



July 17, 2026

Clint Chisler
Senior Reclamation Specialist
NM EMNRD Mining and Minerals Division
Mining Act Reclamation Program
Wendell Chino Building
1220 S. St. Francis Dr.
Santa Fe, New Mexico 87505

VIA E-MAIL

RE: Request for Release, JJ No. 1 Mine, Seboyeta, Cibola County, New Mexico

Dear Mr. Chisler,

On behalf of SOHIO Western Mining Company (Rio Tinto Closure), INTERA Incorporated is requesting release of the former JJ No. 1 Mine (Site), Permit No. CI007RE, from the requirements of the New Mexico Mining Act and the Director's Order (December 2011), including release of the remaining financial assurance (FA).

This request for Site release is justified as evidenced by the reclamation and closure and erosion and revegetation monitoring tasks that have been completed, as summarized in the historical timeline below.

- **March 2006** – MMD issues *Director's Order requesting Site Assessment and Closeout Plan*
- **March 2006** – EMNRD issues Existing Mine Permit Number #CI007RE
- **August 2007** – *Existing Mine Permit Application, Closeout Plan, and Site Assessment, Revision 1*, submitted to MMD
- **October 2008** – *JJ No. 1/L-Bar Mine Closeout/Mitigation Plan* submitted to MMD
- **April 2009** – *Addendum to the Closeout/Mitigation Plan* submitted to MMD
- **May 2009** – MMD issues *Amended Director's Order to the Closeout/Mitigation Plan*
- **July 2009** – Final reclamation cost estimate submitted to MMD
- **August 2009** – Financial assurance for the reclamation work established with MMD
- **September 2009 to September 2010** – Reclamation and closure work completed
- **June 2011** – MMD, New Mexico Environment Department-Ground Water Quality Bureau, Cebolleta Land Grant, and the New Mexico Department of Game and Fish perform post-closure Site inspection, and conditions were found to be acceptable
- **July 2011** – *JJ No. 1/L-Bar Mine Closeout/Mitigation As-Built Report* submitted to MMD
- **December 2011** – MMD issues *Director's Order* approving the reduction in FA
- **2011 to 2022** – 12-year monitoring period, routine erosion and SWPPP inspections completed
- **Fall 2019** – Year 9 revegetation monitoring completed
- **Fall 2021** – Year 11 revegetation monitoring completed
- **Fall 2022** – Year 12 revegetation monitoring completed

- **Fall 2023** – Year 13 revegetation monitoring completed
- **October 2023** – MMD issues *Modification 23-1 to Permit No. CI007RE*
- **Fall 2024** – Year 14 revegetation bond release evaluation completed
- **Fall/Winter 2024** – Completion of erosion mitigation activities
- **Fall 2025** – Year 15 revegetation bond release evaluation completed
- **June 2026** – Submittal of *Erosion Mitigation Report*

In support of this release request, three submittals have been included as attachments. The *Year 14 and Year 15 Revegetation Bond Release Evaluation Report*, dated March 24, 2026, that provides documentation that Site revegetation has met the required standards is included as **Attachment A**; the *Erosion Mitigation Completion Report*, dated June 2026, that documents the efforts completed to mitigate existing and future erosion is included as **Attachment B**; and the Legal Notice in English and Spanish is included as **Attachment C**. To complete the Legal Notice, Rio Tinto Closure requests the formal weblink from Mining and Minerals Division for inclusion prior to publication.

The application fee of \$5,000 will be submitted via check early next week with a hard copy of this letter without the Attachments. Alternatively, please let us know if you would prefer hard copies of the Attachments to be included with the letter.

Please do not hesitate to contact me via email (aarossa@intera.com) or phone (505-240-1587) if you have any questions.

Sincerely,
INTERA Incorporated



Ashley Arrossa, PE
Project Manager/Engineer

Enclosure

cc (electronic): Jeff Lachowski, Rio Tinto Closure

Joseph Fox, Program Manager, MECS, joseph.fox@env.nm.gov

Corey Diamond, Senior Water Resource Professional, MECS, corey.dimond@env.nm.gov

Abimbola Ojekanmi, EMNRD-MMD, abimbola.ojekanmi@emnrd.nm.gov

Attachment A
Year 14 and Year 15 Revegetation Bond Release
March 24, 2026

Revegetation Bond Release Evaluation 2024 & 2025

JJ No. 1/L-Bar Mine



Prepared by:



