this mitigation measure, may review compliance during any site inspection, and shall investigate and respond to citizen complaints about the use of engine braking on heavy trucks traveling from the subject mine.

## 40. Hazardous Materials Management

The storage, handling, and disposal of any potentially hazardous material must be in compliance with applicable state regulations.

## 41. State Waste Disposal Regulations

All site conditions and operations must conform to State solid waste laws and regulations.

#### 42. Access Road Gates

**Purpose:** To ensure that adequate fire department access is provided in conformance with current California State Law and Ventura County Fire Protection District Standards.

**Requirement:** The Permittee shall design and install all gates along required fire access roads or driveways consistent with Fire Protection District Standards.

**Documentation:** The Permittee shall submit design plans for any proposed access gates to the VCFPD Fire Prevention Bureau for review and approval.

**Timing**: The Permittee shall obtain approval of the gate design before the installation of any access gates.

## 43. Inspection Authority

**Purpose:** To ensure on going compliance with all applicable codes, ordinances and project conditions.

**Requirement:** The Permittee, by accepting these project conditions of approval, shall acknowledge that the fire code official (i.e. Ventura County Fire Prevention Bureau) is authorized to enter at all reasonable times and examine any building, structure or premises subject to this project approval for the purpose of enforcing the Fire Code and these conditions of approval.

**Documentation:** No documentation required.

**Timing:** The Permittee shall allow on-going inspections by the fire code official (Fire District) for the life of the project.

**Monitoring and Reporting:** A copy of the approved Conditional Use Permit shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau shall ensure ongoing compliance with this condition through on-site inspections.

# 44. Fair Share Contribution to SR 23/SR 126 Intersection Improvements (City of Fillmore)

If a governmental agency(s) completes a final intersection design, secures a licensed engineer's cost estimate for the construction of the proposed intersection improvements, secures all real property rights and project approvals necessary to construct the proposed SR 23/SR 126 intersection improvements, and adopts a fair

share contribution funding mechanism that, together with other documented and secured sources of financing, is sufficient to fully fund construction of the proposed improvements, then the Permittee, together with future projects contributing to traffic impacts at the intersection, shall pay a fee proportional to the Rancho San Cristobal project's fair share of SR-23/SR 126 intersection impacts. The Permittee's fair share contribution shall be determined based upon the limit of 300 maximum daily one-way hauling truck trips arriving to or departing from the facility. It is recognized that some or all of the proposed SR 23/SR126 improvements may not be feasible due to expense, issues with right-of-way acquisition, technical issues, or lack of required approval from all relevant agencies.

Note: Condition of Approval No. 45 (below) added to CUP PL14-0086 with the granting of Permit Adjustment No. PL18-0083.

## 45. Truck Trip Limits through the City of Moorpark

**Purpose:** To ensure the Project truck traffic through the City of Moorpark will not exceed 10 percent of the Project total truck traffic.

**Requirement:** The number of hauling trucks traveling through the City of Moorpark on State Route 23 (SR23) shall be limited to 10 percent of the total truck traffic volume authorized by this conditional use permit and to a total of no more than 7,800 trips in a rolling 12-month period. The table below summarizes these truck traffic limits.

## One-way Truck Trips on SR 23 Through the City of Moorpark

Truck		Days of the Week					
Truck	Trip Category	Monday - Friday		Saturday		Sunday	
Туре		Total	10%	Total	10%	Total	10%
Haul Trucks	Average Daily Trips (ADT)	300	30	0	0	0	0
	Maximum trips in any one day	300	300*	0	0	0	0
	Maximum trips in one 12-month period	7800	ı	-	ı	-	1

\*Santa Clara Valley Agricultural Development Corporation (or successor operator) is authorized for up to 300 maximum truck trips on SR 23 south of the Rancho San Cristobal Mine for a maximum of 25 days per calendar year. This is needed because the facility supplies landfill operations typically in large quantities over short term durations. Unused trips shall not accrue for use in future years. In no case shall the project truck traffic on SR23 through the City of Moorpark exceed 300 one-way trips on any one day.

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**Documentation:** The permittee shall maintain a written or electronic record of the destination of each material hauling truck departing from the mining facility for a rolling 3-year period. These records shall be provided to the County Planning Division or City of Moorpark upon request. The permittee shall notify the City of Moorpark via email prior to exceeding 30 ADT through the City of Moorpark on a given day. The County SMARA administrator shall be copied on the notification.

**Timing:** Prior to the issuance of the Zoning Clearance for Use Inauguration, the Permittee shall initiate the required record-keeping and shall obtain approval from the Planning Division of example documentation to be used for record keeping.

**Monitoring and Reporting:** County staff shall review the truck traffic records as part of periodic inspections of the facility. County staff will also respond to any complaints.



## **Rancho San Cristobal Mine**

## **RECLAMATION PLAN**

California Mine ID # 91-56-0030 Ventura County, California

PL14-0086 (CUP 4913)

APN(s) 500-0-050-460 500-0-050-480 500-0-050-440 500-0-050-490 500-0-050-070

## Submitted by:

Santa Clara Valley Agriculture Development Corporation 133 N. Tenth Street Santa Paula, CA

> July 28, 2015 Updated November 17, 2016

> > SMARA Lead Agency:



County of Ventura • Resources Management Agency • Planning Division 800 S. Victoria Ave., Ventura, CA 93009 • 805/654-2488 • www.ventura.org/rma/planning

County of Ventura
Planning Director Hearing
Case No. PL22-0181
Exhibit 4 - Approved Reclamation Plan

## **Project Contact Information**

## APPLICANT/PROPERTY OWNER:

Santa Clara Valley Ag. Development Corporation Contact: Chuck Teague 1708 Cherry Hill Road Santa Paula, CA 93060 (805)525-2831

#### **MINE OPERATOR:**

Santa Clara Valley Ag. Development Corporation Contact: Chuck Teague 1708 Cherry Hill Road Santa Paula, CA 93060 (805)525-2831

#### **AGENT:**

Sespe Consulting, Inc. Contact: Jane Farkas 374 Poli Street, Suite 200 Ventura, CA 93001 (805) 275-1515

## **REGISTERED GEOLOGIST**:

John C. Rubenacker, CEG JRC Consulting 444 Moondance Street Thousand Oaks, CA (805) 300-4564

## **ON-SITE**

## **REGISTERED GEOLOGIST:**

Jose G. Sanchez, PG, CEG 1804 Avenida De Las Flores Thousand Oaks, CA (805) 312-3404

#### **ENGINEER:**

Donald M. Jensen Jensen Design & Survey, Inc. 1672 Donlon Street Ventura, CA (805) 654-6977

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## **APPENDICES**

- 1. Updated Geologic and Geotechnical Review Report, dated June 9, 2015
- 2. Hydrology and Drainage Report, dated July 1996
- 3. CUP Adjustment Drainage Analysis, dated July 15, 2015
- **4.** 2016-2017 Financial Assurance Cost Estimate

## **FIGURES**

Sheet 1 – Reclamation Plan Final Contours

Sheet 2 – Reclamation Plan Map Aerial Photograph

Sheets 3 & 4 – Reclamation Plan Cross Sections

## 1.0 SITE AND AREA CHARACTERISTICS

Site Information			
General Plan Designation	A-E (agricultural exclusive).		
Zoning District, Ordinance	AE (agricultural exclusive).		
Site Size	Project Site: 79.2 acres		
	Mine: 51.3 acres		
	Access Road: Aprox. 8 acres		
Comment Head 0	(APN 500-0-050-460, -480, -440, -490, -090, -070).		
Current Use & Development	Existing Mining Operation		
Surrounding Land Use	North: Ranch land with oil facilities (O-S-160)		
	South: Ranch land (A-E)		
	East: Ranch land (O-S-160)		
A	West: Agriculture (O-S-160)		
Access	Direct access to the project site is from State Highway 23 (Grimes Canyon Road), both from the north and the south.		
Public Services/Utilities	<ul> <li>Canyon Road), both from the north and the south.</li> <li>The project does not include any structures that contain domestic plumbing fixtures. Therefore, a domestic water supply is not required.</li> <li>There will be no change in water use.</li> <li>The Fire Protection District has advised there is adequate fire flow to meet or exceed District requirements for this type of project.</li> <li>The project does not include any structures that contain domestic plumbing fixtures. Therefore, an individual sewage disposal system (i.e., septic tank) is not required.</li> <li>The project will not require on-site disposal of domestic sewage; nor will it impact sewage collection / treatment facilities.</li> <li>The project is not expected to generate a significant amount of solid waste.</li> <li>Electrical service is already provided to the site by the Southern California Edison Co. No additional increase in existing lines will be necessary nor will any overhead facilities need to be relocated.</li> <li>The project will not use natural gas. There will be no natural gas facilities.</li> <li>Employees will continue to utilize cellular phones and there would be no need to install fixed cable telephones to the project site.</li> </ul>		

#### 1.1 EXISTING LAND USE

The property is currently zoned A-E (agricultural exclusive). The parcel to the north is zoned O-S-160 (open space). The current use is a County approved Conditional Use Permit (CUP 4913) and a reclamation plan. The approvals were granted in 1998 to perform additional remedial grading in conjunction with ongoing clay mining and overburden export activities.

The property is underlain by a large-scale, composite, ancient landslide (7,000 to 20,000 years old) that extends beyond the property limits. In 1988 (and again in 1994) an approximately 45-acre portion of the ancient landslide was reactivated. Damage attributed to the landslide of 1988 included the deflection of Grimes Canyon wash, obstruction of Grimes Canyon Road (Highway 23) resulting in the permanent relocation of the road by approximately 200 to 250 feet to the west by CalTrans, damage to existing oil well sites, and extensive damage to the previously existing avocado orchard (cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15).

Santa Clara Valley Agricultural Development Corporation (SCVADC) was granted a Maintenance Order Grading Permit by the County of Ventura in 1994 to perform remedial grading near the toe of the reactivated landslide. Subsequently, SCVADC applied for and was granted a CUP 4913 in 1998 to perform additional remedial grading in conjunction with ongoing clay mining and overburden export activities.

The existing operation continues to improve the factor of safety by removing the driving force of the landslide which will allow the land to be returned to agricultural usage (cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15). The nearest residence is a single-family dwelling that is on the opposite side of State Highway 23 (Grimes Canyon Road) and is approximately 1,250 feet from the mining area.

#### 1.2 VISIBILITY

The project site is located adjacent to State Route 23 (Grimes Canyon Road), which is eligible for designation as a County scenic highway. The entrance to the site is visible from the highway but the majority of the site is obscured from view by the natural drainage of Grimes Canyon wash, a vegetated slope, and the natural terrain. The end use for the reclaimed land is twofold: "open space" on those portions of the site that will not be able to be made level enough to support agriculture, and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control.

The aesthetics of the project site have been and will continue to be improved by the removal of the landslide material, dead trees, and twisted irrigation and the planting of native cover and/or grazing grasses.

#### 1.3 SITE LOCATION AND ACCESS

The project site is located within the unincorporated area of Ventura County on Grimes Canyon Road (State Highway 23) approximately 2 miles south of the City of Fillmore. Please see the Location Map insert on Sheet 2 – Reclamation Plan Aerial Map. The project is described as part of Section 7, Township 3N, Range, 19 W.

The project area lies on portions of six assessor parcels:

Assessor's Parcel	Assessor's Acreage
Number	
500-0-050-460	120.8 acres
500-0-050-480	0.8 acres
500-0-050-440	4.3 acres
500-0-050-490	0.8 acres
500-0-050-090	40.0 acres
500-0-050-070	120.0 acres

The reclamation and mine disturbance area within the permit boundary is 51.3 acres and is limited to the "Slope" and "Valley" areas. Additional project areas located within the CUP boundary comprise of access roads, desilting basins and test plot areas. Please see Sheet 1 – Reclamation Plan Map Final Contours (attached).

#### **REGIONAL GEOLOGY**

Regional Geology: The site is situated in the northeast portion of the Ventura Basin which is part of the Traverse Ranges geomorphic province which is characterized by east-west trending structural features. The Ventura Basin in an east-west structurally controlled sedimentary basin that is bordered by the Oak Ridge and the San Cayetano faults, on the north and south. The Oak Ridge fault is an active south-dipping reverse fault, the trace of which is located approximately 1 mile to the north of the site along the southern side of the Santa Clara floodplain. The San Cayetano fault is a north-dipping reverse fault that is located about 3 miles north of the site. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

#### SITE GEOLOGY

The principal geologic feature of the property is the active landslide (approximately 45 acres). A portion of an ancient landslide reactivated in 1988 (and again in 1994 as a result of the Northridge earthquake) caused extensive damage to various improvements on the subject property and off-site improvements to the west. It is generally believed that the reactivation of the landslide was caused by a combination of the following: a) unlined water storage basins; b) above average precipitation; and c) irrigation of the avocado orchard that was formally present at the site.

The bedrock material immediately beneath the ancient landslide is primarily described as sandstone assigned to the Sespe Formation as well as sandstone of the Topanga Formation. Bedding of the undisturbed bedrock, where exposed, has been found to dip to the southeast at 30 to 40 degrees, which is consistent with the geologic information shown on information contained on previously published geologic maps. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The approximate limits of the ancient and recent landslides are shown on the Geologic Map included in the JRC Consulting, Updated Geologic and Geotechnical Review Report, dated June 9, 2015 (Appendix 1).

#### 1.4 HYDROLOGY

#### (a) Surface Water

A Hydrology and Drainage Report dated July 1996 was prepared by Jensen Design & Survey for the project during the initial permitting (Appendix 2). The report found that there will be no increase in runoff due to the project. Existing drainage patterns are now confined to the steep canyon valleys of the watershed that flow more or less directly to their concentration points near Grimes Canyon Road. The project will continue to utilize a variety of agricultural access roads, bench drains, culverts, and "V" ditches, which create a very circuitous drainage route, thereby lengthening the runoff pattern and corresponding time of concentration, which results in lower runoff quantities. (*Cite: Jensen Design, Hydrology & Drainage Report, July 1996*)

Run-off from the site would continue to be collected in sediment retention basins to ensure there is no significant degradation of surface water hydrology or quality. Runoff from the site ultimately flows to the Grimes Canyon wash. The Grimes Canyon wash flows south to north and is located at or near the western limit of the landslide. The Wash is periodically cleared of slough material so that seasonal runoff is not obstructed.

Jensen Design & Survey prepared a Proposed CUP Adjustment Drainage Analysis, dated July 15, 2015 to discuss the hydrologic drainage pattern differences between the reclaimed surface topography and of the currently permitted final reclaimed surface, and the proposed final reclaimed surface (Appendix 3). The analysis found that the general drainage pattern remains unchanged; however, drainage velocities are expected to be considerably less with the proposed flatter reclaimed floor. The limits of the overall drainage area are unchanged. (*Cite: Jensen Design, Drainage Analysis, 7/15/15*)

#### (b) Groundwater

The Jensen Design Hydrology and Drainage Report also evaluated groundwater at the project site and found that existing drainage flows through steep canyon valleys into the Grimes Canyon drainage which flows northwest along Grimes Canyon Road into the Santa Clara River. There will be no increase in runoff due to the project.

Perched ground water was encountered in three of the four drill holes excavated for the study. The depth to ground water ranged from 6 to 78 feet. Perched water was initially encountered at a depth of 22 feet in drill hole DH-3 on June 14, 1994. SCVADC reported that the water level rose to a depth of about 6 feet prior to backfilling on June 15, 1994.

The depth to the regional ground water table is likely to be several hundred feet below the site. County of Ventura water well records indicate that the water level in the Santa Clara River valley in the vicinity of Fillmore ranges from about 10 to 40 feet below the ground surface (elevation of about +400 feet) depending on the season, amount of rainfall, etc. (Ventura County, 1986). (Cite: Jensen Design, Hydrology & Drainage Report, July 1996)

#### 1.5 SOILS

Soils on the property are weathered landslide material consisting of mixtures of silt, sand and clay. They are disturbed and broken up due to the movement of the landslide across the property. Distinct soil horizons are not common. Based on boring logs by both Fugro West (Geotechnical Study, Active Landslide in Grimes Canyon, March 1995) and Buena Engineers (Soil Mechanics Investigation, Grimes Canyon Road, October 1980), no distinct mappable soil horizons were encountered. (Cite: Final EIR, March 1998)

#### 1.6 VEGETATION

A biological study was prepared for the County of Ventura Planning Department by Fugro West, Inc. during the initial CUP permitting. In this document, the project mining area is described as an old orchard with mostly dead avocado trees and coyote brush colonizing the disturbed slopes. Native plants on the undisturbed slopes include giant wild rye, purple sage and California sagebrush.

The report states that based on the California Natural Diversity Data Base, sensitive species have not been reported within three miles of the mining area. The project is not expected to adversely impact rare, threatened or endangered species. Only one coast live oak is located within the permit area, is outside the mining area and would be preserved. Per the State of California, Department of Conservation (DOC) request, orange fencing has been placed around this tree at the dripline and all equipment was removed from the area inside the fence.

The Department of Conservation (DOC) Office of Mine Reclamation requested that the eucalyptus tree row above the landslide be retained for raptor nesting habitat. This tree row is not within the grading area and has never been considered for removal. (Cite: Reclamation Plan, November 1997)

#### 1.7 WILDLIFE

Initial Study Biological Resources Assessment (ISBA) was prepared for the Ventura Country Resource Management Agency by Fugro West, Inc. during the initial CUP permitting. The ISBA stated that based on the California Natural Diversity Data Base, sensitive species have not been

reported within three miles of the proposed grading area. The project is not expected to adversely impact rare, threatened or endangered species. Local wildlife movement may occur along the Grimes Canyon drainage. The project is not expected to further degrade this potential wildlife movement corridor. (Cite: Reclamation Plan, November 1997)

#### 1.8 GENERAL PROJECT DESCRIPTION

The ultimate goal of this project is to improve the current global stability of the area within the CUP boundary. The project is to continue the existing permitted operations approved under Conditional Use Permit (CUP) 4913 with the following modifications: extending the permit by an additional 30 years, lower the final grade within the CUP in the central portion of the landslide by 25 to 75 feet, increase maximum daily truck trips from 300 (150 loads) to 372 trips (186 loads) per day (removing approximately 4,650 tons of material per day), increase days of operation from 180 days per year to 312 days per year, and revise the reclamation end use from an orchard of Sapphire Dragon Trees to range land for cattle and equine grazing. SCVADC is requesting approval to continue mine operations 6 days a week, Monday through Saturday from 6:00 a.m. to sunset.

SCVADC is requesting to extend the life of the permit for an additional 30 years. CUP 4913, Condition of Approval, Modification 2 discusses the expiration date.

2.b.1: The expiration date for CUP 4913 is June 11, 2014. One additional ten year time extension (June 11, 2024) may be approved by the Planning Director subject to compliance with the applicable regulations, standards, and policies in effect at the time a minor modification for time extension is filed; The Planning Director shall make a written finding that the use remains compatible with surrounding uses and properties, truck trips generated by this use have not and will not impact existing or future vehicle trips within Grimes Canyon Road or any portion of State Route 23 from SR 118 (Moorpark) to SR 126 (Fillmore).

The proposed Reclamation Plan states that 3,905,500 cubic yards or approximately 5.9 million tons of material is available. SCVADC is permitted to remove 675,000 tons yearly, but has only excavated an average of 101,764 tons per year since 1995 due to the intermittent excavation schedule. We have assumed that average production will double to around 200,000 tons per year and calculate the life of the reserve to be 30 years. For this reason, SCVADC is requesting a 30-year time extension.

The updated mine plan calls for deeper removal depths as well as a uniform 2:1 (h:v) slope gradient for the planned finished slopes. The deeper bottom depth and the steeper finish slopes will significantly increase the available excavation areas of the mine while allowing the beneficial unloading of the mid-portion of the landslide mass. Please refer to Sheet 1 – Reclamation Plan Final Contours (attached). The access road system shown in the original reclamation plan has been eliminated and no terrace drain system is planned. As a result, the

maximum proposed 2:1 (h:v) cut slope is approximately 295 feet. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

No processing of the excavated material will occur onsite except some segregation of stockpiles. Excavation activities will continue to be concentrated in the summer dry season.

Access to the site is directly from State Highway 23 (Grimes Canyon Road). Trucks would continue to enter the site empty, load, and exit with 80% traveling north on State Highway 23 toward the City of Fillmore and 20% traveling south on State Highway 23 toward the City of Moorpark. To insure no impact to the City of Moorpark, no peak hour truck traffic will travel on the southerly portion of Highway 23.

The proposed end use for the reclaimed land is two-fold: "open space on those portions of the site which will not be able to support agriculture and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control.

#### 2.0 OPERATIONS PLAN (MINING PLAN)

Section 2772(c) of SMARA requires that all of the following information be included in the Reclamation Plan.

#### 2.1 MINERAL COMMODITY

The material to be excavated is silt, clay, sand, and bedrock blocks.

#### 2.2 MINING OPERATION AND PHASING

This project is a grading operation for the purpose of stabilizing the active landslide and restoring agricultural usage to the property. Material to be excavated is clay material from the active landslide. The material is a mixture of silt, clay, sand and bedrock blocks. Grading will be by normal methods utilizing bulldozers to push the excavated materials from the hillside and excavators and/or loaders to put the material into trucks. The excavation area for this project is generally sloping, open space property that is within an active landslide. The landslide surface contains fissures, vertical escarpments, and ground movements. The grading activities proposed do not create slopes steeper than 2:1 and have large level areas that should be stable even if the larger landmass continues to move. (Cite: Reclamation Plan, November 1997)

SCVADC proposes to continue excavating the middle portion of the landslide mass, thereby improving slope stability. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*). Grading will continue to be by normal methods utilizing a bulldozer to push the excavated materials from the hillside and an excavator and/or loader to put the material into trucks. In undisturbed areas, the surface layer will be removed with a bulldozer. This material will be placed in the stockpile Areas located near the bottom of the slide mass. Export

material is pushed from the slope area to the staging area where it is stockpiled and/or loaded onto trucks for transportation from the site. No phasing is proposed.

#### 2.3 END USE

The end use for the reclaimed land is two-fold: "open space" on those portions of the site which will not be able to support agriculture and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control. The proposed end use is consistent with the General Plan Designation A-E (agricultural exclusive).

#### 2.4 PROJECT LIFE

Mining operations began in January 1994 under a nine-month grading permit under emergency status. CUP 4913 was approved in 1998 for eight (8) years and modified in 2008 for an extension until 2014. This CUP modification is requesting an additional 30-year permit life.

#### 2.5 PROJECT SIZE

The reclamation area within the 80 acre permit boundary is 51.3 acres.

#### 2.6 EXCAVATIONS

The project proposes to excavate approximately 3.9 million cubic yards (5.9 million tons) of landslide material. The updated mine plan calls for deeper removal depths as well as a uniform 2:1 (h:v) slope gradient for the planned finished slopes. The deeper bottom depth and the steeper finish slopes will significantly increase the available excavation areas of the mine while allowing the beneficial unloading of the mid-portion of the landslide mass. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*). The access road system shown in the original reclamation plan has been eliminated and no terrace drain system is planned. As a result, the maximum proposed 2:1 (h:v) cut slope is approximately 295 feet.

JRC Consulting prepared an Updated Geotechnical Review Report for the Revised Reclamation Plan (Appendix 1). The report states that based on the analysis, the proposed remedial grading will result in a final reclamation plan surface condition that has a significantly greater factor of safety than that of the previously approved reclamation plan.

#### 2.7 ANTICIPATED PRODUCTION COMMODITY

The project proposes to excavate approximately 3.9 million cubic yards (5.9 million tons) of landslide material.

A complete table of total material produced can be found in Section 3.2.1 of this report.

#### 2.8 PLANNED ORE PROCESSING METHODS (on-site)

There is no planned ore processing on site.

#### 2.9 PRODUCTION WATER DATA

Water for the mining operation is used for dust control. This water will continue to be applied by water trucks and supplied by an existing well. Estimated maximum water usage for dust control is 50 acre feet per year (AFY). The historical usage figure for the above well is 316 AFY, 31% of which is 98 AFY applies to this property. Therefore, projected water usage is well below historical quantities and demand can be met by existing water supplies without impact to the Fillmore Groundwater Basin.

#### 2.10 MINE WASTES

There is no mine waste associated with this project.

#### 2.11 IMPORTED WASTES

There are no imported materials associated with this project.

#### 2.12 AVAILABILITY OF BACKFILL MATERIAL

The topsoil will be retained and used as fill material within the project area if needed.

#### 2.13 EROSION AND SEDIMENTATION CONTROL

Site drainage is generally to the west-northwest and is topographically controlled. On-going landslide related deformation has resulted in localized areas of hummocky terrain. Periodic grading of hummocky areas improves the drainage characteristics; however, due to constant movement of the more active portions of the landslide, any improvement in these areas is short lived. In other areas where access is limited or not possible, correctional grading is not currently performed. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The desilting basins are maintained by the operator prior to and during the rainy season. These basins follow the guidelines for desilting facilities per the County of Ventura Public Works Agency. The continued use of the desilting basins during the project is a primary means of removing sedimentation before discharging storm water from the site. (*Cite: Reclamation Plan, November 1997*)

At project completion, the desilting basins will be notched and any existing pipes will be removed. No undrained depressions will be left on site. If other drainage features are required, they will be installed as the project progresses and as the roads are built. If installation is necessary, the installation timing will be directed by a registered Professional Engineer.

The erosion control methods were designed to handle runoff from a 50 year storm event which exceeds the SMARA performance standards as specified in Article 9, Section 3706d. (Cite: Reclamation Plan, November 1997)

#### 2.14 BLASTING

There is no blasting associated with this project. There is no storage or detonation of explosives on site.

#### 2.15 TRUCK TRAFFIC

Previously approved excavation, trucking, and reclamation activities were limited to Monday through Friday, with up to a maximum of 180 operational days per year. These activities were permitted from 6:00 a.m. to sunset and daily truck traffic was limited to a maximum of 300 one-way trips (150 trucks arriving empty and 150 trucks leaving with material).

SCVADC is proposing to increase the number of maximum daily truck trips from 300 to 372 one-way trips per day (186 trucks arriving empty and 186 leaving with material). SCVADC is also requesting to increase the maximum days of operation per year from 180 days to 312 days. SCVADC will utilize the additional trips during the off-peak hour periods. No additional trips will occur between the hours of 6:00 am - 9:00 am and 4:00 pm - 6:00 pm.

Due to the intermittent excavation schedule, it is difficult to project when the additional truck trips will become necessary. The demand for excavation may not occur for a period of time and then there may be demand for large amounts of material. For this reason, SCVADC is requesting the increase in the number of truck trips to accommodate the demand for material when it is necessary.

Please note that an Air Quality Study, dated June 9, 2014 was prepared by Sespe Consulting to quantify project related criteria pollutant, greenhouse gas (GHG) and comparison of emissions to the Ventura County Air Pollution Control District (VCAPCD) thresholds of significance (*Ventura County Air Quality Assessment Guidelines, October 2003*). The Air Quality Study was prepared for this project to quantify and determine the significance of air quality and climate change impacts associated with the proposed time extension and the increase of truck trips and days of operation. The emissions calculated were found to be below the significance threshold. Therefore, SCVADC requested that the County approve a 30-year extension and a minor increase in truck trips and days of operation while continuing to operate below the County thresholds and have less than significant impacts.

#### 2.16 SETBACKS

No processing equipment or facilities shall be permanently located, and no mining or accessory uses shall occur, within the horizontal setbacks specified below: (AM. ORD. 4092 - 6/27/95)

- a. 100 feet of any dedicated public street or highway unless the Public Works Agency determines a lesser distance would be acceptable.
- b. 100 feet of any dwelling not accessory to the project, unless a waiver is signed pursuant to Sec. 8107-9.6.13 allowing the setback to be reduced. In no case shall permanent processing facilities, equipment, or mining be located less than 50 feet from said structures.

Other facilities and structures shall be set back distances which are applicable for accessory structures for the zone in which the use is located.

The project does not have any permanent facilities and complies with the required Ventura County and SMARA setback requirements.

#### 2.17 CONTAMINANT CONTROL

No contaminants are known to be present or are to be introduced during the operation. Water run-off is discussed in Section 1.5 of this report. Siltation is discussed in Section 2.13 of this report.

#### 2.18 DUST PREVENTION

To prevent the emanation of dust on the Project site all hauling routes and mining areas will have water applied by water trucks at all times that excavation and loading activities are occurring. This water will be supplied by an existing onsite well.

#### 2.19 LIGHT EMANATION

Light emanation shall be controlled so as not to produce excessive levels of glare or abnormal light levels directed at any neighboring uses. The operation does not propose to utilize nightime lighting.

#### 2.20 BUILDING COLOR SCHEME

Section 8107-9.6.7 (Painting) of the County Non-Costal Zoning Ordinance applies to all permanent facilities and structures. No permanent facilities or structures will be erected as part of this Project.

#### 2.21 SITE MAINTENANCE

The permit area shall be maintained in a neat and orderly manner so as not to create unsightly conditions visible from outside the permitted area or any hazardous conditions. Equipment and materials may be stored on the site which are appurtenant to the operation and maintenance of mining operations. The site will continue to be maintained in a neat and orderly fashion, any trash produced onsite will be collected by E.J. Harrison.

#### **2.22 NOISE**

A noise analysis was submitted along with the application materials of the original CUP. The analysis determined that the noise associated with mining and trucking activities is expected to be less than significant, largely due to the scheduled working hours (6:00 a.m. to 5:00 p.m.) and the fact that there are no sensitive receptors in the immediate vicinity of the project. No significant impacts are expected since SCVADC is not proposing any changes regarding equipment and onsite operations.

#### 3.0 CONSISTENCY WITH THE RECLAMATION STANDARDS OF SMARA

The following section describes the conformance of the proposed Reclamation Plan with the requirements of Section 8107-9 of the County Non-Costal Zoning Ordinance and the California Surface Mining and Reclamation Act (PRC Section 2710 et. seq.).

## 3.1 NON-COSTAL ZONING ORDINANCE §8107-9.6.9

The following section describes the conformance of the proposed Reclamation Plan with the requirements of Section 8107-9 of the County Non-Costal Zoning Ordinance and the California Surface Mining and Reclamation Act (PRC Section 2710 et. seq.).

All reclamation plans must be found to be consistent with and approved in accordance with: the provisions of SMARA (Public Resource Code Section 2710 et seq.), PRC Section 2207, and State regulation Title 14 of the California Code of Regulations (CCR) Sections 3500 et seq., as amended; the regulations, guidelines and other measures adopted by the State Mining and Geology Board; Ventura County Public Works Agency standards; any and all locally adopted resource management goals and policies; and compatible with the existing geological and topographical features of the area.

The plans shall provide in designated phases for the progressive rehabilitation of the mining site land form so that, when reclamation is complete, it will contain stable slopes, be readily adaptable for alternate land uses, and be free of derelict machinery, waste materials and scrap to the satisfaction of the designated County official. The proposed mining site land form, to the extent reasonable and practical, shall be revegetated for soil stabilization, free of drainage problems, coordinated with present and anticipated future land use, and compatible with the topography and general environment of surrounding property.

Conformance of this proposed Reclamation Plan with each of the above-listed standards is described below:

#### (a) Progressive rehabilitation of the mining site land form

There is no phasing proposed as part of this mining operation.

## (b) Stable slopes

The updated Reclamation Plan lowers the final grade within the central portion of the landslide by approximately 25 to 75 feet. The maximum final 2:1 (h:v) cut slope height is approximately 295 feet. The remedial grading will result in a final reclamation plan surface condition that has a greater factor of safety than that of the previously approved reclamation plan. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The final graded surface will be checked by a Registered Professional Engineer who will submit a report to the County of Ventura Planning Department assuring that the final graded contours are consistent with the Reclamation Plan.

No intermediate slopes are proposed.

## (c) Site readily adaptable for alternate land use

The end use for the reclaimed land is two-fold: "open space on those portions of the site which will not be able to support agriculture and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control.

The end use is consistent with the General Plan Designation A-E (agricultural exclusive).

#### (d) Free of derelict machinery, waste materials and scrap

At the termination of mining, all equipment (excavators and loaders) will be removed from the site. Roads and drainage features other than the desilting basins will remain for use in the agricultural operation and access to the property.

#### (e) Revegetation for soil stabilization

The areas of the site which are stabilized by this grading effort will be planted with grasses for cattle and equine grazing as Option 1- Agricultural Revegetation Plan. The areas of the site which are not stabilized will be planted with native cover according to Option 2 - Native Revegetation Plan. The decision to reclaim areas of the site to agricultural or native open space will be made SCVADC in conjunction with the Ventura County Planning Department, based on geotechnical studies performed by a competent, local geotechnical firm as each area reaches final grade.

#### **OPTION 1: AGRICULTURAL REVEGETATION PLAN**

The Agricultural Revegetation Plan will be utilized in any portion of the site which is disturbed and deemed stable enough to be reclaimed to agriculture. This includes disturbed acreage within the excavation area, access road areas outside the roads and desilting basins. This revegetation plan calls for the planting of grasses for forage production and erosion control.

#### Planting Plan:

The planned agricultural usage is dry land range grazing. The seed mix was chosen because it addresses erosion control and forage production at the same time. It contains three grasses and two legumes. While none of these species are native, most are naturalized in our area and are drought tolerant.

