



PLANNING DEPARTMENT COUNTY OF TEHAMA

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Scot Timboe
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January 9, 2023

Department of Conservation
Office of Mine Reclamation
Environmental Services Unit Manager
Attn: Beth Hendrickson
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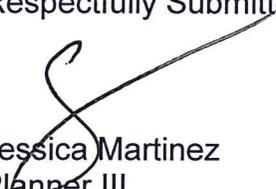
RE: TCR-2 Mine – Application to Ament Reclamation Plan

To: Whom it May Concern:

On May 16, 2022 Tehama County Planning Department received an Amendment Reclamation Plan for the TCR-2 Mine. As part of that process, staff has completed the Reclamation Plan Chart (Index/Checklist/Certification) for submittal of the attached Reclamation Plan to the Department of Conservation for review and comment pursuant to PRC Section 2772.1.

A new FACE is included in this reclamation plan packet for review by the Office of Mine Reclamation pursuant to PRC 2773.4. At this time Tehama County believes the FACE is adequate complete and consistent with PRC 2773.1, Article 11 (commencing with Section 3800) of Subchapter 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, and the board's financial assurance guidelines adopted pursuant to subdivision (f) of Section 2773.1; pending review and approval.

Respectfully Submitted,


Jessica Martinez
Planner III

INDEX AND SMARA
CHART
CERTIFICATION

**INDEX OF ITEMS INCLUDED
IN
TCR-2 RECLAMATION PLAN AMENDMENT**

- ITEM 1: Proposed Amendments to TCR-2 Reclamation Plan by The Land Designers.
- ITEM 2: Tehama County Reclamation Plan form
- ITEM 3: Addendum to the Tehama County Reclamation Plan form
- ITEM 4: Reclamation Plan Maps
- ITEM 5: Revegetation Plan for the TCR-2 Mine by Wildland Resource Managers
- ITEM 6: SMARA Chart
- ITEM 7: Notification Notice by property owner
- ITEM 8: Assessor's Parcel Map of property
- ITEM 9: Grant deed of property
- ITEM 10: Financial Assurance Cost Estimate

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CHART PER PRC 2772(b)

Location and Page(s) of SMARA section referenced.

P= Pages containing referenced material.

PA – Proposed Amendment to Reclamation Plan text. Item 1 in Index.

RPT – Reclamation Plan text form. Item 2 in Index.

AD - Addendum to Reclamation Plan text. Item 3 in Index.

RPM- Reclamation Plan Maps including cross sections and details. Item 4 in Index.

RV – Revegetation Plan by Wildland Resource Managers. Item 5 in Index.

NF – Notification Form. Item 7 in Index.

GENERAL CONSIDERATIONS

AUTHORITY	REQUIREMENTS/PRACTICES/STANADARDS	Yes, or N/A	LOCATION IN DOCUMENT
PRC 2772(c)(1)	Contact information: Name and address of the surface mining operator and any person designated by the operator as an agent for service of process (must reside in CA).	Yes	RPT P.1 & 6 PA P. 2 RPM
PRC 2772(c)(2)	Material quantity and type: The anticipated total quantity and type of minerals to be mined (see Annual Report Instructions, Exhibit B, for mineral types and units of measure)	N/A	RPT P. 2 & 3
PRC 2772(c)(3)	Dates: The initiation and termination dates of mining (be as specific as possible, e.g. December 31, 2030).	N/A	RPT P. 2 AD P. 3
PRC 2772(c)(4)	Depth of mining: The maximum anticipated depth of the surface mining operation.	Yes	RPT P. 3 RPM
PRC 2772(c)(5) (A-F)	Reclamation plan maps shall include: Size and legal description of lands affected by surface mining operations;	Yes	RPM
	Names and addresses of owners of all surface interests and mineral interests;	Yes	RPM
	Property lines, setbacks, and the reclamation plan boundary;	Yes	RPM
	Existing and final topography with contour lines at appropriate intervals;	Yes	RPM
	Detailed geologic description of the area of the surface mining operation;	Yes	RPT P. 2 AD P. 1
	Locations of railroads, utility features, and roads (access roads, temporary roads to be reclaimed, and any roads remaining for the end use).	Yes	RPM
PRC 2772(c)(6)	All maps, diagrams, or calculations that are required to be prepared by a California-licensed professional shall include the preparer's name, license number, signature & seal.	Yes	RPM
	Mining method and schedule: A description of the mining methods and a time schedule that provides for completion of mining on each segment so that reclamation can be concurrent or phased.	N/A	
PRC 2772(c)(7)	Subsequent use(s): A description of the proposed subsequent use(s) after reclamation	Yes	RPT P.4; RPM; RV P. 6-10 PA P.5, 8 - 10
	Evidence that all landowners have been notified of the proposed use.	Yes	NF P.1
PRC 2772(c)(9)	Impact on future mining: A statement regarding the impact of reclamation on future mining on the site.	Yes	RPT. P.5
PRC 2772(c)(10)	Statement signed by the operator accepting responsibility for reclamation of the mined lands per the reclamation plan.	Yes	RPT. P.5 & 7
PRC 2772(c)(11)	Any other information the Lead Agency may require by Ordinance.	Yes	
PRC 2776(b- c)	Pre-SMARA areas: Reclamation plans shall apply to operations conducted after January 1, 1976 or to be conducted in the future. Mined lands disturbed prior to January 1, 1976 and not disturbed after that	N/A	

	date may be excluded from the reclamation plan.		
CCR 3502(b)(2)	Public health and safety: A description of how any potential public health and safety concerns that may arise due to exposure of the public to the site will be addressed.	Yes	AD P. 2
CCR 3709(a)	Equipment storage and waste disposal: Designate areas for equipment storage and show on maps.	Yes	RPM
	All waste shall be disposed of in accordance with state and local health and safety ordinances.	Yes	AD P. 2
CCR 3709(b)	Structures and equipment should be dismantled and removed at closure, except as demonstrated to be necessary for the proposed end use.	Yes	RPT P. 5 AD P. 3 RPM
CCR 3713(a)	Well closures: Drill holes, water wells, monitoring wells will be completed or abandoned in accordance with laws, unless demonstrated necessary for the proposed end use.	N/A	
CCR 3713(b)	Underground openings: Any portals, shafts, tunnels, or openings will be gated or protected from public entry, and to preserve access for wildlife (e.g. bats).	N/A	
GEOLOGY & GEOTECHNICAL			
PRC 2772(c)(5)	A description of the general geology of the area	Yes	RPT P. 2
	A detailed description of the geology of the mine site.	Yes	AD P.1
PRC 2773.3	If a metallic mine is located on, or within one mile of, any "Native American sacred site" and is located in an "area of special concern," the reclamation plan shall require that all excavations and/or excess materials be backfilled and graded to achieve the approximate original contours of the mined lands prior to mining.	N/A	
CCR 3502(b)(4)	The source and disposition of fill materials used for backfilling or grading shall be considered in the reclamation plan.	Yes	PA 5-11, RV P. 4,5 & 8 RPT P. 5; RPM
CCR 3502(b)(3)	The designed steepness and treatment of final slopes must consider the physical properties of slope materials, maximum water content, and landscaping.	Yes	PA P. 11 RPT P. 5 RPM
	The reclamation plan shall specify slope angles flatter than the critical gradient for the type of slope materials.	Yes	PA P. 11; RPT P. 5 RPM
	When final slopes approach the critical gradient, a Slope Stability Analysis will be required.	N/A	
CCR 3704.1	Backfilling required for surface mining operations for metallic minerals.	N/A	
CCR 3704(a)	For urban use, fill shall be compacted in accordance with Uniform Building Code, local grading ordinance, or other methods approved by the lead agency.	N/A	
CCR 3704(b)	For resource conservation, compact to the standards required for that end use.	Yes	RV P. 14
CCR 3704(d)	Final reclamation fill slopes shall not exceed 2:1 (H:V), except when allowed by site-specific engineering analysis, and the proposed final slope can be successfully revegetated. See also Section 3502(b)(3).	Yes	PA P. 11 RPT P. 5 RPM
CCR 3704(e)	At closure, all fill slopes shall conform with the surrounding topography or approved end use.	Yes	RPM AD P. 4
CCR 3704(f)	Final cut slopes must have a minimum slope stability factor of safety that is suitable for the end use and conforms with the surrounding topography or end use.	Yes	PA P. 11 RPT P. 5 RPM AD P. 4
HYDROLOGY & WATER QUALITY			
PRC 2770.5	For operations within the 100-year flood plain (defined by FEMA) and within one mile up- or downstream of a state highway bridge, Caltrans must be notified and provided a 45-day review period by the lead agency.	N/A	

PRC 2772(c)(8)(A)	Description of the manner in which contaminants will be controlled and mine waste will be disposed.	Yes	AD P. 4
PRC 2772(c)(8)(B)	The reclamation plan shall include a description of the manner in which stream banks/beds will be rehabilitated to minimize erosion and sedimentation.	N/A	
PRC 2773(a)	The reclamation plan shall establish site-specific sediment and erosion control criteria for monitoring compliance with the reclamation plan.	Yes	AD P. 1 RV P. 11
CCR 3502(b)(6)	Temporary stream and watershed diversions shall be detailed in the reclamation plan.	N/A	
CCR 3503(a)(2)	Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.	Yes	AD P. 1
CCR 3503(b)(2)	Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.	N/A	
CCR 3503(a)(3)	Erosion control facilities shall be constructed and maintained where necessary to control erosion.	N/A	
CCR 3503(b)(1)	Settling ponds shall be constructed where they will provide a significant benefit to water quality	N/A	
CCR 3503(d)	Disposal of mine waste and overburden shall be stable and shall not restrict natural drainage without suitable provisions for diversion.	Yes	AD P.4
CCR 3503(e)	Grading and revegetation shall be designed to minimize erosion and convey surface runoff to natural drainage courses or interior basins.	Yes	RPM PA 8-10 RV 8-11
	Spillway protection shall be designed to prevent erosion.	N/A	RPM
CCR 3706(a)	Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of water.	Yes	PA P. 8-10; RPM RPT P. 4-5 RV 8-9, 10-11
CCR 3706(b)	Water quality, recharge potential, and groundwater storage that is accessed by others shall not be diminished.	Yes	AD P. 1 & 4 PA P. 3, 5, 8-10 RV P. 1,6-11 & 13
CCR 3706(c)	Erosion and sedimentation shall be controlled during all phases of construction, operation, reclamation, and closure of surface mining operations to minimize siltation of lakes and water courses as per RWQCB/SWRCB.	Yes	AD P. 1
CCR 3706(d)	Surface runoff and drainage shall be controlled to protect surrounding land and water resources.	Yes	AD P.1
	Erosion control methods shall be designed for not less than 20 year/1 hour intensity storm event.	N/A	
CCR 3706(e)	Impacted drainages shall not cause increased erosion or sedimentation. Mitigation alternatives shall be proposed in the reclamation plan.	N/A	
CCR 3706(f)(1)	Stream diversions shall be constructed in accordance with the Lake and Streambed Alteration Agreement (LSAA) between the operator and the Department of Fish and Wildlife.	N/A	
CCR 3706(f)(2)	Stream diversions shall also be constructed in accordance with Federal Clean Water Act and the Rivers and Harbors Act of 1899.	N/A	
CCR 3706(g)	All temporary stream diversions shall eventually be removed and the affected land reclaimed.	N/A	
CCR 3710(a)	Surface and groundwater shall be protected from siltation and pollutants in accordance with the Porter-Cologne Act, the Federal Clean Water Act, and RWQCB/SWRCB requirements.	Yes	AD P. 1 & 4 PA P. 3, 5, 8-10 RV P. 1,6-11 & 13
CCR 3710(b)	In-stream mining shall be conducted in accordance 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.	N/A	
CCR 3710(c)	In-stream mining shall be regulated to prevent impacts to structures, habitats, riparian vegetation, groundwater levels, and banks.	N/A	

	In-stream channel elevations and bank erosion shall be evaluated annually using extraction quantities, cross-sections, and aerial photos.	N/A	
CCR 3712	Mine waste and tailings and mine waste disposal units are governed by SWRCB waste disposal regulations and shall be reclaimed in accordance with this article: CCR Article 1. Surface Mining and Reclamation Practice. Section 3500 et seq.	Yes	RPT P. 5
SENSATIVE SPECIES & HABITAT			
CCR 3502(b)(1)	A description of the environmental setting (identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands).	Yes	PA P. 5-10 RPT P. 2 RV P. 1-6; 9-13 & 16-22
	Impacts of reclamation on surrounding land uses.	Yes	PA P. 12
CCR 3503(c)	Fish and wildlife habitat shall be protected by all reasonable measures.	Yes	PA P. 8-12 RV P.1, 6-14
CCR 3703(a)	Sensitive species shall be conserved or mitigated as prescribed by the federal and California Endangered Species Acts.	Yes	RV P. 1,5-6, 9-10, 13, 19-20
CCR 3703(b)	Wildlife habitat shall be established on disturbed land at least as good as pre-project, unless end use precludes its use as wildlife habitat.	Yes	PA P. 8-10 RV P. 1,5-6, 7-14
CCR 3703(c)	Wetlands shall be avoided or mitigated at 1:1 minimum for both acreage and habitat value.	N/A	
CCR 3704(g)	Piles or dumps shall not be placed in wetlands without mitigation.	N/A	
CCR 3710(d)	In-stream mining shall not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.	N/A	
TOPSOIL			
CCR 3503(a)(1)	Removal of vegetation and overburden preceding mining shall be kept to a minimum.	N/A	
CCR 3503(f)	When the reclamation plan calls for resoiling, mine waste shall be leveled and covered with a layer of finer material. A soil layer shall then be placed on this prepared surface.	Yes	PA P. 10 RV P. 8
	The use of soil conditioners, mulches, or imported topsoil shall be considered where such measures appear necessary.	N/A	
CCR 3704(c)	Mine waste shall be stockpiled to facilitate phased reclamation and kept separate from topsoil or other growth media.	Yes	PA P. 10 RV P. 8
CCR 3705(e)	If soil is altered or other than native topsoil, soil analysis is required. Add fertilizers or soil amendments if necessary.	N/A	
CCR 3711(a)	All salvageable topsoil shall be removed as a separate layer.	Yes	PA P. 10
	Topsoil and vegetation removal should not precede mining by more than one year.	N/A	
CCR 3711(b)	Topsoil resources shall be mapped prior to stripping and location of topsoil stockpiles shown on map included in the reclamation plan.	Yes	PA P.6 RV P.4 RPM
	Topsoil and other growth media shall be maintained in separate stockpiles.	Yes	AD P.4
	Test plots may be required to determine the suitability of growth media for revegetation purposes.	N/A	
CCR 3711(c)	Soil salvage operations and phases of reclamation shall be set forth in the reclamation plan to minimize the area disturbed and to achieve maximum revegetation success.	N/A	
CCR 3711(d)	Topsoil and growth media shall be used to phase reclamation as soon as can be accommodated following the mining of an area.	N/A	
	Topsoil stockpiles shall not be disturbed until needed for reclamation.	Yes	AD P.4
	Topsoil stockpiles shall be clearly identified.	Yes	RPM
	Topsoil shall be planted with vegetation or otherwise protected to prevent erosion and discourage weeds.	Yes	AD P.1

CCR 3711(e)	Topsoil shall be redistributed in a manner resulting in a stable, uniform thickness consistent with the end use.	Yes	PA P. 10 RV P. 8
REVEGETATION			
PRC 2773(a)	The reclamation plan shall be specific to the property and shall establish site-specific criteria for evaluating compliance with the reclamation plan with respect to revegetation.	Yes	RV P.10-11, 14
CCR 3503(g)	Available research regarding revegetation methods and selection of species given the topography, resoiling characteristics, and climate of the mined areas shall be used	Yes	RV P. 2-7
CCR 3705(a)	Baseline studies shall be conducted prior to mining activities to document vegetative cover, density, and species richness.	Yes	RV P.7-8, 10-13, 16-20
	Vegetative cover shall be similar to surrounding habitats and self-sustaining.	Yes	RV P.7-8, 10-13, 16-20 PA P.8-10
CCR 3705(b)	Test plots shall be conducted simultaneously with mining to ensure successful implementation of the proposed revegetation plan.	N/A	
CCR 3705(c)	Decompaction methods, such as ripping and disking, shall be used in areas to be revegetated to establish a suitable root zone for planting.	Yes	RV P.14
CCR 3705(d)	Roads shall be stripped of road base materials, resoiled, and revegetated, unless exempted.	Yes	RPM PA P. 11
CCR 3705(f)	Temporary access shall not disrupt the soil surface on arid lands except where necessary for safe access. Barriers shall be installed to keep unauthorized vehicles out.	N/A	
CCR 3705(g)	Use local native plant species (unless non-native species meet the end use).	Yes	PA P. 5, 8-10 RV P. 5-10 & 11
	Areas to be developed for industrial, commercial, or residential shall be revegetated for the interim period to control erosion.	N/A	
CCR 3705(h)	Planting shall be conducted during the most favorable period of the year for plant establishment.	Yes	RV P. 9
CCR 3705(i)	Use soil stabilizing practices and irrigation when necessary to establish vegetation.	N/A	RV P.14
CCR 3705(j)	If irrigation is used, demonstrate that revegetation has been self-sustaining without irrigation for two years prior to the release of financial assurance.	N/A	RV P.14
CCR 3705(k)	Noxious weeds shall be monitored and managed.	Yes	RV P. 1 & 14
CCR 3705(l)	Plant protection measures such as fencing and caging shall be used where needed for revegetation success. Protection measures shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.	Yes	AD P.4
CCR3705(m)	Quantitative success standards for vegetative cover, density, and species richness shall be included in the reclamation plan.	Yes	RV 10, 11,12 & 14 PA P.9
	Monitoring to occur until success standards have been achieved.	Yes	RV P.14 AD P.4
	Sampling techniques for measuring success shall be specified. Sample size must be sufficient to provide at least an 80 percent statistical confidence level.	Yes	AD P. 2
AGRICULTURE			
CCR 3707(a)	Where the end use will be agriculture, prime agricultural land shall be returned to a fertility level specified in the reclamation plan.	Yes	RV P.7, 14 PA P. 9
CCR 3707(b)	Segregate and replace topsoil in proper sequence by horizon in prime agricultural soils.	Yes	PA P. 9; AD P.4 RV P. 8
CCR 3707(c)	Post reclamation productivity rates for prime agricultural land must be equal to pre-project condition or to a similar site for two consecutive years.	Yes	RV P. 7, 14 AD P. 4
	Productivity rates shall be specified in the reclamation plan.	Yes	RV P. 7, 14 PA P.9
CCR 3707(d)	If fertilizers and amendments are applied, they shall not cause contamination of surface or groundwater.	Yes	RV P. 14

CCR 3708	For sites where the end use is to be agricultural, non-prime agricultural land must be reclaimed to be capable of sustaining economically viable crops common to the area.	Yes	RV P.7,14
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The County of Tehama acting as the Lead/Local Responsible Agency in regards to the processing and approval of the application for TCR-2 Mine request here by certifies that the proposed Amendment Reclamation Plan Application is complete, and that it is in compliance with PRC 2772.1(a)(3) A thru B, pursuant to PRC 2772.1(a)(3).

Local Agency Contact

A handwritten signature in black ink, consisting of a large, stylized 'S' shape with a long, sweeping tail that extends upwards and to the right.

1/9/2023
Date

ITEM 1

INTRODUCTION:

The TCR-2 Mine was approved by the Tehama County Planning Commission in 2006. The mine is a sand and gravel operation that extracted aggregates from land adjacent to the lower section of Thomes Creek. The mine is on the south side of Thomes Creek and east of Hall Road. Figure 1, next page, shows the general location of the mine. The mine ceased operation 2018 and the mine operator, Thomes Creek Rock, Inc., has been in the process of reclaiming the site. There is no intent to resume mining at this location. The purpose of this document is to identify the changes proposed to the current reclamation plan and describe the new reclamation plan standards for the TCR-2 Mine.

The amended reclamation plan maps consist of six sheets. Sheets one through four show the mining area and depict the overall site, existing conditions, and proposed reclamation at the mine. The last two sheets contain cross sections depicting existing and proposed surface elevations.

Reclamation to date has mainly focused upon filling in the low area on the eastern end of the mine. Thomes Creek Rock has been working with the property owner, Doyle Ranch, in reclaiming the site.