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MARCH 24, 2026

Revegetation Bond Release Evaluation 2024 & 2025

JJ No. 1/L-Bar Mine

Authors Page

Prepared for:



New Mexico Department of Energy, Minerals and Natural Resources
Mining and Minerals Division
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Prepared by:



MARCH 24, 2026

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Acronyms and Abbreviations

Cedar Creek	Cedar Creek Associates, Inc.
INTERA	INTERA Incorporated
MMD	New Mexico Mining and Minerals Division
mmhos/cm	millimhos per centimeter
Site	JJ No. 1/L-Bar Mine

1.0 Introduction

INTERA Incorporated (INTERA) contracted Cedar Creek Associates, Inc. (Cedar Creek) in early 2016 to develop a methodology for determining revegetation success in accordance with the *Closeout/Mitigation Plan, JJ No. 1/L-Bar Mine* (INTERA, 2008) and *JJ No. 1/L-Bar Mine Closeout/Mitigation As-Built Report* (INTERA, 2011). The methodology for determining revegetation success was submitted to the New Mexico Mining and Minerals Division (MMD) in a draft plan entitled *Methodology for the Determination of Revegetation Success for the JJ No. 1/L-Bar Mine* dated June 12, 2016 (INTERA, 2016a) and in a subsequent letter entitled *Proposed Methodology for the 6-Year Quantitative Survey for Determination of Revegetation Success, JJ No. 1/L-Bar Mine* dated July 22, 2016 (INTERA, 2016b). In February 2018, INTERA and Cedar Creek submitted the *Amendment to Closeout/Mitigation Plan, Methodology for Determination of Revegetation Success, JJ No. 1/L-Bar Mine* (INTERA, 2018). The methodology defines procedures and protocols to be utilized for revegetation success evaluations, pursuant to the mandates of Title 19, Chapter 10, Part 5 of the Mining Act Rules set forth by the MMD.