#### **Proposed Seed Mix**

<b>Botanical Name</b>	Common Name	
Avena sativa	California Oats	
Bromus hordeaceus	Blando Brome	
Trifolium incarnatum	Crimson Clover	
Vicia dasycarpa "Lana"	Lana Vetch	
Vulpia myuros var. hirsuta	Zorro Annual Fescue	

#### Topsoil:

No special top soil is required for the planting of the dry land grazing lands as the seed mix grows well in marginal soils. Because the existing soil layer is very disturbed and broken up, no soil stockpiles will be created. However, as no topsoil will be removed from the site, soil left behind from the excavation process will be re-distributed across the planting areas.

## **Planting Method**:

The planting method will be in compliance with the Natural Resources Conservation Service Conservation Practice Standard for Range Planting, Code 550.

The disturbed areas will be graded to the specifications of the Reclamation Plan. The preparation of the seedbed will include disking and incorporation of available topsoil (left behind from the grading operation) into the seedbed. Areas to be planted will be hydroseeded or hand broadcast onto the prepared areas and will be applied at 30-50 lbs./acre depending on test plot results. The critical area planting will take place in the late fall to take advantage of the winter rains for irrigation.

#### Irrigation/Fertilizer:

No irrigation or fertilizer is proposed.

#### **OPTION 2: NATIVE REVEGETATION PLAN**

The Native Revegetation Plan will be utilized in any portion of the site which is not stable enough to be reclaimed to agriculture. This plan calls for the planting of fescue and native seed for the purposes of erosion control and to reclaim the unstable landslide surface to open space (coastal sage scrub). This option is the one sure method of reclamation as Option 1 (described above) requires a slope stability qualification. Therefore, the financial assurance calculations will be based on the Option 2 revegetation plan.

#### <u>Planting Plan</u>:

Critical Area planting will take place for erosion control with eventual colonization by native species on all disturbed slopes at or steeper than 2:1 (see Sheet 1 – Reclamation

Plan Final Contours). These slopes will be planted with a mixture of a native seed mix and "Zorro" annual fescue (at 8 lbs./acre), a cover crop designed to quickly stabilize slopes and to naturally recede as native species take over the habitat.

The disturbed areas will be graded to the specifications of the Reclamation Plan. The preparation of the seedbed will include disking and incorporation of available topsoil (left behind from the grading operation) into the seedbed. Seed will be hand broadcast onto the prepared areas. The critical area planting will take place in the late fall to take advantage of the winter rains for irrigation.

## **Proposed Seed Mix**

Botanical Name	Common Name
Artemesia californica	California sagebrush
Salvia mellifera	Black sage
Salvia leucophylla	Purple sage
Encelia californica	California brittlebush
Mimulus aurantiacus	Sticky monkey-flower
Lotus scoparius	Deer weed
Eriogonum fasciculatum	California buckwheat
Malosma laurina	Laurel sumac
Vulpia microstachys	Small fescue
Eriophyllum confertiflorum	Golden yarrow
Baccharis pilularis	Coyote brush

#### Topsoil:

The native seed mix should not require special topsoil as these species are currently thriving on the undisturbed areas of the property. The planting areas will be disced to help with seed germination.

#### Irrigation/Fertilizer:

No irrigation or fertilizer is proposed.

#### (f) Free of drainage problems

Site drainage is generally to the west-northwest and is topographically controlled. On-going landslide related deformation has resulted in localized areas of hummocky terrain. Periodic grading of hummocky areas improves the drainage characteristics; however, due to constant movement of the more active portions of the landslide, any improvement in these areas is short lived. In other areas where access is limited or not possible, correctional grading is not currently performed. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The desilting basins are maintained by the operator prior to and during the rainy season. These basins follow the guidelines for desilting facilities per the County of Ventura Public Works Agency. The continued use of the desilting basins during the project is a primary means of removing sedimentation before discharging storm water from the site. (*Cite: Reclamation Plan, November 1997*)

At project completion, the desilting basins will be notched and any existing pipes will be removed. No undrained depressions will be left on site. If other drainage features are required, they will be installed as the project progresses and as the roads are built. If installation is necessary, the installation timing will be directed by a registered Professional Engineer.

The erosion control methods were designed to handle runoff from a 50-year storm event which exceeds the SMARA performance standards as specified in Article 9, Section 3706d. (Cite: Reclamation Plan, November 1997)

(g) Compatible with the topography and general environment of surrounding property The end use for the reclaimed land is twofold: "open space" on those portions of the site that will not be able to be made level enough to support agriculture, and "agriculture" on the remaining areas, where grasses will be planted for cattle and equine grazing, which will also provide for erosion control.

The aesthetics of the site have been and will continue to be improved by the removal of the landslide material, dead trees, and twisted irrigation and the planting of native cover and/or the grazing land.

#### 3.2 CONSISTENCY WITH SMARA RECLAMATION STANDARDS

#### 3.2.1 Past Reclamation Activities

Besides the removal of the landslide materials which in itself improves site conditions, no reclamation activities have taken place to date at the site.

The table blow shows the historical production data for the Rancho San Cristobal Mine. Material Production (Source: SCVADC Self Reporting)

YEAR	TOTAL MATERIAL	
ILAN	PRODUCED (TONS)	
1995	415,000	
1996	321,000	
1997	217,000	
1998	46,000	
1999	6,500	
2000	44,250	
2001	35,800	
2002	37,600	
2003	25,500	
2004	105,000	
2005	84,000	
2006	21,000	
2007	23,000	
2008	30,000	
2009	15,000	
2010	0	
2011	195,390	
2012	209,138	
2013	104,479	
2014	408,400	

## 3.3 STATE MINING AND GEOLOGY BOARD (SMGB) – Sections 3502 et seg.

#### (a) Environmental Setting [SMGB §3502 (b)(1))]

The property is underlain by a large-scale, composite, ancient landslide (7,000 to 20,000 years old) that extends beyond the property limits. In 1988 (and again in 1994) an approximately 45 acre portion of the ancient landslide was reactivated. Damage attributed to the landslide of 1988 included the deflection of Grimes Canyon wash, obstruction of Grimes Canyon Road (Highway 23) resulting in the permanent relocation of the road by approximately 200 to 250 feet to the west by CalTrans, damage to existing oil well sites, and extensive damage to the previously existing avocado orchard. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

SCVADC was granted a Maintenance Order Grading Permit by the County of Ventura in 1994 to perform remedial grading near the toe of the reactivated landslide. Subsequently, SCVADC applied for and was granted a conditional use permit in 1998 to perform additional remedial grading in conjunction with ongoing clay mining and overburden export activities.

The existing operation continues to improve the factor of safety by removing the driving force of the landslide which will allow the land to be returned to agricultural usage. The nearest residence is a single-family dwelling that is on the opposite side of State Highway 23 (Grimes Canyon Road) and is approximately 1,250 feet from the mining area. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The principal geologic feature of the property is the active landslide (approximately 45 acres). A portion of an ancient landslide reactivated in 1988 (and again in 1994 as a result of the Northridge earthquake) caused extensive damage to various improvements on the subject property and off-site improvements to the west. It is generally believed that the reactivation of the landslide was caused by a combination of the following: a) unlined water storage basins; b) above average precipitation; and c) irrigation of the avocado orchard that was formally present at the site. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

The bedrock material immediately beneath the ancient landslide is primarily described as sandstone assigned to the Sespe Formation as well as sandstone of the Topanga Formation. Bedding of the undisturbed bedrock, where exposed, has been found to dip to the southeast at 30 to 40 degrees, which is consistent with the geologic information shown on information contained on previously published geologic maps. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

The approximate limits of the ancient and recent landslides are shown on the Geologic Map included in the JRC Consulting, Updated Geologic and Geotechnical Review Report, dated June 9, 2015 (Appendix 1).

#### (b) Public Health and Safety [SMGB §3502 (b)(2)]

Public access to the site is currently restricted by a four strand, barbed-wire fence with two locked gates along Grimes Canyon Road. The gates have signs reading "NO TRESPASSING". The fence and gates restrict access to foot traffic and motor vehicles from the main highway and will remain during mining and reclamation activities.

The locked gate to the project site located at the entrance will remain to discourage unauthorized access. All mining and backfill sites will comply with all Federal (MSHA) and State (OSHA) mine safety regulations concerning operating standards and operation of equipment.

Workers, including contract labor, are trained in mine safety and first aid. Refresher courses are conducted periodically in accordance with applicable regulations.

Mine operators carry portable cellular phones for off-site communication. All visitors, outside vendors and truck drivers are required to check in and check out with the site manager. Conditions affecting safety are continually monitored by a dedicated safety coordinator based out of the operations office.

SCVADC is private property, and after reclamation of the Rancho San Cristobal Quarry is completed, as well as during the interim while mining operations continue, the general public will not be admitted to these lands.

When mining has concluded and reclamation has been completed, there will be no open shafts or any hazardous materials present on these lands.

## (c) Slope Stability and Design [SMGBRR §3502 (b)(3)]

The designed steepness and proposed treatment of the mined lands' final slopes shall take into consideration the physical properties of the slope materials, its probable maximum water content, landscaping requirements, and other factors. In all cases, reclamation plans shall specify slope angles flatter than the critical gradient for the type of material involved.

Whenever final slopes approach the critical gradient for the type of material involved, an engineering analysis of the slope stability is required. Special emphasis on slope stability and design shall be necessary when public safety or adjacent property may be affected.

The updated Reclamation Plan lowers the final grade within the central portion of the landslide by approximately 25 to 75 feet. The maximum final 2:1 (h:v) cut slope height is approximately 295 feet. The remedial grading will result in a final reclamation plan surface condition that has a significantly greater factor of safety than that of the previously approved reclamation plan. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

The final graded surface will be checked by a Registered Professional Engineer who will submit a report to the County of Ventura Planning Department assuring that the final graded contours are consistent with the Reclamation Plan.

## (d) Backfilling [SMGB §3502 (b)(4)]

Areas mined to produce additional materials for backfilling and grading, as well as settlement of filled areas, shall be considered in the reclamation plan. Where ultimate site uses include roads, building sites, or other improvements sensitive to settlement, the reclamation plan shall include compaction of the fill materials in conformance with good engineering practice.

Placement of fill and backfilling is not anticipated at this time. If placement of fill becomes necessary to achieve the proposed reclamation plan grades, it is understood that the fill will be placed and compacted by the utilization of heavy construction equipment using typical compaction techniques such as track walking or wheel rolling. (*Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15*)

## (e) Disposition of Old Equipment [SMGB §3502 (b)(5)]

At the termination of mining, all equipment (excavators and loaders) will be removed from the site. Roads and drainage features other than the desilting basins will remain for use in the agricultural operation.

## (f) Temporary Stream or Watershed Diversions

There are not any existing or proposed temporary stream or watershed diversions on-site. Previously, a 1.7-acre area has been graded outside of the project area. This grading project removed landslide material and accumulated sediment that blocked the stream course, causing flooding of the orchard on the southwesterly adjacent property.

STATE MINING AND GEOLOGY BOARD (SMGB) – SECTIONS 3700 et seq.

#### 3.3.1 Section 3703 – Performance Standards for Wildlife Habitat

## (a) Rare, Threatened or Endangered Species shall be conserved:

Regional wildlife movement is expected to occur along the Santa Clara River. The project is not expected to impact the regional wildlife migration corridor. Local wildlife movement may occur along the Grimes Canyon drainage, but this drainage has been excavated previously in most areas within the project boundary. The drainage has been filled in two locations to provide roadway crossings. The project is not expected to further degrade this potential wildlife migration corridor. (Cite: Final EIR, March 1998)

Coast live oak (Quercus agrifolia) occurs within and immediately west of the project area. The coast live oak is considered a protected tree under Section 8107-25 of the Ventura Non-Coastal Zoning Ordinance. Only one coast live oak is located within the CUP boundary. This tree is located outside of the proposed excavation area (i.e. it will continue to be preserved). Per the EIR prepared for this project, the mining activities will not adversely impact locally important species/communities. (Cite: Final EIR, March 1998)

SCVADC is not proposing to disturb any new acreage as part of this project.

# (b) Wildlife shall be established on disturbed land in a condition at least as good as that which existed before the lands were disturbed by surface mining operations:

The project is the remediation of a landslide. The Native Revegetation Plan will be utilized in any portion of the site which is not stable enough to be reclaimed to agriculture. This plan calls for the planting of fescue and native seed for the purposes of erosion control and to reclaim the unstable landslide surface to open space (coastal sage scrub).

(c) Wetland Habitat shall be avoided. Any wetland habitat impacted as a consequence of surface mining operations shall be mitigated at a minimum of one to one ratio for wetland habitat acreage and wetland habitat value:

An Initial Study Biological Assessment was prepared for the Ventura Country Resource Management Agency by Fugro West, Inc. for the approved CUP. The report states: "Wetlands of the Grimes Canyon drainage (if any) have been excavated under the approved County grading permit, Army Corps of Engineers permit No. 94-50842-TS, and California Department of Fish and Game Streambed Alteration Agreement No. 5-268-94. Landslides have created a small depression in the central portion of the grading area. This depression is not dominated by wetland plant species (facultative or obligate) and does not support wetlands. This area is planned as a de-silting basin under the approved County grading permit. The project is not expected to result in additional adverse impacts to wetlands." (Cite: Final EIR, March 1998)

- 3.3.2 Section 3407 Performance Standards for Backfilling, Re-grading, Slope Stability and Re-contouring
- (a) Where backfilling is proposed for urban uses (e.g., roads, building sites, or other improvements subject to settlement), the fill material shall be compacted in accordance with Section 7010, Chapter 70 of the UBC, or the local grading ordinance:

The ultimate end use of the site is agricultural; no backfilling for urban uses is proposed.

- (b) Where backfilling is required for resource conservation purposes, fill material shall be backfilled to the standards required for the resource conservation use involved:

  Placement of fill and backfilling is not anticipated at this time. If placement of fill becomes necessary to achieve the proposed reclamation plan grades, it is understood that the fill will be placed and compacted by the utilization of heavy construction equipment using typical compaction techniques such as track walking or wheel rolling. Any backfilling that may occur will be in accordance with agricultural standards. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)
- (c) Piles or dumps of mining waste shall be stockpiled in such a manner as to facilitate phased reclamation. They shall be segregated from topsoil, etc.:

Grading will continue to be by normal methods utilizing a bulldozer to push the excavated materials from the hillside and an excavator and/or loader to put the material into trucks. In undisturbed areas, the surface layer will be removed with a bulldozer. This material will be placed in the stockpile Areas located near the bottom of the slide mass. Export material is pushed from the slope area to the staging area where it is stockpiled and/or loaded onto trucks for transportation from the site.

(d) Final reclaimed fill slopes shall not exceed 2:1 (horizontal to vertical), except with support of geologic and engineering analysis:

No fill slopes are proposed. Final slopes will be 2:1 (h:v).

(e) At closure, all fill slopes, including permanent piles or dumps of mine waste and overburden, shall conform with the surrounding topography and/or approved end use: The active landslide destroyed the agricultural orchard that previously existed at the project site. The primary objective of this project is to restore viable agricultural use to the property and plant unusable areas with native vegetation. The final reclaimed site will conform with the

(f) Cut slopes, including final highwalls and quarry faces, shall have a minimum slope stability factor of safety that is suitable for the approved end use and conform with the surrounding

The updated Reclamation Plan lowers the final grade within the central portion of the landslide by approximately 25 to 75 feet. The maximum final 2:1 (h:v) cut slope height is approximately 295 feet. The remedial grading will result in a final reclamation plan surface condition that has a significantly greater factor of safety than that of the previously approved reclamation plan. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

The final graded surface will be checked by a Registered Professional Engineer who will submit a report to the County of Ventura Planning Department assuring that the final graded contours are consistent with the Reclamation Plan.

(g) Permanent placement of piles or dumps of mining waste and overburden shall not occur within wetlands, unless mitigation acceptable to the lead agency has been proposed to offset wetland impacts and/or losses:

No piles or dumps of mining waste are proposed within wetland areas of the site. Wetlands of the Grimes Canyon drainage (if any) have been excavated under the approved County grading permit, Army Corps of Engineers permit No. 94-50842-TS, and California Department of Fish and Game Streambed Alteration Agreement No. 5-268-94. Landslides have created a small depression in the central portion of the grading area. This depression is not dominated by wetland plant species (facultative or obligate) and does not support wetlands. This area is planned as a de-silting basin under the approved County grading permit. The project is not expected to result in additional adverse impacts to wetlands. (Cite: Final EIR, March 1998)

# **3.3.3** Section 3405 – Performance Standards for Revegetation

#### (a) Suitable Vegetative Cover shall be provided:

surrounding topography and land use.

topography and/or approved end use:

This Reclamation Plan consists of two revegetation alternatives depending on the analysis of the stability of the site as the grading effort proceeds. The purpose of the CUP grading is to remove a larger portion of the middle of the landslide block to improve the factor of safety and stabilize the site. (Cite: JRC Consulting, Updated Geologic and Geotechnical Review Report, 6/9/15)

The areas of the site which are stabilized by this grading effort will be planted with a dry land range mix for cattle and equine grazing Option 1- Agricultural Revegetation Plan. The areas of the site which are not stabilized will be planted with native cover according to Option 2 - Native Revegetation Plan. The decision to reclaim areas of the site to agricultural or native open space will be made by SCVADC in conjunction with the Ventura County Planning Department, based on geotechnical studies performed by a competent, local geotechnical firm as each area reaches final grade.

#### **OPTION 1: AGRICULTURAL REVEGETATION PLAN**

The Agricultural Revegetation Plan will be utilized in any portion of the site which is disturbed and deemed stable enough to be reclaimed to agriculture. This includes disturbed acreage within the excavation area, access road areas outside the roads and desilting basins. This revegetation plan calls for the planting of grasses for forage production and erosion control.

# <u>Planting Plan</u>:

The planned agricultural usage is dry land range grazing. The seed mix was chosen because it addresses erosion control and forage production at the same time. It contains three grasses and two legumes. While none of these species are native, most are naturalized in our area and are drought tolerant.

#### **Proposed Seed Mix**

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<b>Botanical Name</b>	Common Name	
Avena sativa	California Oats	
Bromus hordeaceus	Blando Brome	
Trifolium incarnatum	Crimson Clover	
Vicia dasycarpa "Lana"	Lana Vetch	
Vulpia myuros var. hirsuta	Zorro Annual Fescue	

#### Topsoil:

No special top soil is required for the planting of the dry land grazing lands as the seed mix grows well in marginal soils. Because the existing soil layer is very disturbed and broken up, no soil stockpiles will be created. However, as no topsoil will be removed from the site, soil left behind from the excavation process will be re-distributed across the planting areas.

#### Planting Method:

The planting method will be in compliance with the Natural Resources Conservation Service Conservation Practice Standard for Range Planting, Code 550. The disturbed areas will be graded to the specifications of the Reclamation Plan. The preparation of the seedbed will include disking and incorporation of available topsoil (left behind from the

grading operation) into the seedbed. Areas to be planted will be hydroseeded or hand broadcast onto the prepared areas and will be applied at 30-50 lbs./acre depending on test plot results. The critical area planting will take place in the late fall to take advantage of the winter rains for irrigation.

# Irrigation/Fertilizer:

No irrigation or fertilizer is proposed.

#### **OPTION 2: NATIVE REVEGETATION PLAN**

The Native Revegetation Plan will be utilized in any portion of the site which is not stable enough to be reclaimed to agriculture. This plan calls for the planting of fescue and native seed for the purposes of erosion control and to reclaim the unstable landslide surface to open space (coastal sage scrub). This option is the one sure method of reclamation as Option 1 (described above) requires a slope stability qualification. Therefore, the financial assurance calculations will be based on the Option 2 revegetation plan.

#### Planting Plan:

Critical Area planting will take place for erosion control with eventual colonization by native species on all disturbed slopes at or steeper than 2:1 (see Sheet 1 – Reclamation Plan Final Contours). These slopes will be planted with a mixture of a native seed mix and "Zorro" annual fescue (at 8 lbs./acre), a cover crop designed to quickly stabilize slopes and to naturally recede as native species take over the habitat. The disturbed areas will be graded to the specifications of the grading plan. The preparation of the seedbed will include disking and incorporation of available topsoil (left behind from the grading operation) into the seedbed. Seed will be hand broadcast onto the prepared areas. The critical area planting will take place in the late fall to take advantage of the winter rains for irrigation.

Cover crop planting will take place on all disturbed slopes gentler than 2:1 (see Sheet 1 – Reclamation Plan Final Contours). In these areas, the soil will be disked as described above and the native seed mix and will be hand broadcast onto the seedbed.

#### **Proposed Seed Mix**

Botanical Name	Common Name
Artemesia californica	California sagebrush
Salvia mellifera	Black sage
Salvia leucophylla	Purple sage
Encelia californica	California brittlebush
Mimulus aurantiacus	Sticky monkey-flower
Lotus scoparius	Deer weed
Eriogonum fasciculatum	California buckwheat

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Malosma laurina	Laurel sumac
Vulpia microstachys	Small fescue
Eriophyllum confertiflorum	Golden yarrow
Baccharis pilularis	Coyote brush

# Topsoil:

The native seed mix should not require special topsoil as these species are currently thriving on the undisturbed areas of the property. The planting areas will be disked to help with seed germination.

# Irrigation/Fertilizer:

No irrigation or fertilizer is proposed.

# (b) Test Plots shall be provided:

OPTION 1: A 20 X 20 test plot for the dry land range mix area planting will be established in the 'Test Plot Area' identified on the Reclamation Plan Aerial Map – Sheet 2.

OPTION 2: A 20' X 20' test plot for the native vegetation critical area planting will be established in the 'Test Plot Area' identified on the Reclamation Plan Aerial Map – Sheet 2.

# (c) Where surface mining activities result in compaction of the soil, ripping or disking shall be used in areas to be revegetated:

The disturbed surface area of the site will be scarified to prepare for revegetation. Any significantly compacted staging or stockpile areas at the site will be ripped as prior to revegetation.

# (d) Prior to closure, all access roads shall be stripped of road base materials:

Dirt haul/access roads will be reclaimed as part of the slope creation and grading operations. Any road base materials, or the like that will not remain as part of the agricultural operations will be removed as part of the project reclamation.

# (e) Soil analysis shall be required to determine the presence of essential elements for plant growth:

OPTION 1: Test plot results will determine if soil conditions are appropriate for the proposed seed mixes.

OPTION 2: Test plot results will determine if soil conditions are appropriate for the proposed seed mixes.

# (f) Temporary access for exploration shall not disrupt the soil surface except where necessary to gain safe access:

There is no temporary access for exploration associated with this project.

# (g) Native species shall be used for revegetation:

Option 1 includes native seeding as erosion control for areas in which the dry land range mix is not planted.

Critical Area planting will take place for erosion control with eventual colonization by native species on all disturbed slopes at or steeper than 2:1 (see Sheet 1 – Reclamation Plan Final Contours Map). These slopes will be planted with a mixture of a native seed mix and "Zorro" annual fescue (at 8 lbs./acre), a cover crop designed to quickly stabilize slopes and to naturally recede as native species take over the habitat. The disturbed areas will be graded to the specifications of the grading plan. The preparation of the seedbed will include disking and incorporation of available topsoil (left behind from the grading operation) into the seedbed. Seed will be hand broadcast onto the prepared areas. The critical area planting will take place in the late fall to take advantage of the winter rains for irrigation.

Cover crop planting will take place on all disturbed slopes gentler than 2:1. In these areas, the soil will be disced as described above and the native seed mix will be hand broadcast onto the seedbed.

#### (h) Planting shall be conducted during the most favorable period of the year:

OPTION 1: Erosion control seeding will take place in the late fall to take advantage of winter rains for irrigation.

OPTION 2: This reclamation planting will take place in the late fall to take advantage of the winter rains for irrigation.

# (i) Soil stabilizing practices shall be used where necessary to control erosion:

Soil stabilization for erosion will be controlled by seeding and revegetation.

# (j) If irrigation is used, the operator must demonstrate that the vegetation has been selfsustaining without irrigation for a minimum of two years prior to release of financial assurances:

No irrigation is proposed for revegetation. Seeds will be planted in the late fall to take advantage of the winter rains for irrigation.

#### (k) Noxious weeds shall be managed:

Weeds (i.e. invasive, non-native species) would be eradicated in the reclamation area during mine operation and as part of interim and final reclamation of the site, consistent with established agricultural practices. Invasive weeds shall be eradicated.

(I) Protection measures, such as fencing of vegetated areas, shall be used where needed to protect from grazing, trampling, etc.:

Existing site fencing will remain.

# (m) Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use:

The operator will hire a qualified biologist to perform an annual survey to assess the following performance criteria and to evaluate the erosion control and permanent revegetation efforts. The surveys will commence in the year following the first reclamation planting and will continue until three years after the reclamation planting is complete or until the three year performance standards have been met. In the revegetated areas, there should be no formation of large gullies or loss of soil. The biologist will submit an annual report to the County of Ventura Planning Department with an evaluation of the reclamation effort and recommendations for remedial work. The Planning Department will direct the operator to conduct remedial work, if necessary.

In the Agricultural Reclamation areas, the goal is to establish a producing dry land range crop for cattle and equine grazing as well as erosion control. The combined seed mix should create a vegetative cover for cattle and equine foraging as well as provide erosion control. The dry land range mix should provide a 75% cover each year for three years with no bare areas larger than 10 feet by 10 feet for erosion control. Seed success will be based on Test Plot results.

In the Native Reclamation Areas, the goal is to establish a permanent coastal sage scrub environment in both the critical and native cover areas.

In the critical areas, the goal is to create a temporary cover of fescue while establishing a permanent native coastal sage scrub environment. The fescue should reseed itself for the first three years after which the native shrubs should be established. The combined fescue/native shrubs should provide a 75% cover each year for three years with no bare areas larger than 10 feet by 10 feet for erosion control. In addition, the performance criteria for the native shrubs will be:

- > 15% native shrubs in the first year,
- > 50% native shrubs in the second year, and
- > 75% native shrubs in the third year.

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Density and species richness measurements will be taken via standard quantitative methods and used to measure the long-term success of the revegetation effort. Density will decrease over time ranging from 1-5 plants per square meter. Species richness will also vary and is expected to range from 2-3 plants per square meter.

In the native cover areas, the performance criteria will be > 15% native shrubs in the first year, > 50% in the second year, > 75% in the third year. Density and species richness measurements will follow as described above.

## Monitoring Deposit:

The operator (SCVADC) shall bear the full costs of the monitoring program associated with this reclamation plan. These costs are included in the Financial Assurances calculations provided to the County.

## Determination of Reclamation Completeness:

The Planning Director shall determine when reclamation is complete. After this determination has been made, SMARA Financial Assurances and any remaining deposits will be returned to the operator.

# 3.4.4 Section 3706 – Performance Standards for Drainage, Diversion Structures, Waterways and Erosion Control

# (a) Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses:

The Storm Water Pollution Prevention Plan and the annual implementation of Best Management Practices would prevent substantial effects on downstream resources and users.

# (b) The quality of water, recharge potential, and storage capacity of groundwater aquifers shall not be diminished:

Mining of the clay reserve and establishment of the final reclamation surface would not reduce recharge potential or the storage capacity of ground water aquifers.

Potential ground water quality impacts from fuels and lubricants will be minimized by the use a very small mobile equipment fleet in the mine area and regular maintenance of equipment to limit potential releases of fuels or lubricants from that equipment. No hazardous materials will be stored on site unless provided secondary containment.

# (c) Erosion and sedimentation shall be controlled:

Implementation of best management practices pursuant to the SWPPP shall control erosion and sedimentation.

# (d) Surface runoff and drainage from surface mining operations shall be controlled:

A Hydrology and Drainage Report dated July 1996 was prepared by Jensen Design & Survey (Appendix 2) for the project during the initial permitting and an updated Drainage Analysis, dated 7/15/15 was prepared for the revised mining Plan (Appendix 3). The report found that there will be no increase in runoff due to the project. Existing drainage patterns are now confined to the steep canyon valleys of the watershed that flow more or less directly to their

concentration points near Grimes Canyon Road. The project will continue to utilize a variety of agricultural access roads, bench drains, culverts, and "V" ditches, which create a very circuitous drainage route, thereby lengthening the runoff pattern and corresponding time of concentration, which results in lower runoff quantities.

Run-off from the site would continue to be collected in sediment retention basins to ensure there is no significant degradation of surface water hydrology or quality. Runoff from the site ultimately flows to the Grimes Canyon wash. The Grimes Canyon wash flows south to north and is located at or near the western limit of the landslide. The Wash is periodically cleared of slough material so that seasonal runoff is not obstructed. (*Cite: Jensen Design, Hydrology & Drainage Report, July 1996*)

- (f) When stream diversions are required, they shall be constructed in accordance with the stream and lake alteration agreement between the operator and State Department of Fish and Game; and the requirements of the Federal Clean Water Act:
- No temporary stream or watershed diversions are proposed as part of this project.
- (g) When no longer needed, stream diversions shall be removed:

  No temporary stream or watershed diversions are proposed as part of this project.
- **3.4.5 Section 3707 Performance Standards for Prime Agricultural Land Reclamation** In addition to the standards for topsoil salvage, maintenance and redistribution, the following standards shall apply to mining operations on prime agricultural lands where the end use is agriculture:
- (a) Mining Operations which will operate on prime agricultural lands, as defined by the U.S. Soil Conservation Service (Natural Resources Conservation Service), shall return all disturbed areas to a fertility level as specified in the approved reclamation plan.

The active landslide destroyed the agricultural orchard that previously existed at the project site, including the roots of the trees and irrigation facilities. A primary objective of this project is to restore viable agricultural use to the property through improved drainage, erosion control measures, access, and development of a low water requirement crop, which will reduce movement in this area.

(b) When district soil are present, topsoil shall be salvaged and segregated by defined A, B, and C soil horizons. Upon reconstruction of the soil, the sequence of horizons shall have the A atop the B, the B atop the C, and the C atop the graded overburden.

No special top soil is required for the planting of the rangeland grasses because they are known to grow in marginal soil areas. Because the existing soil layer is very disturbed and broken up, no soil stockpiles will be created. However, as no topsoil will be removed from the site, soil left behind from the excavation process will be re-distributed across the planting areas.

The native seed mix should not require special topsoil as these species are currently thriving on the undisturbed areas of the property. The planting areas will be disked to help with seed germination.

- (c) Reclamation shall be deemed complete when productive capability of the affected land is equivalent to or exceeds, for two consecutive crop years, that of the pre-mining condition or similar crop production in the area. Productivity rates, based on reference areas described in the approved reclamation plan, shall be specified in the approved reclamation plan. Test plots will provide productivity rates for rangeland/grazing areas.
- (d) Use of fertilizers or other soil amendments shall not cause contamination of surface or ground water. Note: Authority cited: Sections 2755, 2756 and 2773, Public Resources Code. Reference 2772, Public Resources Code.

No fertilizers or soil amendments are proposed as part of the revegetation portion of this project. If the use of fertilizers or other soil amendments is needed they will be limited to types and application rates consistent with applicable regulations.

## 3.4.6 Section 3708 - Performance Standards related to Other Agricultural Lands

In the critical areas, the goal is to create a temporary cover of fescue while establishing a permanent native coastal sage scrub environment. The fescue should reseed itself for the first three years after which the native shrubs should be established. The combined fescue/native shrubs should provide a 75% cover each year for three years with no bare areas larger than 10 feet by 10 feet for erosion control. In addition, the performance criteria for the native shrubs will be:

- > 15% native shrubs in the first year,
- > 50% native shrubs in the second year, and
- > 75% native shrubs in the third year.

Density and species richness measurements will be taken via standard quantitative methods and used to measure the long-term success of the revegetation effort. Density will decrease over time ranging from 1-5 plants per square meter. Species richness will also vary and is expected to range from 2-3 plants per square meter.

In the native cover areas, the performance criteria will be > 15% native shrubs in the first year, > 50% in the second year, > 75% in the third year. Density and species richness measurements will follow as described above.

3.4.7 Section 3709 - Performance Standards for Building, Structure and Equipment Removal (a) All equipment, supplies and other materials shall be stored in designated areas:

All equipment and materials on the project site are stored in areas designated for such uses.

(b) All buildings, structures and equipment shall be dismantled and removed prior to final mine closure, except as necessary for the end use.

At the termination of mining, all equipment (excavators and loaders) will be removed from the site. Roads and drainage features other than the desilting basins will remain for use in the agricultural operation.

# 3.4.8 Section 3710 - Performance Standards for Stream Protection, including Surface and Groundwater

(a) Surface and groundwater shall be protected from pollutants:

Existing drainage patterns are now confined to the steep canyon valleys of the watershed that flow more or less directly to their concentration points near Grimes Canyon Road. The project will continue to utilize a variety of agricultural access roads, bench drains, culverts, and "V" ditches, which create a very circuitous drainage route, thereby lengthening the runoff pattern and corresponding time of concentration, which results in lower runoff quantities.

Run-off from the site would continue to be collected in sediment retention basins to ensure there is no significant degradation of surface water hydrology or quality. Runoff from the site ultimately flows to the Grimes Canyon wash. The Grimes Canyon wash flows south to north and is located at or near the western limit of the landslide. The Wash is periodically cleared of slough material so that seasonal runoff is not obstructed. (*Cite: Jensen Design, Hydrology & Drainage Report, July 1996*)

(b) In-stream surface mining operations shall be conducted in compliance with Section 1600 et seq. of the California Fish and Game Code, Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

There is no in-stream mining proposed as part of this project.