A number of factors require that the original reclamation plan be amended. These revisions are the result of how the site was mined, certain requests by the property owner, the current natural revegetation of the site, and hydrologic conditions affecting final reclamation. The five main changes to the plan are:

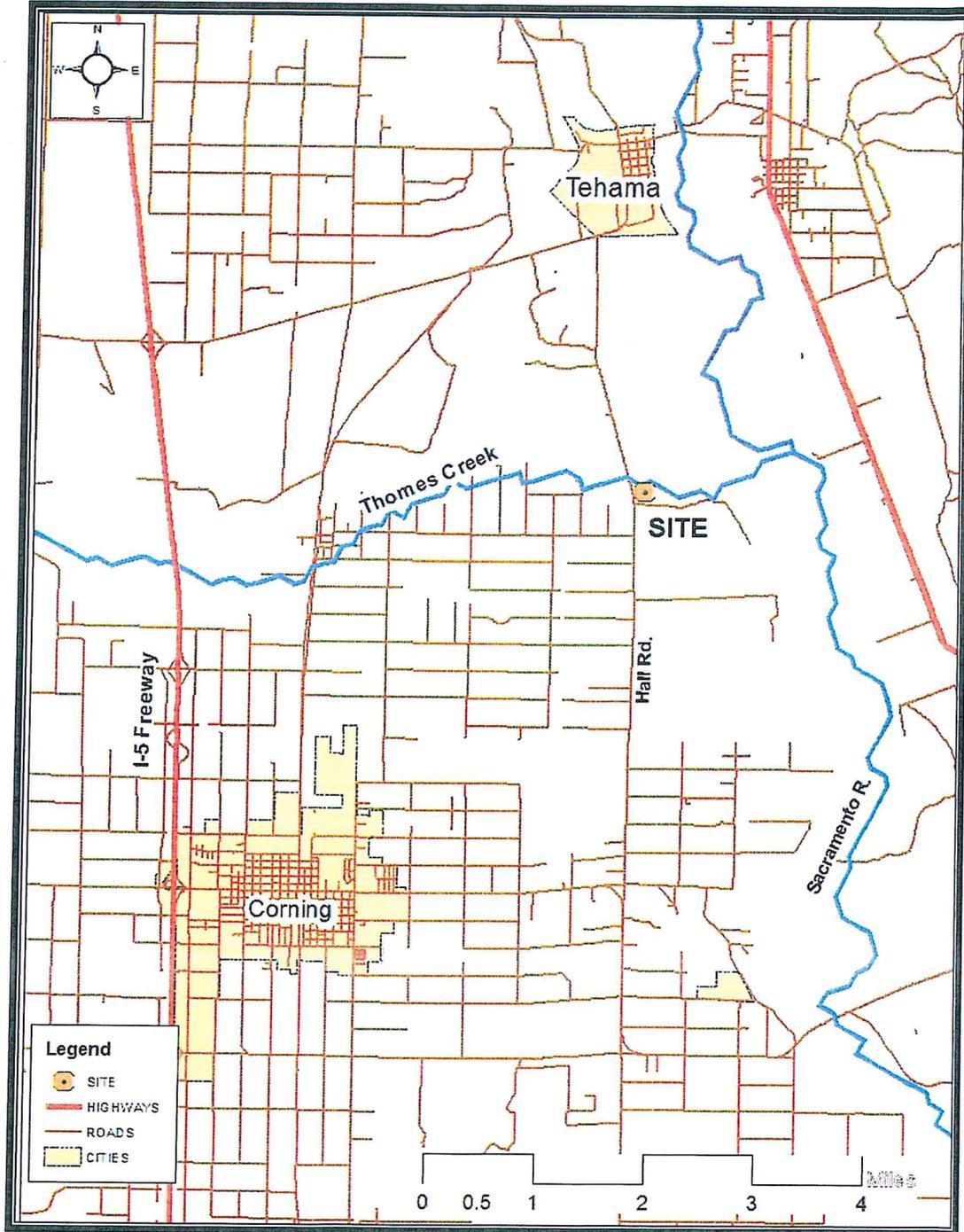
- Reducing the acreage in the reclamation plan from 131.31 acres to 94.12 acres. This is a decrease of 37.19 acres.
- Changing the end use in the East Area of the mine from irrigated pasture to non-irrigated pasture¹.
- Changing the end use in the West Area of the mine from irrigated pasture to Apiary use.
- Permitting the finished floor elevations of the mine to be at a lower elevation than shown on the original reclamation plan maps.
- Installing a small berm to help reduce stream flows from entering the mine during higher flows in Thomes Creek.

This report is made part of the Amended TCR-2 Reclamation Plan application that is being submitted to Tehama County in 2022. Reclamation requirements and standards noted in this report refer to the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources

¹ The terms non-irrigated pasture and dryland pasture are used interchangeably.

Code (PRC) Section 2710 et seq) and California Code of Regulations (CCR) commencing with Section 3700).

Figure 1
Location Map



MAIN CHANGES TO RECLAMATION PLAN:

Reduction of Acreage in Reclamation Plan

The reclamation plan acreage is being reduced at the request of the property owner. The 2006 Reclamation Plan had an acreage of 131.31 acres. The amended plan is 94.12 acres. This change results in a 28 percent reduction in the size of the mine. The main location being excluded from mining is the existing prune orchard within the 2006 mine boundary. This exclusion allows the property owner to retain and farm their existing orchard. The exclusion of the orchard has basically separated the mine into the two separate mining areas which are identified as the West Area and East Area in the amendment proposal. The Amended Reclamation Plan maps show both the 2006 reclamation plan boundary and the currently proposed boundary.

These are a number of other remaining areas being excluded from the reclamation plan since they have not been mined or disturbed by the operator. One of these locations is at the southeastern corner of the mine. This land is being excluded since it provides a buffer area to protect a levee at this location. There is one location in the West Area of about 0.6 acres that is being added to the reclamation plan since the mine operator went outside the original mining boundary to extract aggregate.

Change in Final End Use from Irrigated Pasture to Either Non-irrigated Pasture or Apiary Use

There are a number of reasons to change the final land use from irrigated pasture to either non-irrigated pasture or apiary use. The primary justifications are that the majority of the site is not suitable as irrigated lands and that existing revegetation and other site conditions make irrigated pastures difficult if not impossible to achieve at the site. The soil limitations will first be discussed and then the site's natural revegetation/site conditions.

Figure 2, next page, shows the Natural Resource Conservation Service's soils of the site from their Soils Website². Table 1 also on the next page defines the soil symbols on Figure 2 as well as the soil capability classification of each soil. For reader orientation purposes, Hall Road is located on the west side of the property, left side of map, and Thomes Creek is north of the mine. The two blue colors on the map dominate the soil types at the mine and cover 93 percent of the area in the reclamation plan. The darker blue identifies the Riverwash (Rr) soil series. This soil composed of sand of gravels deposited by Thomes Creek. The soil survey does not have a soil profile for Riverwash. Riverwash is on about 45 percent of the site. The lighter blue is the Cortina complex which is on about 48 percent of the land. This is a thin soil with 0-3 inches of gravelly sandy loam on top, very gravelly to fine sandy loam to 15 inches with the remainder of the profile of extremely gravelly sand to 72 inches³. Both of these soils were created due to their

² Web Soil Survey Home. <https://websurvey.mrcs.usda.gov/app.HomePage.htm>.

³ 72 inches is the maximum depth the NRCS did their soil profile.

Figure 2
NRCS Soil Survey Map

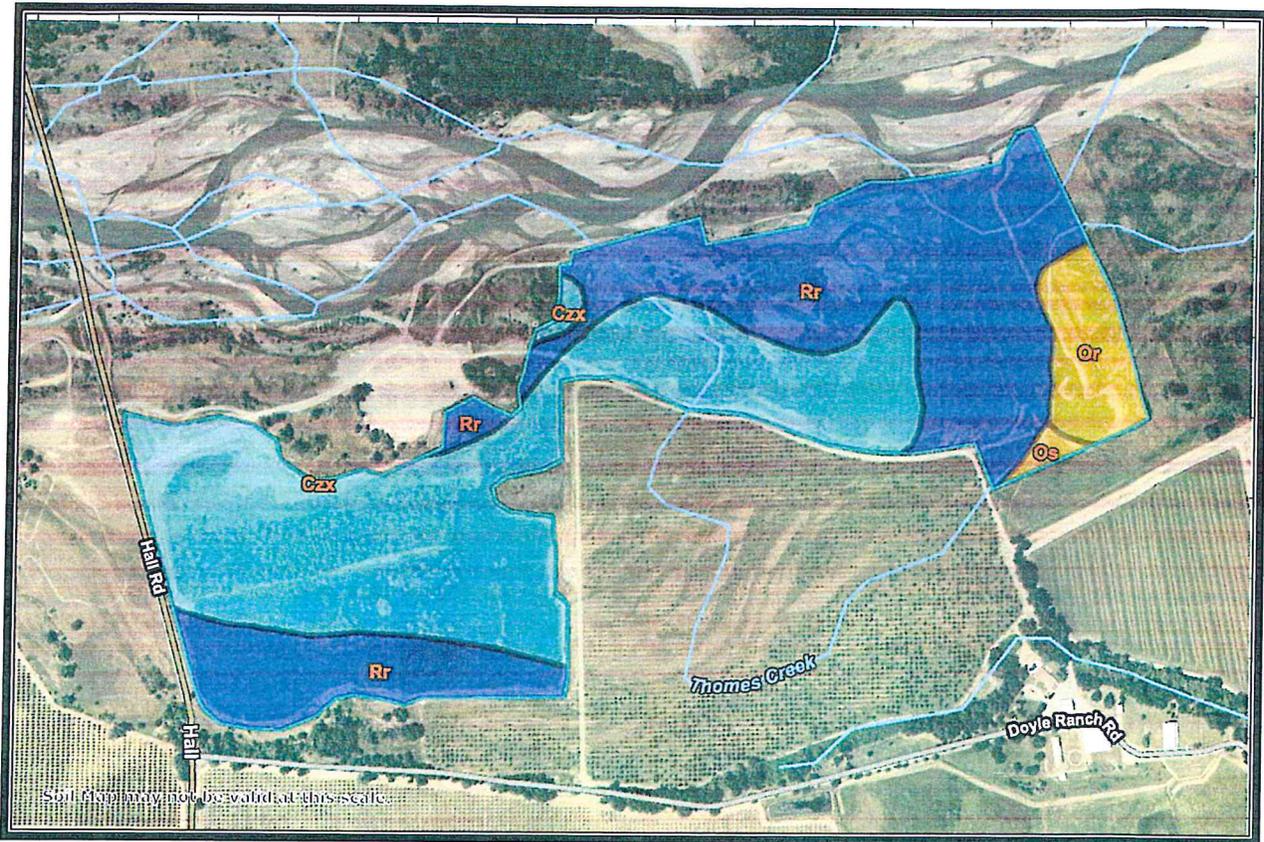


Table 1 NRCS Soils Classification

Map Unit Symbol	Map Unit Name	Acres	Percent of Area	Non-Irrigated Soil Classification
Czx	Cortina complex	44.1	48.1 %	6
Or	Orland, loam	5.7	6.2 %	3
Os	Orland silt loam	0.7	.08 %	3
Rr	Riverwash	41.2	44.9 %	8

Note: Acreage in Table 1 is 91.6 acres whereas reclamation plan maps have 94.12 acres. This discrepancy is due to visually drawing the mine boundary in using the NRCS Soil Website. The difference in the acreages is about 3 percent.

close proximity to Thomes Creek. The NRCS's non-irrigated capability classification of these soils is class 8 for Riverwash and class 6 for the Cortina. Neither soil is given an irrigated capability class. Most locations with Riverwash and Cortina soils have been mined except for the northeastern corner with about 1.5 acres of land, and a smaller area at the northwest corner which has the mine company's scales and scale shack.

The remaining soil series is the Orland which is subdivided into the Orland loam (Or) and the Orland (Os) silt loam. Most of the soil is Orland Loam at about 5.7 acres and 0.7 acres for the Orland silt loam. Combined these soils only constitute 7 percent of the mine area. These soils are only found at the southeastern corner of the mine. The Orland silt loam is a deep soil with silt loam to a depth of 60 inches. The Orland loam has loam to 11 inches, stratified silt loam to fine sand to 19 inches, then loam to 30 inches. Very gravelly sandy loam is found from 30 to 60 inches. Both Orland soils are in capability classification 3 for non-irrigated soils. The irrigated classification is 2 for Orland loam and 1 for Orland silt loam. The Orland soils at this location have never been irrigated.

Overall the soils at the site prior to mining were of poor quality. The top two inches of the Cortina and Riverwash were retained where topsoil was present and used in resoiling the site. Over 1 acre of the Orland loam was mined for the underlying aggregate. In this instance the deeper Orland topsoil layer was stockpiled on site for reclamation. Part of this stockpiled material has been used to resoil the East Area. The remaining stockpile of soil will be utilized for future resoiling of the East Area. Additional soil from this location will be used to fill in the low spot in the East Area, if needed.

The original resoiling concept was to retain 2 inches of topsoil from the mining areas with Cortina and Riverwash soils and add 7.5 inches of reject fines from the onsite screening of the sand and gravel to create a soil layer of 9.5 inches. This did not occur since Thomes Creek Rock did not screen onsite and instead took all the mined material to their main Thomes Creek Rock facility on Hwy. 99 W. in Richfield, CA. for processing. Onsite screening would have given a deeper soil layer in the reclamation area, but probably not a terribly productive soil.

An unforeseen consequence of mining is the vigorous growth of riparian trees and other water loving plants within parts of the mining area due to the ground surface being closer to the seasonal groundwater table. The proximity of Thomes Creek allows the lateral flow of groundwater to migrate to the mining area from the active stream channel during the winter months. In the summer months the Sacramento River influences the water table by rising its height due to higher summertime river flows. The combination of more and closer water to the ground surface, plus an abundance of seed sources from adjacent vegetation has resulted in a mixed growth of trees, grasses and other plants in the formerly mined areas. There are basically two problems that this situation creates in having irrigated fields as originally proposed. The original proposal had a K line irrigation system in which a drip line irrigation line moved across the fields to irrigate the pasture. Having a functional irrigation line is difficult if there are riparian trees continually growing in the fields. Also, if there is subterranean water currently near the ground surface, it would not make sense to increase this groundwater source by irrigating during certain seasons of the year.

The main location with riparian and wetland plants is the West Area since it was initially mined and seasonal ponding is present at certain locations. The East Area was mined later and was recently graded. The East Area does have ponding of water on its eastern side, but this area is being filled in so the site drains to Thomes Creek. Due to current site conditions the East Area is proposed dryland pasture and the West Area is proposed as apiary use. The East Area will be discussed first as to how the site will be reclaimed as dryland pasture and the West Area afterwards.

East Area Reclamation:

Dryland pasture is the end use desired by the landowner at this location. The site is presently being prepared for pasture usage by grading the site so it is a smooth ground surface that slopes to the east and has an outlet to Thomes Creek. As noted previously the eastern portion of this area is to be filled in to eliminate ponding of water and to have positive drainage to Thomes Creek. Upon completion of resoiling and grading, the site will be seeded with grasses and forbs for the grazing of livestock.

44 plus acres of land in the East Area is on soils that were non-prime soils (Riverwash and Cortina) CCR §3708 sets the performance standard of agricultural production on non-prime soils as follows:

“The following standards shall apply to agricultural lands, other than prime agricultural lands, when the approved end use is agriculture...non-prime agricultural lands shall be reclaimed so as to be capable of sustaining economically viable production of crops commonly grown in the surrounding areas.”

For the remaining 7⁴ acres of land within the East Area that is prime agricultural soils (Orland soil series), CCR §3707 set the performance standard for prime soils as follows:

“... the following standards shall apply to mining operations on prime agricultural lands where the approved end use is agriculture:

- (a) Mining operations which will operate on prime agricultural lands, as defined by the U.S. Soil Conservation Service, shall return all disturbed areas to a fertility level as specified in the approved reclamation plan.*
- (b) When distinct soil horizons 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 C atop the graded overburden.*
- (c) Reclamation shall be deemed complete when productivity capability of the affected land is equivalent to or exceeds, for two consecutive crop years, that of the premining 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*

⁴ Acreage is rounded up to a whole number.

(d) Use of fertilizers or other soil amendments shall not cause contamination of surface or groundwater”

It should be noted that not all the prime agricultural land within the reclamation plan boundary will be disturbed. This is true for a portion of the land north of the levee on the Doyle Ranch and for part of land along the eastern boundary of the reclamation plan. Part of these soils are being left in place to provide additional protection to the levee. The other location with prime agricultural soils may be needed to re-soil the adjacent area in the mine that needs to be raised so there positive surface drainage to Thomes Creek. If these eastern area soils are used for re-soiling, the A horizon will be stockpiled to re-soil the disturbed area and CCR §3707 (b) will be adhered to where the reconstructed soil will have the A horizon atop the B, the B atop the C, and C atop the graded overburden.

The firm of Wildland Resource Managers was employed to review the dryland grazing potential of the East Area and prepared a revegetation plan for the East Area that addressed site preparation for revegetation, seeding prescription, planting method, planting timing, success criteria for revegetation, and compliance monitoring requirements. Their report is Item 5 of the amendment application and is titled *”Revegetation Plan for the TCR-2 Mine, July 2021”*. This report is made part of the Amended TCR-2 Reclamation Plan.

The criteria for meeting the requirements for the production of crops as required by CCR §3707 and 3708 is having dryland pasture production of forage that is equal to that of comparable sites in the surrounding area. In order to determine the productivity of a comparable site, Wildland Resource Managers took thirty 1 sq. ft. plots on a two part vegetative transect of undisturbed ground south of the East Area. The collected vegetation was weighted to determine the residual dry matter (RDM) at the transect area. The average weight of RDM from the transects is 2,007.09 pounds of residual dry matter/acre. This weight of 2,007.09 RDM/acre will be the success requirement for the revegetation of the East Area as dryland pasture. This success requirement applies to both lands that were mapped by the NRCS as non-prime and prime agricultural soils at this location.

West Area Reclamation:

Wildland Resources Managers surveyed the West Area as to existing vegetation and wildlife habitat values. The firm found West Area currently supporting a very rich environment of wetlands, seasonal water impoundments and riparian habitat. No additional revegetation is required in the West Area except for the planting of native grasses at a few fringe upland locations that are bare ground. The West Area is a richer and more varied vegetation and wildlife habitat than the seasonal grassland that existed prior to mining. The West Area meets the requirements of CCR §3703 (b) which states:

“Wildlife habitat shall be established on disturbed land in a condition at least as good as that which existed before the land were disturbed by surface mining operations, unless the proposed end use precludes it use as wildlife habitat...”

One of the goals of the reclamation plan is to preserve the varied wildlife and vegetative habitats that have been created. The success criteria for this location being reclaimed is described in the revegetation plan prepared by Wildland Resource Managers. The presence of seasonal water and the variety of plants make the site ideal for use as an apiary.

Lowering of Depth of Mined Areas

The mining of the site proceeded in a west to east direction. Thomes Creek Rock found that the depth of aggregate was shallower in the West Area and deeper in the East Area. Mining of the West Area was completed in 2009 and this location is at its finished floor elevation. The average depth of mining is about ten feet. The resulting land form is a graded bank around the perimeter of the mined area with a flat mine floor that slopes from west to the east. The West Area ground form is complete except for the grading of a slope bank near the northwestern corner of the site. This bank grading is shown on Sheet 2 of the Amended Reclamation Plan maps.

The East Area had more gravel and at a deeper depth. Mining in the East Area ceased in 2018. In 2017 Thomes Creek broke through the 100 foot wide non-disturbance area adjacent to the mine and deposited in the East Area sediment and aggregates. This raised the ground elevation of the East Area, but there is still a low area at the eastern end of the mine that ponds water to a depth of approximately one foot. Thomes Creek Rock has been in the process of leveling out the floor of the East Area and filling in the ponded area. Currently the East Area drains in the desired west to east direction and there is an outlet in the stream bank for water to re-enter Thomes Creek. Sheet 4 of the Amended Reclamation Plan maps shows the remaining area to be filled and the flowline of drainage to Thomes Creek. It is estimated that 40,000 cubic yards of material is needed to fill the remaining low area and have positive drainage to the stream.

There is currently a large quantity of previously stockpiled topsoil that can be used in refilling the low area. This stockpile is on the adjacent land east of the low area and it has not been mined. Additional topsoil/overburden is available at this location if the existing stockpile is insufficient to re-soil the site. About half of these adjacent soils are Riverwash (Rr) and half Orland loam. If the Riverwash is used in re-soiling, the top two inches of this soil that contains the A horizon will be stockpiled and used to re-soil the top layer of the ground used in filling the low area. The Orland loam has an A horizon of 11 inches and then a C horizon 49 inches deep. The A horizon of the Orland will be stockpiled and used to re-soil the top area of the Orland area that has been used as fill. The A horizon of Orland fill material will be placed on top of the C horizon and not vice versa. The eastern area is still within the limits of the reclamation plan as well as the within the boundary of the previous 2006 reclamation plan.

The reclamation plan map on sheet 4 shows current ground contours and future ground elevations needed to have positive drainage to Thomes Creek and that fill in the low area. Final ground contours in the reclamation could be affected by Thomes Creek depositing sediment and gravels into the East Area during high flows and change some of these elevations. Due to the potential variability of final contours, the elevations on Sheet 4 are the minimum elevations to reclaim the East Area. Any additions of soil, sand, gravel, and sediment that increase the height of ground elevations will be consistent with final site reclamation.

Installing Berm

Doyle Ranch has requested that a berm be installed along the area where Thomes Creek had previously eroded away the 100 foot wide buffer area to the stream and allowed stream flows to enter the East Area. This berm would be about 555 feet long, 2 feet high with a top width of 20 feet. The side slopes of the berm would be 4:1. The berm location is shown on sheet 4 of the amended reclamation plan maps. The intent of the berm is to reduce stream flows from entering the East Area by having raised ground at this location.

There is an existing stockpile of soil and aggregate that can be used to create this berm. This stockpile is shown on sheet 4. Thomes Creek Rock is not opposed to creating this berm unless it becomes a long and expensive permitting issue that could delay reclamation.

Other Changes:

#1. Phasing.

The 2006 Reclamation Plan had four phases which were numbered 1 through 4. The amended reclamation plan maps have simplified to a West Area and East Area in the mine. Phase 3 in the original plan is not needed since it is the prune orchard which is being removed from the reclamation plan. Phases 1 and 4 are being combined as the West Area since they were never used to separate the proposed gravel screening plant site from the rest of the mining area. The original Phase 2 is now the East Area.

#2. Perimeter bank slopes.

The 2006 reclamation plan maps have 3:1 perimeter slopes around the mining area. The ranch owner expressed a desire for 4:1 slopes and the reclamation plan is being amended to meet this request.

#3. Removal of tree planting along Hall Road.

The 2006 plan had the planting of 31 trees along Hall Road to act as a visual screen into the mine. The tree planting is no longer needed since the adjoining mining area has revegetated with trees, grasses and other plants which are a visual asset to the area. The only sign of mining activity is the presence of a small scale shack and scales which are to be removed.

#4. Removal of roads.

There is one road at the northwestern corner of the mine that is being removed. There is also another road at the East Area that may be removed and used as resoiling material. These roads are shown on the amended reclamation plan maps. Any roads removed will be stripped of their road base materials, ripped to a depth of 12 inches, covered with a suitable growth media and revegetated with grasses per § CCR 3705(d). All other roads can remain since they are part of the ranch operation.

Thomes Creek Rock has been working on completing the reclamation of the TCR-2 mine site. A large of amount time and money has been spent in creating flat pasture land in the East Area and eliminating ponded water. The amendments to the existing 2006 plan are necessary since circumstances have changed and the mine cannot be reclaimed as originally intended. The proposed changes to the plan set realistic goals to achieve reclamation and the site is compatible with other creek side lands in the area that are not suitable for intensive agricultural use. There is an added benefit of changing the end use in that a variety of rich vegetative and wildlife habitats are preserved.

ITEM 2

RECLAMATION PLAN

SECTION A

OWNER, OPERATOR AND AGENT:

1. Applicant

Name Thomes Creek Rock, Inc.

Address 6069 Highway 99 West, Corning, CA. 96021

Telephone (530) 824-0191

2. Name (if any) of Mineral Property TCR-2 Mine

3. Property Owners, or Owners of Surface Rights (List of owners).

Name Doyle Ranch, Inc. % Beverly Biswell

Address P.O. Box 28, Corning, CA. 96021 % Beverly Biswell

Telephone (530) 824-6402

4. Owners of Mineral Rights

Name Doyle Ranch, Inc. % Beverly Biswell

Address P.O. Box 28, Corning, CA. 96021 % Beverly Biswell

Telephone (530) 824-6402

5. Lessee of Mineral Rights

Name Thomes Creek Rock, Inc.

Address 6069 Highway 99 West, Corning, CA. 96021

Telephone (530) 824-0191

6. Agent of Process (Person designated by operator as his agent for the service of process).

Name Keith Hamblin, The Land Designers

Address 1975 Placer St. Ste. A, Redding, CA. 96001 Telephone (530) 244-0506

SECTION B

LOCATION

7. Brief description, including legal, of the extent of the mined lands (to be) involved by this operation, including total acreage.

Section(s) 32 Township 25N Range 2W

MDBM Meridian.

8. Describe the access route to the operation site.

Access to the site is via SR 99W to Richfield, CA. Travel east on Sonoma St. to Alameda, then north on Alameda to River Rd. Go east on River Rd. to Hall Rd intersection. Travel north on Hall Rd. & mine is on east side of road and slightly south of Thomes Creek.

9. Attach Legal Description, Location and Topographic Map

Legal description is submitted as Item 9 with application and it is also on the reclamation plan maps.

DESCRIPTION:

10. Mineral commodity (to be) mined: Sand and gravel was mined. Mining has ceased with no intent to resume.

11. Geologic description, including brief general geologic setting, more detailed geologic description of the mineral deposit (to be) mined, and principal minerals or rock types present.

As listed in the "State of California Geologic Map of California", the site consists of alluvium, old alluvium, and young stream terrace deposits.

Riverwash (Rr), Cortina complex (Czx) and Orland (Or) and (Os) are the soils on the site.

12. Description of environmental setting of the site and the surrounding areas. Describe existing area land use, soil, vegetation, ground water elevation and surface water characteristics, average annual rainfall and/or other factors pertaining to environmental impacts and their mitigation and reclamation. (Attach extra paper if necessary)

The mine is slightly south of Thomes Creek. The mine is inactive and in the process of being reclaimed. The mine is lower terrain due to the extraction of sand and gravel. The site is currently revegetated with trees, grasses and other plants in the western area. The eastern side is mainly bare ground from regrading and resoiling reclamation work. The Doyle Ranch is on the north, south and eastern sides of the mine. Thomes Creek and grazing land is to the north. Orchards, pasturelands and the ranch residence is to the south. Dryland pasture is to the east. Hall Rd. is immediately to the west and vacant land is west of the road. Average rainfall is 23 inches.

SECTION C.

PROPOSED (EXISTING) SURFACE MINING OPERATION:

13. Proposed Starting Date of Operation Site is inactive with no intent to restart operations.

Estimated Life of Operation Site is inactive with no intent to restart operations.

Duration of First Phase N/A

14. Operation will be (is) Continuous _____, Seasonal _____, Intermittent _____.

Developed _____, Not yet in operation _____, Temporarily deactivated _____,

Stockpile in mine _____ Site is inactive with no intent to restart operations.

Specific cu. yds./yr.

15. Operation will be (is): Under 5,000 cu. yds./yr. Site is inactive with no intent to restart operations.
- 5,000 - 50,000 cu. yds./yr. _____
- 50,000 - 250,000 cu. yds./yr. _____
- 250,000 - 1,000,000 cu. yds./yr. _____
- Over 1,000,000 cu. yds./yr. _____

16. Total Anticipated Production:

Mineral commodities to be removed tons (cu. yds.) Site is inactive with no intent to restart operations.

Waste retained on the site tons (cu. yds.) _____

Waste disposed off site tons (cu. yds.) _____

Maximum anticipated depth Elevation 190.

17. Mining Method: (check all applicable)

Open Pit Single Bench _____ Gravel/Sand Pit _____ Drill and Blast _____

Quarry:

Hill top	_____	Clay Pit	_____
Multibench	_____	Truck to Processing Plant (To RR)	_____
Side Hill	_____	Borrow Pit	_____
Dragline	_____	Tailings Pond	_____
Low Level	_____	Slurry Pump	_____
Shovel	_____	Waste Dump	_____
Underground	_____	Rail	_____
Gravel Bar Skimming	_____		

Other _____ Other _____

18a. If processing of the ores or minerals mined is planned to be conducted at or adjacent to the site, briefly describe the nature of the processing and explain disposal method of the tailings or waste from processing.

Sands and gravels were transported offsite for processing at the Thomes Creek Rock plant in Richfield.

- 18b. Estimate quantity (gallons per day) and quality of water required by the proposed operation, specifying proposed sources of this water, of method of its conveyance to this property and the quantity and quality and method of disposal of used and/or surplus water.

Water is used for dust control during mine reclamation. A water truck will bring in water from the TCR plant in Richfield.

About 5,000 gal. per day is used during hot weather.

19. If the nature of the deposit and the mining method used will permit, describe and show the steps or phases or the mining operation that allow concurrent reclamation, and include a proposed time schedule for such concurrent activities.

Mine is currently in the process of being reclaimed. The reclamation plan is being amended for the end uses of dryland pasture on

the east side of the mine and apiary use on the western side. The western side currently meets most of the proposed reclamation criteria except for seeding with grasses and resoiling in certain upland locations. The east side will require resoiling, grading and planting of dryland pasture grasses.

20. Attach a map of the mined lands and/or suitable aerial photograph showing:

- (a) Boundaries and topographic details of the site;
- (b) Location of all streams, roads, railroads, water wells, and utility facilities within 500 feet of the site;
- (c) Location of all currently proposed access roads to be constructed in conducting the surface mining operation(s);
- (d) Location of areas (to be)mined, and of waste dumps and tailings ponds;
- (e) By use of overlay symbol or color, depiction of separate mining phases if applicable. (See Item 19)
- (f) The source of map base, orientation (North arrow), and scale (e.g. 1"=500', etc.) of the map. Amended reclamation plan maps included with this application.

SECTION D

RECLAMATION PLAN:-

21. Indicate on an overlay of map of item 20, or by color or symbol on map those areas to be covered by reclamation plan.

Acreage 94.12 acres in amended reclamation plan maps.

22. Describe the ultimate physical condition of the site and specify proposed use(s), or potential uses, of the mined lands as reclaimed.

The end use of the eastern side of the mine is dryland pasture and it will be planted with dryland pasture grasses.

The end use for the western area is apiary use. The area is currently revegetated with trees, grasses and other plants that meet this objective. There are a few upland areas on the west side that need resoiling and planting with grasses.

23. Describe relationship of the interim uses other than mining and the ultimate physical condition to:

- (a) Zoning regulations. AG-2 Valley Floor and NR Natural Resource
- (b) General plan and plan elements. Valley Floor Ag.

24. Provide evidence that all owners of a possessory interest in the land have been notified of the proposed use(s) or potential uses identified in Item 21. (Attach copy of notarized statement of acknowledgement, etc.)

Item 7 of the application contains the notarized statement that the owner has been notified of the proposed uses or potential uses identified in Item 22 of this form.

25. Describe soil conditions and proposed soil salvage plan.

Pre-mining soil depths were meager since the soils were mainly sand and gravel. Where present, the removed soil was used to reoil the mined areas. There is soil stockpiled along the eastern site of the mine and this soil is being used to reoil the dry pasture area on the eastern part of the mine.

26. Describe the methods, their sequence and time, to be used in bringing the reclamation of the land to its end state. Indicate on map (Item 20-21) or on diagrams as necessary. Include discussion of the pertinent items listed below.

- (a) Backfilling and grading.
- (b) Stabilization of slopes.
- (c) Stabilization of permanent waste dumps, tailings, etc.
- (d) Rehabilitation of pre-mining drainage:
- (e) Removal, disposal, or utilization of residual equipment, structures, refuse, etc.
- (f) Control of contaminants, especially with regard to surface runoff and ground water
- (g) Treatment of streambeds and streambanks to control erosion and sedimentation.
- (h) Removal or minimization of residual hazards.
- (i) Resoiling, revegetation with evidence that selected plants can survive given the site's topography, soil and climate.

(a) The eastern area is to be backfilled with approximately 40,000 cy of topsoil and overburden to create the pasture area and have positive drainage from the site. Minor resoiling occurs on the upland ground in the western area for areas with gravel and sand surfaces. (b) All perimeter slopes will be 4:1 or greater which are stable slopes. (c) N/A, none present. (d) No pre-mining drainages present, runoff was Hortonian overland flow. (e) All equipment, structures, refuse will be removed prior to final reclamation. (f) Revegetation

with grasses and retention of existing vegetation in western area will control potential contaminants. (g) Two foot high berm proposed on western end of east area to reduce potential stream flows onto site. (h) No residual hazards identified at site. (i) Refer to Revegetation Plan prepared for mine by Wildland Resource Managers which addresses resoiling, revegetation and analysis of plant selection.

27. If applicant has selected a short term phasing of his reclamation, describe in detail the specific reclamation to be accomplished during first phase.

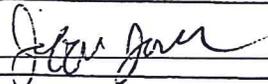
N/A. Site is in final phase of reclamation.

28. Describe how reclamation of this site in this manner may affect future mining at the site and in the surrounding area.

Future mining at the site is not affected by the proposed reclamation since there are no proposed structures or land uses that would present physical or social barriers to the future extraction of aggregates.

29. Statement of Responsibility.

I, Jeffrey Jackson hereby accept full responsibility by Thomes Creek Rock, Inc. for reclaiming all mined lands described and submitted herein.

Signed:  Jeffrey Jackson, Manager Thomes Creek Rock.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

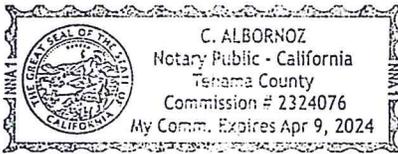
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of TEHAMA)
On 4-28-2022 before me, C. ALBORNOZ, NOTARY PUBLIC
Date Here Insert Name and Title of the Officer
personally appeared JEFFREY JACKSON
Name(s) of Signer(s)

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.

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Reclamation Plan Document Date: _____
Number of Pages: _____ Signer(s) Other Than Named Above: _____

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: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

AGENT AUTHORIZATION

To: Tehama County, Planning Department

Keith Hamblin - The Land Designers

(530) 244-0506

Print name of Agent

Phone Number

1975 Placer Street, Ste. A. Redding, CA. 96001

Mailing Address

Is hereby authorized to process this application on my/our property, identified as Tehama County Assessors Parcel Number(s): 067-120-001, 006, & 010.

This authorization allows representation for all applications, hearings, appeals, etc. and to sign all documents necessary for said processing, but not including documents(s) relating to record title interest.

Owner(s) of Record (sign and print name)

Bryce Biswell

Print Name

Signature

Print Name

Signature

Print Name

Print Name

Signature

Jeffrey Jackson

Print Name of Applicant (*if other than owner*)

Signature

Signature of Applicant (*if other than owner*)

Duane K. Miller RCE

(530) 365-5610

Print Name of California Civil Engineer/Land Surveyor

Phone Number

P.O. Box 1307 Anderson, CA 96007

duane@dkmengr.com

Mailing Address

Email Address

[Notary Required]

P.6

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

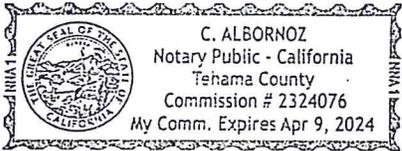
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of TEHAMA)
On 4-28-2020 before me, C. ALBORNOZ, Notary Public
Date Here Insert Name and Title of the Officer
personally appeared BRYCE BISWELL & JEFFREY JACKSON
Name(s) of Signer(s)

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.

WITNESS my hand and official seal.
Signature [Signature]
Signature of Notary Public



Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document
Title or Type of Document: Agent Authorization Page Redeviation Plan Packet Document Date:
Number of Pages: Signer(s) Other Than Named Above:

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:

STATEMENT OF RESPONSIBILITY (SOR)

Reference SMARA 2772.C.10

In consideration of approval by the lead agency of this application for a Surface Mining Permit and/or Reclamation Plan, the undersigned, jointly and severally, hereby covenant with the lead agency and the Department of Conservation as follows:

MINE NAME: TCR-2 Mine

CALIFORNIA MINE ID #: 91-52-0041

LEAD AGENCY: Tehama County

CONDITIONAL USE PERMIT #: _____

I hereby acknowledge that all of the provisions of said permit and reclamation plan, and any and all conditions appended thereto shall be faithfully performed and completed by the undersigned within the time therein provided, or within any additional time as may be allowed pursuant to the Surface Mining Ordinance Code of the lead agency and with the applicable requirements of Articles 1 and 9 (commencing with section 3500 et seq., respectively) of chapter 8, division 2, title 14, of the California Code of Regulations, the Surface Mining and Reclamation Act of 1975 (SMARA), as amended (section 2710 et seq. of the Public Resources Code) which are incorporated herein by reference.

That the obligations of the undersigned to perform and complete the provisions of said permit and/or plan, including any and all conditions appended thereto, shall be subject to the provisions of said Ordinance Code and SMARA and the State Mining and Geology Board's implementing regulations and guidelines.

That the place of performance by the undersigned of the covenants herein, shall be the area managed by the lead agency in the State of California.

That, pursuant to Public Resources Code section 2774.1 (a) notice procedures, any notice required to be given, or otherwise given to the undersigned may be by personal service or by certified mail.

Owner of Operation Business Structure: (check one)	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Limited Partnership
	<input type="checkbox"/> Limited Liability Corporation	<input type="checkbox"/> Individual
	<input type="checkbox"/> General Partnership	

Check one:

<input type="checkbox"/>	I have posted an adequate financial assurance mechanism pursuant to Public Resources Code section 2773.1 that is equal to or greater than the lead agency approved financial assurance cost estimate. Date Posted: _____
	Mechanism Type (check one)
	<input type="checkbox"/> Surety Bond <input type="checkbox"/> Certificate of Deposit <input type="checkbox"/> Letter of Credit <input type="checkbox"/> Other: _____

Or

<input checked="" type="checkbox"/>	I will post an adequate financial assurance mechanism, pursuant to Public Resources Code section 2773.1 that is equal to or greater than the lead agency approved financial assurance cost estimate.
	Mechanism Type (check one)
	<input checked="" type="checkbox"/> Surety Bond <input type="checkbox"/> Certificate of Deposit <input type="checkbox"/> Letter of Credit <input type="checkbox"/> Other: _____

Dated this 28th day of April, 20 22

Thomes Creek Rock, Inc.

Printed Name of Owner of Operation

[Signature]
Signature of Owner of Operation
(to be acknowledged by a Notary Public)

FOR DEPARTMENT USE ONLY (completed by staff after approval of project)	
SMARA Database Entry Date	Analyst Initials

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

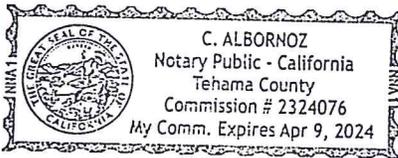
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of TEHAMA)
On 4-28-2022 before me, C. ALBORNOZ, Notary Public
Date Here Insert Name and Title of the Officer
personally appeared JEFFREY JACKSON
Name(s) of Signer(s)

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.

WITNESS my hand and official seal.



Signature [Handwritten Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Statement of Responsibility (SOR) Document Date: Apr. 28, 2022
Number of Pages: _____ Signer(s) Other Than Named Above: _____

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: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

ITEM 3

ADDENDUM TO TCR-2 RECLAMATION PLAN

INTRODUCTION:

This addendum is divided into two sections. Section 1 discusses items identified in the Tehama County Reclamation Plan form (Item 2 in Index) that need to be addressed, but the space on the form is too small to adequately respond to the item. Each response item is identified by its number and page in the reclamation plan form.

Section 2 addresses regulations listed in the required SMARA Chart Form (Item 6 in Index) which need to be addressed in the reclamation plan but are not answered in other sections of the TCR-2 Amended Reclamation Plan submittal or they need elaboration. The SMARA sections are addressed in the order they occur on the SMARA chart, Item 6 in the Index.