(c) Extraction of sand and gravel from river channels shall be regulated to control channel degradation in order to prevent undermining of bridge supports, exposure of pipelines or other structures buried within the channel, loss of spawning habitat, lowering of groundwater levels, destruction of riparian vegetation, and increased stream bank erosion (exceptions may be specified in the approved reclamation plan). Changes in channel elevations and bank erosion shall be evaluated annually using records of annual extraction quantities and benchmarked annual cross sections and/or sequential aerial photographs to determine appropriate extraction locations and rates.

There is no in-stream mining proposed as part of this project.

(d) In accordance with the requirements of the California Fish and Game Code section 1600 et seq., in-stream mining activities shall not cause fish to become entrapped in pools or in off-channel pits, nor shall they restrict spawning or migratory activities.

There is no in-stream mining proposed as part of this project.

#### 3.4.9 Section 3711 - Performance Standards for Topsoil Salvage

(a) All salvageable topsoil suitable for revegetation shall be removed as a separate layer from mining area. Topsoil removal shall not precede mining activities by more than one year without approval:

No special top soil is required for the planting of the rangeland grass areas as they grow well in marginal soils. Because the existing soil layer is very disturbed and broken up, no soil stockpiles will be created. However, as no topsoil will be removed from the site, soil left behind from the excavation process will be re-distributed across the planting areas.

The native seed mix should not require special topsoil as these species are currently thriving on the undisturbed areas of the property. The planting areas will be disked to help with seed germination.

(b) Topsoil resources shall be mapped prior to stripping and the location of topsoil stockpiles shall be shown on the reclamation plan:

Based on boring logs by both Fugro West (Geotechnical Study, Active Landslide in Grimes Canyon, March 1995) and Buena Engineers (Soil Mechanics Investigation, Grimes Canyon Road, October, 1980), no distinct mappable soil horizons were encountered. No topsoil material will be removed from the site. During the final grading process, soil left behind from the excavation will be redistributed across the reclamation planting areas. (Cite: Final EIR, March 1998)

- (c) Soil salvage operations and phases of reclamation shall be carried out in accordance with a schedule that: 1) is set forth in the approved reclamation plan; 2) minimizes the area disturbed; and 3) is designed to achieve maximum revegetation success:

  No phasing is proposed as part of this project.
- (d) Topsoil and suitable growth media shall be used to phase reclamation as soon as can be accommodated by the mining schedule presented in the approved reclamation plan following the mining of an area. Topsoil that cannot be used immediately should be stockpiled where it will not be disturbed. Topsoil shall be clearly identified to distinguish it from mine waste. Protect stockpiles from erosion and weed growth Relocation of topsoil stockpiles must be approved:

No special top soil is required for the planting of the rangeland grasses as they grow well in marginal soils. Because the existing soil layer is very disturbed and broken up, no soil stockpiles will be created. However, as no topsoil will be removed from the site, soil left behind from the excavation process will be re-distributed across the planting areas.

The native seed mix should not require special topsoil as these species are currently thriving on the undisturbed areas of the property. The planting areas will be disked to help with seed germination.

- (e) Topsoil and growth media shall be redistributed in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration and drainage. No topsoil material will be removed from the site. During the final grading process, soil left behind from the excavation will be redistributed across the reclamation planting areas.
- **3.4.10** Section **3712** Performance Standards for Tailing and Mine Waste Management State Water Resources Control Board mine waste disposal regulations in Article 1, Subchapter 1, Chapter 7 (C:15) of Title 27, California Code of Regulations, shall govern mine waste and tailings and mine waste disposal units shall be reclaimed in conformance with this article: There is no mining waste or tailings associated with this project.

# 3.4.10.1 Section 22470: SWRCB - Applicability

There is no mining waste or tailings associated with this project.

# 3.4.10.2 Section 22480: SWRCB - Groups of Mining Waste

# (a) Definition:

Mining waste is waste from the mining and processing of ores and mineral commodities. Mining waste includes: (1) Overburden; (2) Natural geologic material which have been removed or relocated but have not been processed (waste rock); and (3) the solid residues, sludges, and liquids from the processing of ores and mineral commodities.

#### (b) Waste Group Classification

There is no mining waste or tailings associated with this project.

#### (c) Treatment:

There is no mining waste or tailings associated with this project.

## 3.4.10.3 Section 22490: SWRCB - Mining Unit Siting and Construction Standards

#### (a) Proximity to Faults - New Mining Units

1. Holocene Faults: (Cite: Final EIR, March 1998)

In addition to the Oak Ridge and San Cayetano faults, there are at least 20 additional active or potentially active faults within a 50-mile radius of the Grimes Canyon area. The table below summarizes the estimated maximum credible magnitudes for 10 selected nearby faults. Their selection is based upon their ability to generate strong ground motion at the site.

# **Significant Faults**

Fault	Approximate Distance (Miles)	Maximum Credible Magnitude
OakRidge	1	7.5
San Cayetano	3	7.5
Simi-Santa Rosa	7	7.0
Santa Susana	9	7.0
Holser	11	6.6
Arroyo Parida-More Ranch	14	7.5
SantaYnez	15	7.5
Ventura-Pitas Point	16	7.2
Pine Mountain	16	7.0
Red Mountain	21	7.3

#### 2. Areas of Rapid Geologic Change:

The ultimate goal of the reclamation plan is to improve the current global stability of the area within the CUP boundary.

It has been recognized that if the slide mass of this large slide feature is reduced above its center of the large slide then the slide feature would become more stable. This would result in reducing downhill hazards and assist in preventing or reducing the historical disruption to the drainage course and state highway which had been previously been regularly affected by this large feature before the mining operation was permitted. (Cite: Final EIR, March 1998)

# (b) Flooding - All mining units shall be protected from flooding as shown on Table 1.2 of the Section 22490 SWQCB regulations.

Existing drainage patterns and desilting basins protect the site from flooding and runoff damage.

# (c) Construction and Discharge standards

Standards are met via existing BMPs described in the Stormwater Pollution Prevention Plan.

#### (d) Registered Professionals

Containment structures shall be designed by a registered civil engineer. Construction shall be supervised and certified by a registered civil engineer or certified engineering geologist. The final graded surface will be checked by a Registered Professional Engineer. Planting plans will be submitted in conjunction with reports by the registered Professional Engineer and geotechnical consulting firm as each area reaches final grade. (Cite: Final EIR, March 1998)

#### (e) General Containment Structure Criteria

Not applicable to this project.

#### (f) Liners

No liners are proposed as part of this project.

# (g) Leachate Collection and Removal Systems

No leachate collection or removal systems are proposed as part of this project.

## (h) Precipitation and Drainage Controls; Design Storm

There will be no increase in runoff due to the project. Existing drainage patterns are now confined to the steep canyon valleys of the watershed that flow more or less directly to their concentration points near Grimes Canyon Road. The project proposes a variety of agricultural access roads, bench drains, culverts, and "V" ditches, which create a very circuitous drainage route, thereby lengthening the runoff pattern and corresponding time of concentration, which will result in lower runoff quantities. (Cite: Jensen Design, Hydrology & Drainage Report, July 1996)

The existing disilting basins are located in the lower reaches of the watershed and will continue to intercept the main water overflow in the project area. (Cite: Jensen Design, Hydrology & Drainage Report, July 1996)

All of the drainage features of the project have been sized using the runoff quantities developed from the Ventura County Flood Control District data. Final project design facilities range in size from 18-inch to 27-inch diameter pipes. (*Cite: Jensen Design, Hydrology & Drainage Report, July 1996*)

# 3.4.10.4 Section 22510 - Closure and Post-Closure Maintenance of Mining Units

#### (a) Closure Performance Standard

The reclamation plan includes the incorporation of permanent sediment control measures including grading and revegetation of the mine site and disturbed areas. The reclaimed land will meet applicable State and County standards for stability. These measures will avoid substantial erosion of the final reclaimed slopes and preclude the potential for substantial sedimentation of nearby streams. (*Cite: Jensen Design, Hydrology & Drainage Report, July 1996*)

#### (b) Plan

Mining Units shall be closed according to an approved closure and post closure maintenance plan which implements this section and provides for continued compliance with the applicable standards in this article for waste containment, precipitation and drainage controls, and monitoring throughout closure and the post closure maintenance period.

Upon approval, this Reclamation Plan would fulfill the requirements of this section.

# (c) Reclamation

The site is certified by the RWQCB under the Notice of Intent Order 2014-0057-DWQ; WDID No. 4 561023550.

# (d) Oversight and Monuments

Not applicable to this project.

#### (e) Inactive Units

Containment structures at inactive Mining Units shall be subject to the same standards as apply to an active Mining Unit.

## (f) Financial Assurance:

The operator's financial assurance to be established under SMARA for this reclamation plan will be adequate to comply with any and all closure and post-closure maintenance requirements as verified by County and State Office of Mine Reclamation staff. A current reclamation bond, in the amount of \$117,114.00 is in place.

# (g) Ending Post-Closure

Post closure monitoring will be ended upon achievement of the revegetation success criteria and release of the reclamation bond.

#### (h) Vegetation:

Revegetation of the project site will not impair the integrity of any of the containment features provided for site reclamation.

#### (i) Waste Pile Closure Standards

Not applicable

#### (j) Surface Impoundment Closure Standards

Not applicable

#### (k) Tailings Pond Closure Standards

Not applicable

#### (I) Erosion and Sedimentation Protection

The erosion, sedimentation control and revegetation features of the proposed reclamation plan are designed to minimize erosion and the threat of water quality degradation from sedimentation.

- 3.4.11 Section 3713 Performance Standards for Closure of Surface Openings
- (a) Except those used solely for blasting or those that will be mined through within one year, all drill holes, water holes, water wells, and monitoring wells shall be completed or abandoned in accordance with each of the following: (1) Water Code sections 13700, et seq. and 13800, et seq.; (2) the applicable local ordinance adopted pursuant to Water Code section 13803; (3) the applicable Department of Water Resources report issued pursuant of Water Code section 13800; and (4) Subdivisions (1) and (2) or section 2511(g) of Chapter 15 of Title 23 regarding discharge of waste to land:

There are no surface openings associated with this project.

(b) Prior to closure, all portals, shafts, tunnels, or other surface openings to underground workings shall be gated or otherwise protected from public entry to protect the public and wildlife:

No underground workings exist nor are they planned at the proposed project site. The main access road to the project site will remain protected with a locked gate.

# 4.0 FINANCIAL ASSURANCE (SMARA SECTION 2773.1)

The 2016 – 2017 Financial Assurance Cost Estimate for the Ranch San Cristobal Mine is attached as Appendix 4.

Rancho San Cristobal Clay Mine Mine ID # 91-56-0030 July 2015 (Updated: September 2016) Page 42 of 42

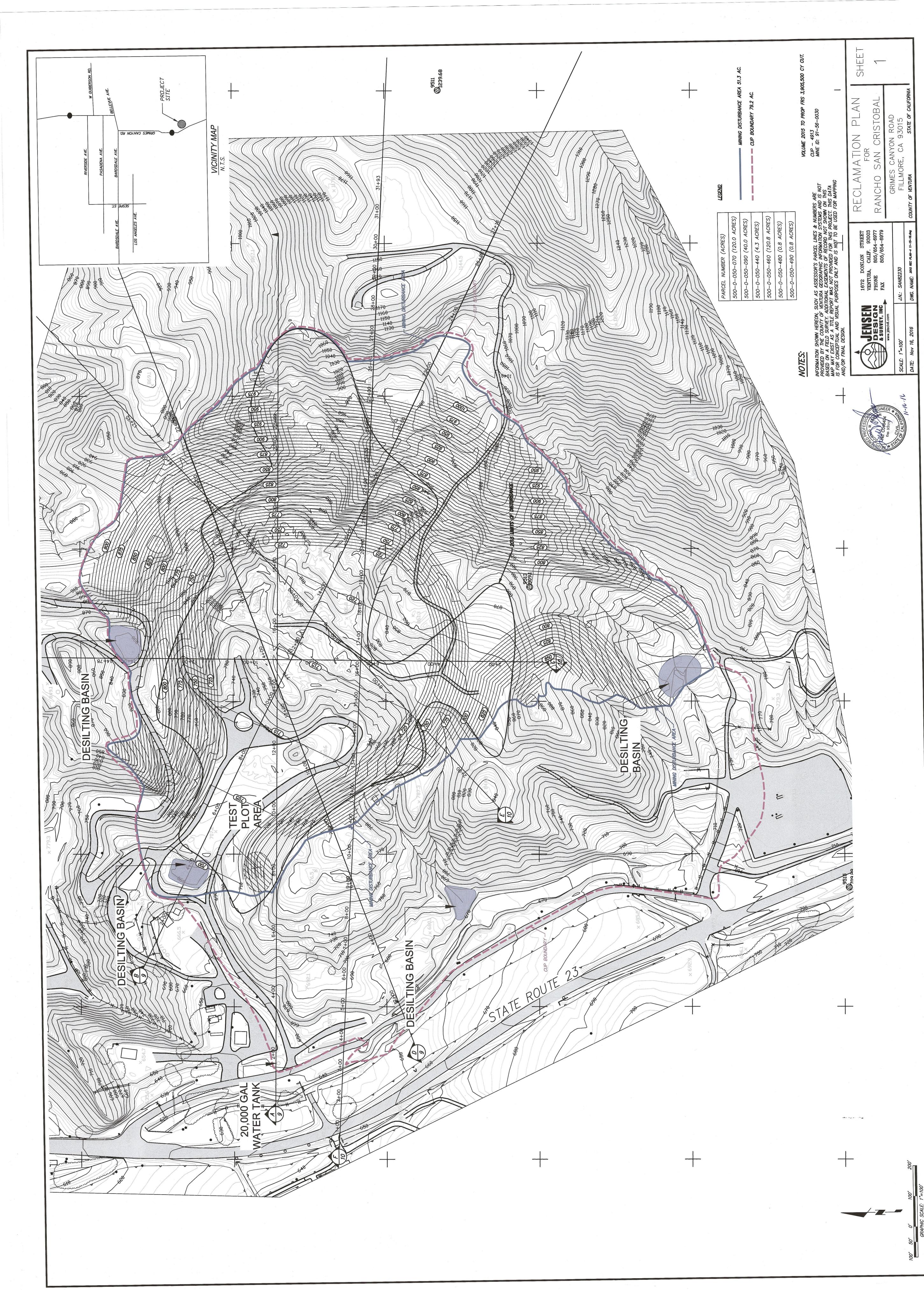
#### 5.0 STATEMENT OF RESPONSIBILITIES

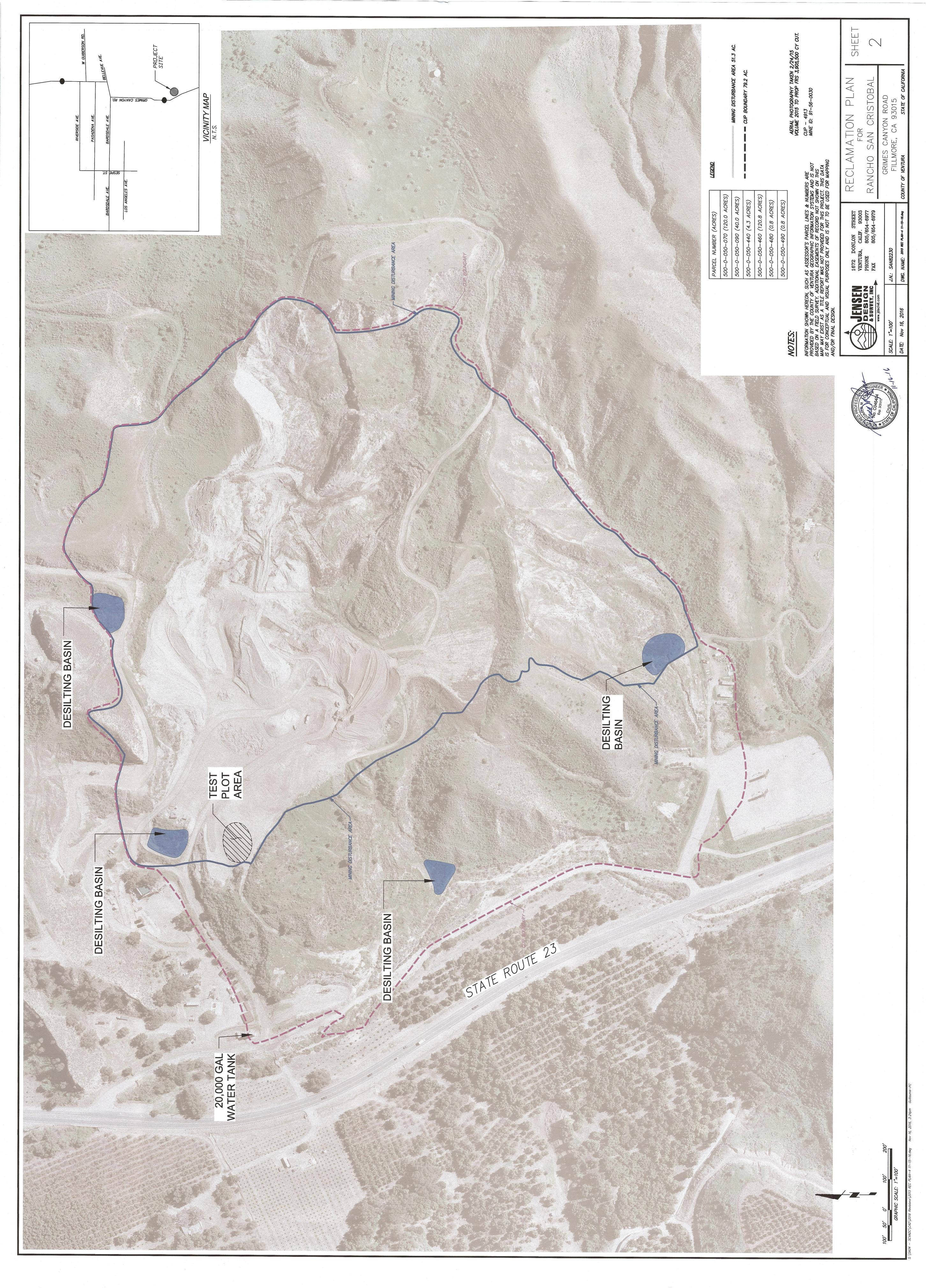
I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with Section 2710 et seq., and with any modifications requested by the administering agency as conditions of approval.

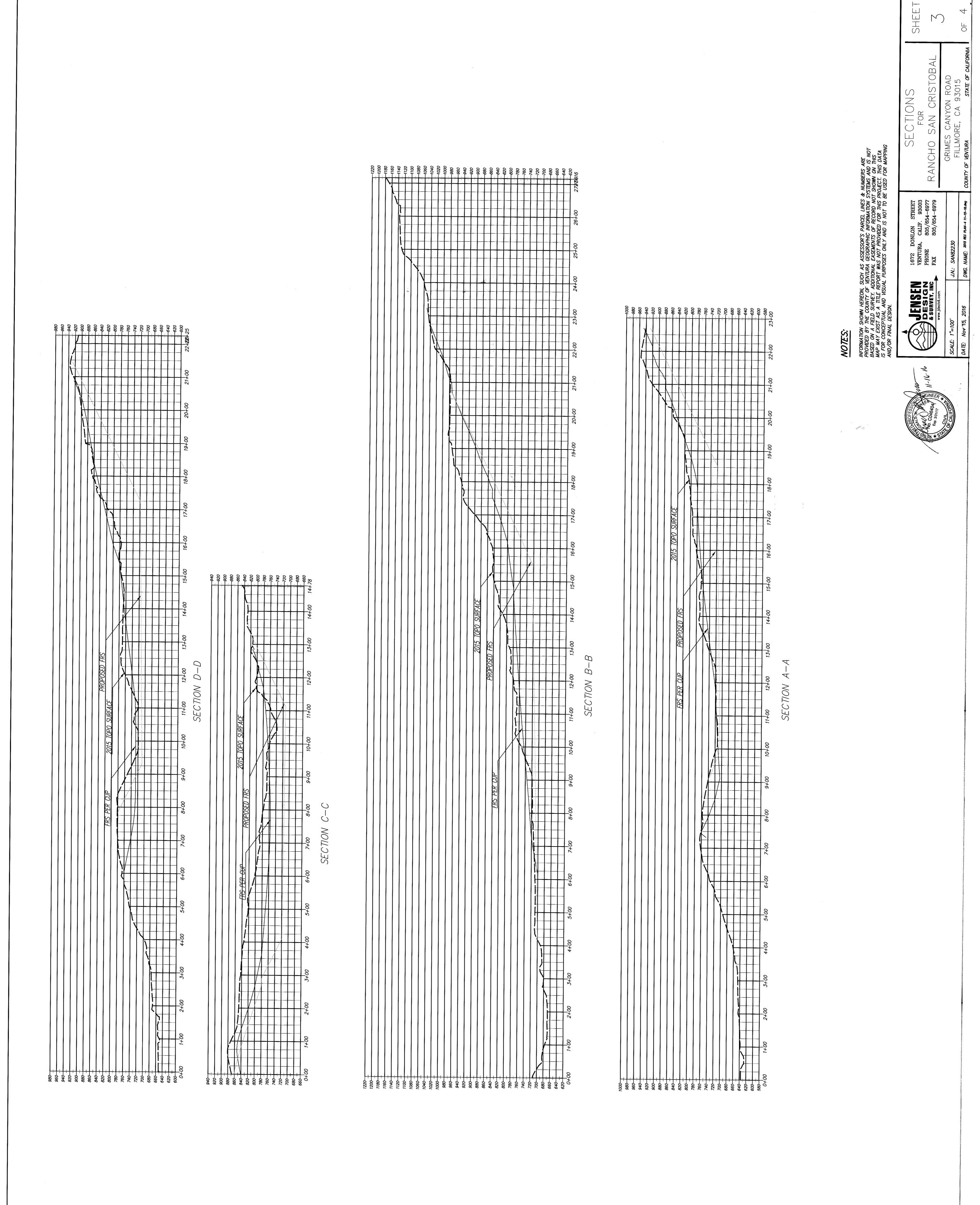
Signature

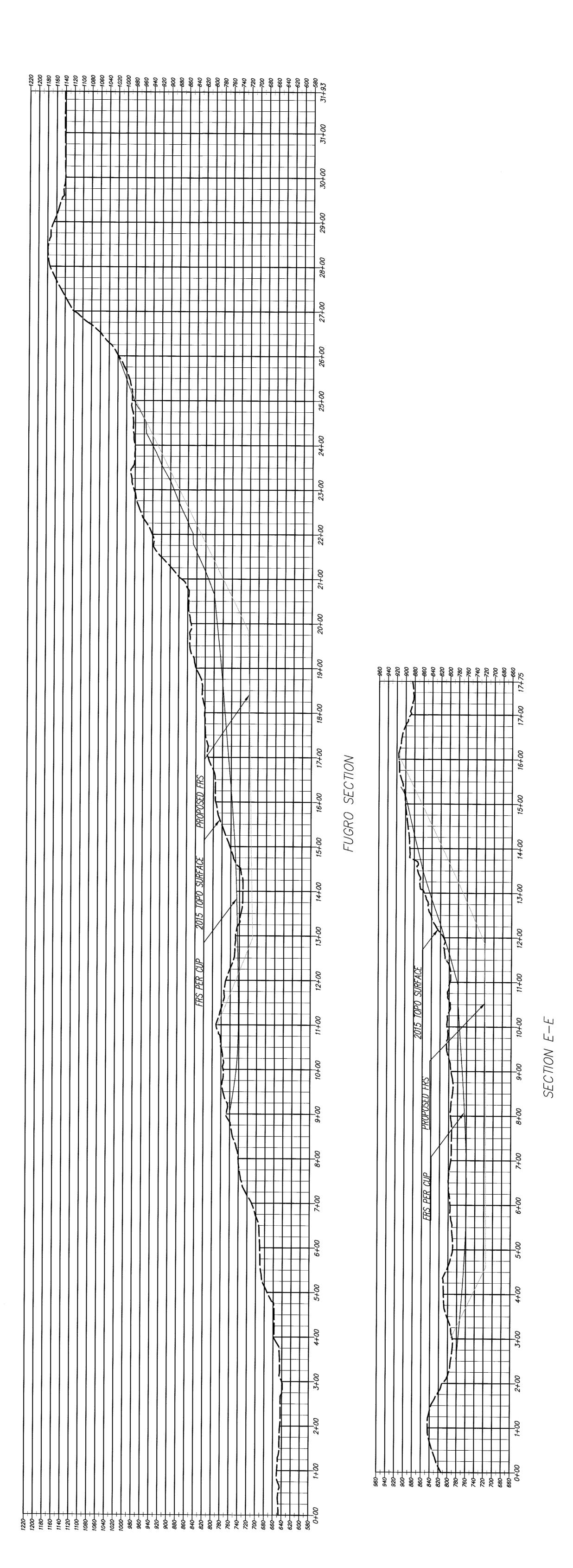
Name CHARLES M TEAGUE

Signed this 23 day of 5 EPTEMBER, 20 16

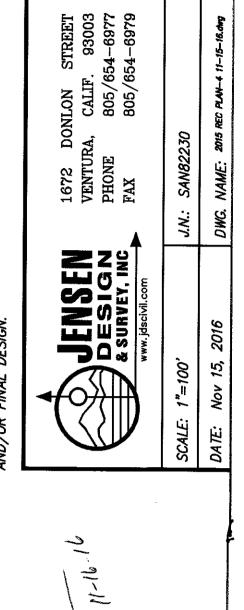








INFORMATION SHOWN HEREON, SUCH AS ASSESSOR'S PARCEL LINES & NUM PROVIDED BY THE COUNTY OF VENTURA GEOGRAPHIC INFORMATION SYSTEM BASED ON A FIELD SURVEY. ADDITIONAL EASEMENTS OF RECORD NOT SHOW MAP MAY EXIST AS A TILE REPORT WAS NOT PROVIDED FOR THIS PROJEC IS FOR CONCEPTUAL AND USUAL PURPOSES ONLY AND IS NOT TO BE USE AND/OR FINAL DESIGN.



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GRIMES CANYON ROAD FILLMORE, CA 93015 COUNTY OF VENTURA STATE OF JCR CONSULTING

ENGINEERING GEOLOGY, PERCOLATION TESTING AND SEPTIC SYSTEM DESIGN

File No.: JCR11-08127

June 9, 2015

SANTA CLARA VALLEY AG DEVELOPMENT CORPORATION

1708 Cherry Hill Road

Santa Paula, California 93060

Attn.: Mr. Chuck Teague

**SUBJECT:** 

Updated Geologic and Geotechnical Review Report, Revised Reclamation Plan for

Rancho San Cristobal Clay Mine Operations and Vicinity, as Related to California Mine

ID No. 91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura.

Dear Mr. Teague:

In accordance with your request, this updated report has been prepared to summarize the results of our review of the planned revisions to your current Conditional Use Permit (CUP) and reclamation plan for the earth movement activities at the Rancho San Cristobal Clay Mine. It is our understanding, based upon our review of the proposed reclamation plan, the original limits of the reclamation area have been modified, the final "as-built" cut slope gradient within the CUP boundaries has been modified to a uniform 2:1 slope ratio, and that the removal depths have been increased. The changes were proposed to allow for greater access to clay product and to increase the ultimate gross stability of the existing landslide mass.

SCOPE OF WORK

The scope of work for this updated report included the completion of the following tasks:

1. Review of the referenced geologic and geotechnical reports prepared for the subject property. A complete list of references is included in Appendix III.

2. Review of the revised Reclamation Plan Set, prepared by Jensen Design and Survey, dated May 13, 2015.

- 3. Revision of the Geologic Site Map using the current Topographic Map as a base.
- 4. Revised slope stability analysis of the "most critical" slope.
- 5. Preparation of this updated report to present the results of our analysis and our geologic and geotechnical recommendations.

#### SITE DESCTIPTION & BACKGROUND

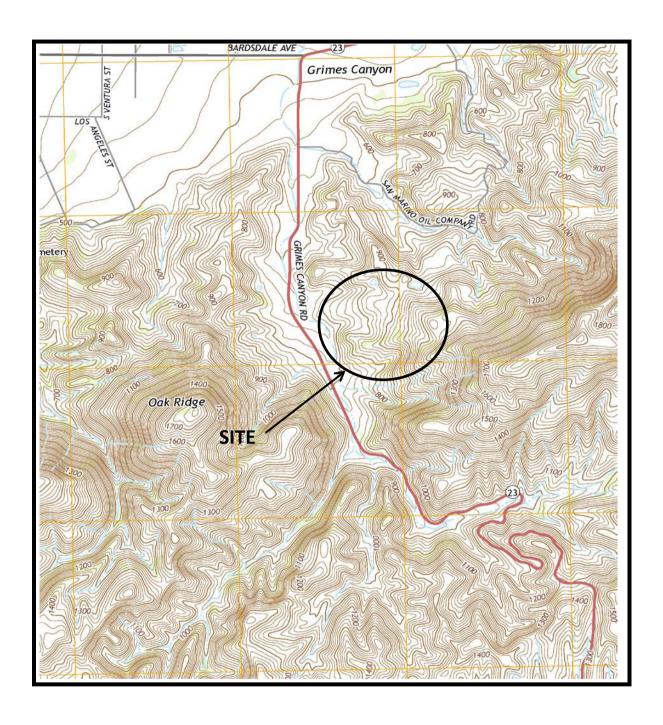
The property is located on the east side of Grimes Canyon Road approximately 2.8 miles south of Fillmore (see Site Map, Figure 1). As previously discussed in the referenced reports, the site topography is strongly influenced by the east-west trending Oak Ridge Fault, located approximately one mile north of the site, as well as the north-south trending Grimes Canyon. Oak Ridge is approximately 1400 feet above the Santa Clara River floodplain. Elevations at the site range from approximately 640 feet at the westerly side of the property to 1180 feet as measured at the hilltop just east of the landslide scarp and the easterly boundary of the CUP. Slopes on the property within the landslide mass are typically inclined at a 3 to 1 slope ratio (3h:1v) becoming steeper toward the eastern scarp areas. Slopes on and adjacent to the property, located outside the limits of the landslide, are inclined at slope ratios between 2 to 1 and 1 to 1.

The subject property is underlain by a large-scale, composite, ancient landslide (7,000 to 20,000 years old) that extends beyond the property limits. In 1988 (and again in 1994) an approximately 45 acre portion of the ancient landslide was reactivated. Damage attributed to the landslide of 1988 included the deflection of Grimes Canyon Creek, obstruction of Grimes Canyon Road (HWY 23) resulting in the permanent relocation of the road by approximately 200 to 250 feet to the west by CALTRANS, damage to existing oil well sites, and extensive damage to the previously existing avocado orchard.

The Santa Clarita Valley Ag Development Corp (SCVADC) was granted a Maintenance Order Grading Permit by the County of Ventura in 1994 to perform remedial grading near the toe of the reactivated landslide. Subsequently, the SCVADC applied for and was granted a conditional use permit in 1998 to perform additional remedial grading in conjunction with ongoing clay mining and overburden export activities.

# **REGIONAL GEOLOGY**

The site is situated in the northeast portion of the Ventura Basin which is part of the Transverse Ranges geomorphic province which is characterized by east-west trending structural features. The Ventura Basin is an east-west structurally controlled sedimentary basin that is bordered the by the Oak Ridge and the San Cayetano faults, on the north and south, respectively. The Oak Ridge fault is an active south-dipping reverse fault, the trace of which is located approximately 1 mile to the north of the site along the southern side of the Santa Clara floodplain. The San Cayetano fault is a north-dipping reverse fault that is located about 3 miles north of the site.



**BASE MAP:** 

USGS 7.5 MinuteTopographic Map of the Moorpark Quadrangle, CA (2015)



**JCR CONSULTING** 

**SITE LOCATION MAP** 

2100 Grimes Canyon Road, Fillmore Area

**DATE:** May-15

FILE NO.: JCR11-08127

FIGURE 1

#### SITE GEOLOGY

The principal geologic feature of the subject property is the active landslide (approximately 45 acres). As extensively detailed in the referenced reports, a portion of an ancient landslide reactivated in 1988 (and again in 1994 as a result of the Northridge earthquake) caused extensive damage to various improvements on the subject property and off-site improvements to the west. It is generally believed that the reactivation of the landslide was caused by a combination of the following: a) unlined water storage basins; b) above average precipitation; and c) irrigation of the avocado orchard that was formerly present at the site.

The bedrock material immediately beneath the ancient landslide is primarily described as sandstone assigned to the Sespe Formation as well as sandstone of the Topanga Formation. Bedding of the undisturbed bedrock, where exposed, has been found to dip to the southeast at 30 to 40 degrees, which is consistent with the geologic information shown on information contained on previously published geologic maps.

The approximate limits of the ancient and recent landslides (Qlsa and Qls, respectively) are shown on the Geologic Map, included as Plate 1.

# **Site Drainage and Flood Protection Improvements**

Site drainage is generally to the west-northwest and is topographically controlled. On-going landslide related deformation has resulted in localized areas of hummocky terrain. Periodic grading of hummocky areas improves the drainage characteristics, however, due to the constant movement of the more active portions of the landslide, any improvement in these areas is short lived. In other areas where access is limited or not possible, correctional grading is not currently performed.