SECTION 1. ADDITIONAL INFORMATION TO SECTIONS IN RECLAMATION PLAN FORM

ITEM 11. PAGE 2 GEOLOGY

The relative Geologic time for this site is the Cenozoic era and Pleistocene Modesto formation.

MODESTO FORMATION—The youngest unit comprising the Pleistocene alluvium consists of distinct alluvial terraces and some alluvial fans and abandoned channel ridges. The unit forms the lowest deposits lying topographically above the Holocene deposits along streams and in valleys. It consists of tan and light — gray gravely sand, silt, and clay except where derived from volcanic rocks of the Tuscan Formation; it then is distinctly red and black with minor brown clasts. The Modesto was deposited by streams still existing today because the deposits, for the most part, border existing streams. An exception is the abandoned channel filled with deposits belonging to the upper member of the Modesto on the south side of the alluvial fan of Stony Creek. The Modesto formation is divided into:

Qmu: Upper member—Unconsolidated, unweathered gravel, sand, silt, and clay. The upper member forms terraces that are topographically the lowest of the two Modesto formation terraces. It also forms alluvial fans along the east side of the Sacramento Valley from Red Bluff to Oroville. Soils at the top of the member have A/C horizon profiles, but unlike the lower member, they lack argillic B horizons. Deposits belonging to the upper member of the Modesto are only a few meters thick and generally form a thin veneer deposited on older alluvial deposits.

Qml: Lower Member—Unconsolidated slightly weathered gravel, sand, silt, and clay. The lower member forms terraces that are topographically a few meters higher than those of the upper member. It forms alluvial fans along the main channel of the Sacramento River and Feather River and large levees bordering the Sacramento River from Stony Creek to Sutter Buttes. Upstream from Stony Creek the lower member of the Modesto is preserved as scattered terrace remnants. Alluvium of the lower member of the Modesto surrounds the Dunnigan Hills and borders Cache Creek near Esparto. Soils developed on the lower member contain an argillic B horizon, which is marked by a noticeable increase in clay content and a distinct red color. Its surface fluvial morphology is remarkably smooth and displays little relief. The unit is much more extensive than the upper member and probably represents a longer period of deposition. The lower member of the Modesto unit is the youngest deposit from which we have evidence for possible fault displacement.

Information obtained from DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY. GEOLOGIC MAP OF THE LATE CENOZOIC DEPOSITS OF THE SACRAMENTO VALLEY AND NORTHERN SIERRAN FOOTHILLS, CALIFORNIA PAGE 10. AND, STATE OF CALIFORNIA'S GEOLOGIC MAP OF CALIFORNIA.

ITEMS 26 (a), (b) & PAGE 5 (f) EROSION CONTROL, DISPOSAL OF WASTE, & PUBLIC HEALTH AND SAFETY

If there is rill erosion of topsoil or overburden stockpiles after mulching and seeding, a silt fence or fiber rolls will be installed around the perimeter of the stockpile. Stockpiles and other locations of potential erosion will be mulched and seeded if they are in present after October 15 of each year.

Areas in the mine that are eroding will either have straw mulch or gravel armor placed on them. An eroding area is one that has erosion rills greater than 5 square inches and exceeding 5 feet in length. Mulch is applied at a rate of 2 tons/acre.

Per CCR 3502 (b) (2) Public health and safety.

Public health and safety features incorporated in the plan include: Having all cut and fill banks 4:1 or less in slope, fencing and locked gates along Hall Rd., patrolling of area as part of ranch operations, and the site being private property which excludes the public.

Per CCR 3709 (a) All wastes will be disposed of in accordance with state and local health and safety ordinances.

ITEM 26 (i) SAMPLING TECHNIQUES FOR MEASURING VEGETATIVE SUCCESS

Valid sampling techniques for measuring vegetative success must be of sufficient size to produce at least an 80% confidence level per §CCR 3705 (m).

SECTION 2. RESPONSE TO SMARA CHART REGULATIONS

Section 2 addresses regulations listed in the required SMARA Chart Form (Item 6 in Index) which need to be addressed in the reclamation plan but are not answered in other sections of the TCR-2 Amended Reclamation Plan submittal or additional elaboration is necessary. The SMARA sections are addressed as they are listed in the order they are posted on the SMARA Chart.

PRC 2772 (c) (3) Termination date of mining operation.

The mining operation is currently terminated and only reclamation of the site required.

PRC 2772(c)(11) Any other information the Lead Agency may require by Ordinance

County Ordinances Applicable to the Mining Operation

The property within the proposed TCR-2 amendment area is Zoned Ag-2; Agricultural Valley and NR, Natural Resource districts with a VFA; Valley Floor Agriculture General Plan Land Use Designation. The proposed Reclamation Plan is consistent with the Goal OS-8 and policy OS-8.2 described in sections 6.3 of the General Plan, and with Tehama County Municipal Zoning Code sections 17.12.030 and 17.88.020 which allow surface mining operations with approval of a use permit.

Pursuant to Tehama County Municipal Code section 13.28.090 (A)&(B), prior to approval, the approving body shall make the following findings:

A. Site Approvals. In addition to any findings required by the county code, site approvals for surface mining operations shall include a finding that the project complies with the provisions of SMARA and state regulations.

B. Reclamation Plans. For reclamation plans, the following findings shall be required:

1. That the reclamation plan complies with SMARA Section 2772 and Section 2773, and any other applicable provisions;
2. That the reclamation plan complies with applicable requirements of state regulations (CCR Sections 3500 through 3505, and Sections 3700 through 3713);
3. That the reclamation plan and potential use of reclaimed land pursuant to the plan are consistent with this chapter and the county's general plan and any applicable resource plan or element;
4. That the reclamation plan has been reviewed pursuant to CEQA and the county's environmental review guidelines, and all significant adverse impacts from reclamation of the surface mining operations are mitigated to the maximum extent feasible;
5. That the land and/or resources such as water bodies to be reclaimed will be restored to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or that suitable off-site development will compensate for related disturbance to resource values;
6. That the reclamation plan will restore the mined lands to a usable condition which is readily adaptable for alternative land uses consistent with the general plan and applicable resource plan;
7. That a written response to the State Department of Conservation has been prepared, describing the disposition of major issues raised by that department. Where the county's position is at variance with the recommendations and objections raised by the State Department of Conservation, said response shall address, in detail, why specific comments and suggestions were not accepted.

CCR 3709 (b) Structures and equipment should be dismantled and removed at closure except as demonstrated to be necessary for the proposed end use.

All equipment will be removed at the end of reclamation. The only structures at the mine are a scales and scale shack. The scale shack will be demolished and removed from the property. The scales will be removed and taken to the Thomes Creek Rock plant site on Hwy. 99W in Richfield. Per Section PCR 2729, equipment is the only mine waste at the site since all overburden is being used to resoil the site.

CCR 3703 (e) At closure, all fill slopes shall conform with the surrounding topography or approved end use. & CCR 3703 (f) Final cut slopes must have a minimum slope stability factor of safety that is suitable for the end use and conforms with the surrounding topography or end use.

The plan is proposing perimeter slopes of 4:1 slopes or less. These gentle slopes allow the reclaimed lands to blend in with the existing perimeter terrain.

PRC 2772 (c) (8) (A) Description of the manner in which contaminants will be controlled and mine waste will be disposed.

The only contaminants are sediment, possible petroleum discharges from the mobile equipment, and trash. Sediment is controlled by the erosion control measures in the reclamation plan and revegetation of the site. Preventing the potential discharge of fluids from the mobile equipment is through regular inspections of the equipment and prompt fixing of the leak. There is also an equipment parking area on the reclamation plan so the equipment is parked on a higher location in the mine and not in a low location which may be subject to runoff. Overburden is not a contaminate since it is used in the resoiling of the site and erosion control measures are in the plan to control erosion from stockpiles. Trash is picked up on a daily basis.

CCR 3503 (d) Disposal of mine waste and overburden shall be stable and shall not restrict natural drainage without suitable provision for diversion.

There is no mine waste other than equipment. Overburden is used in the resoiling of the East Area in the reclamation plan. The overburden is placed in a uniform layer and graded to a uniform slope so as not to restrict natural drainage.

CCR 3706 (b) Water quality, recharge potential, and groundwater storage that is accessed by others shall not be diminished.

The reclamation plan's resoiling and revegetation policies, erosion control measures, non-compaction of soils, sheet flow drainage, and stockpile protection measures all reduce the offsite transport of sediment and other pollutants as well as encouraging stormwater infiltration into the groundwater table and limits pollutants from traveling to the groundwater table.

CCR 3771 (b) Topsoil and other growth media shall be maintained in separate stockpiles....Topsoil stockpiles shall be clearly identified.

All topsoil stockpiles will be located separate from overburden and other growth media stockpiles. The topsoil location(s) will have a sign on or adjacent to them stating they are topsoil storage locations.

CCR 3771 (d) Topsoil stockpiles shall not be disturbed until need for reclamation.

All topsoil stockpiles will not be disturbed until they are needed to resoil the site or used in other reclamation activities.

CCR 3705 (l) Plant protection measures such as fencing and caging shall be used where needed for revegetation success. Protection measures shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.

Measures to protect plants is not anticipated. There is currently no livestock grazing on the site or on adjacent properties that have access to the mine. If livestock is introduced during site reclamation, fencing may be required.

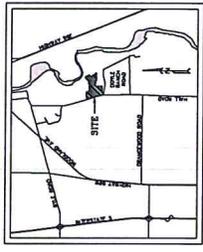
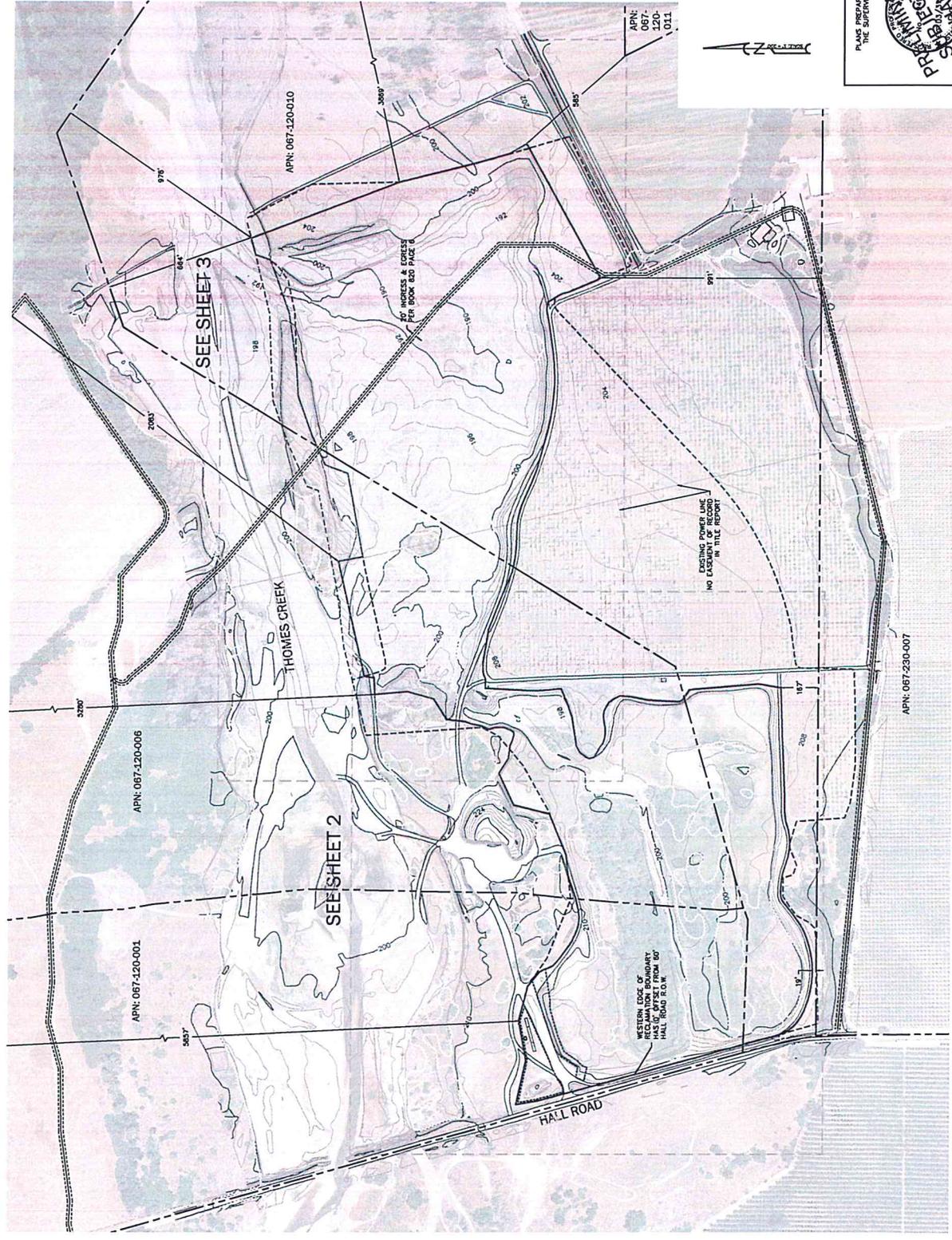
CCR3705 (m) CCR3705 (m) ... Monitoring to occur until success standards have been achieved.

Revegetation standards will only be met if during the last two years of monitoring there has been no human intervention such as irrigation, fertilization, and weeding.

CCR 3707(c) Post reclamation productivity rates for prime agricultural land must be equal to pre-project condition or to a similar site for two consecutive years.

Reclamation productivity of prime agricultural lands will be equal to pre-project conditions or to a similar site for two consecutive years.

ITEM 4



OWNER
 RANCH
 P.O. BOX 28
 0059 HIGHWAY 99W
 CORNING, CA 96021

APPLICANT/MINE OPERATOR
 P.O. BOX 28
 0059 HIGHWAY 99W
 CORNING, CA 96021

APNs
 067-120-001
 067-120-006
 067-120-010

ASSESSORS REC PLAN
 131.31 ACRES

ASSESSORS AMENDED REC PLAN
 94.12 ACRES

CA NUMBER
 91-52-004

LEGEND

- EXISTING RECLAMATION PLAN BOUNDARY
- PROPOSED RECLAMATION PLAN BOUNDARY
- RECLAMATION BOUNDARY
- SETBACK
- ADJACENT/ADSORP PARCEL
- DO NOT CROSS

NOTE: SETBACK DISTANCES OF RECLAMATION PLAN ARE TO BE MAINTAINED FROM THE RECLAMATION PLAN PER THE TEHAMA COUNTY ASSESSORS MAP

CONTOURS:
 TOPOGRAPHY PROVIDED BY POINT CO.
 DATED: 12-23-2020

SHEET INDEX:

1. COVER SHEET
2. WEST AREA REC PLAN MAP PORTIONS
3. EAST AREA REC PLAN MAP PORTIONS
4. CROSS SECTIONS
5. CROSS SECTIONS
6. CROSS SECTIONS

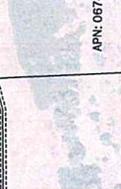
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 TRACTS 7, C, AND H AS THE SAME ARE DESIGNATED, TOGETHER WITH TRACTS 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



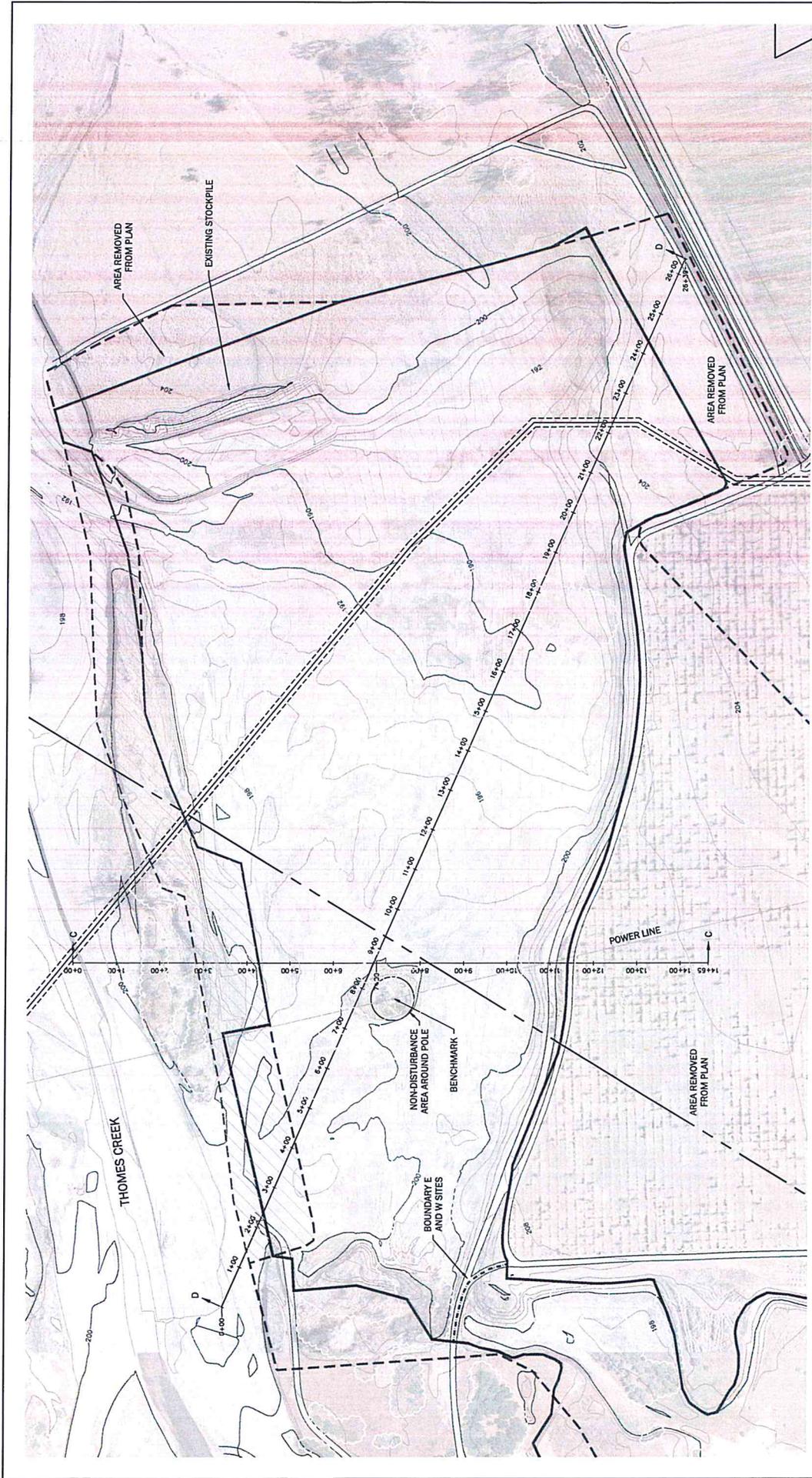
Amended Reclamation Plan for TCR - 2 Mine

Tehama County
 Thomas Creek Rock
 Cover Sheet

APPLICANT/MINE OPERATOR	DATE	SHEET
JUDANE K. MILLER	11/21/22	1
CIVIL ENGINEER, INC.	SCALE	OF
6714 HUNTERS TRAIL, SUITE 100	1" = 200'	6
REDAWOOD CITY, CA 96001		



PLANS PREPARED UNDER THE SUPERVISION OF THE SIGNATURE OF

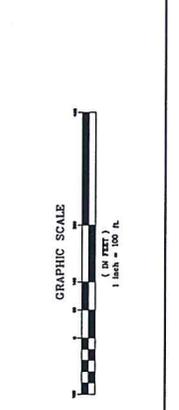


PLANS PREPARED UNDER THE SUPERVISION OF THE PROFESSIONAL ENGINEER

Tehama County
Thomas Creek Rock
East Area Existing Conditions

DATE	11/21/22	SHEET	3
BY	RYAN E. MILLER CIVIL ENGINEER, INC. 10000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000	OF	6
SCALE	1" = 100'		

RYAN E. MILLER
 CIVIL ENGINEER, INC.
 10000
 14000
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 16000
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 20000
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 23000
 24000
 25000



14+65 14+00 13+00 12+00 11+00 10+00 9+00 8+00 7+00 6+00 5+00 4+00 3+00 2+00 1+00 0+00

25+00 24+00 23+00 22+00 21+00 20+00 19+00 18+00 17+00 16+00 15+00 14+00 13+00 12+00 11+00 10+00 9+00 8+00 7+00 6+00 5+00 4+00 3+00 2+00 1+00 0+00

THOMAS CREEK

EXISTING STOCKPILE

AREA REMOVED FROM PLAN

NON-DISTURBANCE AREA AROUND POLE

BENCHMARK

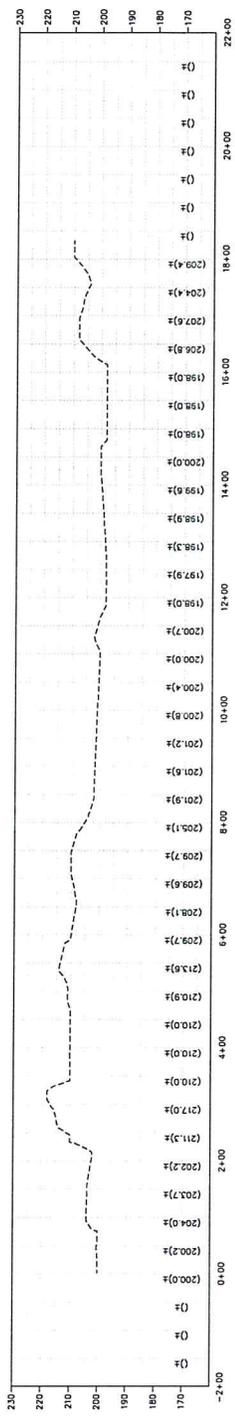
BOUNDARY E AND W SITES

POWER LINE

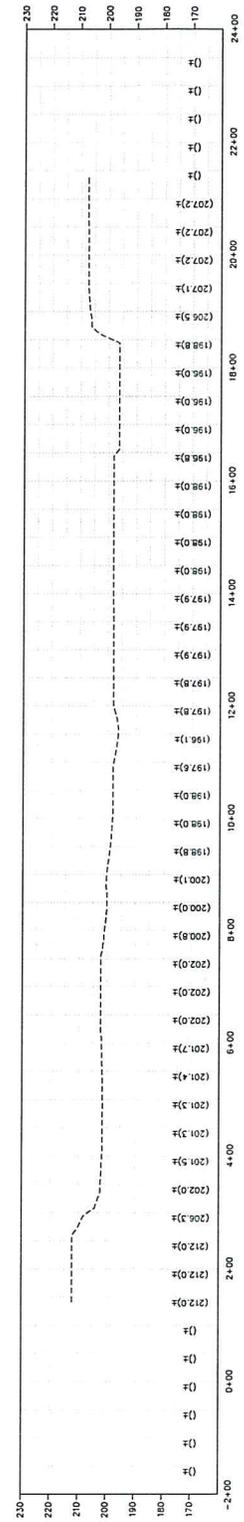
AREA REMOVED FROM PLAN

AREA REMOVED FROM PLAN

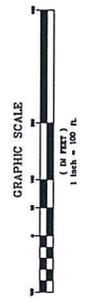
AREA REMOVED FROM PLAN



SECTION: A-A



SECTION: B-B

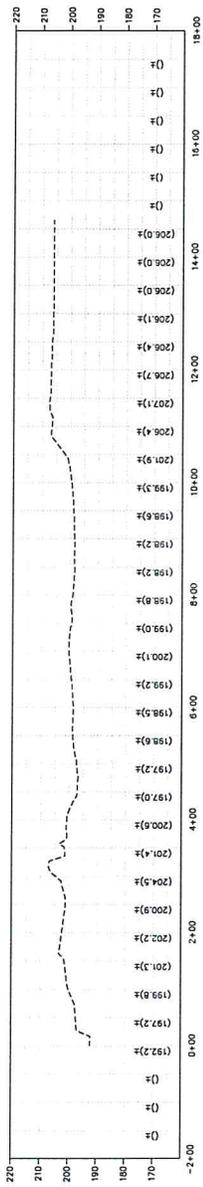


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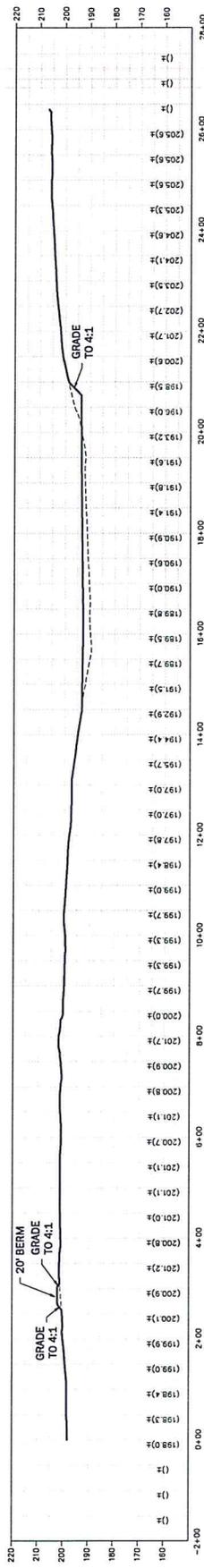


Tehama County	
Thomas Creek Rock	
Cross Sections	
DATE	SHEET
11/24/22	5
CIVIL ENGINEER, INC.	OF
PO BOX 107	OF
8175 N. STATE ST. SUITE 1	SCALE
ANDERSON, CA 95601	1" = 100'
PH: 530-842-1000	PROJECT NO.
WWW.RKML.COM	1102021

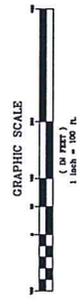
BY: Ryan K. Miller, License No. 51714, State of California, Civil Engineering



SECTION: C-C



SECTION: D-D



Tehama County	
Thomas Creek Rock	
Cross Sections	
DATE	11/21/22
BY	DIANE K. MILLER
FOR	CIVIL ENGINEER, INC.
PROJECT	6
SHEET	6
SCALE	1" = 100'
OF	6

BY: Diane K. Miller, License No. 45678, State of California, License No. 117,022

ITEM 5

Revegetation Plan for TCR-2 Mine

Prepared for

Thomes Creek Rock, Inc.
6069 State Highway 99 W.
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Introduction

In April of 2006 Thomes Creek Rock, Inc. applied for and was granted a permit to operate an aggregate mine on the Doyle Ranch, located 5 miles east of the town of Richfield, Tehama County, California. The Doyle Ranch is located in Section 32 of Township 25 North, Range 2 West, MDBM, see Figure 1. Mining at the TCR-2 site commenced in 2007 and continued until 2019 at which time it was determined that available gravels had been extracted. Currently the mine is in the process of being reclaimed.

This revegetation plan is being prepared with acknowledgement that the mine operator is changing the end use of the mine from irrigated pasture to two separate end uses. The eastern portion of the mine is proposed as dryland pasture and the western half of the mine is proposed for apiary utilization. These revised end uses reflect existing site conditions and will add to the diversity of habitats at the ranch.

The two end uses require different types of reclamation methods. The dryland pasture use will be reclaimed by replacement of overburden and topsoil, treated to prevent noxious weeds from germinating and seeded to a dryland pasture mix suitable for livestock forage. The majority of the west mining area is currently comprised of wetlands, seasonal water impoundments and riparian habitats which will be a source of pollen, nectar and water for bee utilization. No additional revegetation measures are required for most of this area. Remaining revegetation is slated for the fringe upland areas with the planting of native grasses. The control of noxious weeds is also proposed for the western mining area.

This report details the reclamation methods and seed prescriptions to be used to reclaim the vegetative character of the site and describes success standards and methods of measuring success.

Figure 1. On the following page shows the location of the TRC-2 mine site.

Figure 2. Present site condition

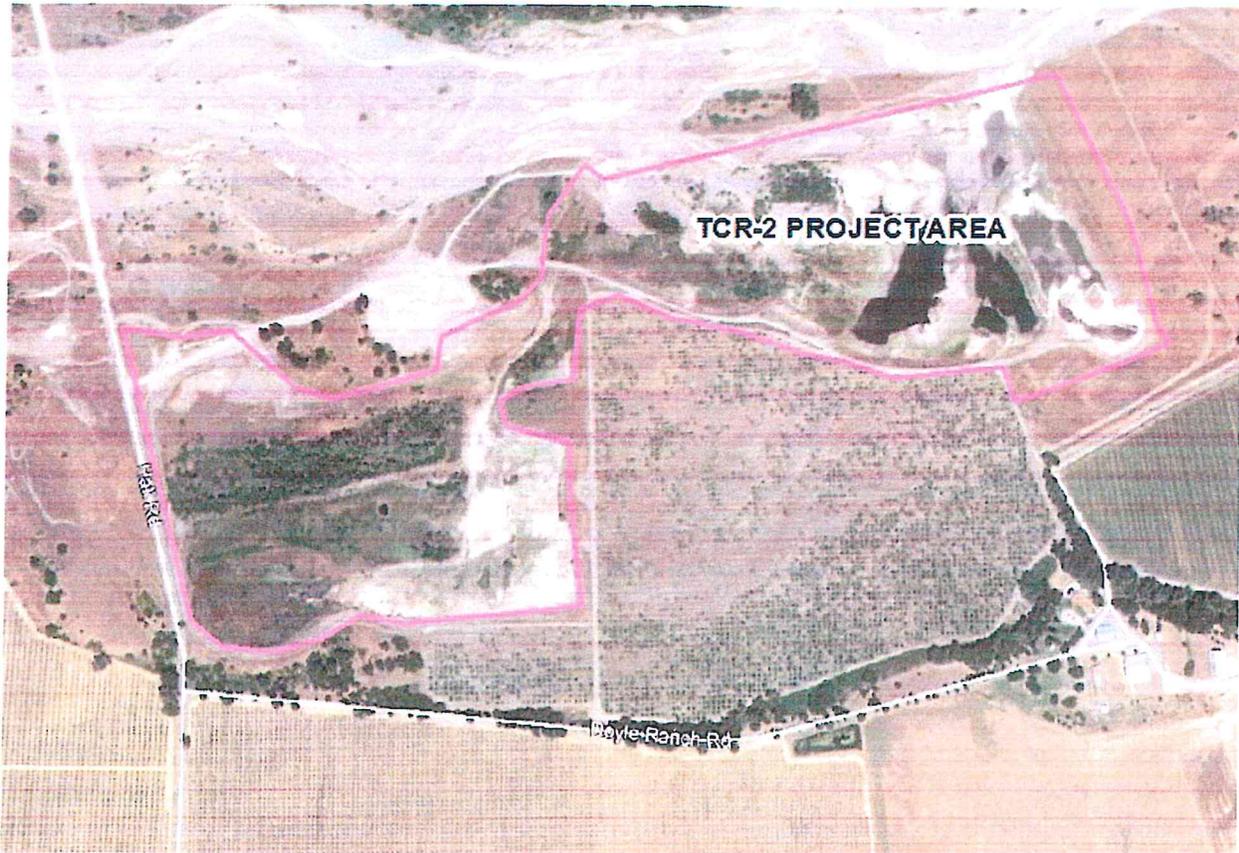
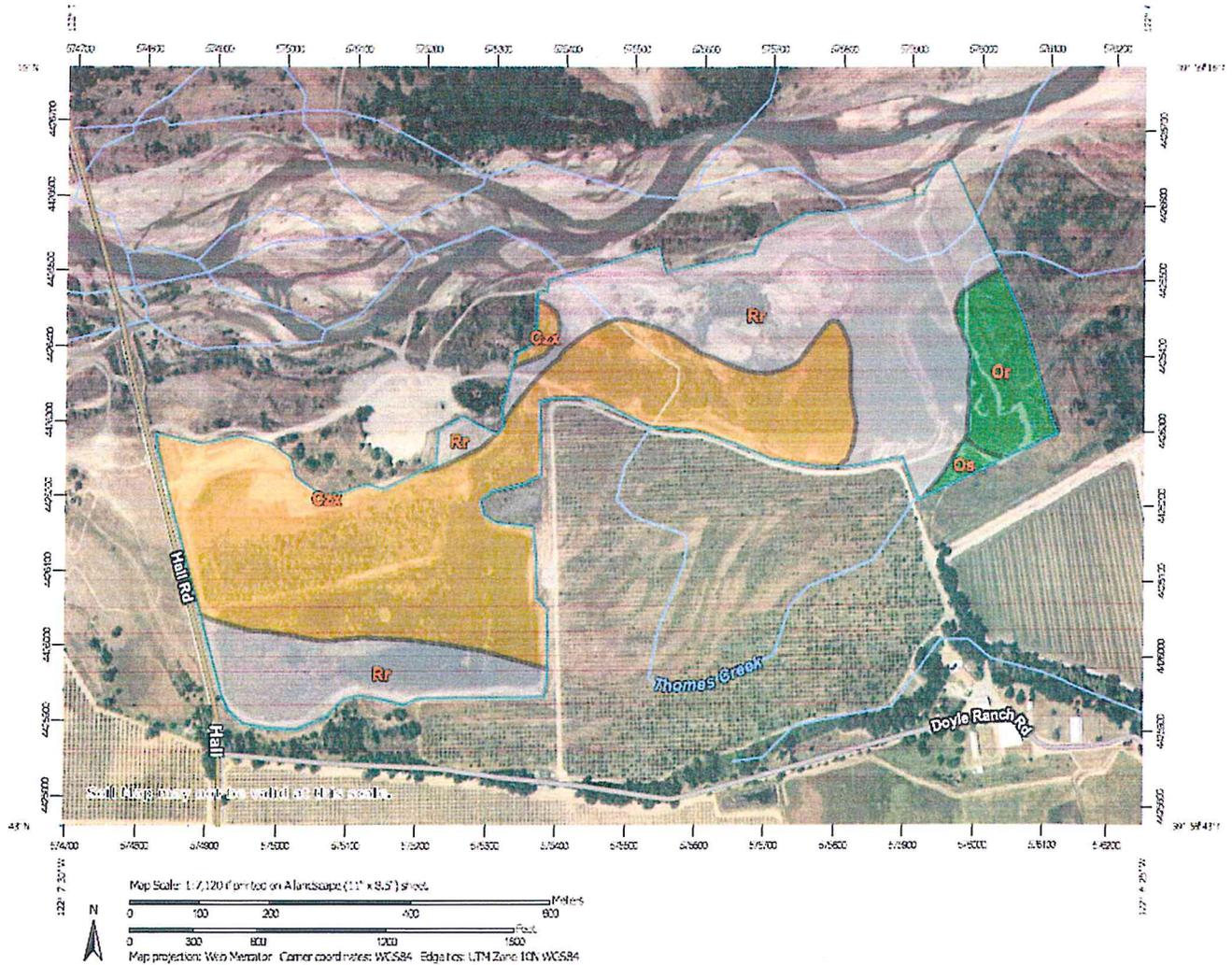


Figure 3 is the NRCS soil map for the project area indicating four soils types that are present: Cortina complex (Czx), Orland loam (Or), Orland silt loam (Os) and Riverwash (Rr). A description of each type follows this page.

Figure 3. TCR-2 project area with soil type identification



(SCS Tehama Soil map colorized by the Land Designers, 2021).

Soil Description (excerpts from the SCS Tehama Soil survey, May 1967)

Cortina complex: The Cortina series consists of nearly level, somewhat excessively drained to excessively drained soils. These soils formed in recent gravelly alluvium derived from sedimentary and metamorphic rocks. The rocks contain many pebbles of chert and quartzite. Cortina soils are brown to yellowish brown throughout. The surface layer is gravelly fine sandy loam and the subsoil is extremely gravelly sand.

Orland Loam, moderately deep over gravel: The Orland series are nearly level, well-drained soils formed in recent alluvium derived chiefly from metamorphic rock. These soils are medium textured and are gray to light brownish gray throughout. Orland soils are on flood plains west of the Sacramento River. This soil has a very gravelly layer at a depth of 30 to 50 inches but is otherwise similar to the Orland Loam (Om) soils in the series. The soil is well-drained. Runoff is very slow and permeability is moderate. The available water holding capacity and fertility are high. Except for the cutting of streambanks in places there is no erosion hazard.

Orland silt loam: The texture of the surface soil is loam, silt loam or fine sandy loam. The soil is well-drained, runoff is very slow and the permeability is moderate. The available water holding capacity and fertility are high. There is no erosion hazard.

Riverwash: Riverwash consists of channels of intermittent streams and of active streams when the water is high. The areas are made up of deposits of sand and gravel.

The predominant pre-mining soils at the site were mainly the Cortina complex (48% of area) or Riverwash (45% of area).¹ Both the Cortina and Riverwash soils have very shallow A horizons and do not meet the requirements of prime soils. The Cortina is in the non-irrigated soil classification of 6 and the Riverwash is 8.

The remaining soils (7%) are the Orland series which are confined to the southeastern corner of the site. Their non-irrigated classification is 3.

Present vegetative condition

The present vegetation at TRC-2 differs remarkably between the two areas. The east side is in the very early stages of recovery consisting of scattered grasses/forbs, low shrubs, scattered small trees, and many bare areas while the west area is a maturing wetland ecosystem with a diversity of upland and wetland plants. Each of these mined areas are described below with a complete plant list in the Appendix.

East side: Portions of the east side area are currently flooded, a result of winter stormwater flowing over the Thames Creek bank and into the low lying areas of the mine. Much of the higher ground consists of barren riverwash soil, seen as gray areas in Figure 3. Where soil is present there is a variety of upland and wetland species interspersed with shrubs, primarily mule fat, and young willow and cottonwood trees. Along the northeast pit border is a topsoil stockpile area consisting of 40,000 cubic yards of material. Annual grasses and forbs are growing on the stockpile with vetch and rip-gut brome dominating the site.

¹ Soil acreages calculated by the Land Designers, 2021. 5

West side: Vegetation on the west side is in a more advanced stage of recovery and more diverse than that at the east excavation area. The botany survey of the area found over 60 species of plants including upland, wetland, shrubs and tree species, all being well established. Portions of this site are wooded with cottonwood and willow with a dense shrub layer composed primarily of mule-fat. Large portions of the site retain sufficient water to support bulrush and spike rush along with a host of other wetland species. On the more upland areas, annual grasses and forbs dominate. The diversity of these plant communities may be seen in Figure 5.

Regulatory Authority

Reclamation of the mine is regulated by the State of California "Surface Mining and Reclamation Act of 1975" (SMARA; Public Resources Code (PRC) Section 2710 et seq). and California Code of Regulations (CCR) 3500 et seq.). Subsection 2712 states:

"It is the intent of the Legislature to create and maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that:

- (a) Adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses.
- (b) The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment.
- (c) Residual hazards to the public health and safety are eliminated."

Therefore, reclamation plans must be compliant with the SMARA appropriate sections.

Reclamation Objectives

East Mining Area:

The east mining area is to be planted as dryland pasture. The Performance Standard for dryland pasture is stated in Subsection 3708 which states:

"§ 3708. Performance Standards for Other Agricultural Land

"The following standards shall apply to agricultural lands, other than prime agricultural lands, when the approved end use is agriculture. In addition to the standards for topsoil salvage, maintenance, and redistribution, non-prime agricultural lands shall be reclaimed so as to be capable of sustaining economically viable production of crops commonly grown in the surrounding areas."

The criteria for success in the east area is the production a forage crop that is economically viable and equal in productivity to other non-irrigated lands in the surrounding areas. The ranch has adjacent non-irrigated land to the north, east, west and south that can be used as a comparable forage indicator that the reclaimed east mined area reclamation must meet.

Success Criteria

1. *East side: Success objective: Dryland pasture*

Section 3705 (M) state that:

“Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of the vegetative cover, density and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area.” “Comparisons shall be made until performance standards are met provided that, during the last two years there has been no human intervention, including, for example, irrigation, fertilization or weeding. Standards for success shall be based on expected local recovery rates.” “Sample sizes must be sufficient to produce at least an 80% confidence level. “

In order to quantify the naturally occurring vegetation in the area, on May 18, 2021 thirty 1 sq. ft. plots were established by WRM on a two-part vegetative transect in the undisturbed area south of the east mine area to collect residual dry matter (RDM). Vegetative species composition in this area is heavily dominated by rip-gut brome. A complete species list may be found in the Appendix. Table 1 below lists the average RDM and plant height across the area sampled. Figure 4 (on page 12) shows the location of the transect. Note that half of the transect is in the old prune orchard west of the farm road and half east of the road. This was done to sample the diversity of vegetation south of the east mined area. Table 1 lists the average RDM/Heights found on the transect and resultant total pounds of RDM/acre for the site.