The existing desilting basins were observed to be well vegetated. It is recommended that the project civil engineer periodically evaluate the condition of the basins to determine if they remain within design parameters. Runoff from the site ultimately flows to the Grimes Canyon wash. The Grimes Canyon wash flows south to north and is located at or near the western limit of the landslide. It is our understanding that the wash must be periodically cleared of slough material so that seasonal runoff is not obstructed. The condition of the wash appeared to be relatively unobstructed at the time of our site visit and no significant sloughing was observed.

#### **General Condition**

Based upon our recent observations, the limits of the landslide do not appear to have significantly changed since our most recent quarterly summary report (May, 2015). East-west trending lateral shears are observed at various locations throughout the active landslide mass. The shears are considered to be the result of variability in the rate of westward movement within the landslide body that is likely influenced by the localized nature of the mining/overburden removal operations. North-south trending separation cracks located to the north, east, and south of the loading area, as previously described in our past reports, can still be found within the limits of the active landslide. The separation cracks indicate the active nature of the landslide and are the result of extension and compression movement of the composite landslide. When graded over, the separation cracks reappear within a short period of time.

As the cracks and shears develop into larger fissures, it is recommended that they be backfilled for safety reasons and to minimize the volume of storm water runoff into the landslide body. Given the extent of vegetation across most of the landslide body and adjacent areas, subtle evidence of recent movement is difficult to observe, monitor or quantify.

Currently the most active portion of the original 1988 landslide appears to be the northern half. It is likely that the ongoing removals performed at the northwestern side of the landslide will result in the continued westward movement of existing landslide material.

The lateral sloughing identified immediately to the north of the northern portion of the landslide remains active. As stated in past reports, the area is comprised of previously mapped ancient landslide material. It is acknowledged that this failure area is outside the limits of the 1988 landslide per previous geologic mapping, however, future mitigation of this area will be within the current limits of the Reclamation Plan Limit as allowed by the CUP.

The main scarp at the head of the 1988 landslide does not appear to have significantly changed since the November 2014 and February 2015 quarterly reports, however pre-existing landslide material located immediately west of the scarp area appears to have slipped lower onto the face of the scarp. The westward migration of landslide material is attributed to the activity in the current removal area to the west. A roughly north–south trending, west dipping fissure was recently observed approximately 100 feet east of the main scarp of the 1988 landslide. The continued westward movement of the landslide material below the main scarp results in a reduction of support and the fissure is indicative that additional failure(s) east of the main scarp are possible.

#### SLOPE STABILITY ANALYSIS

Based on our review of the proposed CUP and reclamation plan prepared by Jensen Design and Survey, it is now proposed to lower the final grade within CUP in the central portion of the landslide by approximately 25 to 75 feet. The purpose of our slope stability analysis was to determine the factor of safety for the ancient slide plane and the 1988 slide plane to ensure that the proposed new reclamation plan final grade elevation and remedial grading would not result in an overall decrease in the factor of safety when compared to the original reclamation plan. In order to determine the factor of safety of the ancient slide plane and 1988 slide plane, global stability analysis of each slide plane was performed with the Visual Slope computer program (Version 4.3, 2007-2009) using the Fugro Cross Section (A-A'). A copy of an Updated Geotechnical Cross Section (along Fugro Cross Section A-A') is included as Plate 2.1 with this report. The program performs a two-dimensional limit equilibrium analysis that searches for the most critical surface. Bishop's Simplified Method was utilized to search for the most critical circular potential failure surface. A minimum of 500 surfaces were analyzed. Static conditions were analyzed for global stability.

Shear strength parameters used in our analysis were obtained from direct shear tests and back calculations performed by Fugro on representative samples of the Sespe Formation bedrock and landslide materials obtained from the site, as presented in the referenced Fugro reports. An ultimate friction angle of 35 degrees and an ultimate cohesion value of 1300 psf were used for the Sespe Formation bedrock. A residual friction angle of 12 degrees and a residual cohesion value of 170 psf were used for the landslide materials for static conditions.

Based on information provided to this office and our review of the revised CUP conditions, revised reclamation plans, and referenced reports by Fugro, the proposed final reclamation plan surface condition is required to maintain a static factor of safety greater than the factor of safety previously calculated for both the ancient and the 1988 landslides. Based on our analyses, the proposed remedial grading will result in a final reclamation plan surface condition that has a significantly greater factor of safety than that of the previously approved reclamation plan. Therefore, it is our opinion that the proposed post reclamation configuration is adequate for its intended final use, from a geotechnical engineering standpoint. The results of the analyses are presented with this report and are summarized as follows:

Cross Section (Most Critical)	Condition Analyzed	Static Factor of Safety* Calculated for the Previously Approved Reclamation Plan	Static Factor of Safety Calculated for the Currently Proposed Reclamation Plan
Fugro Section (A-A')	Ancient Landslide Plane	0.79	1.07
Fugro Section (A-A')	1988 Landslide	1.00	2.17

<sup>\*</sup>The static factor of safety for the previously approved reclamation plan was determined by Fugro.

# **CONCLUSIONS AND RECOMMENDATIONS**

The revised reclamation plan now calls for deeper removal depths as well as a uniform 2:1 slope gradient for the planned finished slopes. The deeper bottom depth and the steeper finish slopes will significantly increase the available excavation area of the mine while allowing the beneficial unloading of the midportion of the landslide mass. It is noted that the access road system shown in the original reclamation plan has been eliminated and no terrace drain system is planned. As a result, the maximum proposed 2:1 cut slope height is approximately 295 feet (see Cross-Section F-F').

It is our understanding, based upon our review of the reclamation plan and conversations with the County of Ventura, that the ultimate goal of the reclamation plan is to improve the current global stability of the area within the CUP boundary. Scarp surfaces at the easterly perimeter of the landslide (within and outside of the Reclamation Plan Boundary) will, in all likelihood, continue to fail until equilibrium is reached. Additionally, it is anticipated that the final reclamation surface will not be free from future landslide-related deformation. Given the fact that the site is underlain by landslide debris, ongoing deformation to one degree or another will continue. It is understood that the volume of material to be ultimately removed from the landslide will increase the global stability of the site and thus reduce the driving forces that could result in another significant landslide at the westerly side of the site, which is the ultimate goal of the Conditional Use Permit/Reclamation Plan.

#### Placement of Fill

Placement of fill is not anticipated at this time. If placement of fill becomes necessary in the future to achieve the proposed reclamation plan grades, it is understood that the fill will be placed and compacted by the utilization of heavy construction equipment using typical compaction techniques such as track

walking or wheel rolling. It is our understanding that compaction testing and ultimate certification of any fill placed within the reclamation boundaries will not be required.

#### **Vertical Excavations**

Vertical excavations exceeding four feet in height are not permitted. Any excavations higher than four vertical feet in must be laid back at a maximum of 1:1 (H:V) slope ratio.

#### **Restricted Access Area**

The previously designated restricted access area located at eastern side of the 1988 landslide has been enlarged due to the recent observation of a north-south trending fissure located to the east of the existing scarp. The recommended limits of the restricted access area are shown on the attached Plot Plan.

# **Site Inspections**

It is recommended that the reclamation area be observed on a regular basis by the undersigned engineering geologist. If sudden and/or significant site conditions changes are observed, the property manager shall immediately notify this office to arrange for a site inspection.

#### Limitations

This report has been prepared solely for the benefit of the Santa Clara Valley Ag Development Corporation as stipulated by the Conditional Use Permit and the Reclamation Plan. The observations summarized herein are generalized and are based upon verbal information provided by the property owner and representatives of Ventura County as well as visual observations made over the course of the required site visits. The scope of services did not include subsurface exploration and geotechnical analysis was not performed. The gross stability of the landslide mass was previously evaluated by other consultants and additional stability analysis is outside the scope of this report.

It is noted that the evaluation of the mining operations, with respect to requirements contained in the reclamation plan and CUP-4913 that are contingent upon data and analysis typically collected and presented by a civil engineer, are considered to be beyond the scope of this observation summary letter/report.

# Remarks

Please call this office at (805) 300-4564 if you have any questions regarding this letter/report.

Respectfully submitted,

JCR CONSULTING

John C. Rubenacker, CEG 2200

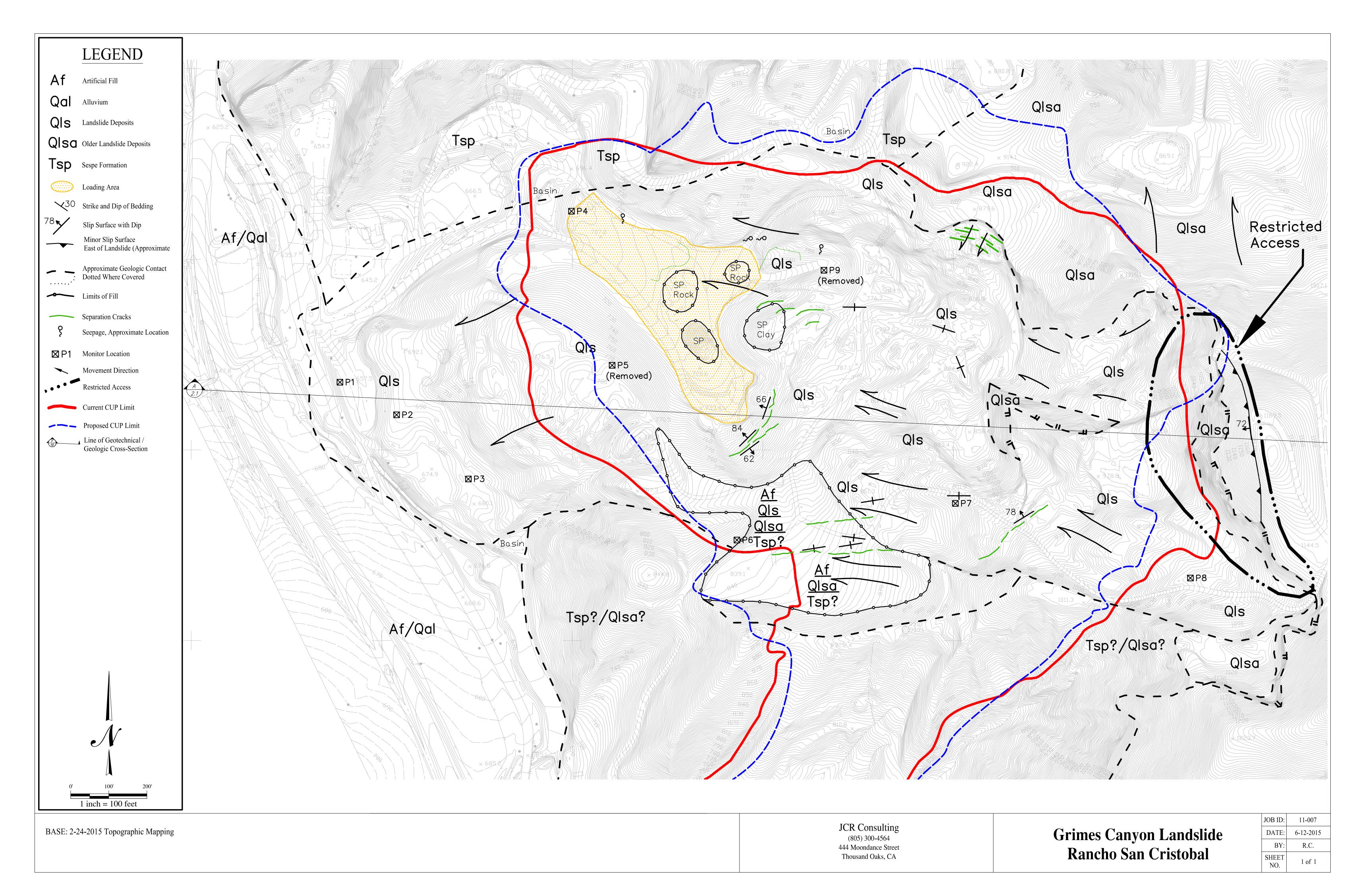
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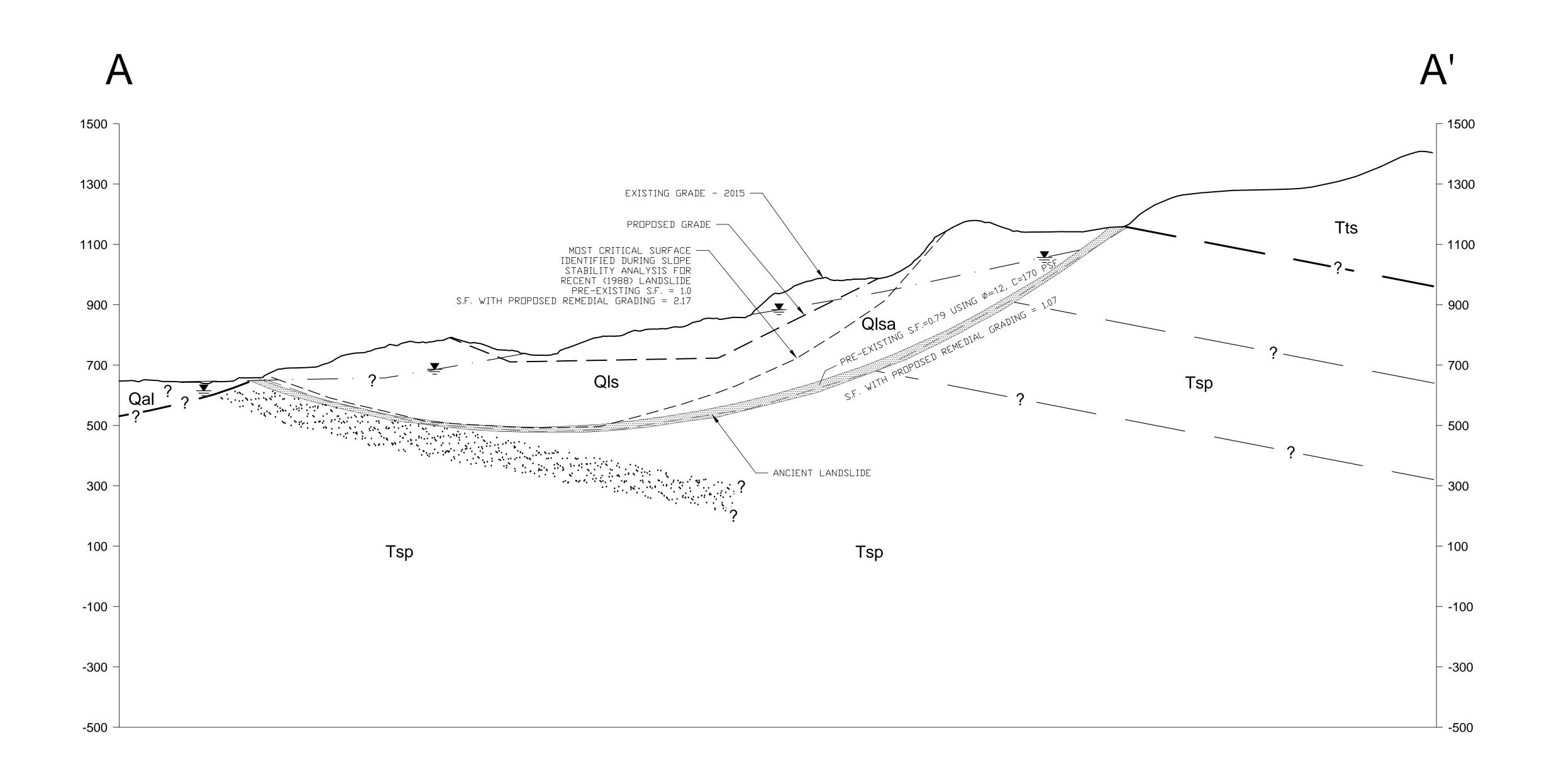
R. Mark Workman Jr., RCE 68557

No. 68557 EXP. 09/30/15

# APPENDIX 1

GEOLOGIC MAP AND GEOTECHNICAL/GEOLOGIC CROSS-SECTION





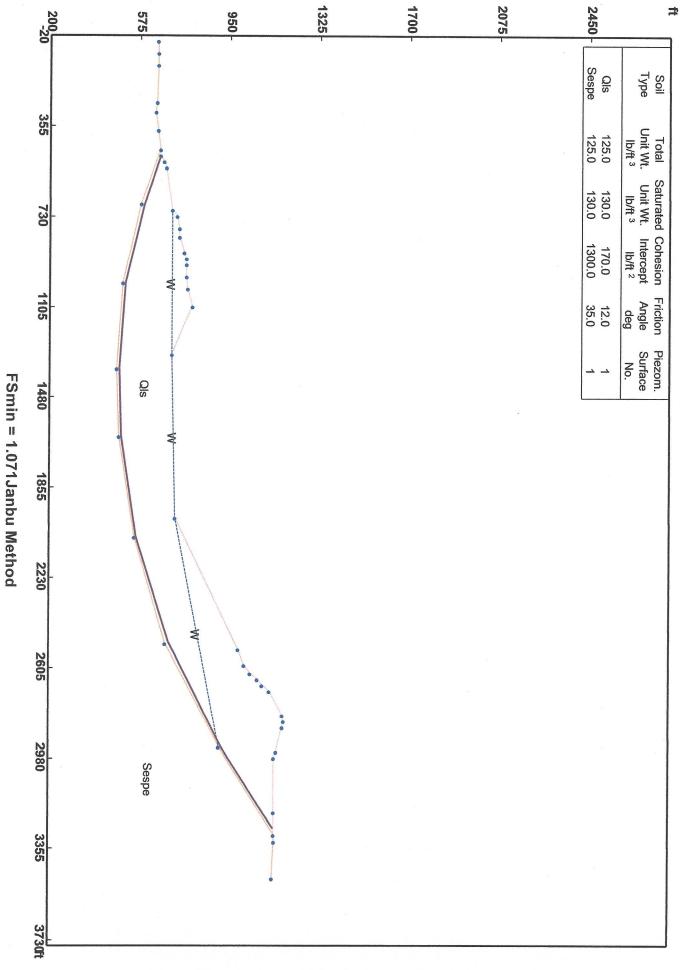
# APPENDIX 2 SLOPE STABILITY ANALYSIS

(ASD)

Z Visual Slope

# Rancho San Cristobal





### Visual Slope

### Slope Stability Analysis and Reinforced Slope Design

Project Information:

Rancho San Cristobal

Ancient Landslide (User Defined Slide Plane With Water), Fugro Section

User Name :

Workman

Calculation

Method:

ASD Method

Input Data

Line#	X-Left	Y-Left	X-Right	Y-Right	Soil Name
	ft	ft	ft	ft	
1	0.00	648.00	50.00	650.00	Sespe
2	50.00	650.00	100.00	650.00	Sespe
3	100.00	650.00	255.00	645.00	Sespe
4	255.00	645.00	295.00	640.00	Sespe
5	295.00	640.00	370.00	650.00	Sespe
6	370.00	650.00	450.00	660.00	Sespe
7	450.00	660.00	475.00	660.00	Qls
8	475.00	660.00	500.00	675.00	Qls
9	500.00	675.00	525.00	685.00	Qls
10	525.00	685.00	700.00	710.00	Qls
11	700.00	710.00	725.00	730.00	Qls
12	725.00	730.00	775.00	740.00	Qls
13	775.00	740.00	810.00	740.00	Qls
14	810.00	740.00	875.00	760.00	Qls
15	875.00	760.00	900.00	770.00	Qls
16	900.00	770.00	925.00	770.00	Qls
17	925.00	770.00	975.00	770.00	Qls
18	975.00	770.00	1025.00	775.00	Qls
19	1025.00	775.00	1100.00	795.00	Qls
20	1100.00	795.00	1300.00	710.00	Qls
21	1300.00	710.00	1980.00	725.00	Qls
22	1980.00	725.00	2525.00	990.00	Qls
23	2525.00	990.00	2590.00	1015.00	Qls
24	2590.00	1015.00	2625.00	1040.00	Qls

			1300.00 1980.00		710.00 725.00		
			700.00		710.00		
			Х		Υ		
	Piezometric	Surface No.	1	Consists Of	4	Points	
	Unit Weight	Of Water =	62.4	lb/ft^3			
		1	Piezometric	Surface(s)			
Sespe	125	130	1300	35	0	0	1
Qls	125	130	170	12	0	0	1
	lb/ft^3	lb/ft^3	psf	(degree)	psf	ft	
Name	Unit WT.	Unit WT.	Intercept	Angle	Pressure	Constant	Surface
Soil	Unsat	Saturated	Cohesion	Friction	Pore	Pressure	Piez.
Soil Data							
	44	2930.00	910.00	3295.00	1140.00	Sespe	
	43	2500.00	685.00	2930.00	910.00	Sespe	
	42	2060.00	555.00	2500.00	685.00	Sespe	
	41	1640.00	490.00	2060.00	555.00	Sespe	
	40	1360.00	480.00	1640.00	490.00	Sespe	
	39	1000.00	505.00	1360.00	480.00	Sespe	
	38	675.00	580.00	1000.00	505.00	Sespe	
	37	450.00	660.00	675.00	580.00	Sespe	
	36	3324.00	1142.00	3476.00	1134.00	Sespe	
	35	3295.00	1140.00	3324.00	1142.00	Sespe	
	34	3200.00	1140.00	3295.00	1140.00	Qls	
	33	2975.00	1140.00	3200.00	1140.00	Qls	
	32	2950.00	1150.00	2975.00	1140.00	Qls	
	31	2850.00	1175.00	2950.00	1150.00	Qls	
	30	2825.00	1180.00	2850.00	1175.00	Qls	
	29	2800.00	1175.00	2825.00	1180.00	Qls	
	28	2700.00	1120.00	2800.00	1175.00	Qls	
	27	2675.00	1090.00	2700.00	1120.00	Qls	
	26	2650.00	1070.00	2675.00	1090.00	Qls	

0.00	0.00

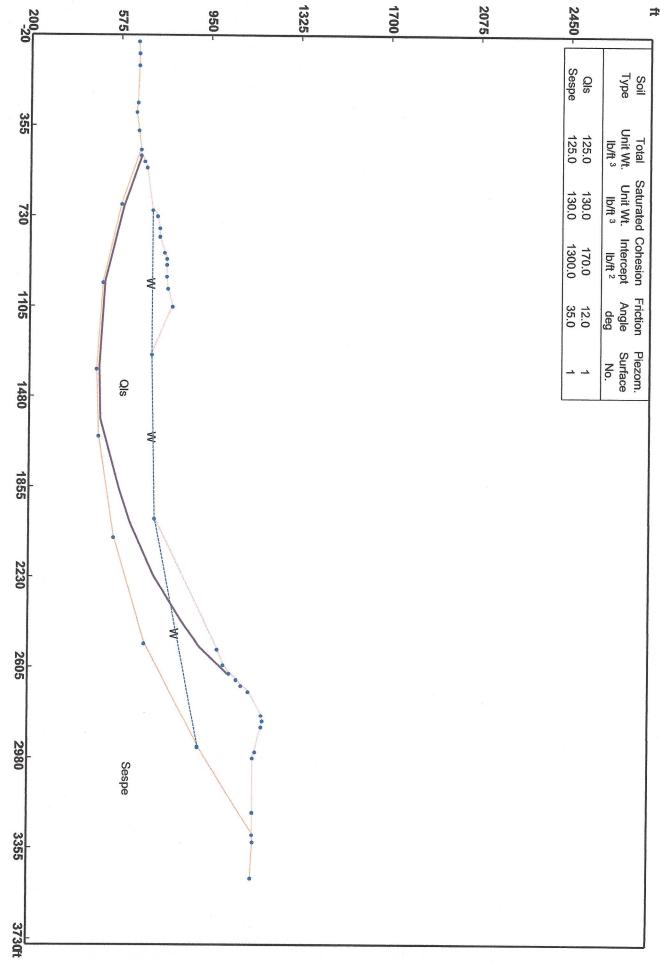
Results

Failure Surface

	Defined By:	9	Points FS=	1.071
Point		X-Coord ft		Y-Coord ft
1		479.09		660.91
2		683.64		592.73
3		1002.73		516.36
4		1357.27		491.82
5		1640.91		500.0
6		2060.91		562.73
7		2494.55		699.09
8		2922.73		914.55
9		3271.82		1138.18

# Rancho San Cristobal

1988 Landslide (User Defined Slide Plane With Water), Fugro Section



(ASD)

### Visual Slope

### Slope Stability Analysis and Reinforced Slope Design

Project Information:

Rancho San Cristobal

1988 Landslide (User Defined Slide Plane With Water), Fugro Section

User Name:

Workman

Calculation

Method:

ASD Method

Input Data

Line#	X-Left	Y-Left	X-Right	Y-Right	Soil Name
	ft	ft	ft	ft	Oon Name
1	0.00	648.00	50.00		C
				650.00	Sespe
2	50.00	650.00	100.00	650.00	Sespe
3	100.00	650.00	255.00	645.00	Sespe
4	255.00	645.00	295.00	640.00	Sespe
5	295.00	640.00	370.00	650.00	Sespe
6	370.00	650.00	450.00	660.00	Sespe
7	450.00	660.00	475.00	660.00	Qls
8	475.00	660.00	500.00	675.00	Qls
9	500.00	675.00	525.00	685.00	Qls
10	525.00	685.00	700.00	710.00	Qls
11	700.00	710.00	725.00	730.00	Qls
12	725.00	730.00	775.00	740.00	Qls
13	775.00	740.00	810.00	740.00	Qls
14	810.00	740.00	875.00	760.00	Qls
15	875.00	760.00	900.00	770.00	Qls
16	900.00	770.00	925.00	770.00	Qls
17	925.00	770.00	975.00	770.00	Qls
18	975.00	770.00	1025.00	775.00	Qls
19	1025.00	775.00	1100.00	795.00	Qls
20	1100.00	795.00	1300.00	710.00	Qls
21	1300.00	710.00	1980.00	725.00	Qls
22	1980.00	725.00	2525.00	990.00	Qls
23	2525.00	990.00	2590.00	1015.00	Qls
24	2590.00	1015.00	2625.00	1040.00	Qls

	25	2625.00	1040.00	2650.00	1070.00	Qls		
	26	2650.00	1070.00	2675.00	1090.00	Qls		
	27	2675.00	1090.00	2700.00	1120.00	Qls		
	28	2700.00	1120.00	2800.00	1175.00	Qls		
	29	2800.00	1175.00	2825.00	1180.00	Qls		
	30	2825.00	1180.00	2850.00	1175.00	Qls		
	31	2850.00	1175.00	2950.00	1150.00	Qls		
	32	2950.00	1150.00	2975.00	1140.00	Qls		
	33	2975.00	1140.00	3200.00	1140.00	Qls		
	34	3200.00	1140.00	3295.00	1140.00	Qls		
	35	3295.00	1140.00	3324.00	1142.00	Sespe		
	36	3324.00	1142.00	3476.00	1134.00	Sespe		
	37	450.00	660.00	675.00	580.00	Sespe		
	38	675.00	580.00	1000.00	505.00	Sespe		
	39	1000.00	505.00	1360.00	480.00	Sespe		
	40	1360.00	480.00	1640.00	490.00	Sespe		
	41	1640.00	490.00	2060.00	555.00	Sespe		
	42	2060.00	555.00	2500.00	685.00	Sespe		
	43	2500.00	685.00	2930.00	910.00	Sespe		
	44	2930.00	910.00	3295.00	1140.00	Sespe		
Soil Data								
Soil	Unsat	Saturated	Cohesion	Friction	Pore	Pressure	Piez.	
Name	Unit WT.	Unit WT.	Intercept	Angle	Pressure	Constant	Surface	
	lb/ft^3	lb/ft^3	psf	(degree)	psf	ft		
Qls	125	130	170	12	0	0	1	
Sespe	125	130	1300	35	0	0	1	
		1	Piezometric	Surface(s)				
	Unit Weight	Of Water =	62.4	lb/ft^3				
	Piezometric	Surface No.	1	Consists Of	4	Points		
			X		Υ			
			700.00		710.00			
			1300.00		710.00			
			1980.00		725.00			
			***					

. ~-

0.00 0.00

Results

Failure Surface

11

Y-Coord
ft
663.64
590.0
513.64
491.82
497.27
576.36
625.45
720.91
835.45
917.27

2633.64

1034.55

### APPENDIX 3

### REFERENCES

Earth Systems (1993), Geologic Recommendations for Emergency Use Permit (EUA), Grimes Canyon Landslide Property, Fillmore Area, Ventura County, California, unpublished consultant's report, prepared for Santa Clara Valley Ag Development Corporation, dated September 17.

Fugro West, Inc. (1997), Supplemental Geotechnical Slope Stability Evaluation, Ventura County Public Works Maintenance Grading Permit, Rancho San Cristobal (Active Grimes Canyon) Landslide Project, Ventura County, California, May 14.

Fugro West, Inc. (1997), Response to County of Ventura Comments Dated March 27, 1997, Conditional Use Permit 4913 Rancho San Cristobal Landslide Project Ventura County, California, April.

Fugro West, Inc. (1995), Geotechnical Study Active Landslide in Grimes Canyon, March.

Jensen Design & Survey (1997, Revised), Reclamation Plan, Grimes Canyon Project, Ventura County, California, November.

Sespe Consulting, Inc., (2011), Annual Compliance Report, Santa Clara Valley Ag Development Corp., San Cristobal Clay Mine, CA Mine ID #91-56-0030, June 30.

JCR Consulting, (2011), Notice of Change of Consultants for Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, California, September 9,

JCR Consulting, (2011), Summary of Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, September 5.

JCR Consulting, (2011), Response to County of Ventura Public Works Agency Memorandum Review of CUP 4913 (Rancho San Cristobal) Landslide Removal/Mine, CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, December 12.

Sespe Consulting, Inc., (2011), Annual Mine Inspection For CUP 4913, San Cristobal Clay Mine, CA Mine ID #91-56-0030, December 14.

JCR Consulting, (2012), Quarterly Summary of Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, January 4, March 22, June 28, and October 23.

Jensen Design and Survey, Inc., (2012), Rancho San Cristobal 2011 Mine Inspection for CUP 4913 CA Mine ID No. 91-56-0030, February 16.

JCR Consulting, (2013), Quarterly Summary of Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, January 13, April 14, July 27, and November 15.

JCR Consulting, (2014), Quarterly Summary of Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, February 11, May 15, August 6, and November 12.

JCR Consulting, (2015), Quarterly Summary of Geologic Observations for the Clay Mine Operations and Vicinity, as Related to CA Mine ID #91-56-0030, 2100 Grimes Canyon Road, Fillmore Area, County of Ventura, February 12 and May 15.

### **HYDROLOGY & DRAINAGE REPORT**

for

**CUP 4913** 

, in the

County of Ventura, California



Prepared by:

Jensen Design & Survey 4171 Market Street, Suite 4A Ventura, CA 93003 (805) 654-6977

July, 1996

This report provides a summary of the hydrologic and hydraulic analysis for CUP 4913.

Hydrologic information for the area was obtained from the Ventura County Flood Control District. Runoff quantities for 10-year, 50-year, and 100-year frequency storms were developed in the report titled "Hydrologic Analysis, Flood Control Zone 2" on file at the Flood Control District. Plate 5 and Table 8 of the Districts report contain the information pertinent to CUP 4913, and are included herein.

There will be no increase in runoff due to the proposed project. Existing drainage patterns are now confined to the steep canyon valleys of the watershed that flow more or less directly to their concentration points near Grimes Canyon Road. The project proposes a variety of agricultural access roads, bench drains, culverts, and "V" ditches, which create a very circuitous drainage route, thereby lengthening the runoff pattern and corresponding time of concentration, which will result in lower runoff quantities.

Three disilting basins will be constructed in the lower reaches of the watershed. One basin will be located off-site from the property at the northerly edge of the watershed boundary; one will be centrally located within the watershed; and one will be located at the southerly property boundary. The desilting basins will intercept the three main watercourses from the project.

All of the drainage features of the project have been sized using the runoff quantities developed from the Ventura County Flood Control District data. Final project design facilities range in size from 18-inch to 27-inch diameter pipes.

A hydrology exhibit is included herewith which shows the major watershed subareas that are affected by the proposed project. Much of the existing overall watershed will remain natural and no change in runoff quantities will result in these areas. The exhibit indicates developed project subarea concentration points and runoff quantities where culverts or other significant drainage facilities are proposed. The available capacities of all bench drains, roadside drainage ditches, and "V" ditches exceed the required capacities developed from the hydrologic data.

Included in the Appendix is the hydrology data, and preliminary calculations for bench drains, access roads, "V" ditches, and culverts.