Table 1

Average RDM weight for 30 plots	Average height
20.9 grams	9.7 inches

By applying the following formula, we may determine the pounds of DRM/acre:

$$1 \text{ acre} = 43,560 \text{ sq. ft.} \times 20.9 \text{ grams/sq. ft.} = 910,404 \text{ grams/acre}$$

910,404 grams/acre divided by 453.592 grams/pound = **2,007.09 pounds of residual dry matter/acre** are currently present on the undisturbed area just south of the mine site. For the east mine site to be sufficiently re-vegetated, after two years the site should be producing an equal amount of forage.

Section 3705 (a) of the 2020 SMARA regulations states:

“A vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer shall be established on disturbed land unless artificially maintained landscape is consistent with the approved reclamation plan. Vegetative cover or density and species richness shall be, where appropriate, sufficient to stabilize the surface against effects of long-term erosion and shall be similar to naturally occurring habitats in the surrounding area. The vegetative density, cover and species richness of naturally occurring habitats shall be documented in baseline studies carried out prior to the initiation of mining activities.”

For the east area the proposed end use is dry pastureland and not all the items stated in section 3705 (a) are relevant. The replanting is a vegetative cover that is suitable as forage for livestock and the grasses are common species found as dryland forage in Tehama County. The grasses are capable of self-regeneration without continued dependence on irrigation, but fertilizers may be used to increase pasture productivity. Vegetative cover or density is not appropriate criteria since success is based on the pounds of forage produced per acre of land.

These objectives will be met in the following manner:

Site Preparation:

East area: This location currently slopes from west to east with the stormwater discharge point from the mine at the northeastern corner of the excavation area. Remaining earthwork is to fill in the eastern part of the mined area so it does not retain ponded water and then convert it into pastureland. In addition, the pasture area must have positive drainage to Thomes Creek to limit ponded water in the pasture. A D-9 equivalent bulldozer and a 623 scraper will perform the re-soiling. 40,000 yards is estimated to be needed to fill in the ponded area and provide the positive drainage. This material will come from of the existing large top-soil stockpile presently located along the east side of the area. This location will supply any additional overburden and topsoil should it be needed. Areas with overburden applied to them will have a covering of topsoil at a minimum depth of two inches. Following final site grading the area will be harrowed utilizing a spring tooth harrow pulled by a tractor in order to form shallow furrows to accept seeds. Following planting (see seeding prescription and planting methods below) the seedbed will be covered by using a chain harrow pulled by a tractor. This will be the final step in the planting of the east pit.

Seed prescription, Planting timing:

Seeding prescription: This seeding prescription was developed to meet the reclamation objectives of providing livestock forage and stabilizing the disturbed areas of the site.

<i>Species composition</i>		<i>Application rate</i>
25% Fawn Tall fescue	<i>Festuca arundinacea</i>	30 lbs./acre
25% Tetraploid perennial ryegrass	<i>Lolium perenne</i>	
15% Potomac orchard grass	<i>Dactylis glomerata</i>	
10% Tetraploid annual ryegrass	<i>Lolium multiflorum</i>	
7.5% Ladino clover	<i>Trifolium repens</i>	
7.5% Strawberry clover	<i>Trifolium fragiferum</i>	
5.0% Alsike clover	<i>Trifolium hybridum</i>	

Planting method and timing:

Planting will be done aerially on a calm day just prior to the on-set of dependable fall rains but prior to a hard frost. This window, in most years, occurs in October or November. To reduce seed loss to birds and small mammals, immediately after seeding the seed bed will be covered using a chain harrow dragged behind a wheel tractor.

West Mining Area:

With the exception of the extreme northwest corner and a portion of the stockpile storage area, the west side is in a natural state of recovery to a functioning wetland wildlife habitat and open space. No site preparation or planting is planned for this portion of the west side. The northwest corner and stockpile areas are sparsely covered with annual grasses and forbs and will be replanted. This will be accomplished by first spreading two to four inches of top soil over the areas and then tilling using a spring tooth harrow to prepare the seed bed. Once prepared, the site will be planted using a broad-cast seeder or drill pulled behind a tractor. Once seeded, the areas will be covered using a chain harrow pulled behind a tractor.

This area will be planted concurrently with the east area with seeding being done with a broadcast seeder rather than aerially due to the small size of the areas.

Success Criteria for Wildlife Habitat

Section 3703 (b) Performance Standards for Open space, Recreation and Wildlife Habitat states:

(b) Wildlife habitat 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, unless the proposed end use precludes its use as wildlife habitat or the approved reclamation plan establishes a different habitat type than that which existed prior to mining.”

A botany survey of the west pit lowland area identified nearly 40 plant species of which 24 were hydrophytic. Of these, mule fat, common spike rush, annual rabbits foot grass and broad leaf cattail were dominant in terms cover percentage. Within the upland portions of the pit there are an additional 30 species dominated by rip-gut brome, rat-tailed fescue, soft brome and rye grass. As shown in Figure 5, there is spatial diversity with corresponding edge effect between different vegetative associations. In addition, there is diversity in terms of habitat heights. These diversities result in numerous habitats on the horizontal and vertical plane. To be considered successful, this vegetative species diversity and wildlife habitat character will be present for three years barring unforeseen events such as flooding or fire.

Success Criteria for Revegetation

Section 3705 (m) that states:

“Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of the vegetative cover, density and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area.” “Comparisons shall be made until performance standards are met provided that, during the last two years there has been no human intervention, including, for example, irrigation, fertilization or weeding. Standards for success shall be based on expected local recovery rates.”

In order to quantify the naturally occurring vegetation, on June 15, 2021 fifty 1 sq. ft. plots were established by WRM on two vegetative transects on land adjacent to the areas that need to be replanted. Each of these transects sampled the naturally occurring vegetation richness, percent cover and RDM for the area. Vegetation density was not measured since only grasses are in the revegetation plan and not trees or shrubs. The success criteria of Section 3705 (m) sets a quantifiable measure as vegetative cover and richness for grasses. WRM surveyed for residual dry matter RDM and plant height since they are also indicators of the how well adjacent upland areas are vegetated with grasses. Table 2 displays the results to the RDM/Height survey for the two west side areas to be replanted

Table 2

Average RDM weight for 50 plots	Average height
23.4 grams	8.2 inches

By applying the following formula, we may determine the pounds of DRM/acre:

$$1 \text{ acre} = 43,560 \text{ sq. ft.} \times 23.4 \text{ grams/sq. ft.} = 1,019,304 \text{ grams/acre}$$

$$1,019,304 \text{ grams/acre divided by } 453.592 \text{ grams/pound} = \mathbf{2,247 \text{ pounds of residual dry matter/acre}}$$

The survey results of the two transects show the average percent vegetation percent cover of the upland areas are 70 percent. The upland areas to be reseed will have the same percent vegetative cover requirement as those in the transects.

The West area vegetative species composition in the upland area transects is quite rich in species and the following plants were identified. Table 3, on the following page, lists the species identified.

Table 3
West Area upland species

<u>Common name</u>	<u>Scientific name</u>	<u>Indicator status</u>	<u>Dominance</u>
Soft brome	Bromus hordeaceus	up	yes
Red sands purry	Spergularia rubra	up	yes
Rip-gut brome	Bromus diandrus	up	yes
Q-tips	Bombycilaena californica	?	no
Star thistle	Centaurea solstitialis	up	no
Maltese star thistle	Centaurea melitensis	up	no
Short pod mustard	Hirschfieldia incana	up	yes
Milk thistle	Silybum marianum	up	no
Vetch	Vicia sativa	FACW	yes
Spreading alkali weed	Cressa truxillensis	FAC	no

Note 1: The "Indicator status" is from the USACOE manual on whether the plants are found in Upland (up) locations, are Facultative wetland plants (FACW) which usually occur in wetlands but may occur in non-wetland or they are Facultative wetland (FAC) plants that are usually a hydrophyte but occasionally found in Uplands.

Note 2: star thistle is a noxious weed.

Note 3: Dominance means that the plant is prevalent within the area.

Seed prescription, Planting timing for west side area:

Seeding prescription: This seeding prescription was developed to meet the reclamation objectives of providing a California natural upland grassland habitat.

<i>Species composition</i>		<i>Application rate</i>
25% Molate creeping red fescue	<i>Festuca rubra</i>	70 lbs./acre
25% June grass	<i>Koeleria amcrantha</i>	
25% Slender hair grass	<i>Deschampsia elongate</i>	
15% Sandburg bluegrass	<i>Poa secunda</i>	
10% Western fescue	<i>Festuca occidentalis</i>	

Note: The type of native grasses to be planted may be revised based on the availability of the grasses, site monitoring results, or other re-vegetation studies or expert advice from agencies such as the County Farm Advisor. The Tehama County Planning Department may approve changes in the grass species and application rates based on evidence presented by the mine operator as it relates to the reasons stated.

Figure 4. Vegetative transect locations

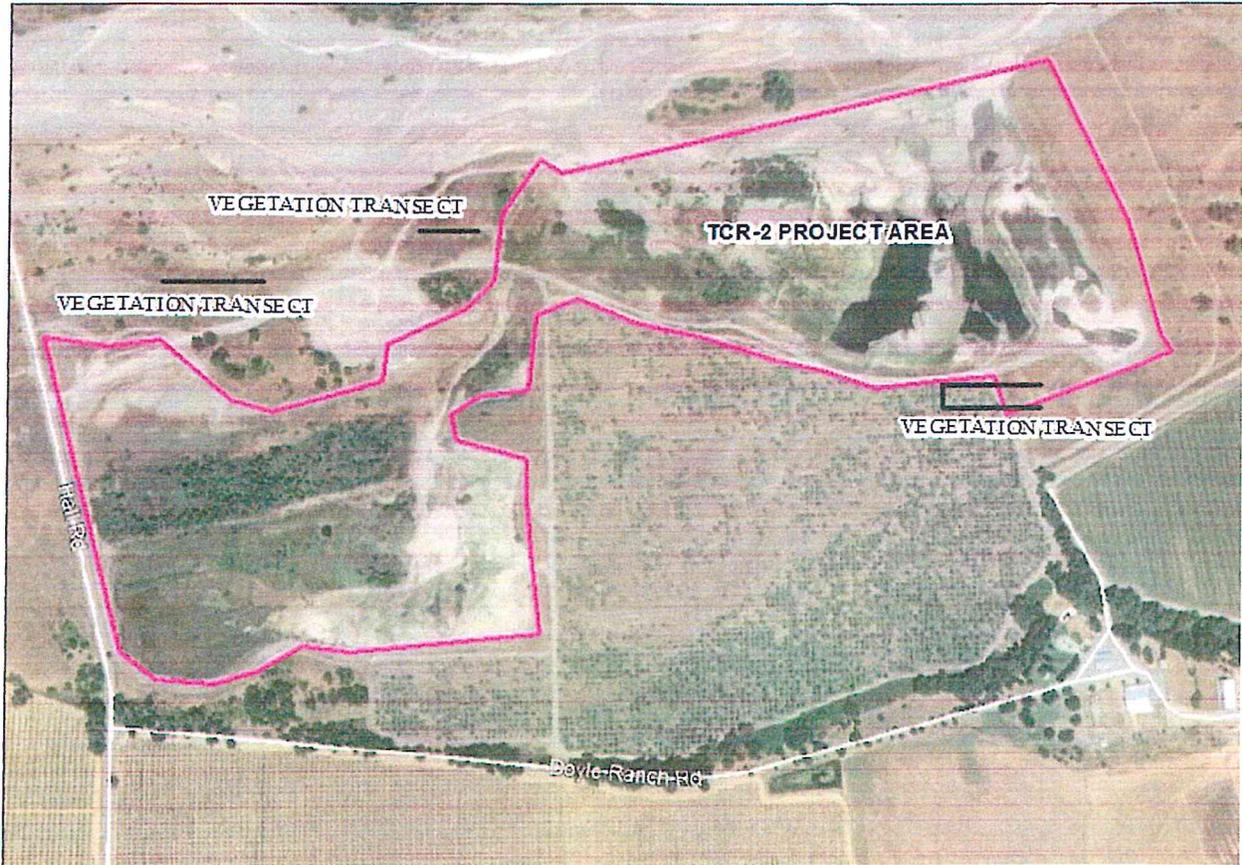


Figure 5. West Pit Vegetative diversity showing dominant species and spatial diversity



The diversity of vegetative habitats is currently supporting a variety of wildlife species which include, but not limited to: deer, black-tailed jackrabbits, brush rabbits, Belden's ground squirrel, raccoon, pocket gophers, common egrets, great blue heron, robin, red-tailed hawks, European starling, and nesting red-wing blackbirds.

The reclamation objective for the west mine area shown in Figure 5 is the continual growth of the present vegetative species diversity with resultant continual function of a wetland/upland ecosystem and associated wildlife habitat.

Other Criteria:

- CCR 3704 (b) The soils at both locations will not be compacted since the end uses are for resource conservation purposes (agriculture and wildlife habitat). In addition, any compacted soils will be ripped to a depth of 12 inches to increase grass revegetation success.
- CCR 3705 (k) Noxious weeds shall be monitored and managed. The monitoring of the location and density of noxious weeds will be performed yearly by the operator or his consultant
- CCR 3704 (c) and 3711 (a), (b) & (d). Topsoil and overburden will be stored in separate stockpiles, topsoil stockpiles shall be clearly identified and separate from the overburden, and topsoil stockpiles shall not be disturbed until needed for reclamation.
- CCR 3707 (d) Fertilizers may be used. Manufacturer's directions on application will be followed and fertilizer will not be applied prior to or during rainy weather conditions.
- CCR 3705 (i) and (j). No Irrigation or other soil stabilizing practices are necessary to establish vegetation.
- CCR 3707 (c) Post reclamation productivity rates for prime agricultural lands must equal the RDM of the vegetative transect for two consecutive years.

Compliance Monitoring:

East area: To determine the extent of the vegetative recovery at the east mine area, a second vegetative transect will be established within the reclaimed area and RDM samples taken on an annual basis until success criteria is met. Success will be achieved when RDM average weight equals that of the control transect that was established in May of 2021. The control transect will also be read annually in order to have a yearly baseline RDM weight. By reading both transects, a direct comparison may be made between the RDM of the reclaimed area and the surrounding area.

While reading the transects, species height and diversity will also be compared. Revegetation success will be attained when RDM weights of the reclaimed area are equal or exceed the control areas, along with evidence that four planted species will be present with one being a legume as a nitrogen fixing plant.

West area: For the next three years, botanical surveys will be done within the naturally recovering area to determine the extent of the vegetative diversity. Results of those surveys will be compared to the species diversity found in May of 2021. If the plant diversity is equal to or greater than 80% of the present diversity in terms of the number of species, the site will be deemed recovered. If diversity is less than 80% the site will be evaluated by a qualified biologist to determine the reasons for the loss of diversity and assess if that loss poses a detriment to the recovery and stabilization of the site. It is possible that weather fluctuations over the next several years may affect the stream flow of Thomes Creek which in turn may affect the water availability on the site. It may also be possible that flooding of the area may change the vegetative composition of the site.

Reference cited

Surface Mining and Reclamation Act 1975

Appendix

Residual Dry Matter by Transects
Listing of plant species by area

Photo section follows Appendix

Appendix cont.

Table 4

Residual Dry Mater by Transects

East Area Transect: 1 sq. ft. plots spaced 60 feet apart

East of Farm road

Plot number	Weight (grams)	Average height (inches)
1	46.5	13
2	41.0	16
3	41.5	13
4	32.5	16
5	18.5	6.0
6	25.5	11

West of road

7	6.5	5.0
8	4.5	5.0
9	16.5	8.0
10	14.0	10
11	8.0	7.0
12	17.5	11
13	31.5	11
14	7.5	7.0
15	10.0	7.0
16	8.0	4.5
17	7.5	6.0
18	24.0	12.5
19	33.5	13.0
20	19.0	8.0
21	6.0	8.0
22	3.0	4.0
23	8.5	4.0

East of Road

24	9.5	3.0
25	16.5	13.0
26	11.0	6.0
27	15.5	13.0
28	48.5	19.0
29	58.0	20.0
30	39.5	13.0

Totals 629.5 293

Average 20.98 grams 9.7 inches

Table 5

Residual Dry Mater by Transects

West Area Transect 1: 1 sq. ft. plots spaced 30 feet apart

Plot number	Weight (grams)	Average height (inches)
1	28.5	12.5
2	22.0	10.0
3	28.5	7.0
4	32.0	9.5
5	19.5	7.0
6	20.5	7.0
7	32.0	5.5
8	32.0	7.0
9	40.0	10.0
10	18.0	14.0
11	31.0	6.0
12	26.5	6.5
13	27.5	12.5
14	32.0	10
15	25.5	6.0
16	8.5	12.0
17	11.0	6.0
18	10.0	4.0
19	11.0	6.0
20	22.5	6.5
Average	21.7	8.5

Table 6

Residual Dry Mater by Transects

West Area Transect 2: 1 sq. ft. plots spaced 30 feet apart

Plot number	Weight (grams)	Average height (inches)
1	29.5	8.5
2	22.0	11.0
3	22.5	8.0
4	31.0	8.0
5	27.0	9.0
6	6.0	2.0
7	23.5	8.5
8	19.5	7.5
9	26.5	12.0
10	14.0	6.0
11	29.0	8.0
12	23.0	9.0
13	12.0	4.0
14	23.5	9.5
15	43.0	7.0
16	40.0	6.0
17	39.5	6.5
18	35.0	14.0
19	17.5	14.0
20	21.0	8.0
21	31.5	5.5
22	25.5	5.0
23	3.0	4.5
24	10.5	3.5
25	21.0	6.0
26	20.5	7.0
27	47.5	13
28	29.0	10.5
29	39.5	9.0
30	25.5	8.0
Average	25.2	7.9

Table 7

West side: Vegetative species Composition - low land area

<u>Common name</u>	<u>Scientific name</u>	<u>Indicator status</u>	<u>Dominance</u>
Short pod mustard	<i>Hirschfeldia incana</i>	up	yes
Yellow sweet clover	<i>Melilotus indicus</i>	FACU	yes
Rip-gut brome	<i>Bromus diandrus</i>	up	yes
Bull thistle	<i>Cirsium vulgare</i>	FACU	no
Wal barley	<i>Hordeum murinum</i>	FAC	yes
Perennial rye grass	<i>Lolium perenne</i>	FAC	yes
Scarlet pimpernel	<i>Anagallis arvensis</i>	up	no
Wild oats	<i>Avena barbata</i>	up	no
Mule fat	<i>Baccharis salififolia</i>	FAC	yes
Cottonwood	<i>Populus fremontii</i>	FACW	yes
Common spike rush	<i>Eleocharis palustris</i>	OBL	yes
Mint	<i>Mintha pulegium</i>	OBL	yes
Iris leaf rush	<i>Juncus xiphioides</i>	OBL	no
Flat sedge	<i>Cyperus eragrostis</i>	FACW	no
Rough hawkbit	<i>Leontodom saxatillis</i>	FACU	yes
Cutleaf geranium	<i>Geranium dissectum</i>	up	no
Broad leaf cattail	<i>Typha latifolia</i>	OBL	yes
Speedwell	<i>Veronica beccabunga</i>	OBL	yes
Curley doc	<i>Rumex crispus</i>	FAC	no
Lop grass	<i>Bromus hordeaceus</i>	FACU	no
Water speedwell	<i>Veronica Anagallis</i>	OBL	yes
Red Brome	<i>Bromus rubens</i>	up	no
Vetch	<i>Vicia sativa</i>	FACW	yes
Tamarisk	<i>Tamarix ramosissima</i>	FAC	no
Narrow leaf willow	<i>Salix exigua</i>	FACW	no
European meadow rush	<i>Juncus inflexus</i>	FACW	no
Desert willow	<i>Chilopsis linearis</i>	FAC	no
Foothill penstemon	<i>Penstemon heterophyllus</i>	up	no
Coyote brush	<i>Baccharis pilularis</i>	up	no
Desert bloom	<i>Baccharis sarothroides</i>	FACU	no
Hairy vetch	<i>Vicia villosa</i>	up	yes
Dames rocket	<i>Hesperis matronalis</i>	FACU	no
Pennyroyal	<i>Mentha pulegium</i>	OBL	yes
Annual rabbit foot grass	<i>Polypagan monspeliensis</i>	OBL	yes

West side: Vegetative species composition-upland area

<u>Common name</u>	<u>Scientific name</u>	<u>Indicator status</u>	<u>Dominance</u>
Soft brome	<i>Bromus hordeaceus</i>	up	yes
Red sands purry	<i>Spergularia rubra</i>	up	yes
Rip-gut brome	<i>Bromus diandrus</i>	up	yes
Q-tips	<i>Bombycilaena californica</i>	?	no
Star thistle	<i>Centaurea solstitialis</i>	up	no
Maltese star thistle	<i>Centaurea melitensis</i>	up	no
Short pod mustard	<i>Hirschfieldia incana</i>	up	yes
Milk thistle	<i>Silybum marianum</i>	up	no
Vetch	<i>Vicia sativa</i>	FACW	yes
Spreading alkali weed	<i>Cressa truxillensis</i>	FAC	no

Photo section follows this page

Photo section

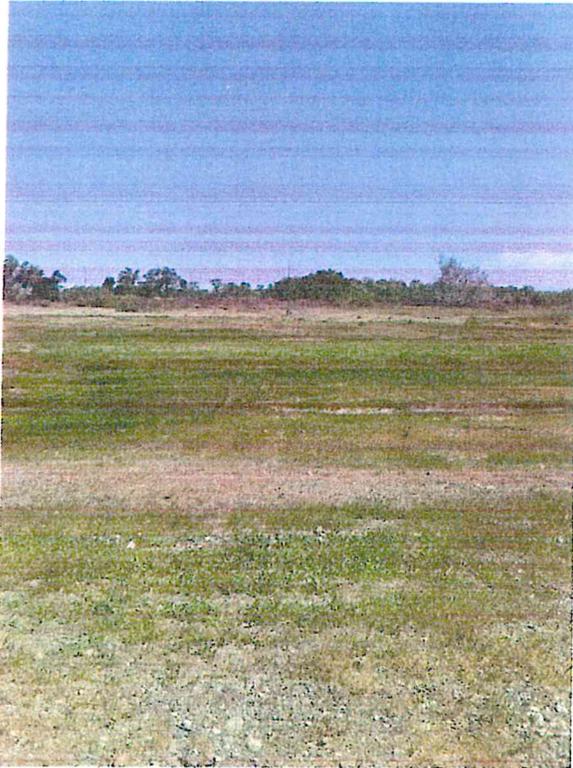


Photo 1 shows the west side of the east mine area with limited vegetation. This East area will be replanted.

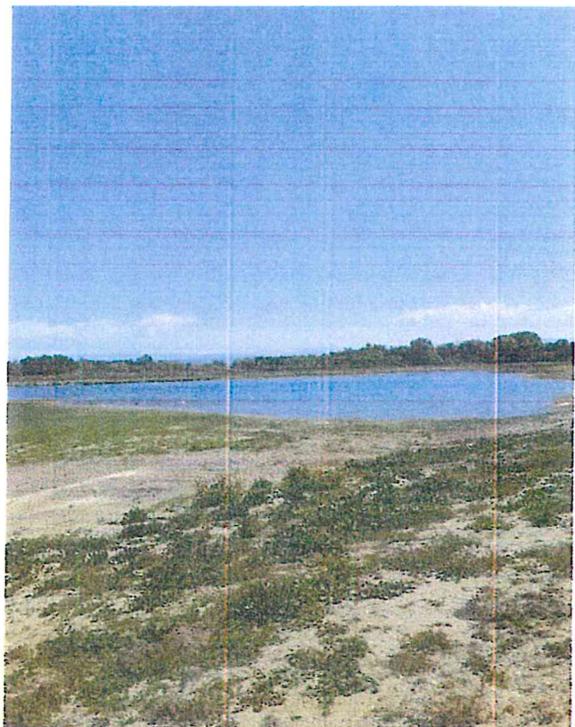


Photo 2 shows the east side of the East area which will be replanted.



Photo 3 looks north across the west side of the West mine area showing the diversity of wetland vegetation. This area will not be replanted due to the natural recovery process.



Photo 4 looks east across the southeast part of the West mine area. This area will not be replanted due to the abundance of wetland vegetation already present.

ITEM 6

CHART PER PRC 2772(b)

Location and Page(s) of SMARA section referenced.

P= Pages containing referenced material.

PA – Proposed Amendment to Reclamation Plan text. Item 1 in Index.

RPT – Reclamation Plan text form. Item 2 in Index.

AD - Addendum to Reclamation Plan text. Item 3 in Index.

RPM- Reclamation Plan Maps including cross sections and details. Item 4 in Index.

RV – Revegetation Plan by Wildland Resource Managers. Item 5 in Index.

NF – Notification Form. Item 7 in Index.

GENERAL CONSIDERATIONS

AUTHORITY	REQUIREMENTS/PRACTICES/STANADARDS	Yes, or N/A	LOCATION IN DOCUMENT
PRC 2772(c)(1)	Contact information: Name and address of the surface mining operator and any person designated by the operator as an agent for service of process (must reside in CA).	Yes	RPT P.1 & 6 PA P. 2 RPM
PRC 2772(c)(2)	Material quantity and type: The anticipated total quantity and type of minerals to be mined (see Annual Report Instructions, Exhibit B, for mineral types and units of measure)	N/A	RPT P. 2 & 3
PRC 2772(c)(3)	Dates: The initiation and termination dates of mining (be as specific as possible, e.g. December 31, 2030).	N/A	RPT P. 2 AD P. 3
PRC 2772(c)(4)	Depth of mining: The maximum anticipated depth of the surface mining operation.	Yes	RPT P. 3 RPM
PRC 2772(c)(5) (A-F)	Reclamation plan maps shall include: Size and legal description of lands affected by surface mining operations;	Yes	RPM
	Names and addresses of owners of all surface interests and mineral interests;	Yes	RPM
	Property lines, setbacks, and the reclamation plan boundary;	Yes	RPM
	Existing and final topography with contour lines at appropriate intervals;	Yes	RPM
	Detailed geologic description of the area of the surface mining operation;	Yes	RPT P. 2 AD P. 1
	Locations of railroads, utility features, and roads (access roads, temporary roads to be reclaimed, and any roads remaining for the end use).	Yes	RPM
	All maps, diagrams, or calculations that are required to be prepared by a California-licensed professional shall include the preparer's name, license number, signature & seal.	Yes	RPM
PRC 2772(c)(6)	Mining method and schedule: A description of the mining methods and a time schedule that provides for completion of mining on each segment so that reclamation can be concurrent or phased.	N/A	
PRC 2772(c)(7)	Subsequent use(s): A description of the proposed subsequent use(s) after reclamation	Yes	RPT P.4; RPM; RV P. 6-10 PA P.5, 8 - 10
	Evidence that all landowners have been notified of the proposed use.	Yes	NF P.1
PRC 2772(c)(9)	Impact on future mining: A statement regarding the impact of reclamation on future mining on the site.	Yes	RPT. P.5
PRC 2772(c)(10)	Statement signed by the operator accepting responsibility for reclamation of the mined lands per the reclamation plan.	Yes	RPT. P.5 & 7
PRC 2772(c)(11)	Any other information the Lead Agency may require by Ordinance.	Yes	
PRC 2776(b- c)	Pre-SMARA areas: Reclamation plans shall apply to operations conducted after January 1, 1976 or to be conducted in the future. Mined lands disturbed prior to January 1, 1976 and not disturbed after that	N/A	

	date may be excluded from the reclamation plan.		
CCR 3502(b)(2)	Public health and safety: A description of how any potential public health and safety concerns that may arise due to exposure of the public to the site will be addressed.	Yes	AD P. 2
CCR 3709(a)	Equipment storage and waste disposal: Designate areas for equipment storage and show on maps.	Yes	RPM
	All waste shall be disposed of in accordance with state and local health and safety ordinances.	Yes	AD P. 2
CCR 3709(b)	Structures and equipment should be dismantled and removed at closure, except as demonstrated to be necessary for the proposed end use.	Yes	RPT P. 5 AD P. 3 RPM
CCR 3713(a)	Well closures: Drill holes, water wells, monitoring wells will be completed or abandoned in accordance with laws, unless demonstrated necessary for the proposed end use.	N/A	
CCR 3713(b)	Underground openings: Any portals, shafts, tunnels, or openings will be gated or protected from public entry, and to preserve access for wildlife (e.g. bats).	N/A	
GEOLOGY & GEOTECHNICAL			
PRC 2772(c)(5)	A description of the general geology of the area	Yes	RPT P. 2
	A detailed description of the geology of the mine site.	Yes	AD P.1
PRC 2773.3	If a metallic mine is located on, or within one mile of, any "Native American sacred site" and is located in an "area of special concern," the reclamation plan shall require that all excavations and/or excess materials be backfilled and graded to achieve the approximate original contours of the mined lands prior to mining.	N/A	
CCR 3502(b)(4)	The source and disposition of fill materials used for backfilling or grading shall be considered in the reclamation plan.	Yes	PA 5-11, RV P. 4,5 & 8 RPT P. 5; RPM
CCR 3502(b)(3)	The designed steepness and treatment of final slopes must consider the physical properties of slope materials, maximum water content, and landscaping.	Yes	PA P. 11 RPT P. 5 RPM
	The reclamation plan shall specify slope angles flatter than the critical gradient for the type of slope materials.	Yes	PA P. 11; RPT P. 5 RPM
	When final slopes approach the critical gradient, a Slope Stability Analysis will be required.	N/A	
CCR 3704.1	Backfilling required for surface mining operations for metallic minerals.	N/A	
CCR 3704(a)	For urban use, fill shall be compacted in accordance with Uniform Building Code, local grading ordinance, or other methods approved by the lead agency.	N/A	
CCR 3704(b)	For resource conservation, compact to the standards required for that end use.	Yes	RV P. 14
CCR 3704(d)	Final reclamation fill slopes shall not exceed 2:1 (H:V), except when allowed by site-specific engineering analysis, and the proposed final slope can be successfully revegetated. See also Section 3502(b)(3).	Yes	PA P. 11 RPT P. 5 RPM
CCR 3704(e)	At closure, all fill slopes shall conform with the surrounding topography or approved end use.	Yes	RPM AD P. 4
CCR 3704(f)	Final cut slopes must have a minimum slope stability factor of safety that is suitable for the end use and conforms with the surrounding topography or end use.	Yes	PA P. 11 RPT P. 5 RPM AD P. 4
HYDROLOGY & WATER QUALITY			
PRC 2770.5	For operations within the 100-year flood plain (defined by FEMA) and within one mile up- or downstream of a state highway bridge, Caltrans must be notified and provided a 45-day review period by the lead agency.	N/A	

PRC 2772(c)(8)(A)	Description of the manner in which contaminants will be controlled and mine waste will be disposed.	Yes	AD P. 4
PRC 2772(c)(8)(B)	The reclamation plan shall include a description of the manner in which stream banks/beds will be rehabilitated to minimize erosion and sedimentation.	N/A	
PRC 2773(a)	The reclamation plan shall establish site-specific sediment and erosion control criteria for monitoring compliance with the reclamation plan.	Yes	AD P. 1 RV P. 11
CCR 3502(b)(6)	Temporary stream and watershed diversions shall be detailed in the reclamation plan.	N/A	
CCR 3503(a)(2)	Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.	Yes	AD P. 1
CCR 3503(b)(2)	Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.	N/A	
CCR 3503(a)(3)	Erosion control facilities shall be constructed and maintained where necessary to control erosion.	N/A	
CCR 3503(b)(1)	Settling ponds shall be constructed where they will provide a significant benefit to water quality	N/A	
CCR 3503(d)	Disposal of mine waste and overburden shall be stable and shall not restrict natural drainage without suitable provisions for diversion.	Yes	AD P.4
CCR 3503(e)	Grading and revegetation shall be designed to minimize erosion and convey surface runoff to natural drainage courses or interior basins.	Yes	RPM PA 8-10 RV 8-11
	Spillway protection shall be designed to prevent erosion.	N/A	RPM
CCR 3706(a)	Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of water.	Yes	PA P. 8-10; RPM RPT P. 4-5 RV 8-9, 10-11
CCR 3706(b)	Water quality, recharge potential, and groundwater storage that is accessed by others shall not be diminished.	Yes	AD P. 1 & 4 PA P. 3, 5, 8-10 RV P. 1,6-11 & 13
CCR 3706(c)	Erosion and sedimentation shall be controlled during all phases of construction, operation, reclamation, and closure of surface mining operations to minimize siltation of lakes and water courses as per RWQCB/SWRCB.	Yes	AD P. 1
CCR 3706(d)	Surface runoff and drainage shall be controlled to protect surrounding land and water resources.	Yes	AD P.1
	Erosion control methods shall be designed for not less than 20 year/1 hour intensity storm event.	N/A	
CCR 3706(e)	Impacted drainages shall not cause increased erosion or sedimentation. Mitigation alternatives shall be proposed in the reclamation plan.	N/A	
CCR 3706(f)(1)	Stream diversions shall be constructed in accordance with the Lake and Streambed Alteration Agreement (LSAA) between the operator and the Department of Fish and Wildlife.	N/A	
CCR 3706(f)(2)	Stream diversions shall also be constructed in accordance with Federal Clean Water Act and the Rivers and Harbors Act of 1899.	N/A	
CCR 3706(g)	All temporary stream diversions shall eventually be removed and the affected land reclaimed.	N/A	
CCR 3710(a)	Surface and groundwater shall be protected from siltation and pollutants in accordance with the Porter-Cologne Act, the Federal Clean Water Act, and RWQCB/SWRCB requirements.	Yes	AD P. 1 & 4 PA P. 3, 5, 8-10 RV P. 1,6-11 & 13
CCR 3710(b)	In-stream mining shall be conducted in accordance 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.	N/A	
CCR 3710(c)	In-stream mining shall be regulated to prevent impacts to structures, habitats, riparian vegetation, groundwater levels, and banks.	N/A	

	In-stream channel elevations and bank erosion shall be evaluated annually using extraction quantities, cross-sections, and aerial photos.	N/A	
CCR 3712	Mine waste and tailings and mine waste disposal units are governed by SWRCB waste disposal regulations and shall be reclaimed in accordance with this article: CCR Article 1. Surface Mining and Reclamation Practice. Section 3500 et seq.	Yes	RPT P. 5

SENSATIVE SPECIES & HABITAT

CCR 3502(b)(1)	A description of the environmental setting (identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands).	Yes	PA P. 5-10 RPT P. 2 RV P. 1-6; 9-13 & 16-22
	Impacts of reclamation on surrounding land uses.	Yes	PA P. 12
CCR 3503(c)	Fish and wildlife habitat shall be protected by all reasonable measures.	Yes	PA P. 8-12 RV P.1, 6-14
CCR 3703(a)	Sensitive species shall be conserved or mitigated as prescribed by the federal and California Endangered Species Acts.	Yes	RV P. 1,5-6, 9-10, 13, 19-20
CCR 3703(b)	Wildlife habitat shall be established on disturbed land at least as good as pre-project, unless end use precludes its use as wildlife habitat.	Yes	PA P. 8-10 RV P. 1,5-6, 7-14
CCR 3703(c)	Wetlands shall be avoided or mitigated at 1:1 minimum for both acreage and habitat value.	N/A	
CCR 3704(g)	Piles or dumps shall not be placed in wetlands without mitigation.	N/A	
CCR 3710(d)	In-stream mining shall not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.	N/A	

TOPSOIL

CCR 3503(a)(1)	Removal of vegetation and overburden preceding mining shall be kept to a minimum.	N/A	
CCR 3503(f)	When the reclamation plan calls for resoiling, mine waste shall be leveled and covered with a layer of finer material. A soil layer shall then be placed on this prepared surface.	Yes	PA P. 10 RV P. 8
	The use of soil conditioners, mulches, or imported topsoil shall be considered where such measures appear necessary.	N/A	
CCR 3704(c)	Mine waste shall be stockpiled to facilitate phased reclamation and kept separate from topsoil or other growth media.	Yes	PA P. 10 RV P. 8
CCR 3705(e)	If soil is altered or other than native topsoil, soil analysis is required. Add fertilizers or soil amendments if necessary.	N/A	
CCR 3711(a)	All salvageable topsoil shall be removed as a separate layer.	Yes	PA P. 10
	Topsoil and vegetation removal should not precede mining by more than one year.	N/A	
CCR 3711(b)	Topsoil resources shall be mapped prior to stripping and location of topsoil stockpiles shown on map included in the reclamation plan.	Yes	PA P.6 RV P.4 RPM
	Topsoil and other growth media shall be maintained in separate stockpiles.	Yes	AD P.4
	Test plots may be required to determine the suitability of growth media for revegetation purposes.	N/A	
CCR 3711(c)	Soil salvage operations and phases of reclamation shall be set forth in the reclamation plan to minimize the area disturbed and to achieve maximum revegetation success.	N/A	
CCR 3711(d)	Topsoil and growth media shall be used to phase reclamation as soon as can be accommodated following the mining of an area.	N/A	
	Topsoil stockpiles shall not be disturbed until needed for reclamation.	Yes	AD P.4
	Topsoil stockpiles shall be clearly identified.	Yes	RPM
	Topsoil shall be planted with vegetation or otherwise protected to prevent erosion and discourage weeds.	Yes	AD P.1

CCR 3711(e)	Topsoil shall be redistributed in a manner resulting in a stable, uniform thickness consistent with the end use.	Yes	PA P. 10 RV P. 8
REVEGETATION			
PRC 2773(a)	The reclamation plan shall be specific to the property and shall establish site-specific criteria for evaluating compliance with the reclamation plan with respect to revegetation.	Yes	RV P.10-11, 14
CCR 3503(g)	Available research regarding revegetation methods and selection of species given the topography, resoiling characteristics, and climate of the mined areas shall be used	Yes	RV P. 2-7
CCR 3705(a)	Baseline studies shall be conducted prior to mining activities to document vegetative cover, density, and species richness.	Yes	RV P.7-8, 10-13, 16-20
	Vegetative cover shall be similar to surrounding habitats and self-sustaining.	Yes	RV P.7-8, 10-13, 16-20 PA P.8-10
CCR 3705(b)	Test plots shall be conducted simultaneously with mining to ensure successful implementation of the proposed revegetation plan.	N/A	
CCR 3705(c)	Decompaction methods, such as ripping and diking, shall be used in areas to be revegetated to establish a suitable root zone for planting.	Yes	RV P.14
CCR 3705(d)	Roads shall be stripped of road base materials, resoiled, and revegetated, unless exempted.	Yes	RPM PA P. 11
CCR 3705(f)	Temporary access shall not disrupt the soil surface on arid lands except where necessary for safe access. Barriers shall be installed to keep unauthorized vehicles out.	N/A	
CCR 3705(g)	Use local native plant species (unless non-native species meet the end use).	Yes	PA P. 5, 8-10 RV P. 5-10 & 11
	Areas to be developed for industrial, commercial, or residential shall be revegetated for the interim period to control erosion.	N/A	
CCR 3705(h)	Planting shall be conducted during the most favorable period of the year for plant establishment.	Yes	RV P. 9
CCR 3705(i)	Use soil stabilizing practices and irrigation when necessary to establish vegetation.	N/A	RV P.14
CCR 3705(j)	If irrigation is used, demonstrate that revegetation has been self-sustaining without irrigation for two years prior to the release of financial assurance.	N/A	RV P.14
CCR 3705(k)	Noxious weeds shall be monitored and managed.	Yes	RV P. 1 & 14
CCR 3705(l)	Plant protection measures such as fencing and caging shall be used where needed for revegetation success. Protection measures shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.	Yes	AD P.4
CCR3705(m)	Quantitative success standards for vegetative cover, density, and species richness shall be included in the reclamation plan.	Yes	RV 10, 11,12 & 14 PA P.9
	Monitoring to occur until success standards have been achieved.	Yes	RV P.14 AD P.4
	Sampling techniques for measuring success shall be specified. Sample size must be sufficient to provide at least an 80 percent statistical confidence level.	Yes	AD P. 2
AGRICULTURE			
CCR 3707(a)	Where the end use will be agriculture, prime agricultural land shall be returned to a fertility level specified in the reclamation plan.	Yes	RV P.7, 14 PA P. 9
CCR 3707(b)	Segregate and replace topsoil in proper sequence by horizon in prime agricultural soils.	Yes	PA P. 9; AD P.4 RV P. 8
CCR 3707(c)	Post reclamation productivity rates for prime agricultural land must be equal to pre-project condition or to a similar site for two consecutive years.	Yes	RV P. 7, 14 AD P. 4
	Productivity rates shall be specified in the reclamation plan.	Yes	RV P. 7, 14 PA P.9
CCR 3707(d)	If fertilizers and amendments are applied, they shall not cause contamination of surface or groundwater.	Yes	RV P. 14

CCR 3708	For sites where the end use is to be agricultural, non-prime agricultural land must be reclaimed to be capable of sustaining economically viable crops common to the area.	Yes	RV P.7,14
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ITEM 7

**NOTIFICATION NOTICE
AMENDED RECLAMATION PLAN FOR TCR-2 MINE**

TO WHOM IT MAY CONCERN

The undersigned being all owners of possessory interest in the land have been notified of the proposed uses or potential uses identified in Item 22 of the TCR-2 Amended Reclamation Plan application and with full understanding of the terms and effects thereof, have executed this application.