TABLE 8 (CONTINUED)

SUMMARY OF ESTIMATED FLOOD FLOWS - SANTA CLARA RIVER VENTURA COUNTY FLOOD CONTROL DISTRICT - ZONE 2

						EQUEN		0 F		RREI		
DRAINAGE	CROSS	AREA	CURVE	ONE PE		O YEAR)		ERCENT (5		TEN PE		O YEAR)
AREA	SECTION		NUMBER	PRECIPI		PEAK		TATION	PEAK	PRECIPI	TATION	PEAK
NUMBER	OR				DURATION	FLOOD		OURATION	FLOOD		DURATION	FLOOD
•	STRUCT		24 HR.	POINT	AREAL	FLOWS	POINT	AREAL	FLOWS	POINT	AREAL	FLOWS
···	NUMBER	5Q. MI.	MOITARUO	INCHES	INCHES	C. F 9.	INCHES	INCHES	C. F. S.	INCHES	INCHES	C. K. S.
53A=B	123	4,13	68	10,13	9,97	3000	9,13	8,98	2500	6,66	6,55	1500
53C	124	1,27	63	9,21	9.17	800	8,30	8,26	670	6,06	6,03	380
53A=C	124	5,40	67	9,91	9,70	3400	8,93	8,74	2900	6,52	6,38	1700
53D	125	1,78	57	9,21	9.15	920	8,30	8,24	760	6,06	6,02	400
53A . D	126	7.18	64	9,75	9,47	4200	8,78	8,53	3500	6,41	6,23	2000
53E	127	1;14	61	8,88	8,84	690	8.00	7,96	580	5.84	5,81	320
53A=E	127	8,32	64	9,62	9.30	4400	8,67	8,38	3700	6.33	6,12	210
53F	128	0.79	72	8 88	8,85	510	8,00	7.97	440	5,84	5,82	27(
53AmF	128	9,11	65	9,56	9.21	4700	8,61	8.30	4000	6,29	6,06	. 2300
0 +53F	129	1167,66	62	8.04	6.26	89300	7,24	5.64	72700	5,29	4,12	3650
0 <b>-</b> 53F	130	1167,66	62	8,04	6.26	89300	7,24	5,64	72700	5,29	4,12	36500
54A	131	0,83	. 72	9,88	9,85	780	8,90	8.87	670	6,50	6.48	426
54B	132	0,45	73	8.88	8,86	360	8,00	7.99	310	5,84	5,83	190
54A=B	132	1.28	7Ž	9,52	9,48	1100	8,58	8.54	980	6,26	6,23	600
0 * 5 4 B	133	1168 94	62	8,04	6.26	89300	7.24	5.64	72700	5,29	4,12	3640
0 = E 4 D		4440 04	40	9 04	4 24	90200	7 04	C 44	70460	•		34401
0 × 5 4 B	134	1168,94	62	8.04	6.36	89200	7,24	5,64	72600	5,29	4,12	36400
55A .	135	0,83	66	9,99	9,96	710	9,00	8,97	. 600 -	6,57	6,55	360
55B	136	0,53	68	9,99	9,97	470	9,00	8,98	400	6 57	6,56	240
55A+B	136	1,36	67	9,99	9,94	1100	9,00	8,95	970	6,57	6,53	580
55C	137	0,45	63	9,99	9.97	370	9,00	8,98	310 .	6,57	6,56	180
55D	138	0,57	75	9,99	9,97	560	9.00	8,98	480	6,57	6,56	310
55A+D	139	2,38	68	9,99	9,89	5000	9,00	8.91	1700 ·	6,57	6,51	1000
55 <u>E</u>	140	0,49	61	9,99	9,97	390	9,00	8,98	330	6,57	6,56	1.85
55A+E	.140	2,87	67	9,99	9.88	2400	9,00	8,90	2000	6,57	6,49	1200
55F	141	0,40	72	9,99	9.97	400	9,00	8,99	350	6,57	6,56	210
55 A u F	141	3.27	éВ	9,99	9.86	2600	9,00	8.88	2200	6,57	6,48	1300
55G	142	0.56	65 67	9.99	9.97	470	9.00	8.98	400	<u>-6,57</u>	6,56	230
55A=G	143	3,83		9,99	9.84	3000	9,00	8,86	2600	6,57	6,47	1500
55H	144	0.11	78	9.77	9,76	120	8,80	8,80	105	6,42	6,42	65
55AuH	144	3.94	67	9,98	9,82	3100	8.99	8.85	2600	6,56	6.46	1600

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### DETERMINE RUNOH TO PROSECT CONCENTRATION POINTS

Ret: Hyproxica ANALYSIS, FLOOD CONTROL ZONE 2, prepared by Boyle Engineering, MAY 1967.

PLATE 5 & TABLE 8

THE PROJECT WATERSHED BOUNDARY EXTENDS INTO SUBARRAS 55E & 55G AS SHOWN ON PLANES

FROM TABLE 8:

USE THESE HICHER VALUES

55E = 0.49 SQ.MI. = 314 Ac.

Q10: 185 cfs ; Q10/Ac= 0.59 cfs/Ac.

Q50 = 330 c/s; Q9/Ac = 1.05 c/s/Ac.

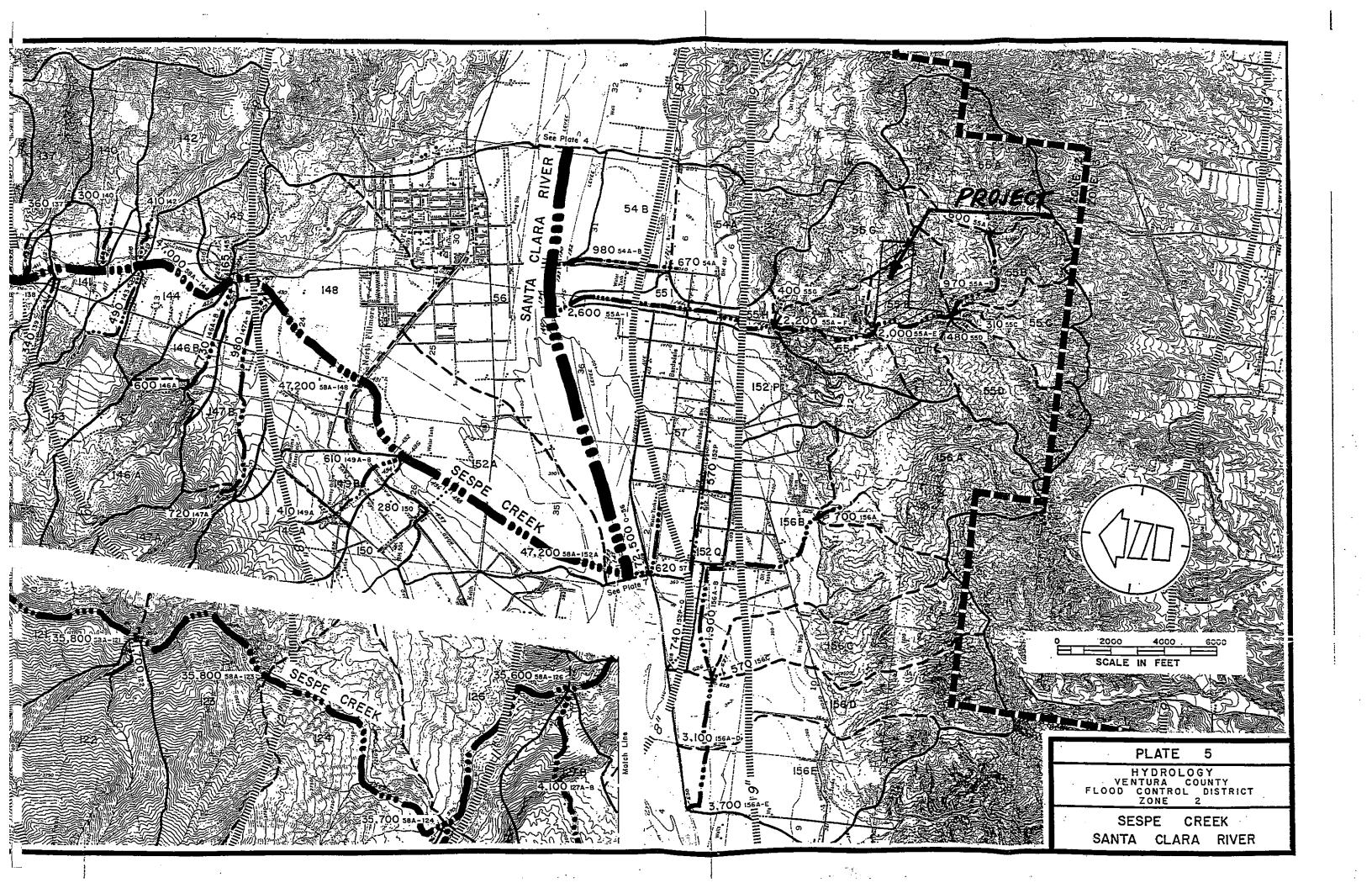
Q100 = 390 c/s; Q100/Ac. = 1.24 c/s/Ac.

556 = 0,56 SQ.MI. = 358 Ac.

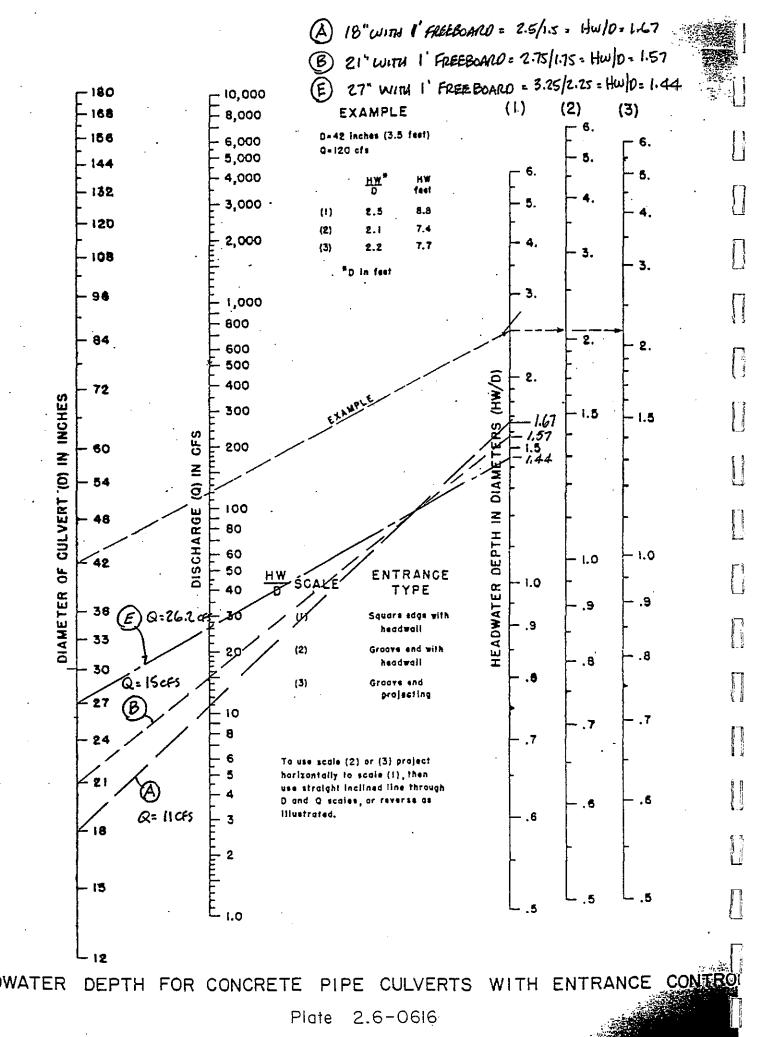
Q10: 230 CFS; Q10/Ac. = 0.64 CFS/Ac.

Q50 - 400 CFS; Q50/Ac. , 1.11 CFS/Ac.

-			. X100 =	47045	You Az.	= 1.31.05/Ac.
	PROV. SUBARKA	Ac.	Q10 (chs)	Q50(ch)	Qroo (crs)	TOTAL DESILNO (0.50)
	A-	7.6	4.9	8.4	10.0	8.4
	<i>B</i>	1.7	1.1	1.9	2.2	10.3
	C	5.1	3.3	5.7	6.7	16.0
	D	9.9	6.3	11.0	13.0	11.0
	E ~	13.7	8.8	15.2	18:0	26.2
	F	8.7	5.6	9.7	11.3	35.9
	G	3.8	11	1.7	50	12



CULVERTS



MISCELLANEOUS DRAINAGE FACILITIES

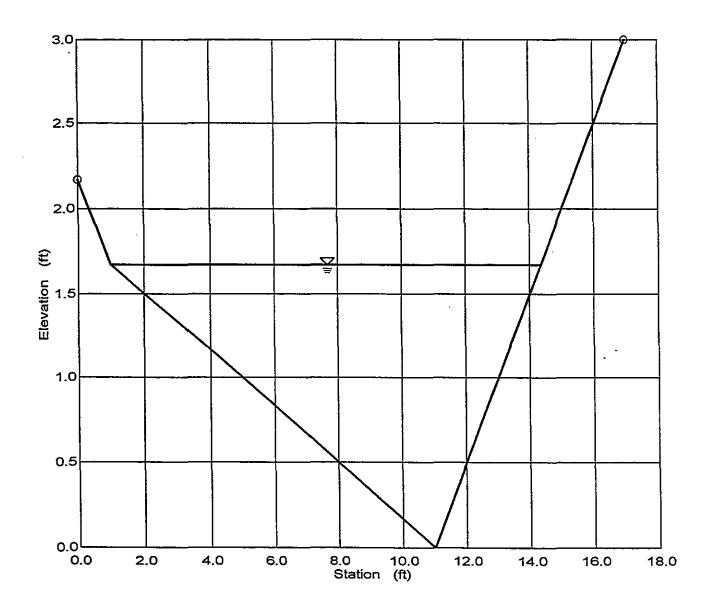
# TRAPEZOIDAL CHANNEL ANALYSIS NORMAL DEPTH COMPUTATION February 9, 1996

	PROGRAM INPUT DATA: DESCRIPTION	VALUE
MAX. CAPACITY	- Flow Rate (cubic feet per second)	150.0 0.0850 0.0350 2.00 2.00 2.0
	PROGRAM RESULTS: DESCRIPTION	VALUE
	Normal Depth (feet)	1.95 12.99 2.111 2.62 4.57 11.55 9.82
	TRAPEZOIDAL CHANNEL ANALYSIS COMPUTER PROGRAM, Version 1.2 Dodson & Associates, Inc., 7015 W. Tidwell, #107, Houston, (713) 895-8322. A manual with equations & flow chart is available.	, TX 77092

## DIVERSION TERRACE Cross Section for Irregular Channel

Project Description	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	DIVERSION TERRACE
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data			
Wtd. Mannings Coefficient	0.030		<del></del>
Channel Slope	0.0200	00 ft/ft	
Water Surface Elevation	1.67	ft	BENICH DRAIN MAX. CAPACITY
Discharge	67.40	cfs	DENICH UNITED MAKE. CHARACT



# DIVERSION TERRACE Rating Table for Irregular Channel

Project Description	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	<b>DIVERSION TERRACE</b>
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Constant Data	
Channel Slope	0.020000 ft/ft

Input Data	<u>.</u>		
	Minimum	Maximum	Increment
Water Surface Elevation	0.00	1.67	0.25 ft

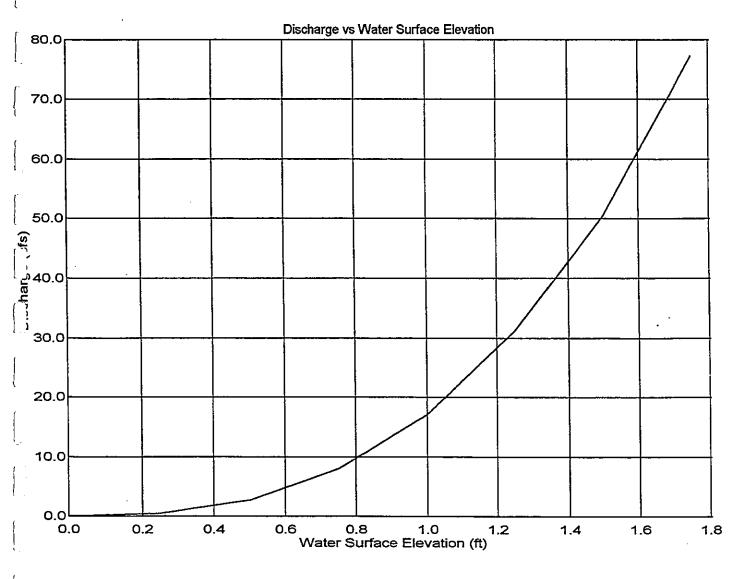
ating Table	-		
Water Surface Elevation (ft)	Wtd. Mannings Coefficient	Discharge (cfs)	Velocity (ft/s)
0.00	0.030	0.00	0.00
0.25	0.030	0.43	1.71
0.50	0.030	2.70	2.71
0.75	0.030	7.97	3.55
1.00	0.030	17.17	4.30
1.25	0.030	31.13	4.99
1.50	0.030	50.62	5.63
1.75	0.030	77.32	6.33

# Curve Plotted Curves for Irregular Channel

Project Description	
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	DIVERSION TERRACE
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Constant Data		
Channel Slope	0.020000 ft/ft	

Input Data			
	Minimum	Maximum	Increment
Water Surface Elevation	0.00	1.67	0,25 ft



# 30" WIDE V-DITCH Worksheet for Triangular Channel

Project Description	•
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	V-DITCH DOWNDRAIN
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.015
Channel Slope	0.280000 ft/ft
Depth	1.00 ft
Left Side Slope	1.250000 H:V
Right Side Slope	1.250000 H:V

Results	_			
Discharge	35.00	cfs	CAPACITY	> MAX. REQ'O = 13.0 CFS
Flow Area	1.25	ft²		CONC.PT. C
Wetted Perimeter	3.20	ft		
Top Width	2.50	ft		
Critical Depth	2.18	ft		
Critical Slope	0.0044	33 ft/ft	•	
Velocity	28.00	ft/s		
Velocity Head	12.19	ft		
Specific Energy	13.19	ft		
Froude Number	6.98			
Flow is supercritical	•			

# GROVE ACCESS ROAD Worksheet for Irregular Channel

Project Description	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	GROVE ACCESS ROAD
Flow Element	Iπegular Channel
Method	Manning's Formula
Solve For	Discharge

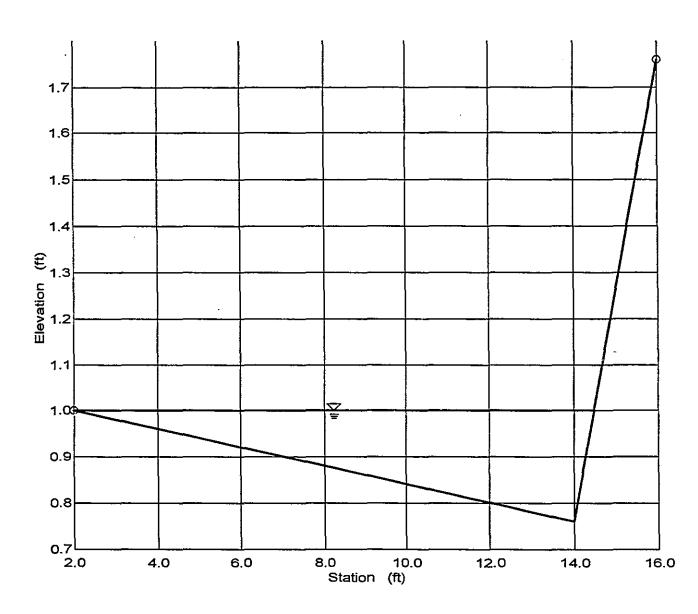
Input Data					
Channel Slope		0.1000	000 ft/ft		
Water Surface Elev	vation	1.00	ft		
Elevation range: 0.	76 ft to 1.76 ft.				
Station (ft)	Elevation (ft)		Start Station	End Station	Roughness
2.00	1.00		2.00	16.00	0.015
14.00	0.76				
16.00	1.76				

Results				
Wtd. Mannings Coefficient	0.015			
Discharge	11.38	cfs -	<del></del>	MAY. CAPACITY
Flow Area	1.50	ft²		
Wetted Perimeter	12.54	ft		NO ROADSIDE DITCH
Top Width	12.48	ft		
Height	0.24	ft		
Critical Depth	1.18	ft		
Critical Slope	0.00509	95 ft/ft		
Velocity	7.60	ft/s		
Velocity Head	0.90	ft		
Specific Energy	1.90	ft		
Froude Number	3.87			
Flow is supercritical.				•

# GROVE ACCESS ROAD Cross Section for Irregular Channel

Project Description	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	GROVE ACCESS ROAD
Flow Element	Irregular Channel
Method	Manning's Formula
Soive For	Discharge

Section Data			
Wtd. Mannings Coefficient	0.015		
Channel Slope	0.10000	00 ft/ft	
Water Surface Elevation	1.00	ft	
Discharge	11.38	cfs	



# MODIFIED GROVE ACCESS ROAD Worksheet for Irregular Channel

Project Description	on
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	MODIFIED GROVE ACCESS ROAD
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

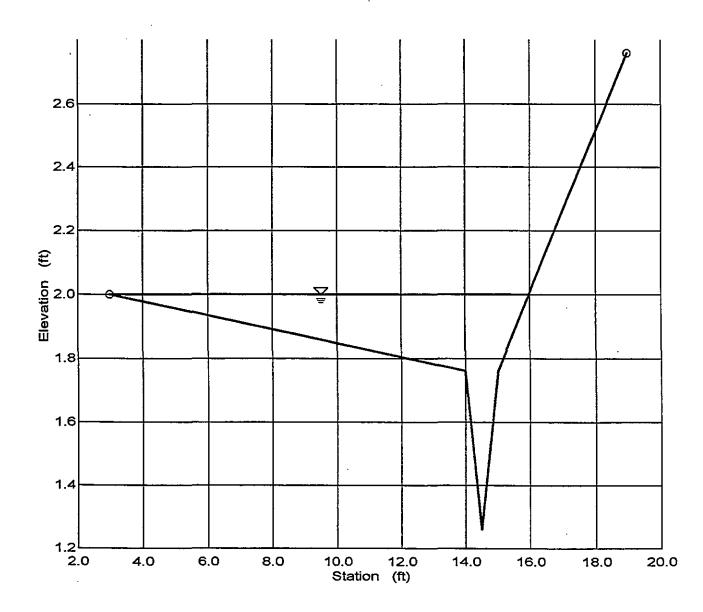
Input Data					
Channel Slope		0.1000	000 ft/ft		
Water Surface Elev	vation	2.00	ft		
Elevation range: 1.3	26 ft to 2.76 ft.				
Station (ft)	Elevation (ft)		Start Station	<b>End Station</b>	Roughness
3.00	2.00		3.00	19.00	0.015
14.00	1.76				
14.50	1.26				
15.00	1.76				
19.00	2.76				

Results			
Wtd. Mannings Coefficient	0.015		MAX.
Discharge	16.54	cfs	CAPACITY
Flow Area	1.93	ft²	
Wetted Perimeter	13.41	ft	
Top Width	12.96	ft	ROADSIDE DITCH
Height	0.74	ft	
Critical Depth	2.22	ft	<del>\</del>
Critical Slope	0.00494	48 ft/ft	
Velocity	8.59	ft/s	
Velocity Head	1.15	ft	0.5'
Specific Energy	3.15	ft	
Froude Number	3.93		V — <u> </u>
Flow is supercritical.			

# GROVE ACCESS ROAD WITH ROADSIDE DITCH Cross Section for Irregular Channel

Project Description	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	MODIFIED GROVE ACCESS ROAD
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data		
Wtd. Mannings Coefficient	0.015	*
Channel Slope	0.100000	ft/ft
Water Surface Elevation	2.00	ft
Discharge	16.54	cfs



# MODIFIED GROVE ACCESS ROAD Worksheet for Irregular Channel

Project Descriptio	n
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	MODIFIED GROVE ACCESS ROAD
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

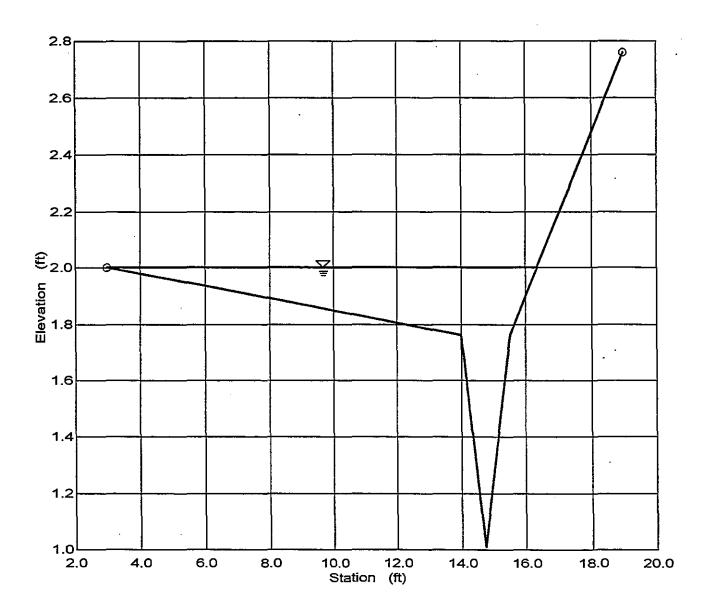
Input Data					
Channel Slope		0.1000	000 ft/ft		
Water Surface Ele	vation	2.00	ft		
Elevation range: 1.	01 ft to 2.76 ft.				
Station (ft)	Elevation (ft)		Start Station	End Station	Roughness
3.00	2.00		3.00	19.00	0.015
14.00	1.76				
14.75	1.01				
15.50	1.76				
19.00	2.76	_			

Results			
Wtd. Mannings Coefficient	0.015		
Discharge	22.30	cfs	MAY. CAPACITY
Flow Area	2.34	ft²	
Wetted Perimeter	14.00	ft	ROADSIDE DITCH
Top Width	13.34	ft	•
Height	0.99	ft	L 1.5'
Critical Depth	2.27	ft	
Critical Slope	0.0047	64 ft/ft	
Velocity	9.52	ft/s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Velocity Head	1.41	ft	0.75
Specific Energy	3.41	ft	
Froude Number	4.00		V
Flow is supercritical.			

## GROVE ACCESS ROAD WITH ROADSIDE DITCH Cross Section for Irregular Channel

Project Description	
Project File	c:\haestad\fmw\gof12230.fm2
Worksheet	MODIFIED GROVE ACCESS ROAD
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data		
Wtd. Mannings Coefficient	0.015	
Channel Slope	0.10000	) ft/ft
Water Surface Elevation	2.00	ft
Discharge	22.30	cfs





1672 Donlon Street Ventura, CA 93003 Local 805 654-6977 Fax 805 654-6979 www.jdscivil.com

SAN08.2230 Wednesday, July 15, 2015

Jim O'Tousa County of Ventura Development Services 800 S. Victoria Avenue Ventura CA, 93009

RE: Rancho San Cristobal – Proposed CUP Adjustment Drainage Analysis

Dear Jim,

The Rancho San Cristobal Mine is applying for a CUP modification, and revision to their mining reclamation plan. This letter is to discuss the hydrologic drainage pattern differences between the reclaimed surface topography of the currently permitted final reclaimed surface, and the proposed final reclaimed surface.

The currently permitted final reclaimed surface (FRS) has a reclaimed floor sloping roughly 9.5% to the north-west of the CUP limits. The proposed FRS is looking to slope the reclaimed floor at 2%, also to the north-west of the CUP limits. The general drainage pattern remains unchanged; however drainage velocities are expected to be considerably less with a flatter reclaimed floor if the proposed FRS. This lower velocity seems advantageous. The limits of the overall drainage area are unchanged.

Please let us know if additional information is required.

Sincerely,

Donald M. Jensen, PE

CEO

Jensen Design & Survey, Inc.

K:\SAN82230\Hydro\2230 Drainage Change Letter 2015-07-15.doc



374 Poli Street, Suite 200 • Ventura, California 93001

# FINANCIAL ASSURANCE COST ESTIMATE 2016-2017

### Rancho San Cristobal Clay Mine

2100 Grimes Canyon Road Fillmore, CA 93015

### CA Mine ID #91-56-0030

December 9, 2015

Lead Agency: Ventura County Resource Management Agency

**Planning Division** 

800 South Victoria Avenue, L#1740

Ventura, CA 93009

Prepared for: Santa Clara Valley Ag Development Corp.

1708 Cherry Hill Road Santa Paula, CA 93060

Prepared by: Sespe Consulting, Inc.

374 Poli Street, Suite 200

Ventura, CA 93001 (805) 275-1515

### FINANCIAL ASSURANCE COST ESTIMATE

Rancho San Cristobal Clay Mine Fillmore, CA

CA Mine ID #91-56-0030

December 9, 2015

### **Certification Statement**

This Financial Assurance Cost Estimate was prepared based on:

- Public Resources Code Section 2207(a)(9) and 2773.1;
- California Code of Regulations Title 14 Section 3804;
- State Mining and Geology Board Financial Assurance Guidelines (revision dated January 16, 1997-A; July 23, 2004);
- The site's Reclamation Plan (Reclamation Plan, Grimes Canyon Project, November 1997);
- Information obtained from the site operator (Santa Clara Valley Ag Development Corp.);
- Information obtained from subcontractors; and
- Conditions noted during site visits.

### I hereby certify that:

- I am familiar with the requirements of the Surface Mining and Reclamation Act of 1975 and the Public Resources Code Section 2710;
- I have visited and am familiar with the facility;
- This Financial Assurance Cost Estimate has been prepared in accordance with good engineering practice; and
- This Financial Assurance Cost Estimate is adequate for this facility.

A. Pearce Swerdfeger, EIT

**Engineer II** 

Sespe Consulting, Inc.

#### **FINANCIAL ASSURANCE COST ESTIMATE**

# Rancho San Cristobal Clay Mine Fillmore, CA

CA Mine ID #91-56-0030

December 9, 2015

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#### **FINANCIAL ASSURANCE COST ESTIMATE**

Rancho San Cristobal Clay Mine Fillmore, CA

CA Mine ID #91-56-0030

December 9, 2015

#### 1.0 EXECUTIVE SUMMARY

The Surface Mining and Reclamation Act of 1975 (SMARA), as amended, and Public Resources Code Section 2710 et seq., requires surface mining operators to prepare a lead-agency-approved Financial Assurance Cost Estimate (FACE) for reclamation activities. Once the FACE is approved by the lead agency, the mine operator must provide a financial assurance mechanism to cover reclamation costs in the event that the mine is abandoned or the operator is financially unable to complete the required reclamation activities.

This Financial Assurance Cost Estimate (FACE) has been prepared for Rancho San Cristobal Clay Mine site located at 2100 Grimes Canyon Road (Highway 23) near the City of Fillmore, California.

This FACE covers the period of January 1, 2016 to June 30, 2017. The estimate includes completion of all reclamation activities that would be required based on current site conditions plus the anticipated conditions through the date specified above.

The total reclamation cost was calculated to be \$117,076.

#### 2.0 BACKGROUND

The site is an active clay mining operation. Operations at the site include overburden removal, clay mining, and related support operations such as vehicle fueling and maintenance. The clay mining process includes loading the material into trucks using mobile equipment. There is no fixed (or portable) processing plant at the site.

A Reclamation Plan has been prepared for the site that details the required reclamation activities (*Reclamation Plan, Grimes Canyon Project, Ventura County, CA*; December 1996, Revised November 1997; Jensen Design & Survey).

To ensure adequate reclamation of the site, this estimate addresses the following **additional** task will be performed as a part of reclamation:

• Preparation of a Phase 1 Environmental Site Assessment.

#### 2.1 Site End Use

The mining project has two primary objectives: 1) Reduce the hazard of an active landslide, and 2) Restore a viable agricultural use to the property which will reduce future landslide movement potential in this area.

#### 2.2 Current and Projected Site Conditions

The total Conditional Use Permit (CUP) area is approximately 80.2 acres. Of this area, the reclamation area with the permit boundary is approximately 51.4 acres. Based on the most recent aerials and topographical images available (Cooper Aerial; March 2015; see Appendix 1), a total of 18.5 acres of disturbed area existed at the mine in 2015. In order to remain conservative and account for potential additional disturbances, 20 acres are assumed to be disturbed for the purposes of reclamation.

In the past year, the operator has continued exporting clay and overburden material offsite. In 2015, one of the aboveground fuel tanks was removed from the property.

**Table 1: Disturbed and Reclaimed Areas** 

Disturbed Acreage (include all disturbed areas on- site)	Pre-SMARA Disturbance (disturbance not subject to reclamation)	Acreage of CUP Boundary	Acreage of Mining Boundary	Acreage Under Reclamation (reclamation not complete)	Reclaimed Acres (Revegetation complete and signed off by County and OMR)	Acreage to be Revegetated
20.0	0	80.2	51.4	0	0	20.0

#### 2.3 Cost Estimate Calculation Methodology

This FACE addresses the activities necessary to implement the Reclamation Plan. It includes the cost of required physical improvements as well as various indirect costs, including mobilization and contingencies as described by the California State Mining and Geology Board's (SMGB) *Financial Assurance Guidelines*.

Where possible, specific unit equipment and labor costs were used. The cost and unit efficiency / capacity data were obtained from the following sources:

- RS Means Heavy Construction Cost Data, 29<sup>th</sup> Annual Edition, 2015 ("Means"). Means guides are widely used to estimate construction costs. They present material, labor, and equipment costs to perform a wide variety of construction tasks. These costs are presented on a per unit basis (e.g., per square foot or cubic yard) and thus can be used to estimate the cost to complete a variety of tasks. The Means guide can be used to estimate construction costs throughout the United States using a "location factor" to adjust the costs to the specific geographic area where the activity will take place;
- State Prevailing Wage Rates ("SPWR") were used to determine labor rates for various job classifications. (General Prevailing Wage Determination Made by the Director of Industrial Relations, Pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773, and 1773.1), effective August 22, 2015 through June 22, 2016, to determine labor rates;
- CalTrans Equipment Rates (Labor Surcharge and Equipment Rental Rates (Cost of Equipment and Ownership)), effective April 1, 2015 through March 31, 2016 to determine equipment rental rates; and
- Caterpillar Handbook (Caterpillar Performance Handbook, Edition 44) to determine equipment capacity and cycle times.

The Office of Mine Reclamation (OMR) developed an MS Excel version of Appendix A-1 of the *Financial Assurance Guidelines* to assist lead agencies and operators preparing reclamation cost estimates in conformance with Section 2773.1 of SMARA. Based on guidance from the County of Ventura, this tool was used to calculate reclamation costs (see Appendix 2).

#### 3.0 RECLAMATION ACTIVITY SUMMARY

The following reclamation activities presented in the SMARA Financial Assurance Guidelines ("SMARA Guidelines") would need to be completed if the site were to be abandoned during the period covered by this FACE:

- **Establish final slopes**: Slopes greater than 2:1 (horizontal:vertical) in disturbed areas will be flattened.
- Construction drainage and erosion controls: The site will have to be graded to direct storm water to
  the existing desilting basins. This cost estimate assumes that this task will be accomplished as part of
  the final slope creation and grading activities at the site.
- **Finish grading**: The disturbed surface area of the site (20 acres) will be finish graded to even contours.
- **Soil preparation:** The compacted portions of the disturbed surface area of the site (15 acres) will be scarified to prepare for revegetation.
- Revegetation: The disturbed surface area of the site (20 acres) will be broadcast seeded.
- **Equipment / debris removal**: There is one (1) aboveground storage tank that is currently on-site that will be removed.
- Miscellaneous: A Phase I Environmental Site Assessment will be prepared to assist the lead agency
  in determining the condition of the site and to identify issues that should be addressed as a part of
  reclamation.
- Monitoring: Revegetation monitoring, maintenance, and weeding in accordance with the Reclamation Plan.

The tasks listed above are discussed in Sections 4 through 8 of this document and cost calculations are presented in Appendix 2.

The following common reclamation activities would <u>not</u> need to be completed given the current site conditions and activities anticipated during the period covered by this FACE:

- **Plant removal**: There is no fixed processing plant at the site.
- Removal of haul / access roads: There are no paved haul or access roads at the site. All dirt haul / access roads will be reclaimed as part of the slope creation and grading operations.
- Decompacting staging / stockpile areas: There are no paved or significantly compacted staging or stockpile areas at the site. All such areas will be reclaimed as part of the grading and revegetation operations.
- Demolition and disposal of building foundations and other debris as well as underground structures: There are no building foundations or underground structures at the site.

- Cleanup of boneyard areas: There are no boneyard areas at the site.
- **Well closure:** There are no wells at the site.
- Remediation of soil contamination: There is no known soil contamination at this site.
- Remove stockpiles: There are no significant stockpiles of material at the site.
- **Establish access restrictions**: The main access to the site (off of Grimes Canyon Road) is currently fenced to deter unauthorized access. The rear of the site is in a remote area that is difficult to access.

#### 4.0 PRIMARY RECLAMATION ACTIVITIES

This section presents details regarding the primary reclamation tasks and the methodology used to calculate the costs for each. Appendix 2 presents detailed calculations for each task as well as a summary of costs.

#### 4.1 Establish Final Grade

Slopes that are greater than 2:1 will be reduced to less than 2:1 and any areas . Based on conditions noted during site visits and the aerial photograph, an estimated 65,000 cubic yards of material would have to be moved to create the final slopes and backfill low areas.

The slopes will be created by pushing material into place with a Caterpillar D9 Dozer. A D9 dozer with a universal blade can move 971 cubic yards of material per hour. This production rate takes into account operator efficiency (75%), job efficiency (50 minutes / hour), average grade (0%), material hardness, and push distance (100 feet). At this rate, this task requires 68 hours to complete.

To control dust emissions, a water truck will be utilized 25% of the total equipment time.

The Caterpillar Handbook was used to determine the operating capacity of the dozer (see Attachment 3). CalTrans Rates were used to determine the rental cost of the dozer and water truck. Equipment operator and water truck driver hourly rates were determined using SPWR.

#### 4.2 General Grading and Contouring

The disturbed surface area of the site (20 acres) will be graded and contoured before revegetation.

A Caterpillar 160 Motor Grader can contour 2.5 acres in one hour. This rate takes into account the typical operating speed of heavy blading (3 mph), the effective blade length of the grader (10.4 feet), the typical pass overlap of a grader (2 feet), and typical work efficiency (0.83). At this rate, the grader can contour 20 acres in approximately 8.0 hours.

To control dust emissions, a water truck will be utilized 25% of the total equipment time.

The Caterpillar Handbook was used to determine the operating capacity of the grader. Equipment rates were determined using CalTrans Rates. Labor rates were determined using SPWR.

In addition, the Reclamation Plan states that "prior to revegetation, the final graded surfaces will be checked by a Registered Professional Engineer who will submit a report to the County of Ventura Planning Department assuring that the final graded contours are consistent with the Reclamation Plan map." The following costs were assumed to be required to address this item:

- Prepare for and conduct site visit (Professional Engineer, 8 hours); and
- Prepare report (Professional Engineer, 8 hours).

The engineer's rate of \$145/hour was derived using the Sespe Consulting rate sheet for a Project Manager I (see Appendix 3).

#### 5.0 REVEGETATION

This section presents details regarding the revegetation tasks remaining and the methodology used to calculate the costs for each. Appendix 2 presents detailed calculations for each task as well as a summary of costs.

#### 5.1 Soil Preparation

It is assumed that the compacted portions of the disturbed surface area (15 acres) will be scarified to decompact and aid in revegetation. This includes staging areas and unpaved roads.

A Caterpillar model 160 Motor Grader with a scarifier attachment can scarify 0.8 acres per hour, based on the Caterpillar Handbook. This rate takes into account the typical operating speed of ripping (1.5 mph), the scarifier length (7.6 feet), the typical pass overlap of a grader (2 feet), and typical work efficiency (0.83). At this rate, it will take the grader 17.8 hours to scarify the site.

To control dust emissions, a water truck will be utilized 25% of the total equipment time.

The Caterpillar Handbook was used to determine the operating capacity of the grader. CalTrans rental rates were used to determine the rental cost of the grader and the water truck. Hourly rates for an equipment operator and a water truck driver were obtained from SPWR.

#### 5.2 Revegetation

It is assumed that the entire disturbed area of the site (20 acres) will have to be revegetated. The Reclamation Plan for the site presents two different reclamation options: planting a Sapphire Dragon orchard or revegetating with native grasses and plants. Given that the purpose of this Financial Assurance Cost Estimate is to estimate the cost necessary to reclaim the site if the operator becomes insolvent, it is assumed that if it was necessary for the lead agency to reclaim the site, they would revegetate the site using native plants (i.e. the lead agency would not want to plant and manage an orchard).

Means Item 329219.14-5700 for tractor spreading of seed was used to determine the equipment and labor costs for this task. Note that the Means costs used in this estimate were increased by 6.0% to account for the location of the site. A seed cost of \$1,225 per acre was obtained from S&S Seeds in Carpinteria, California.

#### Monitoring

Costs to monitor the revegetation efforts are addressed in Section 8 of this document.

#### 6.0 PLANT STRUCTURE AND ANCILLARY EQUIPMENT REMOVAL

There is one (1) aboveground fuel storage tank in use at the site (approximately 500 gallons). Means was used to estimate the following costs related to removing and disposing of the tank:

- Remove sludge, water, and remaining product from tank (Means ID: 026510.30-0300);
- Dispose of sludge off-site (Means ID: 026510.30-0390);
- Inert tank with dry ice (Means ID: 026510.30-0401); and
- Haul to certified dump (Means ID: 026510.30-1243).

Note that the Means costs used in this estimate were increased by 6.0% to account for the location of the site. There are no other plants or ancillary equipment at the site that would have to be removed. (There are no fixed processing plants, underground tanks, buildings, foundations, utilities or boneyards at the site.)

#### 7.0 MISCELLANEOUS COSTS

This estimate assumes that a Phase I Environmental Site Assessment will be prepared to assist the Lead Agency in determining the condition of the site and identifying any issues that should be addressed as a part of reclamation.

#### 8.0 MONITORING / MAINTENANCE

The Reclamation Plan calls for monitoring revegetation efforts for three (3) years. This includes annual visits by a qualified biologist and preparation of an annual report for the County. The following activity level was assumed to be required to meet the performance criteria:

- Prepare for and conduct annual site visit (biologist, 8 hours, \$155/hour); and
- Prepare annual report (biologist, 8 hours, \$155/hour).

The biologist rate of \$155/hour was provided by Ventura County as an average monitoring cost for a qualified biologist.

#### 9.0 INDIRECT COSTS

#### Supervision

Project inspection and supervision is usually performed by a consultant or staff member with experience in reclamation of disturbed lands. Management activities include, but are not limited to, recommending change orders, verifying completed work, and verifying compliance with project specifications. The cost factor for management was calculated by the OMR spreadsheet.

#### Profit and Overhead

In the event that a third party must be retained to do the reclamation work, profit and overhead costs must be added to the total reclamation cost estimate. Profit and overhead are not included in the reclamation cost sheets. The cost factor for profit and overhead was calculated by the OMR spreadsheet.

#### **Contingencies**

Contingency costs are included in the financial assurance estimates to provide for project uncertainties and unexpected natural events. A contingency cost was calculated by the OMR spreadsheet.

#### **Mobilization**

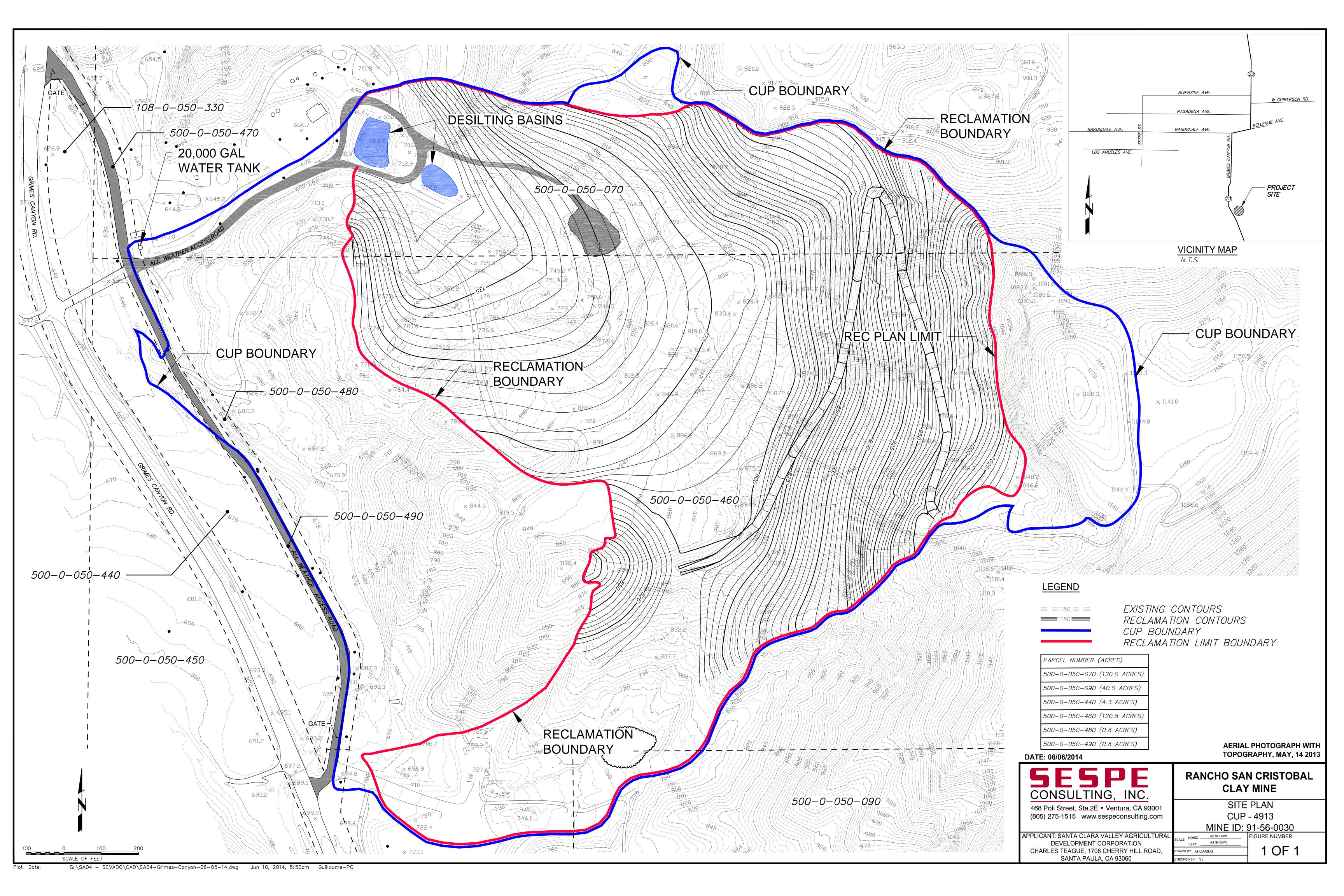
Mobilization costs are required to move equipment to the project site for reclamation activities. These costs normally range from one to five percent of the total direct cost of the reclamation activities and vary depending upon the site location. A mobilization cost of 5% of the total direct cost of reclamation is assumed in this FACE.

#### Lead Agency Administrative Cost

An administrative cost of 10% of the total direct and indirect costs has been included in the FACE to account for Lead Agency costs to implement the Reclamation Plan.

# **APPENDIX 1**

**FIGURE** 



# **APPENDIX 2**

# **RECLAMATION COST CALCULATIONS**

#### **APPENDIX 2**

Department of Conservation Financial Assurance Cost Estimate Form OMR-23 (BETA VERSION)

#### FINANCIAL ASSURANCE COST ESTIMATE

**FOR** 

Rancho San Cristobal Clay Mine

CA MINE ID #91- 56-0030

Prepared by:

Santa Clara Valley Ag Development Corp. 1708 Cherry Hill Road Santa Paula, CA 93060

Date: 12/9/2015

**Note:** This worksheet should be used in conjunction with the *Financial Assurance Guidelines* adopted by the State Mining and Geology Board, and good cost estimating practices.

	ON ACTIVITIES							
Description of Task:								
Establishing final slopes.								
Methods to be Used:								
A D9 dozer will be used to push time to control dust.	approximately 65,000 cubic yar	rds of material into p	lace. A water tru	uck will be used 2				
Miscellaneous Information								
Overburden (c.y.): 65,000								
Production Rate (c.y./hr):	971		† †					
Haul Distance (feet):	100' Push							
			J					
A. Equipment - List equipment r     areas for ease of accounting		ask. For large reclam	ation jobs sepa	rate mine				
Equipment		\$/Hour	# of Hours	Cost (\$)				
aterpillar D9 dozer		\$271.47	67.0	\$18,188				
000-Gallon Water Truck		\$44.95	17.0	\$764				
		\$0.00	0.0	\$0				
		\$0.00	0.0	\$0				
D Lohon List - Webser		ment Cost for this Ta	sk =	<u>\$18.953</u>				
B. Labor - List all labor cate Labor Category	Total Equipn		sk = of ManHours	\$18.953 Cost (\$)				
Labor Category		sk						
Labor Category roup 8 Operating Engineer		sk \$/Hour	of ManHours	Cost (\$)				
Labor Category oup 8 Operating Engineer		\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	of ManHours	Cost (\$) \$4,541				
Labor Category roup 8 Operating Engineer		\$67.78 \$54.43	of ManHours 67.0 17.0	Cost (\$) \$4,541 \$925				
	egories to complete identified ta	\$67.78 \$54.43 \$0.00	of ManHours           67.0           17.0           0.0	Cost (\$) \$4,541 \$925 \$0				
Labor Category roup 8 Operating Engineer	egories to complete identified ta	\$67.78 \$67.43 \$0.00 \$0.00	of ManHours           67.0           17.0           0.0	Cost (\$) \$4,541 \$925 \$0 \$0				
Labor Category roup 8 Operating Engineer roup V Teamster	egories to complete identified ta	\$67.78 \$67.78 \$54.43 \$0.00 \$0.00	of ManHours 67.0 17.0 0.0 0.0	Cost (\$) \$4,541 \$925 \$0 \$0				
Labor Category roup 8 Operating Engineer roup V Teamster  C. Materials - List all mater Item	egories to complete identified ta	\$67.78 \$67.78 \$54.43 \$0.00 \$0.00 Cost for this Task =	of ManHours 67.0 17.0 0.0 0.0	Cost (\$) \$4,541 \$925 \$0 \$0 \$5,467				
Labor Category roup 8 Operating Engineer roup V Teamster  C. Materials - List all mater Item	egories to complete identified ta	\$67.78 \$54.43 \$0.00 \$0.00 Cost for this Task =	of ManHours 67.0 17.0 0.0 0.0 0.0	Cost (\$) \$4,541 \$925 \$0 \$0 \$5,467  Cost (\$)				
Labor Category roup 8 Operating Engineer roup V Teamster  C. Materials - List all mater Item	egories to complete identified ta	\$67.78 \$67.78 \$54.43 \$0.00 \$0.00 Cost for this Task =	of ManHours 67.0 17.0 0.0 0.0 0.0	Cost (\$) \$4,541 \$925 \$0 \$0 \$5,467  Cost (\$)				
Labor Category roup 8 Operating Engineer roup V Teamster  C. Materials - List all mater	Total Labor (	\$67.78 \$67.78 \$54.43 \$0.00 \$0.00  Cost for this Task =  fied task (include disp Quantity  0.00 0.00	of ManHours 67.0 17.0 0.0 0.0 0.0	Cost (\$)  \$4,541  \$925  \$0  \$0  \$5,467  Cost (\$)  \$0  \$0				
Labor Category roup 8 Operating Engineer roup V Teamster  C. Materials - List all mater Item	Total Labor (	\$67.78 \$54.43 \$0.00 \$0.00 Cost for this Task = Guantity 0.00 0.00 0.00	of ManHours 67.0 17.0 0.0 0.0 0.0	Cost (\$) \$4,541 \$925 \$0 \$0 \$5,467  Cost (\$) \$0 \$0 \$0				
C. Materials - List all mater Item	Total Labor (	\$67.78 \$54.43 \$0.00 \$0.00  Cost for this Task =  Glied task (include disposition of the cost of the co	of ManHours  67.0  17.0  0.0  0.0  0.0  0.0  0.0  0.0	Cost (\$) \$4,541 \$925 \$0 \$0 \$5,467  Cost (\$) \$0 \$0 \$0				

#### I. PRIMARY RECLAMATION ACTIVITIES

#### Description of Task:

The entire disturbed surface (20 acres) will be graded to even contours. A water truck will be used to control dust emissions. In addition, a cost for a Professional Engineer visit and report are included. Note that, per the 2015 Cooper Aerial aerial photograph and survey, the disturbed area was 18.5 acres. This is increased to 20 acres to account for recent and future disturbances.

#### Methods to be Used:

A Caterpillar 160 motor grader can contour 2.5 acres per hour. A 3,000 gallon water truck will be utilized 25% of the task tirne.

#### Miscellaneous Information

 Area (acres):
 20.0

 Speed (mph):
 3.0

 Blade Length (ft.):
 10.4

 Overlap (ft.):
 2

Production Rate (acre/hr.):

Production Time (hr.):

7.9

A. Equipment - List equipment required to complete identified task. For large reclamation jobs separate mine areas for ease of accounting

Equipment	\$/Hour	# of Hours	Cost (\$)
Caterpillar 160	\$115.75	8.0	\$926
3,000-Gallon Water Truck	\$44.95	2.0	\$90
	\$0.00	0.0	\$0
	\$0.00	0.0	\$0

Total Equipment Cost for this Task = \$1,016

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

Labor Category	<u>\$/Hour</u>	of ManHours	Cost (\$)
Group 8 Operating Engineer	\$67.78	8.0	\$542
Group V Teamster	\$54.43	2.0	\$109
Registered Professional Engineer	\$145.00	16.0	\$2,320
	\$0.00	0.0	\$0

Total Labor Cost for this Task = \$2,971

C. Materials - List all materials required to complete identified task (include disposal costs).

Item	Quantity	\$/Unit	Cost (\$)
(None)	0.00	\$0.00	\$0
	0.00	\$0.00	\$0
	0.00	\$0.00	\$0

Total Materials Cost for this Task = \$0

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost = \$3,987

#### **II. REVEGETATION**

#### Description of Task:

The compacted portion of disturbed surface (15 acres) will be scarified before revegetation.

#### Methods to be Used:

A Caterpillar 160 Grader with scarifier attachment can decompact and scarify 0.8 acres per hour. To control dust emissions, a water truck will be utilized for 25% of the total task time.

15.0

1.5

7.6

2

#### Miscellaneous Information

Area (acres):
Speed (mph):
Blade Length (ft.):
Overlap (ft.):

Efficiency (%):
Production Rate (acre/hr.):
Production Time (hr.):

0.83 0.8 17.8

#### A. Equipment - List equipment required to complete identified task.

Equipment	<u>\$/Hour</u>	# of Hours	Cost (\$)
Caterpillar 160 Grader	\$115.75	17.8	\$2,061
3,000-Gallon Water Truck	\$44.95	4.5	\$200
	\$0.00	0.0	\$0

Total Labor Cost for this Task = \$2,261

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

Labor Category	<u>\$/Hour</u>	# of ManHours	Cost (\$)
Group 8 Operating Engineer	\$67.78	17.8	\$1,206.7
Group V Teamster	\$54.43	4.5	\$242.2
	\$0.00	0.0	\$0.0

Total Equipment Cost for this Task = \$1,449

#### C. Materials - List all material required to complete identified task.

Item / Plant Species	of	# of Units	\$/Unit	Cost (\$)
ne)		0.0	\$0.00	\$0
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0

Total Materials Cost for this Task = \$0

#### D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost =

\$3,710

#### **II. REVEGETATION**

#### Description of Task:

The entire disturbed surface (20 acres) will be broadcast seeded with a native seed mix. Note that 20 acres equals 871.2 thousand square feet (msf).

#### Methods to be Used:

Means Item 329219.14-5700 (6.0% increase for site location) for tractor spreading of seed is used to determine costs of broadcasting. A seed cost was obtained from S&S Seeds.

A. Equipment - List equipment required to complete identified task.

Equipment	\$/MSF	# of MSF	Cost (\$)
Means Item 329219.14-5700	\$5.35	871.2	\$4,664
	\$0.00	0.0	\$0
	\$0.00	0.0	\$0

Total Labor Cost for this Task =

\$4,664

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

Labor Category	<u>\$/MSF</u>	# of MSF	Cost (\$)
Means Item 329219.14-5700	\$7.95	871.2	\$6,926.0
	\$0.00	0.0	\$0.0
	\$0.00	0.0	\$0.0

Total Equipment Cost for this Task =

\$6,926

C. Materials - List all material required to complete identified task.

Init	

Item / Plant Species	Measure	# of Units	\$/Unit	Cost (\$)
Seed Mix - Native Hillside	lb/acre	20.0	\$1,225	\$24,500
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0
		0.0	\$0.00	\$0

Total Materials Cost for this Task =

\$24,500

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost =

\$36,090

#### III. PLANT STRUCTURES AND EQUIPMENT REMOVAL

Description of Task:

Remove one (1) 500-gallon in-use fuel storage tank.

#### Methods to be Used:

Remove sludge, water and remaining product from tank (026510.30-0300); dispose sludge off site (026510.30-0390); inert tank with dry ice (026510.30-0401); haul tank to certified dump (026510.30-1243). Prices increased by 6.0% to reflect site location.

A. Equipment - List equipment required to complete identified task.

Equipment	<u>\$ / Each</u>	#	Cost (\$)
Remove sludge, water, product (Units = each)	\$162.18	2	\$324
Haul tank to dump (Units = each)	\$259.70	2	\$519
	\$0.00	0	\$0
	\$0.00	0	\$0

Total Labor Cost for this Task

\$844

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

Labor Category	<u>\$/Unit</u>	# of Units	Cost (\$)
Remove sludge, water, product (Units = each)	\$82.68	2	\$165
Dispose sludge (total cost), (Units = each)	\$6.63	50	\$331
Inert tanks (1.5 lb CO2 / 100 gal cap.), (Units = gal. cap.)	\$0.64	8	\$5
Haul tanks (Units = each)	\$413.40	2	\$827

Total Equipment Cost for this Task

\$1,328

C. Demolition - List all structures and equipment to be dismantled or demolished.

Structure / Equipment	Type of Material	Units	Unit Cost Basis	Disposal Cost	Cost (\$)
Inert tanks - material (Units = lb CO2)	CO2 (Dry Ice)	8	\$1.24	\$0.00	\$9
		0	\$0.00	\$0.00	\$0
		0	\$0.00	\$0.00	\$0
		0	\$0.00	\$0.00	\$0

Total Materials Cost for this Task

\$9

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Demolition Cost =

\$2,181

#### (Sections "C"and "D" have been automated)

- E. Surplus / Salvage Value
  - \*\*Total cost to remove plant structures and equip for which salvage value is being claimed.
     (This is obtained from values already entered in A, B, & C above. No entry needed if salvage value is not being claimed)

\$2,181

2. Net salvage value of the plant structures and equipment.\* (no entry if salvage value is not being claimed)

\$0

3. Subtract Line 2 from Line 1. (allowable credit for salvage value)

\$0

4. Total plant structure and misc structure demo costs

\$2,181

\*NOTE This is the value of plant structures, buildings and equipment on a salvage basis -- e.g. after the structures and equipment have been removed for sale or use off-site. In order to include net salvage value in the financial assuranace calculation, the operator must provide a letter of agreement, signed contract, bid, or quote from an independent company which provides industrial dismantling or equipment salvage services, or is in the business of buying and selling scrap metals or similar products.

\*\*Note This value must be obtained by manually adding items previously entered in sections A, B, & C that are related to removal of items for which salvage value is being claimed. This manual step is necessary in order to apply salvage value only towards costs of removing equipment for which salvage is being claimed, not towards other demolition costs.

#### IV. MISCELLANEOUS COSTS

Examples of this type of cost could 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), or disposal of warehouse inventories.

Item / Task	Quantity	\$/Unit	Cost (\$)
Phase 1 Site Assessment	1.0	\$2,500	\$2,500
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0
	0.0	\$0.00	\$0

**Total Miscellaneous Costs** 

\$2,500.00

#### V. MONITORING

# of Monitoring

Monitoring Task	\$/Visit	# Visits/Year	Years	Cost (\$)
Revegetation monitoring (16 hrs * \$155/hr)	\$2,480	1.0	3.0	\$7,440
	\$0.00	0.0	0.0	\$0
	\$0.00	0.0	0.0	\$0
	\$0.00	0.0	0.0	\$0
	\$0.00	0.0	0.0	\$0

**Total Monitoring Costs** 

\$7,440

#### **VII. SUMMARY OF COSTS**

Total Estimated Cost of Reclamation	\$117,076
plus Indirect Costs) (Determined by the Lead Agency or OMR, S	SMARA 3802 (b))
(calculated at % of Direct 10%) Lead Agency Administrative Cost*	\$10,643
Total of Direct and Indirect Costs	\$106,433
Total of Indirect Costs	\$26,106
Mobilization (5%) (1% to 5%)	\$4,016
Contingencies (10%) (based on "C" in section VI.)	\$8,033
Profit/Overhead (12%) (based on graph no. 2)	\$9,639
Supervision (6%) (based on graph no. 1)	\$4,418
Total of Direct Costs	\$80,327
Total of all Monitoring Costs	\$7,440
Total of all Miscellaneous Costs	\$2,500
Total of all Plant Structures & Equipment Removal Costs (corrected for salvage)	\$2,181
Total of all Revegetation Costs	\$39,799
Total of all Primary Activities Costs	\$28,406

\*NOTE The Financial Assurnace Guidelines recommend that when reviewing and approving a financial assurance cost estimate, lead agencies should include their administrative cost to draw on the financial assurance and implement the reclamation plan, should it become necessary.

#### **APPENDIX 3**

#### SUPPORTING DOCUMENTATION

CALTRANS RENTAL RATES
CATERPILLAR PERFORMANCE HANDBOOK EXCERPT
RS MEANS EXCERPT
LABOR RATES
S&S SEEDS QUOTE
SESPE CONSULTING RATE SHEET

State of California California State Transportation Agency

Department of Transportation

Division of Construction

# Labor Surcharge and Equipment Rental Rates

(Cost of Equipment Ownership)



Effective April 1, 2015 through March 31, 2016





# ELECTRIC GENERATORS & LIGHT [ ELGEN ] PLANTS

**DELAY FACTOR = 0.11 OVERTIME FACTOR = 0.90** 

Rates are for gas or diesel power and alternating or direct current.

#### GENERATOR [ GEN ]

Rated in accordance with Mfr's output in kilowatts.

OVER		<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	1		000-001	\$0.88
1	3		001-003	\$2.06
3	7.5		003-008	\$4.23
7.5	15		008-015	\$9.46
15	25		015-025	\$14.86
25	50		025-050	\$14.95
50	100		050-100	\$27.04
100	200		100-200	\$54.77
200	300		200-300	\$93.55
300	400		300-400	\$127.32
400	500		400-500	\$159.41

## LIGHTS [ LITE ]

Includes trailer, pole and generator.

Model	Code	Rate
2 Light Set	2 LIGHT	\$4.17
4 Light Set	4 LIGHT	\$8.35

#### ELECTRIC POWERED HAND TOOLS [ ELTOL ]

#### **DELAY FACTOR = 0.61 OVERTIME FACTOR = 0.42**

Includes electric powered, hand held tools not listed elsewhere in this book. Expendable bits, blades, discs, wheels, etc. shall be paid by separate invoice. Rated in accordance with Mfr's suggested retail price.

TOOLS			[TOOL]	
OVER		TO	<u>Code</u>	Rate
450	600		045-060	\$0.29
600	800		060-080	\$0.38
800	1000		080-100	\$0.48

### FORK LIFT TRUCKS [ FKLFT ]

#### **DELAY FACTOR = 0.19 OVERTIME FACTOR = 0.82**

Includes attachments and accessories. Listed in accordance with the Mfr's maximum rated capacity in kilograms(pounds).

FORI	K LIFT TF	RUCKS	[ <b>FLT</b> ]	
<u>OVE</u>	R	TO	<u>Code</u>	Rate
454	(1000)	1814 (4000)	010-040	\$30.67
1814	(4000)	2722 (6000)	040-060	\$40.86
2722	(6000)	3629 (8000)	060-080	\$46.02
3629	(8000)	5443 (12000)	080-120	\$64.11
5443	(12000)	7258 (16000)	120-160	\$66.91
7258	(16000)	9072 (20000)	160-200	\$78.28
9072	(20000)	11340 (25000)	200-250	\$77.06

11340 (25000)	13608 (30000)	250-300	\$85.26
13608 (30000)	18144 (40000)	300-400	\$107.83
18144 (40000)	22680 (50000)	400-500	\$128.12
22680 (50000)	34020 (75000)	500-750	\$173.94

GRADR	
(	FRADR

#### **DELAY FACTOR = 0.11 OVERTIME FACTOR = 0.90**

Includes ripper and scarifier attachments and all accessories. Electronic blade control and specialty cutting tools shall be paid separately.