Date: April 28, 2022

DOYLE RANCH, INC.

By: 
Bryce Biswell, President

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

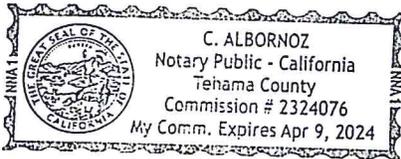
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of TEHAMA)
On 4-28-2022 before me, C. ALBORNOZ, Notary Public
Date Here Insert Name and Title of the Officer
personally appeared BRUCE BISWELL
Name(s) of Signer(s)

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.

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

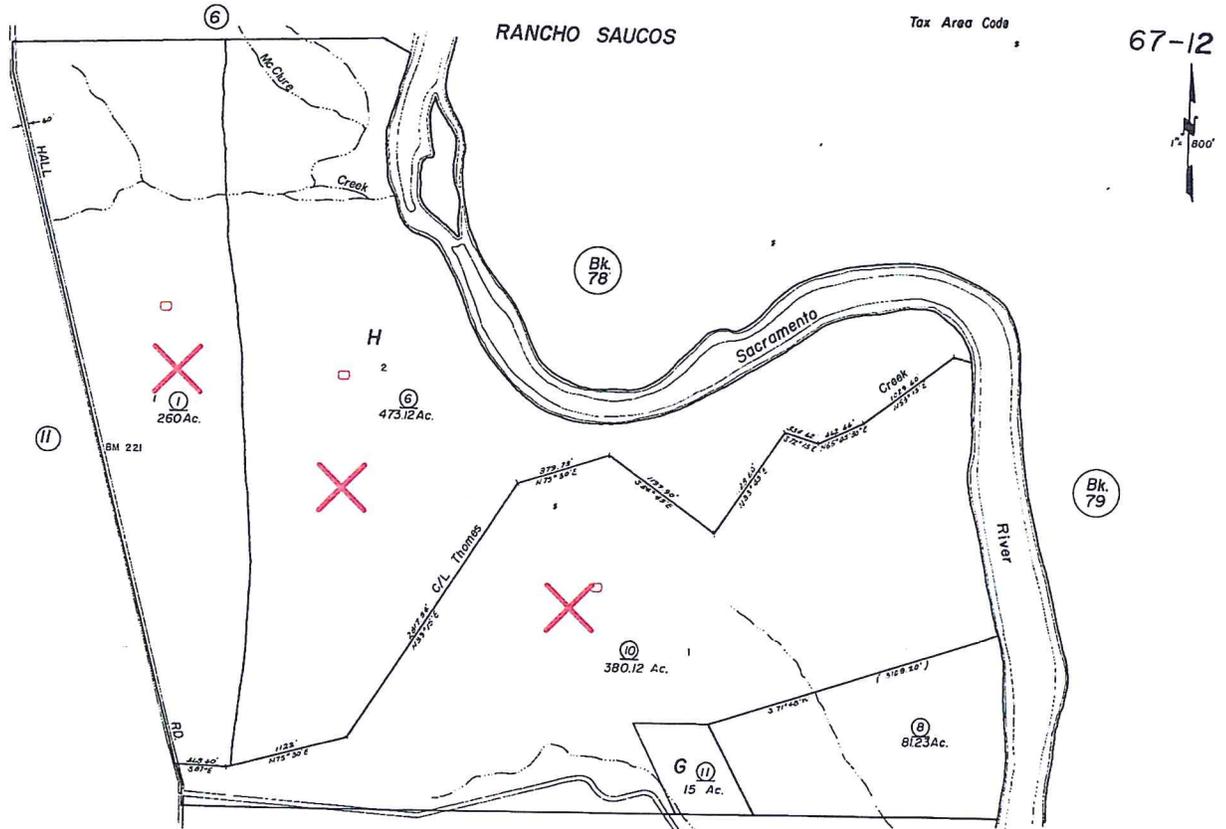
Title or Type of Document: NOTIFICATION NOTICE Document Date: Apr. 28, 2022
Number of Pages: _____ Signer(s) Other Than Named Above: _____

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: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

ITEM 8



R.S. Bk. R, Pg. 118 - El Rancho de los Saucos

NOTE - Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 67 - Pg. 12
County of Tehama, Calif.

ITEM 9

7889

RECORDING REQUESTED BY

WILLIAM A. FARRELL

AND WHEN RECORDED MAIL TO

Name WILLIAM A. FARRELL
Street Address BROBECK, PHLEGER & HARRISON
City & State One Market Plaza, San Francisco, CA 94105

MAIL TAX STATEMENTS TO

Name CLAIRE W. DROWN.
Street Address 422 Stanmar Dr.
City & State Corning, CA 96021

INDEXED

BOOK 866 PAGE 534
RECORDED AT REQUEST OF
at 29 min past 10 A.M.
JUL 20 1981

OFFICIAL RECORDS
TEHAMA COUNTY, CALIFORNIA
FLOYD A. HICKS
Fee \$ 4. Recorder's mark

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Grant Deed

GD 864 GG

THIS FORM FURNISHED BY TRUSTORS SECURITY SERVICE

The undersigned grantor(s) declare(s):
Documentary transfer tax is \$ 3,465.55
() computed on full value of property conveyed, or
() computed on full value less value of liens and encumbrances remaining at time of sale.
() Unincorporated area: () City of _____, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
CLAIRE W. DROWN, also known as,
CLAIRE W. DAVIS, a married woman who acquired title as her separate
property and who is hereby acting with respect to her separate
property hereby GRANT(S) to

DOYLE RANCH, INC., a California corporation

the following described real property and improvements thereon in the
County of TEHAMA, State of California:

Tracts F, G and H, as the same are designated and shown
on that certain map entitled "Map of El Rancho de Dos
Saucos, Tehama County, California, the property of John
Finnell, Esq., surveyed September 9th and November 18th,
1878, by L.B. Healy and E.N. Eager", filed in the office
of the County Recorder of said County of Tehama, State of
California, on July 10, 1879, containing 3682 acres, more
or less.

Subject to taxes a lien but not delinquent and to covenants,
conditions, restrictions, easements and rights of way of record
and without limiting the generality of the foregoing, any and
all perpetual rights of way and easements heretofore granted
by the grantor; also, subject to existing leases and tenancies.

Dated July 17, 1981

Claire W. Drown

CLAIRE W. DROWN

STATE OF CALIFORNIA } ss.
COUNTY OF Tehama

On July 17, 1981 before me, the under-
signed, a Notary Public in and for said State, personally appeared
Claire W. Drown, also known as

Claire W. Davis

known to me
to be the person whose name is subscribed to the within
instrument and acknowledged that she executed the same.
WITNESS my hand and official seal.

Signature

Edyth Fox



(This area for official notarial seal)

Title Order No.

File, Escrow or Loan No.

MAIL TAX STATEMENTS AS DIRECTED ABOVE

BOOK 866 PAGE 534

ITEM 10

FINANCIAL ASSURANCE COST ESTIMATE
FOR

TCR-2 MINE

(Mine Name)

CA Mine ID # 91- 52-001

Reclamation Plan #/Name # 04-1 / TCR-2

Prepared by: (Name & Affiliation):

Land Designers, Inc.
1975 Placer Street, Suite A
Redding, CA 96001
Keith Hamblin, owner

Date: 08/24/2022

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

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

An annual mine inspection performed on (Date): _____

Other: Please Specify:

Amending reclamation plan # 04-1

Most Recent Approved Financial Assurance Cost Estimate

Date: 11/29/2017

Amount: \$ 83,020.06

Amount of existing Financial Assurance Mechanism(s)

Date: 12/04/2018

Amount: \$ 87,0000

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

09/15/2005 #04-1

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

N/A

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

N/A

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

General Prevailing wage is used. Effective June 27, 2022 and July 1, 2022.

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

Labor Surcharge and Equipment Rental Rates by Caltrans is used. April 1, 2022 to March 31, 2023.

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

Caterpillar Performance Handbook is used.

** 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:

N/A

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.)

Mining has ceased and the mine is being reclaimed. The western part of the site is reclaimed except for seeding 2.96 acres, resoiling 1 ac. of upland with 2 inches of soil, ripping 170 lf of gravel rd.

The eastern area has mainly been refilled with soil and overburden. Remaining reclamation is adding soil and overburden to the dryland pasture area, seeding 50.78 acres with a dryland pasture mix, bank grading and creating a small berm along the bank of Thomes Creek.

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.)

Continued filling of eastern area.

IV. Description/Justification of Cost Increase/Decrease

There has been a change in the prevailing wage and equipment costs. The amended reclamation plan has eliminated certain mining areas, reduced the amount of filling of mined areas, changed the end use, eliminated an irrigation system and changed the type of revegetation all of which affect the cost of reclamation.

(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:

All structures and equipment have been removed.

Reclamation Plan Performance Standard (End Use):

Dryland pasture and apiary use.

Describe tasks:

None required.

Equipment on site wholly owned by operator?: YES NO
(If no, please provide the name/s and contact information for any lien holder)

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(use multiple sheets as needed)*

Methods to be used:

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

Equipment	Unit of Measure	\$/Unit	# of Units	Cost (\$)
				0.00

Total Equipment Cost for this Task = \$ 0.00

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

Labor Category	\$/Hour (prevailing wage)	Labor Surcharge/Hr (where applicable) (enter % of wage)	# of Hours	Cost (\$)
				0.00

Total Labor Cost for this Task = \$ 0.00

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

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
					0.00

Total Materials Cost for this Task = \$ 0.00

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

Equipment Costs + Labor Cost + Demolition Cost = \$ 0.00

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

Net Salvage Value = \$ 0.00

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

Total Cost of Structure and Equipment Removal = \$ 0.00

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

VI. PRIMARY RECLAMATION ACTIVITY.

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

Current Site Conditions:

Mining has ceased and the mine is being reclaimed. The western part of the site is reclaimed except for seeding 2.96 acres, resoiling 1 ac. of upland with 2 inches of soil, ripping 170 lf of gravel rd.

The eastern area has mainly been refilled with soil and overburden. Remaining reclamation is adding soil and overburden to the dryland pasture area, seeding 50.78 acres with a dryland pasture mix, bank grading and creating a small berm along the bank of Thomes Creek.

Reclamation Plan Performance Standard (End Use):

Dryland pasture and apiary use.

Describe tasks, methods, equipment, etc.:

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

A dozer and scraper will resoil the low area in the eastern area with 40,000 cy of soil and overburden. The depth of fill is 2 feet or less. A scraper will be used to create the berm along Thomes Creek (1,037 cy to be used) and to apply 2 inches of soil/overburden to 1 acre of land on the western side of the mine (269 cy to be used). A grader will grade 2,684 lf of bank. 170 lf of gravel rd will be ripped. A helicopter is used to apply seed.

Provide quantities:

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

The dozer is used to moved soil and overburden to locations which average less than 300 ft. in distance. A scraper is used for sites greater than 300 ft. The average production rate is 862 cy/hr. with a D10R Cat and 300-332 cy/hr. with a Cat 627 scraper depending on the haul distances. A grader traveling at 1 mph can grade 63,360 sf in 1 hr. & there is 59,048 sf to grade. Any compacted ground is ripped by the dozer. A grader and/or dozer will grade areas of uneven terrain.

(add additional pages as needed)

VI. PRIMARY RECLAMATION ACTIVITY (Resoiling, berm creation, ripping) (use multiple sheets as needed)
 (Describe Reclamation Activity Being Estimated)

Acres:	11.5 acres	Overburden (cy):	17,206 177
Haul Distance (ft):	0-700	Topsoil (cy):	24,000
Production Rate (cy/hr):	862 cy dozer 332 scraper		

Methods to be used:

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

Equipment	Unit of Measure	\$/Unit	# of Units	Cost (\$)
Dozer Cat D10R	Hrs.	350.17	35	12,255.95
Scraper Cat 626	Hrs.	236.53	35	8,278.55
Grader Cat 12 H	Hrs.	91.04	2	182.08
Water Truck	Hrs.	53.73	20	1,074.40

Total Equipment Cost for this Task = \$ 21,790.98

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

Labor Category	\$/Hour (prevailing wage)	Labor Surcharge/Hr (where applicable) (enter % of wage)	# of Hours	Cost (\$)
Foreman	65.00		20	1,300.00
Equipment operator Grp 3	85.64		72	6,166.08
Teamster Grp 2	69.12		20	1,382.40

Total Labor Cost for this Task = \$ 8,848.48

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

Item	\$/Unit	Sales tax (enter local rate in %)	Quantity	Cost (\$)
				0.00

Total Materials Cost for this Task = \$ 0.00

- D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$ 30,639.46

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

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

Current Site Condition:

Mining has ceased and the mine is being reclaimed. The western part of the site is reclaimed except for seeding 2.96 acres, resoiling 1 ac. of upland with 2 inches of soil, ripping 170 lf of gravel rd.

The eastern area has mainly been refilled with soil and overburden. Remaining reclamation is adding soil and overburden to the dryland pasture area, seeding 50.78 acres with a dryland pasture mix, bank grading and creating a small berm along the bank of Thomes Creek.

Reclamation Plan Performance Standard (End Use):

Dryland pasture and apiary use.

Describe tasks:

50.78 acres is to be seeded with a dryland pasture mix. 2.96 acres is to be seeded with a native plant seed mix. A helicopter is to aerially seed the site. The ground to be seeded will be harrowed before and after seed application. 4 acres can be harrowed in an hour.

VII. REVEGETATION (use multiple sheets as needed)

Methods to be used:

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

Equipment	Unit of Measure	\$/Unit	# of Units	Cost (\$)
40 hp tractor	Hrs.	27.23	28	762.44
Spring harrow	Hrs.	3.00	28	84.00
Chain harrow	Hrs.	3.00	28	84.00
Pickup truck	Hrs.	25.30	9	227.70
Helicopter with pilot	Hrs.	1,000.00	2.50	2,970.00

Total Equipment Cost for this Task = \$4,128.14

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

Labor Category	\$/Hour (prevailing wage)	Labor Surcharge/Hr (where applicable) (enter % of wage)	# of Hours	Cost (\$)
Landscape equip. operator Grp III	67.56		28	1,891.68
Foreman, landscape	55.00		9	495.00

Total Labor Cost for this Task = \$2,386.68

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

Item/Plant Species	Unit of measure	\$/Unit	Sales tax (enter local rate in %)	Quantity	Cost (\$)
Dryland pasture seed mix	lbs.	2.57		1,523.40	3,915.14
Native upland seed mix	lbs.	15.00		207.20	3,108.00
Tax			0.0725		509.18

Total Materials Cost for this Task = \$7,532.32

- D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$14,047.14

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

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

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

Item / Task	Quantity	\$/Unit	Cost (\$)
20% vegetation mgt.	.2	14,047.14	2,715.43

Total Miscellaneous Costs = \$ 2,809.43

IX. MONITORING COSTS

Monitoring Task	\$/Visit	# of Visits/Year	# of Monitoring Years	Cost (\$)
Biologist monitoring site	1,718.40	1	2	3,436.80

Total Monitoring Costs = \$ 3,436.80

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	\$ 0.00
(VI) Total of all Primary Reclamation Activities Costs	\$ 30,639.46
(VII) Total of all Revegetation Costs	\$ 14,047.14
(VIII) Total of all Miscellaneous Costs	\$ 2,809.43
(IX) Total of all Monitoring Costs	\$ 3,436.80
	<hr/>
Total of Direct Costs	\$ 50,932.83

XI. Supervision / Profit & Overhead / Contingencies / Mobilization

(A) Supervision (<u>6.0</u> %)	\$ 3,055.97
(B) Profit/Overhead (<u>13.0</u> %)	\$ 6,621.27
(C) Contingencies (<u>10.0</u> %)	\$ 5,093.28
(D) Mobilization (<u>3.0</u> %)	\$ 1,527.98
	<hr/>
Total of Indirect Costs	\$ 16,298.50
Total of Direct and Indirect Costs	\$ 67,231.33
(E) Lead Agency and/or Dept. of Conservation Administrative Costs	\$ 10,084.70
	<hr/>
Total Estimated Cost of Reclamation	\$ 77,316.03

Keith Hamblin

From: Brian Lohse <Brian.Lohse@lockwoodseed.com>
Sent: Friday, July 29, 2022 2:37 PM
To: kjmkc1950@gmail.com
Subject: Seed Quote - What we can do today.

30% Fawn Tall
25% Tet. Perennial Rye
15% Potomac Orchardgrass
10% Corral Tet. Annual Rye
7.5% Ladino Clover
7.5% Strawberry Clover
5% Alsike Clover

Approx 1,500 lbs.
Price: \$2.57/lb.

Our General Livestock mix is very similar to the above.

25% Fawn Tall
25% Tet. Perennial Rye
15% Potomac Orchardgrass
10% Corral Tet. Annual Rye
7.5% Ladino Clover
7.5% Strawberry Clover
5% Alsike Clover
5% Birdsfoot Trefoil.

This mix is almost always in stock and \$2.51/lb today.

Upland Mix

I do not have access today to some of the items you requested and some of those items are terrible expensive.

What I can offer today for prompt delivery:

25% Molate Fescue
25% Blue Wildrye
25% California Brome
15% Meadow Barley
10% Mokelumne Fescue

Your Price: \$15/lb.

If I make it an even 200 lbs. it will save you cost on the mix too. I priced it that way.

Please let me know which direction you would like to proceed.

****All seed quotes subject to change and availability at time of order.****



Billing: 975 1st Avenue, Willows, CA 95988
Physical Address: Willows Airport- 205 County Road G, Hanger 3, Willows, CA 95988
Phone: 530-934-3113 Email: rmichaudaviation@yahoo.com

APPLICATION QUOTE

Quote Date: July 11, 2022

Quoted By: Taylor Michaud

Customer: Land Designers

Contact: Keith Hamblin

Cell: 530-524-8481

Email: kjmke1950@gmail.com

Job: 54 acres of Fall seeding (Tehama County)- Per our phone and email discussions

\$55.00 PER ACRE- This pricing includes fuel pricing

Quote is valid through 12/31/2022

Keith, thank you for your consideration. If you have any questions at all, please feel free to give me a call.

Sincerely,

Taylor Michaud- Owner

Regenald Michaud Aviation, LLC

TM:mm

Keith Hamblin

From: skerns7118@aol.com
Sent: Thursday, September 08, 2022 3:50 PM
To: kjmkc1950@gmail.com
Subject: TCR-2 veg monitoring

Hello Keith,

Here are my thoughts on cost for the TCR-2 vegetation compliance surveys. We put in three vegetative transects which should be read again. Two of them consist of 10 survey plots, one has 20 plots. I think it will take 2 surveyors one day to get it done:

<u>Task</u>		<u>Cost</u>
Field survey time:	8 hrs. X 2 surveyors=16 hrs X \$80/hr.	\$1,280.00
Results write up:	4 hrs. X \$80/hr.	320.00
Fuel cost;	148 mi X \$0.80/mi	118.40
Total Estimate		\$1,718.40

How's this sound? Please let me know if this is what you need.

Steve

Wildland Resource Managers