BLADE-MOR	[ <b>BMOR</b> ]	
Model	Code	Rate
727	2173	\$28.44
747	2178	\$40.76
CATERPILLAR	[ CAT ]	
Model	Code	Rate
120G 87V serial	2685	\$75.47
130G 74V serial	2695	\$83.44
12E 99E serial	2710	\$54.40
12F 73G serial	2768	\$82.44
12F 13K serial	2826	\$63.19
12F 89H serial	2884	\$63.67
12G 61M serial	2890	\$85.19
12H	2895	\$91.90
14E 72G serial	3174	\$84.67
14G	3180	\$126.90
14H	3185	\$139.75
140 14U serial	3250	\$85.69
140G 72V serial	3260	\$92.34
140H	3265	\$98.29
143H	3267	\$109.75
16 49G serial	3290	\$110.37
16 49G800 serial	3348	\$161.54
16 G93U serial	3360	\$176.41
16H	3380	\$186.20
160H	3385	\$115.75
163H	3390	\$121.35
JOHN DEERE	[DEER]	
Model	Code	Rate
JD-570A	3890	\$49.85
JD-570B	3892	\$57.51
JD-670	3900	\$65.41
JD-670A	3905	\$71.39
JD-670CH	3907	\$91.79
JD-770	3910	\$74.34
JD-770A, 770A-H	3915	\$86.64
JD-770B	3916	\$93.86
JD-772CH	3930	\$111.63

CATERPILLAR	[ CAT ]		D-8R	4870	\$201.72
Model	Code	Rate	D-9H	5160	\$228.53
D-3	2340	\$33.17	D-9L	5165	\$272.62
D-3B	2345	\$36.59	D-9N	5170	\$232.51
D-3 LGP	2350	\$33.79	D-9R	<b>5175</b>	\$271.47
D-3B LGP	2355	\$37.79	D-10	5220	\$417.85
D-3B SA	2370	\$40.91	D-10N	5225	\$335.83
D-3C	2380	\$38.77	D-10R	5227	\$374.60
D4C Series III	2450	\$49.51	D-11N	5230	\$521.99
D-4D	2655	\$40.01	JOHN DEERE	[DEER]	
D-4E direct drive	2660	\$41.95	Model	Code	Rate
D-4E power shift	2665	\$43.19	JD 350C	5360	\$36.52
D-4H	2670	\$54.50	JD 350D	5365	\$40.98
D-4H LGP	2675	\$54.21	JD 400G	5405	\$34.28
D-4H Series II	2680	\$55.66	JD 450C	5474	\$36.62
D-4E SA	2772	\$50.91	JD 450D	5476	\$38.01
D-4E LGP power shift	2780	\$43.37	JD 450E	5478	\$38.65
D-4E LGP direct drive	2782	\$43.37	JD 450G	5479	\$41.69
D-4G XL	2790XL	\$50.24	JD 450J LT/LGP	5479J	\$50.49
D-5	3194	\$57.44	JD 550	5480	\$41.29
D-5B power shift	3206	\$60.58	JD 550A	5481	\$44.75
D-5B SA	3325	\$66.19	JD 550B	5483	\$43.54
D-5B LGP	3345	\$63.14	JD 550G	5484	\$48.55
D-5C	3346	\$53.81	JD 650G	5484A	\$54.35
D-5H	3347	\$72.19	JD 650H LGP	5484Н	\$58.11
D-5H Series II	3348	\$76.00	JD 750	5485	\$64.50
D-5H LGP	3350	\$75.09	JD 750B	5486	\$70.72
D-6C direct drive	3645	\$74.60	JD 750 LGP	5487	\$67.32
D-6C power shift	3688	\$75.21	JD 750B LGP	5488	\$85.74
D-6C LGP	3710	\$77.62	JD 850	5490	\$84.39
D-6D	3720	\$85.47	JD 850B	5491	\$97.17
D-6D SA	3725	\$96.23	JD 850 LGP	5492	\$88.95
D-6D LGP	3730	\$85.91	JD 850B LGP	5495	\$104.07
D-6H	3732	\$97.38	DDECCED		
D-6H Series II	3733	\$101.79	DRESSER	[DRES]	ъ.
D-6H LGP	3735	\$101.74	Model TR. 50	Code	Rate
D-6M LGP	3745	\$94.14	TD 7E	9100	\$37.60
D-6N XL	3755	\$96.95	TD 7G	9102	\$41.70
D-6R DS	3800	\$107.28	TD 8E	9105	\$45.80
D-6R XL	3815	\$112.72	TD 8G	9107	\$49.11
D-7G	4180	\$128.37	TD 12	9110	\$65.83
D-7G LGP	4200	\$124.36	TD 12 LGP	9115	\$75.17
D-7G SA	4210	\$137.69	TD 15C	9120	\$92.24
D-7H	4215	\$132.89	TD 15E	9122	\$112.38
D-7H Series II	4216	\$141.90	TD 15C LGP	9125	\$89.49
D-7H LGP	4220	\$139.07	TD 20E	9130	\$124.49
D-8K	4858	\$171.38	TD 20G	9135	\$150.07
D-8L	4862	\$205.10	TD 20G LGP	9137	\$157.40
D-8L SA	4863	\$223.13	TD 25E	9139	\$177.72
D-8N	4864	\$183.59	TD 25G	9140	\$218.27

VERMEER	[ VERM ]	
Model	Code	Rate
CC-135	8350	\$92.14
M 220	8380	\$17.91
M 455 / M455A	8480	\$41.23
M 475	8570	\$43.46
M 475A	8571	\$49.54
M 485	8580	\$47.16
M 495	8585	\$77.26
T 300B, T 300A	8718	\$27.62
T 400C, T 400B, T 400A	8781	\$59.02
T 600D, C, B, A	8842	\$84.94
T 650	8843	\$142.39
T 800B, T 800A, T800	8870	\$135.83
T 800C	8871	\$148.36
T 850	8875	\$264.22
V 430	8950	\$31.44
V 430A	8951	\$35.26
V 434 / M 434	9000	\$30.33
V 440	9015	\$33.38
V 450	9017	\$39.08
V 454	9020	\$34.14
V 1550	9025	\$16.68

# TRUCK, TRUCK TRAILERS, EXCL. DUMP TRUCKS & EQPT TRAIL

#### DELAY FACTOR = 0.14 OVE

**OVERTIME FACTOR** = 0.87

Includes all attachments and accessories related to hauling, with and without trailers as needed. Includes water trucks, freight trucks and passenger vehicles, including 4wd option. Listed by Mfr's Gross Vehicle Weight in Kilograms(pounds). For tractor-trailer units, the gross vehicle weight of the cargo carrying unit or units will control. In the case of water trucks, the tank capacity expressed in kilograms (pounds) of water plus 20%, will determine the gross vehicle weight. For attachment allowance, see attachment class.

TRUCKS		[T&TT]	
OVER	TO	Code	Rate
CARS , LIGHT	TRUCKS	00-06	\$21.50
3175 (7000) spickups	5443 (12000) No small	06-12	\$26.95
5443 (12000)	9072 (20000)	12-20	\$33.06
9072 (20000)	12701(28000)	20-28	\$35.68
12701 (28000)	16330 (36000)	28-36	\$44.95
16330 (36000)	21773 (48000)	36-48	\$51.92
21773 (48000)	27216 (60000)	48-60	\$63.97
27216(60000) &	k Over	60	\$81.17

#### **DELAY FACTOR = 0.19 OVERTIME FACTOR = 0.83**

Includes all attachments and accessories. Includes end dump, belly dump and earthmover types. Listed in accordance with Mfr's rated capacity in tonnes (tons). In the case of earthmover types, rated by Mfr's volumetric capacity, a factor of 1.4 tonnes per cubic meter (1-1/2 tons per cubic yard) of struck capacity shall be used.

TRUCK OFF	F-HIGHWAY	[ <b>TRU</b> ]	
OVER	TO	Code	Rate
9.1 (10)	13.6 (15)	10-15	\$49.80
16.3 (18)	20.0 (22)	18-22	\$88.45
20.0 (22)	24.5 (27)	22-27	\$110.79
24.5 (27)	29.0 (32)	27-32	\$126.41
29.0 (32)	36.3 (40)	32-40	\$172.49
36.3 (40)	49.9 (55)	40-55	\$257.87
49.9 (55)	60.8 (67)	55-67	\$289.21

TRUCKS, DUMP, ON-HIGHWAY	[ TRUON ]

#### **DELAY FACTOR** = 0.16

**OVERTIME FACTOR** = 0.85

Includes all end dump, side dump and belly dump types; including all attachments and accessories.

TRUCK ON-HIGHWAY	[TRUN]	
Model	<u>Code</u>	Rate
2 axles	2AXL	\$55.69
3 axles	3AXL	\$71.65
4 axles	4AXL	\$79.89
5 axles	5AXL	\$90.08

# WELDING EQUIPMENT [ WELD ]

**DELAY FACTOR** = 0.18

**OVERTIME FACTOR = 0.84** 

#### ARC WELDING MACHINES [ AWM ]

Diesel, gas or electric powered. Includes helmets, holders, cable and all attachments and accessories. Rate capacity in amps.

OVER	TO	Code	Rate
0	250	0-250	\$6.12
250	500	250-500	\$11.86
over	500	500	\$12.12

#### GAS WELDING OUTFIT [ GWO ]

Includes regulator, 7.6 meters (25 feet) of hose, torch, goggles, lighter and attachments and accessories. Gas and rod shall be paid separately.

Model	Code	Rate
ALI.	ATT	\$0.26

# Caterpillar Performance Handbook

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**CATERPILLAR®** 

MODEL	14	IOM	16	<mark>om</mark>
Base Power — Net	136 kW	183 hp	159 kW	213 hp
VHP Range — Net	136-155 kW	183-208 hp	159-170 kW	213-228 hp
VHP Plus Range — Net	136-174 kW	183-233 hp	159-185 kW	213-248 hp
Operating Weight*	16 581 kg	36,554 lb	16 820 kg	37,082 lb
Engine Model	C7 ACERT/C9	ACERT (AWD)	C9 A	CERT
Rated Engine RPM	2	000	20	00
No. of Cylinders		6	(	6
Displacement	7.2 L/8.8 L	439 in <sup>3</sup> /537 in <sup>3</sup>	8.8 L	537 in <sup>3</sup>
Max.Torque	1159 N·m/1344 N·m	855 lb-ft/991 lb-ft	1237 N⋅m	912 lb-ft
No. of Speeds Forward/Reverse		3/6	8	/6
Top Speed: Forward	46.6 km/h	29.0 mph	47.4 km/h	29.5 mph
Reverse	36.8 km/h	22.9 mph	37.4 km/h	23.3 mph
Std. Tires — Front and Rear	14.00 24 (	10 PR) (G-2)	14.00 24 (1	0 PR) (G-2)
Front Axle/Steering:				
Oscillation Angle	;	32°	3	2°
Wheel Lean Angle	1:	8.0°	18	.0°
Steering Angle	4	7.5°	47	.5°
Articulation Angle		20°	2	0°
Minimum Turning Radius**	7.6 m	24'10"	7.6 m	24'10"
No. Circle Support Shoes		6		6
Hydraulics:				
PumpType	Variab	le Piston	Variable	e Piston
Max. Pump Flow	210 L/min	55.7 gpm	210 L/min	55.7 gpm
Tank Capacity	64 L	16.9 U.S. gal	64 L	16.9 U.S. gal
Implement Pressure: Max.	24 150 kPa	3500 psi	24 150 kPa	3500 psi
Min.	3100 kPa	450 psi	3100 kPa	450 psi
Interior Sound Level/SAE J919	70	dB(A)	70 d	B(A)
Electrical:				
System Size	2	24V	24	1V
Std. Battery CCA @ 0° F	1	125	11	25
Std. Alternator		80	8	80
GENERAL DIMENSIONS:				
Height (to top of ROPS)	3308 mm	130.2"	3308 mm	130.2"
Overall Length	8754 mm	344.6"	8754 mm	344.6"
With Ripper and Pushplate	10 136 mm	399.1"	10 136 mm	399.1"
Wheelbase	6123 mm	241.1"	6123 mm	241.1"
Blade Base	2511 mm	98.9"	2511 mm	98.9"
Overall Width (at top of front tires)	2511 mm	98.9"	2511 mm	98.9"
Standard Blade: Length	3658 mm	12'0"	3658 mm	12'0"
Height	610 mm	24"	610 mm	24"
Thickness	22 mm	0.87"	22 mm	0.87"
Lift Above Ground	480 mm	18.9"	452 mm	17.8"
Max. Shoulder Reach:***			-	-
Frame Straight — left	1790 mm	70.5"	2090 mm	82.3"
Frame Straight — right	1978 mm	77.9"	2278 mm	89.7"
Fuel Tank Capacity	416 L	110 U.S. gal	416 L	110 U.S. gal

<sup>\*</sup>Operating Weight - based on standard machine configuration with full fuel tank, coolant, lubricants and operator.

<sup>\*\*</sup>Minimum Turning Radius — combining the use of articulated frame steering, front wheel steer and unlocked differential.

\*\*\*Applicable for the standard blade with hydraulic sideshift and tip control. Maximum shoulder reach is obtainable to the right.

#### **PRODUCTION**

The motor grader is used in a variety of applications in a variety of industries. Therefore, there are many ways to measure its operating capacity, or production. One method expresses a motor grader's production in relation to the area covered by the moldboard.

#### Formula:

A = S	X	$(L_e -$	$-L_{o}$	X	1000	×	Ε	(Metric)
A = S	×	(L <sub>e</sub> -	$-L_{\rm o}$	×	5280	X	Е	(English)

where

A: Hourly operating area (m<sup>2</sup>/h or ft<sup>2</sup>/h)

S: Operating speed (km/h or mph)

L<sub>e</sub>: Effective blade length (m or ft)

L<sub>o</sub>: Width of overlap (m or ft)

E: Job efficiency

#### **Operating Speeds:**

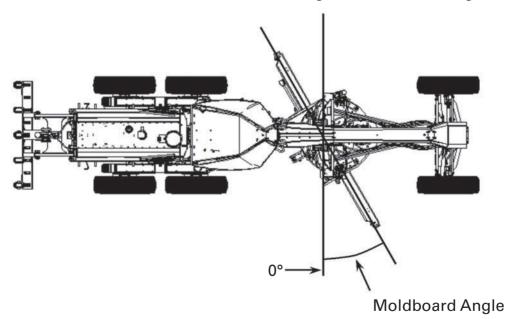
Typical operating speeds by application

0-4 km/h	(0-2.5  mph)
0-9 km/h	(0-6 mph)
0-5 km/h	(0-3  mph)
0-5 km/h	(0-3 mph)
5-16 km/h	(3-9.5  mph)
5-16 km/h	(3-9.5  mph)
7-21 km/h	(4-13 mph)
15-28 km/h	(9-17 mph)
	0-9 km/h 0-5 km/h 0-5 km/h 5-16 km/h 5-16 km/h 7-21 km/h

#### **Effective Blade Length:**

Since the moldboard is usually angled when moving material, an effective blade length must be computed to account for this angle. This is the actual width of material swept by the moldboard.

**NOTE:** Angles are measured as shown below. The effective length becomes shorter as the angle increases.



Moldboard Length, m (ft)	Effective Length, m (ft) 30 degree blade angle	Effective Length, m (ft) 45 degree blade angle		
3.658 ( <mark>12)</mark>	3.17 <mark>(10.4)</mark>	2.59 <b>(8.5)</b>		
4.267 <b>(14)</b>	3.70 <b>(12.1)</b>	3.02 (9.9)		
4.877 <b>(16)</b>	4.22 <b>(13.9)</b>	3.45 (11.3)		
7.315 <b>(24)</b>	6.33 <b>(20.8)</b>	5.17 <b>(17.0)</b>		

For other blade lengths and carry angles:

Effective length = COS [Radians (Blade L)] 3 Blade Length

#### Width of Overlap:

The width of overlap is generally 0.6 m (2.0 ft). This overlap accounts for the need to keep the tires out of the windrow on the return pass.

#### Job Efficiency:

Job efficiencies vary based on job conditions, operator skill, etc.

A good estimation for efficiency is approximately 0.70 to 0.85, but actual operating conditions should be used to determine the best value

#### Example problem:

A Cat motor grader with a 3.66 m (12 ft) moldboard is performing road maintenance on a township road. The machine is working at an average speed of 13 km/h (8 mph) with a moldboard carry angle of 30 degrees. What is the motor grader's production based on coverage area?

Note: Due to the long passes involved in road maintenance — fewer turnarounds — a higher job efficiency of 0.90 is chosen.

#### Solution:

From the table, the effective blade length is 3.17 m (10.4 ft).

Metric

Production, A = 13 km/h × (3.17 m - 0.6 m) × 
$$1000 \times 0.90$$
 = 30 069 m<sup>2</sup>/hr (3.07 hectares/hr)

English

Production, A = 8 mph × 
$$(10.4 \text{ ft} - 2.0 \text{ ft})$$
 ×  $5280 \times 0.90$  = 319,334 ft<sup>2</sup>/hr (7.33 acres/hr)

To pinpoint the theoretical number of motor graders required to properly maintain your haul roads, based on your specific mining applications, please download the haul road maintenance calculator on <a href="https://catminer.cat.com">https://catminer.cat.com</a>. Haul road maintenance impacts cycle time, tire, frame and drive train components, safety and ultimately your cost per ton. To achieve optimal truck productivity, your haul roads must be properly maintained.

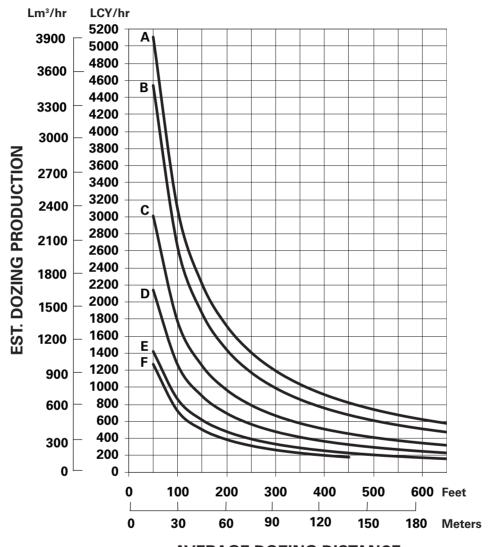
Moderate: ● Road Maintenance

- Pad Cleaning
- Rock Clearing
- Shoulder Sweeping

Difficult: • Ripping

- Spreading Dump Material
- Road Profiling/Reshaping

#### ESTIMATED DOZING PRODUCTION ● Universal Blades ● D7E through D11T CD



#### **AVERAGE DOZING DISTANCE**

**KEY** 

A — D11T CD B — D11T

C - D10T2

D - D9T

E — D8T

F - D7E

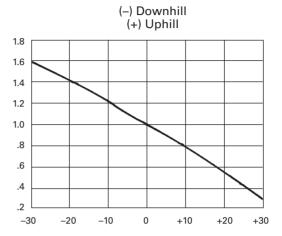
NOTE: This chart is based on numerous field studies made under varying job conditions. Refer to correction factors following these charts.

#### JOB CONDITION CORRECTION FACTORS

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



# 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 Lm<sup>3</sup>/h (600 LCY/hr) (example only)

**Applicable Correction Factors:** 

Hard-packed clay is "hard to cut" material0.80
Grade correction (from graph)
Slot dozing
Average operator
Job efficiency (50 min/hr)
Weight correction (2300/2650)–0.87

Production = Maximum Production × Correction Factors

= (600 LCY/hr) (0.80) (1.30) (1.20) (0.75) (0.83) (0.87) = 405.5 LCY/hr

To obtain production in metric units, the same procedure is used substituting maximum uncorrected production in Lm<sup>3</sup>.

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

MOTOR GRADER/RIPPER	160M		160	M2	160M3		
Parallelogram — Rear Mounted	Ripper/			per/	Ripper/		
	Scarifier			Scarifier		Scarifier	
Tire Size (Std.)	14.00-24		14.00R24		14.00R24		
Front and Rear	10PR (G-2)		★ (G-2)		★ (G-2)		
Scarifier							
Maximum Digging Depth	261 mm	10.3"	265 mm	10.4"	265 mm	10.4"	
Number of Pockets	9		9		9		
Spacing	267 mm	10.5"	267 mm	10.5"	267 mm	10.5"	
Ripper Shank							
Maximum Digging Depth	422 mm	16.6"	426 mm	16.8"	426 mm	16.8"	
Maximum Reach at Ground Line	973 mm	38.3"	973 mm	38.3"	973 mm	38.3"	
Maximum Ground Clearance under Tip (shank pinned in bottom hole)	508 mm	20"	488 mm	19.2"	488 mm	19.2"	
Maximum Ramp Angle, Ripper Up (shank pinned in bottom hole)	15°		15°		15°		
Shank Section	59 × 138 mm		59 × 138 mm		59 × 138 mm		
	2.3" × 5.4"		2.3" × 5.4"		2.3" × 5.4"		
Ripper Beam							
Overall Width	2.31 m	<mark>7'7"</mark>	2.31 m	7'7"	2.31 m	7'7"	
Height	152 mm	6.0"	152 mm	6.0"	152 mm	6.0"	
Length	230 mm	9.1"	230 mm	9.1"	230 mm	9.1"	
Number of Pockets	5		5		5		
Pocket Spacing:							
Inside	533 mm	1'9"	533 mm	1'9"	533 mm	1'9"	
Middle	533 mm	1'9"	533 mm	1'9"	533 mm	1'9"	
Outside	533 mm	1'9"	533 mm	1'9"	533 mm	1'9"	
Shank Gauge	2.13 m	7'0"	2.13 m	7'0"	2.13 m	7'0"	
Installed Weights:							
Ripper with Standard Shank	1111 kg	2449 lb	1086 kg	2394 lb	1086 kg	2394 lb	
Each Additional Shank	31 kg	68 lb	31 kg	68 lb	31 kg	68 lb	
Ripper Forces:	_						
Penetration Force	9273 kg	20,443 lb	9386 kg	20,693 lb	9386 kg	20,693 lb	
Pryout Force	11 712 kg	25,821 lb	12 602 kg	27,783 lb	12 602 kg	27,783 lb	

### 32 92 Turf and Grasses 32 92 19 - Seeding Daily Labor-2015 Bare Costs 32 92 19.14 Seeding, Athletic Fields Output Hours Unit Material Total Crew Labor Equipment 4100 Tractor spreader B-66 52 .154 M.S.F. 10.45 7.50 5.05 23 4200 Hydro or air seeding, with mulch and fertilizer B-81 80 .300 23 12.85 8.65 44.50 4400 Slope mix, 6#/M.S.F., push spreader 1 Clab 8 1 11.75 37.50 49.25 4500 Tractor spreader 52 24.30 B-66 .154 11.75 7.50 5.05 Hydro or air seeding, with mulch and fertilizer 4600 B-81 80 .300 29.50 12.85 8.65 51 4800 Turf mix, 4#/M.S.F., push spreader 1 Clab 8 1 11.25 37.50 48.75 Tractor spreader 4900 .154 11.25 7.50 23.80 B-66 52 5.05 5000 Hydro or air seeding, with mulch and fertilizer .300 28 12.85 49.50 B-81 80 8.65 Utility mix, 7#/M.S.F., push spreader 5200 1 Clab 8 1 9.40 37.50 46.90 5300 Tractor spreader 52 .154 9.40 7.50 5.05 21.95 B-66 5400 Hydro or air seeding, with mulch and fertilizer B-81 80 .300 35.50 12.85 8.65 57 5600 Wildflower, .10#/M.S.F., push spreader 1 Clab 8 1 1.86 37.50 39.36 5700 Tractor spreader 52 1.86 7.50 5.05 14.41 B-66 .154 5800 Hydro or air seeding, with mulch and fertilizer 10.25 12.85 8.65 31.75 B-81 80 .300 Apply fertilizer, 800 lb./acre 1,143 4 2 980 97 7000 B-66 Ton 66 Fertilizer, mechanical spread 7025 1 Clab 1.75 4.571 Acre 5.40 172 177.40 7100 Apply mulch, see Section 32 91 13.16 32 92 23 - Sodding 32 92 23.10 Sodding Systems

Total

Incl 0&P

28.50

54.50

71

30

61.50

70.50

29.50

68.50

27.50

68

60

18.95

40.50

1,300

270

60

0010	SODDING SYSTEMS									
0020	Sodding, 1" deep, bluegrass sod, on level ground, over 8 M.S.F.	B-63	22	1.818	M.S.F.	243	72.50	7.90	323.40	390
200	4 M.S.F.		17	2.353		254	93.50	10.20	357.70	435
300	1000 S.F.		13.50	2.963		295	118	12.85	425.85	520
500	Sloped ground, over 8 M.S.F.		6	6.667		243	265	29	537	705
0600	4 M.S.F.		5	8		254	320	34.50	608.50	805
700	1000 S.F.		4	10		295	400	43.50	738.50	985
000	Bent grass sod, on level ground, over 6 M.S.F.		20	2		252	79.50	8.70	340.20	410
100	3 M.S.F.		18	2.222		261	88.50	9.65	359.15	435
200	Sodding 1000 S.F. or less		14	2.857		286	114	12.40	412.40	505
500	Sloped ground, over 6 M.S.F.		15	2.667		252	106	11.55	369.55	455
1600	3 M.S.F.		13.50	2.963		261	118	12.85	391.85	480
1700	1000 S.F.	1	12	3.333	1	286	133	14.45	433.45	535

## 32 92 26 - Sprigging

32 92	26.13	Sto	lonizing
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0010	STOLONIZING									
0100	6" O.C., by hand	1 Clab	4	2	M.S.F.	51.50	75		126.50	173
0110	Walk behind sprig planter	п	80	.100		51.50	3.76		55.26	62.50
0120	Towed sprig planter	B-66	350	.023		51.50	1.11	.75	53.36	59
0130	9" O.C., by hand	1 Clab	5.20	1.538		23	58		81	115
0140	Walk behind sprig planter	"	92	.087		23	3.27		26.27	30.50
0150	Towed sprig planter	B-66	420	.019		23	.93	.63	24.56	27.50
0160	12" O.C., by hand	1 Clab	6	1.333		12.85	50		62.85	91
0170	Walk behind sprig planter	m m	110	.073		12.85	2.73		15.58	18.35
0180	Towed sprig planter	B-66	500	.016		12.85	.78	.53	14.16	15.90
0200	Broadcast, by hand, 2 Bu. per M.S.F.	1 Clab	15	.533		5.15	20		25.15	36.50
0210	4 Bu. per M.S.F.		10	.800		10.30	30		40.30	58
0220	6 Bu. per M.S.F.		6.50	1.231		15.50	46.50		62	88
0300	Hydro planter, 6 Bu. per M.S.F.	B-64	100	.160		15.50	6.15	3.97	25.62	31
0320	Manure spreader planting 6 Bu. per M.S.F.	B-66	200	.040	1	15.50	1.94	1.32	18.76	21.50

# 02 65 Underground Storage Tank Removal 02 65 10 - Underground Tank and Contaminated Soil Removal

			188	Daily	Labor-	UST DEST	Berry 1971	2015 Bo		120020	Total
	5 10.30 Removal of Underground Storage Tanks		Crew	Output	Hours	Unit	Material	Labor	Equipment	Total	Incl O&P
0010	REMOVAL OF UNDERGROUND STORAGE TANKS										
0011	Petroleum storage tanks, non-leaking										
0100	Excavate & load onto trailer	[2]			10			175	0.1	F. / /	
0110	3000 gal. to 5000 gal. tank	G	B-14	4	12	Ea.		475	91	566	830
0120	6000 gal. to 8000 gal. tank	G	B-3A	3	13.333			535	345	880	1,200
0130	9000 gal. to 12000 gal. tank	G		2	20	*		805	515	1,320	1,800
0190	Known leaking tank, add					%				100%	100%
0200	Remove sludge, water and remaining product from tank bottom										
0201	of tank with vacuum truck	[6]						70	100		
0300	3000 gal. to 5000 gal. tank	G	A-13	5	1.600	Ea.		78	153	231	286
0310	6000 gal. to 8000 gal. tank	G		4	2			97	191	288	360
0320	9000 gal. to 12000 gal. tank	G	Y	3	2.667	*		130	254	384	475
0390	Dispose of sludge off-site, average					Gal.				6.25	6.80
0400	Insert Inert solid CO <sub>2</sub> "dry Ice" into tank	ন	1 cl. l	500	017	rit.				1.77	0.00
0401	For cleaning/transporting tanks (1.5 lb./100 gal. cap)	G	1 Clab	500	.016	Lb.	1.17	.60		1.77	2.22
0403	Insert solid carbon dioxide, 1.5 lb./100 gal.	G	"	400	.020	"	1.17	.75		1.92	2.45
0503	Disconnect and remove piping	G	1 Plum	160	.050	L.F.		2.94		2.94	4.43
0603	Transfer liquids, 10% of volume	G	2 51 1	1600	.005	Gal.		.29		.29	.44
0703	Cut occessway into underground storage tank	G	1 Clab	5.33	1.501	Ea.		56.50		56.50	87
0813	Remove sludge, wash and wipe tank, 500 gal.	G	1 Plum		1			58.50		58.50	88.50
0823	3,000 gal.	G		6.67	1.199			70.50		70.50	106
0833	5,000 gal.	G		6.15	1.301			76.50		76.50	115
0843	8,000 gal.	G		5.33	1.501			88		88	133
0853	10,000 gal.	G		4.57	1.751			103		103	155
0863	12,000 gal.	G	V	4.21	1.900	*		112		112	168
1020	Haul tank to certified salvage dump, 100 miles round trip										
1023	3000 gal. to 5000 gal. tank					Ea.				760	830
1026	6000 gal. to 8000 gal. tank									880	960
1029	9,000 gal. to 12,000 gal. tank					· v				1,050	1,150
1100	Disposal of contaminated soil to landfill									2000	
1110	Minimum					C.Y.				145	160
1111	Maximum					"				400	440
1120	Disposal of contaminated soil to										
1121	bituminous concrete batch plant										
1130	Minimum					C.Y.				80	88
1131	Maximum	[2]								115	125
1203	Excavate, pull, & load tank, backfill hole, 8,000 gal. +	G	B-12C	.50	32	Ea.		1,425	2,350	3,775	4,750
1213	Haul tank to certified dump, 100 miles rt, 8,000 gal. +	G	B-34K	1	8			320	950	1,270	1,525
1223	Excavate, pull, & load tank, backfill hole, 500 gal.	G	B-11C	1	16			705	365	1,070	1,475
1233	Excavate, pull, & load tank, backfill hole, 3,000 – 5,000 gal.	G	B-11M	.50	32			1,400	785	2,185	3,000
1243	Haul tank to certified dump, 100 miles rt, 500 gal.	G	B-34L	1	8			390	245	635	860
1253	Haul tank to certified dump, 100 miles rt, 3,000 – 5,000 gal.	G	B-34M	1	8	Y		390	305	695	925
2010	Decontamination of soil on site incl poly tarp on top/bottom										
2011	Soil containment berm, and chemical treatment	-			1499	150,706	Name of Street	10,000	50000	10,000	43000
2020	Minimum	G	B-11C	100	.160	C.Y.	7.80	7.05	3.64	18.49	23.50
2021	Maximum	G	· ·	100	.160		10.10	7.05	3.64	20.79	26
2050	Disposal of decontaminated soil, minimum									135	150
2055	Maximum					*				400	440

## **Location Factors**

Costs shown in RSMeans cost data publications are based on national averages for materials and installation. To adjust these costs to a specific location, simply multiply the base cost by the factor and divide

CITY MAT. INST. STATE/ZIP TOTAL ALABAMA 100.6 Birmingham 90.2 350-352 76.7 61.2 57.5 354 Tuscaloosa 99.8 83.0 355 100.2 81.6 Jasper 356 99.8 57.9 81.5 Decatur 357-358 Huntsville 99.8 72.1 87.8 359 Gadsden 99.9 60.0 82.5 81.2 360-361 Montgomery 99.9 57.1 98.6 61.8 82.6 362 Anniston 49.4 77.4 363 99.0 Dothan 98.6 364 Evergreen 84.9 77.4 365-366 Mobile 99.9 65.4367 Selma 98.7 49.9 368 Phenix City 99.5 54.6 79.9 369 Butler 98.9 49.4 77.3 ALASKA 118.7 995-996 Anchorage 121.1 115.6 997 Fairbanks 121.0 116.4 119.0 998 121.3 115.6 118.8 Juneau Ketchikan 132.0 115.6 124.8 999 ARIZONA 850,853 Phoenix 99.2 73.8 88.1 72.8 70.0 851,852 98.6 87.4 Mesa/Tempe 86.3 855 Globe 98.8 856-857 97.4 86.5 72.4 Tucson 859 Show Low 98.9 72.5 87.4 101.3 860 Flagstaff 71.8 88.4 863 Prescott 68.9 86.0 864 Kineman 97.6 72.0 86.4 86.2 97.6 865 Chambers 71.5 ARKANSAS 716 Pine Bluff 99.4 63.3 83.6 717 97.1 50.1 76.6 Camden 98.2 49.2 718 Texarkana 76.8 719 96.4 51.8 76.9 Hot Springs 720-722 Little Rock 98.564.0 83.4 723 West Memphis 96.1 62.4 81.4 59.1 80.3 724 Jonesboro 96.7 94.6 95.9 725 726 727 54.6 50.4 77.1 76.0 Batesville Harrison Fayetteville 93.4 52.0 75.4 Russellville 94.6 97.2 728 53.7 76.8 729 61.6 81.7 Fort Smith CALIFORNIA 117.5 114.1 107.2 103.2 99.2 94.8 Los Angeles 900-902 903-905 Inglewood 906-908 Long Beach 96.2 114.1 104.0 910-912 96.4 114.6 104.3 Pasadena Van Nuys 99.1 114.6 105.9 913-916 917-918 98.3 105.5 Alhambra 114.8 100.5 104.5 919-921 San Diego 109.6 922 Palm Springs 97.2 112.0 103.6 923-924 San Bernardino 95.1 111.3 102.1 Riverside 99.4 114.6 106.0 925 926-927 96.9 111.8 114.9 Santa Ana 103.4 99.4 106.2 928 Anaheim 99.6 930 Oxnard 114.4 106.0 931 Santa Barbara 98.9 115.1106.0 932-933 Bakersfield 100.7 113.6 106.3 San Luis Obispo 99.4 104.9 102.5 934 112.0 96.8 109.8 935 Mojave 936-938 Fresno 100.1 115.3 106.7 939 121.6 109.5 Salinas 100.2 940-941 105.2 145.4 122.7 San Francisco 942,956-958 Sacramento 100.5 119.3 108.7 943 114.4 Palo Alto 98.9 134.5 944 San Mateo 100.9 134.6 127.2 115.6 945 Vallejo 100.1 111.9 946 Oakland 103.1 134.3 116.7 135.1 133.1 947 Berkeley 102.7 116.8 948 101.8 Richmond 115.4949 118.0 San Rafael 103.5 136.7 950 Santa Cruz 104.5 121.8 112.0

by 100 for that city. The data is arranged alphabetically by state and postal zip code numbers. For a city not listed, use the factor for a nearby city with similar economic characteristics.

STATE/ZIP	СПУ	MAT.	INST.	TOTAL
CALIFORNIA (CONT 951 952 953 954 955 959 960 961	"D) I San Jose Stockton Modesto Santa Rosa Eureka Marysville Redding Susanville	102.5 100.9 100.8 100.8 102.1 101.3 107.8 106.8	136.6 117.2 115.7 134.7 116.4 115.9 117.7 118.1	117.4 108.0 107.3 115.6 108.4 107.7 112.1 111.7
COLORADO 800-800 800-800 803 804 805 806 807 808-809 811 812 813 814 815 816	Denver Boulder Golden Fort Collins Greeley Fort Morgan Colorado Springs Pueblo Alamosa Salida Durango Montrose Grand Junction Glenwood Springs	100.8 97.8 99.8 101.3 98.9 98.3 100.4 101.1 102.2 101.9 102.7 101.4 104.8 102.3	81.7 81.3 78.9 79.0 75.5 79.0 84.0 80.3 73.7 75.3 75.7 75.4 75.3 78.1	92.5 90.6 90.7 91.6 88.7 89.9 93.2 92.0 89.8 90.3 90.1 91.9 91.8
CONNECTICUT 060 061 062 063 064 065 065 066 067 068 069	New Britain Hartford Willimantic New London Meriden New Haven Bridgeport Waterbury Norwalk Stamford	100.1 101.4 100.8 97.1 98.9 101.6 101.3 100.9 100.8 100.9	120.6 120.8 120.2 120.7 120.7 120.7 120.8 120.7 128.7 128.7	109.1 109.8 109.2 107.4 108.4 109.9 109.8 109.5 113.0
D.C. 200-205	Washington	101.1	91.9	97.1
<b>DELAWARE</b> 197 198 199	Newark Wilmington Dover	98.8 99.3 99.3	109.2 109.2 109.2	103.3 103.6 103.6
FLORIDA 320,322 321 323 324 325 326,344 327-328,347 329 330.332,340 333 334,349 335-336,346 337 338 339,341 342	Jacksonville Daytona Beach Tallahassee Panama City Pensacola Gainesville Orlando Melbourne Miamii Fort Lauderdale West Palm Beach Tampa St. Petersburg Lakeland Fort Myers Sarasota	98.8 99.0 100.8 100.2 102.7 100.3 100.5 101.7 99.8 98.6 97.4 100.1 102.6 99.4 98.6 100.8	66.4 72.9 56.9 57.8 61.2 66.7 70.0 76.3 73.1 72.6 71.1 78.4 63.3 77.8 72.6 74.3	84.7 87.6 81.7 84.6 85.7 87.2 90.6 88.2 87.2 85.9 90.6 85.5 90.0 87.3 89.2
GEORGIA 300303,399 304 305 306 307 308309 310312 313314 315 316 317,398 318319	Atlanta Statesboro Gainesvile Athens Dalton Augusta Macon Savannah Waycross Valdosta Albany Columbus	97.6 97.3 96.0 95.5 97.2 96.3 97.2 99.2 98.3 98.5 98.5 98.4	74.4 55.8 61.6 63.9 59.0 63.6 64.7 60.9 59.4 61.4 61.3 65.4	87.5 79.2 81.0 81.7 80.5 82.1 83.0 82.5 81.4 82.3 82.3 82.3 84.0

## GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

## FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

## CRAFT: #OPERATING ENGINEER

**DETERMINATION:** SC-23-63-2-2015-1

ISSUE DATE: August 22, 2015

EXPIRATION DATE OF DETERMINATION: June 30, 2016\* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for new rates after 10 days from the expiration date, if no subsequent determination is issued.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties.

			E	Employer Payme	ents		Straig	ht – Time		Vertime Hourly	Rate
CLASSIFICATION	Basic Hourly	Health and	Pension	Vacation/	Training	Other	Hours	Total Hourly	Daily	Saturday (d)	Sunday/
(Journeyperson)	Rate	Welfare		Holiday (a)		Payments		Rate	(c)		Holiday
									1 1/2X	1 1/2X	2X
Classification Groups (b	))										
Group 1	\$39.95	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$64.89	\$84.865	\$84.865	\$104.84
Group 2	\$40.73	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$65.67	\$86.035	\$86.035	\$106.40
Group 3	\$41.02	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$65.96	\$86.470	\$86.470	\$106.98
Group 4	\$42.51	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$67.45	\$88.705	\$88.705	\$109.96
Group 6	\$42.73	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$67.67	\$89.035	\$89.035	\$110.40
Group 8	\$42.84	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$67.78	\$89.200	\$89.200	\$110.62
Group 10	\$42.96	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$67.90	\$89.380	\$89.380	\$110.86
Group 12	\$43.13	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.07	\$89.635	\$89.635	\$111.20
Group 13	\$43.23	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.17	\$89.785	\$89.785	\$111.40
Group 14	\$43.26	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.20	\$89.830	\$89.830	\$111.46
Group 15	\$43.34	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.28	\$89.950	\$89.950	\$111.62
Group 16	\$43.46	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.40	\$90.130	\$90.130	\$111.86
Group 17	\$43.63	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.57	\$90.385	\$90.385	\$112.20
Group 18	\$43.73	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.67	\$90.535	\$90.535	\$112.40
Group 19	\$43.84	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.78	\$90.700	\$90.700	\$112.62
Group 20	\$43.96	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$68.90	\$90.880	\$90.880	\$112.86
Group 21	\$44.13	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$69.07	\$91.135	\$91.135	\$113.20
Group 22	\$44.23	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$69.17	\$91.285	\$91.285	\$113.40
Group 23	\$44.34	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$69.28	\$91.450	\$91.450	\$113.62
Group 24	\$44.46	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$69.40	\$91.630	\$91.630	\$113.86
Group 25	\$44.63	\$11.20	\$9.65	\$3.00	\$0.80	\$0.29	8	\$69.57	\$91.885	\$91.885	\$114.20

<sup>#</sup> Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at http://www.dir.ca.gov/das/das.html.

NOTE: For Special Shift and Multi-Shift, see pages 9A and 9B.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at http://www.dir.ca.gov/OPRL/PWD. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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<sup>&</sup>lt;sup>a</sup> Includes an amount withheld for supplemental dues.

<sup>&</sup>lt;sup>b</sup> For classifications within each group, see pages 8 and 9.

<sup>&</sup>lt;sup>c</sup> Rate applies to the first 4 overtime hours. All other daily overtime is paid at the Sunday rate.

<sup>&</sup>lt;sup>d</sup> Rate applies to the first 12 hours worked. All other time is paid at the Sunday rate.

### DETERMINATION: SC-23-63-2-2015-1

CLASSIFICATIONS:

GROUP 1

Bargeman Brakeman

Compressor Operator

Ditchwitch, with seat or similar type equipment

Elevator Operator - Inside

Engineer Oiler

Forklift Operator (includes loed, lull or similar types - under 5 tons)

Generator Operator

Generator, Pump or Compressor Plant Operator

Heavy Duty Repairman Helper

Pump Operator Signalman Switchman

**GROUP 2** 

Asphalt-Rubber Plant Operator (Nurse Tank Operator)

Concrete Mixer Operator - Skip Type

Conveyor Operator

Forklift Operator (includes loed, lull or similar types - over 5 tons)

Hydrostatic Pump Operator

Oiler Crusher (Asphalt or Concrete Plant) Petromat Laydown Machine RJU Side Dump Jack Rotary Drill Helper (Oilfield)

Screening and Conveyor Machine Operator (or similar types) Skiploader (Wheel type up to 3/4 yd. without attachment)

Tar Pot Fireman

Temporary Heating Plant Operator Trenching Machine Oiler

GROUP 3

Asphalt Rubber Blend Operator

Bobcat or similar type (Skid Steer, with all attachments)

Equipment Greaser (rack) Ford Ferguson (with dragtype attachments)

Helicopter Radioman (ground) Stationary Pipe Wrapping and Cleaning Machine Operator

GROUP 4

Asphalt Plant Fireman

Backhoe Operator (mini-max or similar type) Boring Machine Operator

Boring System Electronic Tracking Locator Boxman or Mixerman (asphalt or concrete) Chip Spreading Machine Operator

Concrete Cleaning Decontamination Machine Operator

Concrete Pump Operator (small portable)

Drilling Machine Operator, Small Auger types (Texoma Super Economatic, or similar types - Hughes 100 Gradall Operator or 200, or similar types - drilling depth of 30 maximum) Grouting Machin

Equipment Greaser (grease truck)

Excavator Track/Rubber-Tired (Operating weight under 21,000 lbs)

Guard Rail Post Driver Operator Highline Cableway Signalman Hydra-Hammer-Aero Stomper

Hydraulic Casing Oscillator Operator – drilling depth of 30' maximum

Micro Tunneling Operator (above ground tunnel) Power Concrete Curing Machine Operator

Power Concrete Saw Operator Power - Driver Jumbo Form Setter Operator

Power Sweeper Operator Rock Wheel Saw/Trencher Roller Operator (compacting) Screed Operator (asphalt or concrete) Trenching Machine Operator (up to 6ft.)

Vacuum or Muck Truck

GROUP 5 (for multi-shift rate, see page 9B)

Equipment Greaser (Grease Truck/Multi-Shift)

GROUP 6

Articulating Material Hauler Asphalt Plant Engineer Batch Plant Operator

Concrete Joint Machine Operator (canal and similar type)

Concrete Placer Operator Concrete Planer Operator Dandy Digger Deck Engine Operator

Deck Engineer

Derrickman (oilfield type)

Drilling Machine Operator, Bucket or Auger types (Calweld 100 bucket or similar types - Watson 1000auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum)

Drilling Machine Operator (including water wells)

Hydraulic Casing Oscillator Operator - drilling depth of 45' maximum

Hydrographic Seeder Machine Operator (straw, pulp or seed) Jackson Track Maintainer, or similar type

Kalamazoo Switch Tamper, or similar type

Machine Tool Operator

Maginnis Internal Full Slab Vibrator

Mechanical Berm, Curb or Gutter (concrete or asphalt)

Mechanical Finisher Operator (concrete, Clary-Johnson-Bidwell or similar)

Micro Tunnel System Operator (below ground)

Pavement Breaker Operator Railcar Mover

Road Oil Mixing Machine Operator Roller Operator (asphalt or finish)

Rubber-Tired Earthmoving Equipment (single engine, up to and including 25 yds. struck)

Self-Propelled Tar Pipelining Machine Operator

Skiploader Operator (crawler and wheel type, over 3/4 yds. and up to and including 1 1/2 yds. Slip Form Pump Operator (power driven hydraulic lifting device for concrete forms)

Tractor Operator - Bulldozer, Tamper-Scraper (single engine, up to 100 H.P. flyweel and similar types, up to and including D-5 and similar types)

Tugger Hoist Operator (1 drum)

Ultra High Pressure Waterjet Cutting Tool System Operator

Vacuum Blasting Machine Operator

Volume Mixer Operator Welder – General

GROUP 7 (for multi-shift rate, see page 9B)

Welder – General (Multi-Shift)

**GROUP 8** 

Asphalt or Concrete Spreading Operator (tamping or finishing)

Asphalt Paving Machine Operator (barber greene or similar type, one (1) Screedman)

Asphalt-Rubber Distributor Operator

Backhoe Operator (up to and including 3/4 yds.) small ford, case or similar

Backhoe Operator (over 3/4 yd. and up to 5 cu. yds. M.R.C.) Barrier Rail Mover (BTM Series 200 or similar types)

Cast in Place Pipe Laying Machine Operator

Cold Foamed Asphalt Recycler

Combination Mixer and Compressor Operator (gunite work)

Compactor Operator - Self Propelled Concrete Mixer Operator - Paving Crushing Plant Operator

Drill Doctor

Drilling Machine Operator, Bucket or Auger types (Calweld 150 bucket or similar types -Watson 1500, 2000, 2500 auger or similar types - Texoma 700, 800 auger or similar types -

drilling depth of 60' maximum)

Elevating Grader Operator

Excavator Track/Rubber-Tired (Operating Weight 21,000 lbs - 100,000 lbs)

Global Positioning System/GPS (or Technician)

Grade Checker

Grouting Machine Operator

Heavy Duty Repairman/Pump Installer

Heavy Equipment Robotics Operator

Hydraulic Casing Oscillator Operator - drilling depth of 60' maximum

Hydraulic Operated Grout Plant (excludes hand loading) Kalamazoo Ballast Regulator or similar type Klemm Drill Operator or similar types

Kolman Belt Loader and similar type Le Tourneau Blob Compactor or similar type

Loader Operator (Athey, Euclid, Sierra and similar types)

Master Environmental Maintenance Mechanic Mobark Chipper or similiar types

Ozzie Padder or similar types P.C. 490 Slot Saw

Pneumatic Concrete Placing Machine Operator (Hackley-Presswell or similar type)

Prentice 721E Hydro-Ax Pumpcrete Gun Operato

Rock Drill or Similiar Types (see Miscellaneous Provision #4 for additional information

regarding this classification)

Rotary Drill Operator (excluding caison type)

Rubber-Tired Earth Moving Equipment Operator (single engine, caterpillar, euclid, athey wagon, and similar types with any and all attachments over 25 yds. and up to and including

50 cu. yds. struck)

Rubber-Tired Earth Moving Equipment Operator (multiple engine - up to and including 25

Rubber-Tired Scraper Operator (self-loading paddle wheel type - John Deere, 1040 and

similar single unit)

Self-Propelled Curb and Gutter Machine Operator

Shuttle Buggy

Skiploader Operator (crawler and wheel type over 1 1/2 yds. up to and including 6 1/2 yds.)

Soil Remediation Plant Operator (CMI, Envirotech or Similar)

Soil Stabilizer and Reclaimer (WR-2400)

Somero SXP Laser Screed

Speed Swing Operator Surface Heaters and Planer Operator

Tractor Compressor Drill Combination Operator

### DETERMINATION: SC-23-63-2-2015-1

### GROUP 8 CONT.

Tractor Operator (any type larger than D-5 - 100 flyweel H.P. and over, or similar - bulldozer, tamper, scraper and push tractor, single engine)

Tractor Operator (boom attachments)

Traveling Pipe Wrapping, Cleaning and Bending Machine Operator

Trenching Machine Operator (over 6 ft. depth capacity, manufacturer's rating)

Trenching Machine with Road Miner Attachment (over 6ft. depth capacity, manufacturer's rating - Oiler or Iournevman Trainee required)

Ultra High Pressure Wateriet Cutting Tool System Mechanic

Water Pull (compaction)

### GROUP 9 (for multi-shift rate, see page 9B)

Heavy Duty Repairman (Multi-Shift)

### GROUP 10

Backhoe Operator (over 5 cu. vds. M.R.C.)

Drilling Machine Operator, Bucket or Auger types (Calweld 200 B bucket or similar types - Watson 3000 or 5000 auger or similar types - Texoma 900 auger or similar types - drilling depth of 105' maximum) Dual Drum Mixer

Dynamic Compactor LDC350 or similar types

Heavy Duty Repairman-Welder combination

Hydraulic Casing Oscillator Operator - drilling depth of 105' maximum

Monorail Locomotive Operator (diesel, gas or electric)

Motor Patrol - Blade Operator (single engine)

Multiple Engine Tractor Operator (euclid and similar type - except quad 9 cat.)

Pneumatic Pipe Ramming Tool and similar types Pre-stressed Wrapping Machine Operator (2 Operators required)

Rubber - Tired Earth Moving Equipment Operator (single engine, over 50 vds. struck)

Rubber - Tired Earth Moving Equipment Operator (multiple engine, euclid caterpillar and similar - over

25 vds, and up to 50 vds, struck)

Tractor Loader Operator (crawler and wheel-type over 6 1/2 yds.)
Welder - Certified

Woods Mixer Operator (and similar pugmill equipment)

GROUP 11 (for multi-shift rate, see page 9B) Heavy Duty Repairman – Welder Combination ( Welder – Certified (Multi-Shift) (Multi-Shift)

## **GROUP 12**

Auto Grader Operator

Automatic Slip Form Operator

Backhoe Operator (over 7 cu. yds. M.R.C.)
Drilling Machine Operator, Bucket or Auger types (Calweld, auger 200 CA or similar types - watson, auger 6000 or similar types - hughes super duty, auger 200 or similar types - drilling depth of 175' maximum)

Excavator Track/Rubber Tired (Operating Weight 100,000 lbs. - 200,000 lbs)

Hoe Ram or similar with compressor

Hydraulic Casing Oscillator Operator – drilling depth of 175' maximum Mass Excavator Operator - less than 750 cu. yds.

Mechanical Finishing Machine Operator

Mobile Form Traveler Operator

Motor Patrol Operator (multi-engine)

Pine Mobile Machine Operato

Rubber-Tired Earth Moving Equipment Operator (multiple engine, euclid, caterpillar and similar type,

over 50 cu. yds. struck) Rubber-Tired Self-Loading Scraper Operator (paddle-wheel-auger type self-loading - (two (2) or more units)

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System (single yds. struck) engine, up to and including 25 yds. struck)

## GROUP 14

Canal Liner Operator

Canal Trimmer Operato

Remote Controlled Earth Moving Operator (\$1,00 per hour additional to base rate)

Wheel Excavator Operator (over 750 cu. yds. per hour)

## **GROUP 15**

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System (single engine, caterpillar, euclid, athey wagon, and similar types with any and all attachments over 25 yds. and up to and including 50 cu, yds. struck)
Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System

(multiple engine - up to and including 25 vds. struck)

## MISCELLANEOUS PROVISIONS

### Operators on hoists with three drums shall receive fifteen cents (15¢) per hour additional pay to the regular rate of pay. The additional pay shall be added to the regular rate and become the base rate for the entire shift.

All heavy duty repairman and heavy duty combination shall receive fifty cents (50¢) per hour tool allowance in addition to their regular rate of pay and this shall become their base rate of pay.

Employees required to suit up and work in a hazardous material environment, shall receive Two Dollars (\$2.00) per hour in addition to their regular rate of pay, and that rate shall become the basic hourly rate of pay

A review of rock drilling is currently pending. The minimum acceptable rate of pay for this classification or type of work on public works projects is Laborer and Related Classifications/Group 5 (Driller) as published on pages 13 and 14 of the Director's General Prevailing Wage Determinations. However, the published rate for the craft/classification of Operating Engineer/Group 8 (Rock Drill or Similar Types) may be used by contractors to perform rock drilling on public works projects.

## GROUP 16

Excavator Track/Rubber Tired (Operating Weight exceeding 200,000 lbs.)

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System (single engine, over 50 yds. struck)

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System (multiple engine, euclid, caterpillar, and similar, over 25 yds. and up to 50 yds. struck)

### GROUP 17

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Push-Pull System (multiple engine, euclid, caterpillar, and similar type, over 50 cu. yds. struck) Tandem Tractor Operator (operating crawler type tractors in tandem - Quad 9 and similar type)

Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

### **GROUP 19**

Rotex Concrete Belt Operator

Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - single engine caterpillar, euclid, athey wagon, and similar types with any and all attachments over 25 yds. and up to and including 50 cu. vds. struck)

and up to and including 30 ct., yet. stucky, Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engines, up to and including 25 yds. struck)

GROUP 20
Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck)

Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, euclid, caterpillar and similar, over 25 yds. and up to 50 yds. struck) Drilling Machine Operator, Bucket or Auger types (Calweld, auger 200 CA or similar types -

Rubber-Tired Earth Moving Equipment Operator, Operating in Tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, euclid, caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22
Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (single engine, up to and including 25 vds. struck)

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (single engine, caterpillar, euclid, athey wagon, and similar types with any and all attachments over 25 yds. and up to and including 50 cu. yds. struck)
Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (multiple engine, up to and including 25 yds. struck)

GROUP 24
Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (single engine, over 50 yds. Struck) Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (multiple engine, euclid, caterpillar and similar, over 25 yds. and up to 50

## **GROUP 25**

Concrete Pump Operator-Truck Mounted Pedestal Concrete Pump Operator

Rubber-Tired Earth Moving Equipment Operator, Operating Equipment with the Tandem Push-Pull System (multiple engine, euclid, caterpillar and similar over 50 cu. yds struck)

## GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

## CRAFT: #TEAMSTER (APPLIES ONLY TO WORK ON THE CONSTRUCTION SITE)

**DETERMINATION:** SC-23-261-2-2015-1

ISSUE DATE: August 22, 2015

**EXPIRATION DATE OF DETERMINATION:** June 30, 2016\* Effective until superseded by a new determination issued by the Director of Industrial Relations. Contact the Office of the Director – Research Unit at (415) 703-4774 for new rates after 10 days from the expiration date, if no subsequent determination is issued.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara and Ventura Counties

		_		Employer I	Payments		<u>Straig</u> l	<u>nt-Time</u>	<u>Overt</u>	ime Hourly R	<u>ates</u>
Classification <sup>c</sup>	Basic	Health	Pension	Vacation/	Training <sup>e</sup>	Other	Hours	Total	Daily <sup>d</sup>	Saturday <sup>d</sup>	Sunday/
(Journeyperson)	Hourly a	nd		Holiday		Payments		Hourly			Holiday
	Rate	Welfare						Rate	1 1/2X	1 1/2X	2X
Group I	28.24	16.02	5.00	$2.70^{a}$	1.52	.45	8	59.93	68.05	68.05	82.17
Group II	28.39	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.08	68.275	68.275	82.47
Group III	28.52	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.21	68.47	68.47	82.73
Group IV	28.71	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.40	68.755	68.755	83.11
Group V	28.74	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.43	68.80	68.80	83.17
Group VI	28.77	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.46	68.845	68.845	83.23
Group VII	29.02	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.71	69.22	69.22	83.73
Group VIII	29.27	16.02	5.00	$2.70^{a}$	1.52	.45	8	54.96	68.845	68.845	84.23
Group IX	29.47	16.02	5.00	$2.70^{a}$	1.52	.45	8	55.16	69.895	69.895	84.63
Group X	29.77	16.02	5.00	$2.70^{a}$	1.52	.45	8	55.46	70.345	70.345	85.23
Group XI	30.27	16.02	5.00	$2.70^{a}$	1.52	.45	8	55.96	71.095	71.095	86.23
Subjourneyman											
0-2000 hours	14.20	14.92	5.00	1.35 <sup>a</sup>	1.52	.45	8	37.44	44.54	44.54	51.64
2001-4000 hours	16.20	14.92	5.00	1.60 <sup>a</sup>	1.52	.45	8	39.69	47.79	47.79	55.89
4001-6000 hours	18.20	14.92	5.00	1.85 <sup>a</sup>	1.52	.45	8	41.94	51.04	51.04	60.14
O (000 b	41										

Over 6000 hours and thereafter at journeyman rates

http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at http://www.dir.ca.gov/das/das.html.

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<sup>#</sup> Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @

<sup>&</sup>lt;sup>a</sup> Includes an amount for Supplemental Dues.

<sup>&</sup>lt;sup>b</sup> Subjourneyman may be employed at a ratio of one subjourneyman for every five journeymen.

<sup>&</sup>lt;sup>c</sup> For classifications within each group, see page 21A.

<sup>&</sup>lt;sup>d</sup> Rate applies to the first 4 daily overtime hours on weekdays and the first 12 hours on Saturday. All other overtime is paid at the Sunday/Holiday double-time rate.

<sup>&</sup>lt;sup>e</sup> Includes \$0.60 for Apprentice Program Fund.

**DETERMINATION:** SC-23-261-2-2015-1

## Group I

Warehouseman and Teamster

## **Group II**

Driver of Vehicle or Combination of Vehicles - 2 axles

Traffic Control Pilot Car, excluding moving heavy equipment permit

Truck Mounted Power Broom

## **Group III**

Driver of Vehicle or Combination of Vehicles - 3 axles

Bootman

Cement Mason Distribution Truck

Fuel Truck Driver

Water Truck - 2 axles

Dump Truck of less than 16 yards water level

**Erosion Control Driver** 

## **Group IV**

Driver of Transit Mix Truck-Under 3 yds

Dumpcrete Truck Less than 6 1/2 yards water level

Truck Repairman Helper

## Group V

Water Truck 3 or more axles

Warehouseman Clerk

Working Truck Driver

Truck Greaser and Tireman - \$0.50 additional for Tireman

Pipeline and Utility Working Truck Driver, including

Winch Truck and Plastic Fusion, limited to Pipeline and

Utility Work

Slurry Truck Driver

## **Group VI**

Driver of Transit Mix Truck - 3 yds or more

Dumpcrete Truck 6 1/2 yds water level and over

Driver of Vehicle or Combination of Vehicles - 4 or more axles

Driver of Oil Spreader Truck

Dump Truck 16 yds to 25 yds water level

Side Dump Trucks

Flow Boy Dump Trucks

## **Group VII**

A Frame, Swedish Crane or Similar

Forklift Driver

Ross Carrier Driver

## **Group VIII**

Dump Truck of 25 yds to 49 yards water level

Truck Repairman

Water Pull Single Engine

Welder

## **Group IX**

Truck Repairman Welder

Low Bed Driver, 9 axles or over

## Group X

Water Pull Single Engine with attachment

Dump Truck and Articulating - 50 yards or more water level

## **Group XI**

Water Pull Twin Engine

Water Pull Twin Engine with attachments

Winch Truck Driver - \$0.25 additional when operating a Winch or similar special attachments



374 Poli Street, Suite 200 • Ventura, CA 93001

## **Fee Schedule**

January 16, 2015

## **Hourly Rates**

President	\$ 230
Vice President	\$ 200
Land Use Consultant	\$ 255
Project Manager III	\$ 180
Project Manager II	\$ 160
Project Manager I	\$ 145
Engineer / Planner III	\$ 135
Engineer / Planner II	\$ 125
Engineer / Planner I	\$ 115
Specialist / Drafting	\$ 90
Administrative Assistant	\$ 70

A 100% markup will be imposed on the hourly rate for expert witness services.

## **Other Charges**

Outside Services	Costs Incurred plus 15%
Travel	Costs Incurred plus 15%
Mileage	IRS Rate plus 15%

# SESPE CONSULTING, INC.

374 Poli Street, Suite 200 Ventura, CA 93001 (805) 275-1515 www.sespeconsulting.com S&S SEEDS

S&S Seeds Quote#: 22163

Bid Date: 12/09/15

PO reqr'd within 60 days to hold price Ph: 805/684-0436 - Fax: 805/684-2798

(图: 图形: 2028年) 经基础公司税 (27.27)。

FOB Carpinteria

September 5, 1996

COMPANY: Jensen Design & Survey

ATTENTION: Lynn Gray FAX NUMBER: 654-6979

FAX PAGES: 3

RE: Grimes Canyon - Santa Paula

Dear Lynn;

10 acres

We can suggest the following seeds for your project:

1)

## COVER CROP - ORCHARD

Species

SIR

30

Bromus carinatus Native California Brome

\$6.00/lb

OR

Lbs/Acre Species
Vulpia myuros hirsuta

\$/LB

"Zorro" Fescue

\$4.00/lb

2)

## NATIVE HILLSIDE

4	Acre Species Artemesia californica	- vor unity/Ger	mination
6	Salvia mellifera	13/30	
4	Salvia leucophylla	70/50	
3	Encelia californica	70/50	
2	Mimulus aurantiacus	60/40	
7	Lotus scoparius	2/55	<b>#</b> 4005 00/40DE
6	Eriogonum fasciculatum	90/60	\$1225.00/ACRE
2	Malosma laurina	10/65	·
6	Vulpia microstachys	95/60	
1	Eriophyllum confertiflorum	90/60	
4	Baccharis pilularis	30/60	

Estimated Price: \$ 810.00/ Acre

Thank you. - Bruce Berlin

P.O. BOX 1275 · CARPINTERIA · CALIFORNIA · USA · 93014-1275

FAX: 805/684-2798 · TEL: 805/684-0436

09-05-1996 05:39PM

805 684 2798

P.01



## Exhibit 5 – General Plan Consistency Analysis

County of Ventura · Resource Management Agency · Planning Division 800 S. Victoria Avenue, Ventura, CA 93009-1740 · (805) 654-2478 · vcrma.org/divisions/planning

## CONSISTENCY WITH THE GENERAL PLAN Rancho San Cristobal Interim Management Plan, CASE NO. PL22-0181

The Ventura County General Plan Goals, Policies and Programs (2020, page 1-1) states:

All area plans, specific plans subdivision, public works projects, and zoning decisions must be consistent with the direction provided in the County's General Plan.

Furthermore, the Ventura County Non-Coastal Zoning Ordinance (NCZO) (Section 8111-1.2.1.1.a) states that in order to be approved, a project must be found consistent with all applicable policies of the Ventura County General Plan.

The applicant requests that an Interim Management Plan (IMP) be approved to authorize an existing surface mining facility to be maintained in idle status for up to five years without the requirement that reclamation of the mined lands be initiated.

Evaluated below is the consistency of the proposed project with the applicable policies of the General Plan *Goals, Policies and Programs:* 

**1. Community Character and Quality of Life Policy LU-16.1:** The County shall encourage discretionary development to be designed to maintain the distinctive character of unincorporated communities, to ensure adequate provision of public facilities and services, and to be compatible with neighboring uses.

<u>Staff Analysis:</u> The subject mining facility is located in a sparsely populated rural area in the foothills of the Oak Ridge Mountains that separate the Santa Clara River Valley from the Tierra Rejada Valley in the Moorpark area. This facility is not visible from public viewpoints. Implementation of the proposed IMP will have no effect on community character or quality of life in the area. The mining facility would continue to operate in accordance with the current permit (CUP PL14-0086) and approved Reclamation Plan at a lower level of activity consistent with the definition of "idle" as specified in State law.

Based on the above discussion, the proposed project is consistent with this policy.

**2. Consultation with State and Federal Agencies Policy LU-19.4**: The County shall continue to consult with applicable state and federal regulatory agencies during project review and permitting activities.

<u>Staff Analysis:</u> The proposed IMP was provided to the Department of Conservation, Division of Mine Reclamation (DMR) for review and comment. No changes in the proposed IMP were recommended by that agency.

County of Ventura Planning Director Hearing Case No. PL22-0181 Exhibit 5 - General Plan Consistency Analysis Based on the above discussion, the proposed IMP is consistent with this Policy.

- **4. Watershed Planning Policy WR-1.2:** The County shall consider the location of a discretionary project within a watershed to determine whether or not it could negatively impact a water source. As part of discretionary project review, the County shall also consider local watershed management plans when considering land use development.
- **5. Water Quality Protection for Discretionary Development Policy WR-1.12:** The County shall evaluate the potential for discretionary development to cause deposition and discharge of sediment, debris, waste and other pollutants into surface runoff, drainage systems, surface water bodies, and groundwater. The County shall require discretionary development to minimize potential deposition and discharge through point source controls, storm water treatment, runoff reduction measures, best management practices, and low impact development.

<u>Staff Analysis:</u> The applicant requests that an IMP be approved to authorize an existing surface mining facility to be maintained in idle status for up to five years without the requirement that reclamation of the mined lands be initiated. All continuing operations will be required to conform with the conditions of approval of CUP PL14-0086 and the associated Approved Reclamation Plan. Implementation of the IMP will not affect the terms of the CUP or the requirements of the approved Reclamation Plan. No aspect of the IMP would result in any new effect on water resources.

Based on the above discussion, the proposed project is consistent with these policies.

**6.** Balanced Mineral Resource Production and Conservation Policy COS-6.1: The County shall balance the development and conservation of mineral resources with economic, health, safety, and social and environmental protection values.

<u>Staff Analysis:</u> The IMP would authorize an existing surface mining facility to be maintained in idle status for up to five years without the requirement that reclamation of the mined lands be initiated. The IMP would not alter any of the conditions of approval of CUP PL14-0086 or change the requirements of the Approved Reclamation Plan. Operations are anticipated to continue at the subject mining facility, but at a much lower level of intensity. Thus, no new effect on the environment or public health and safety would result from IMP implementation.

The IMP would serve the beneficial purpose of maintaining permitted mineral resource reserves available for future use by postponing mine closure and site reclamation due to an economic downturn. The IMP would ensure that the site is maintained in a safe and stable condition and ready for a market upswing.

Based on the above discussion, the proposed project is consistent with this Policy.

**7. Protection of Sensitive Biological Resources Policy COS-1.1:** The County shall ensure that discretionary development that could potentially impact sensitive biological resources be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures that fully account for the impacted resource. When feasible, mitigation measures should adhere to the following priority: avoid impacts, minimize impacts, and compensate for impacts. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.

<u>Staff Analysis:</u> The IMP would authorize an existing surface mining facility to be maintained in idle status for up to five years without the requirement that reclamation of the mined lands be initiated. The IMP would not alter any of the conditions of approval of CUP PL14-0086 or change the requirements of the Approved Reclamation Plan. The area of mine excavation would not expand, and the final reclaimed condition of the mining site would not change. Thus, no new effects on biological resources would result from IMP implementation.

Based on the above discussion, the proposed project is consistent with this Policy.

**8. Scenic Roadways Policy COS-3.1:** The County shall protect the visual character of scenic resources visible from state or County designated scenic roadways.

**Open Space Character Policy COS-3.6:** The County shall require discretionary development outside of Existing Communities be planned and designed to maintain the scenic open space character of the surrounding area, including view corridors from highways. Discretionary development should integrate design, construction, and maintenance techniques that minimize the visibility of structures from public viewing locations within scenic vistas.

<u>Staff Analysis:</u> The subject mining facility is located in a sparsely populated rural area in the foothills of the Oak Ridge Mountains that separate the Santa Clara River Valley from the Tierra Rejada Valley in the Moorpark area. This facility is not visible from public viewpoints. Implementation of the proposed IMP will have no effect on views from State Highway 23 or on the open space character of the area.

Based on the above discussion, the proposed project is consistent with these policies.