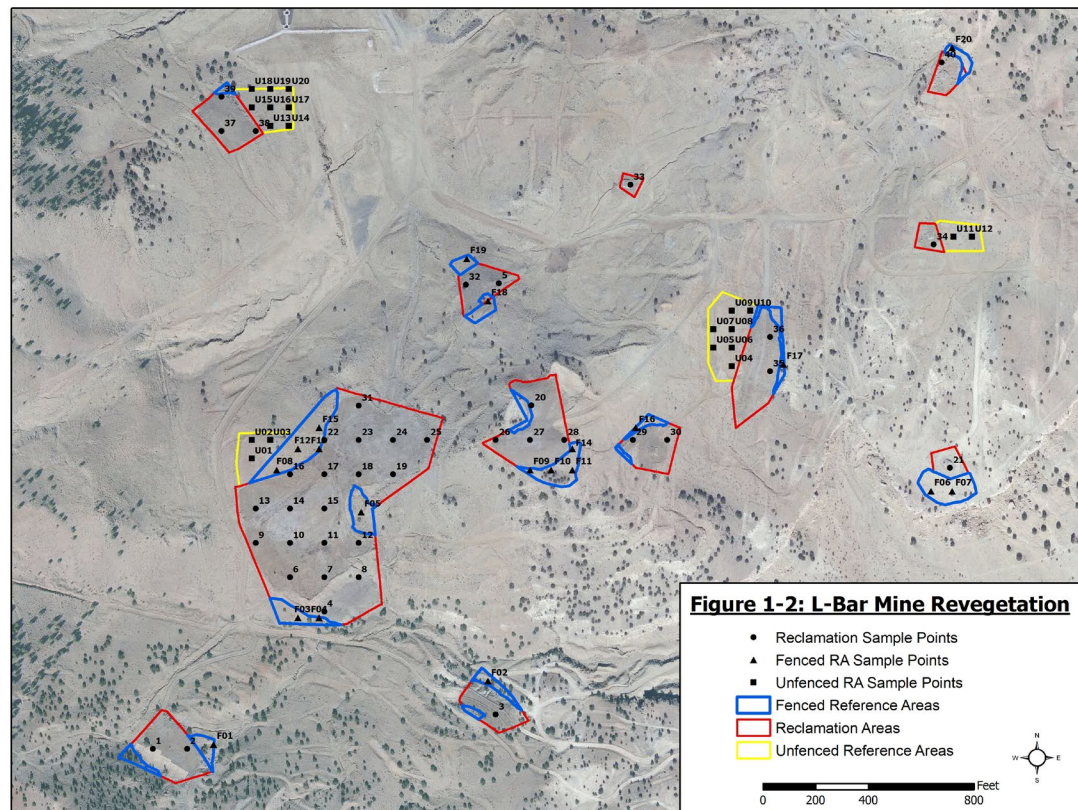
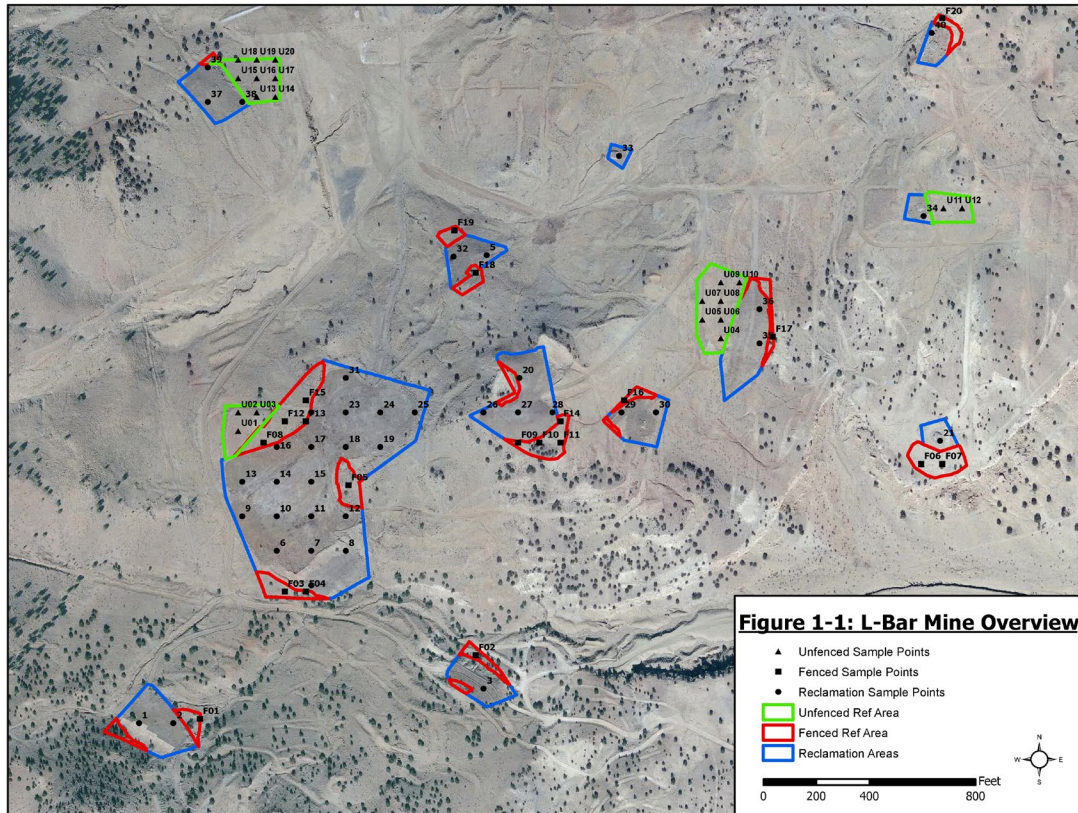
Revegetation success at the JJ No. 1/L-Bar Mine (Site) will address perennial (and biennial) vegetative cover and woody plant density through comparison to background reference conditions that are representative of the pre-existing vegetation communities and/or desirable ecological conditions. Evidence of success will be reflected by growth of approved and/or planted species and will indicate whether the post mining land use (continued livestock grazing with coincidental wildlife habitat) has been established, and whether the vegetation is capable of being grazed at proper grazing intensity. As described in Section 2.1, revegetation success has been monitored following reclamation at the Site in 2010.

The default 12-year monitoring period has been extended, due to revegetation challenges in select reclamation areas, which refers to the reclaimed vent shafts, and the stockpile and borrow areas at the Site. Modification 23-1 to JJ No. 1 Mine Permit No. CI007RE dated October 10, 2023 (EMNRD, 2023), details the approved modifications to the revegetation success standards and the modified evaluation timeframes that are being implemented going forward.

In September 2024, Cedar Creek implemented the Year 14 ecological monitoring specific to revegetation areas located in the reclamation areas, and the associated reference areas for the Site. The revegetation evaluation was conducted on September 12, 2024, under the direct supervision of Cedar Creek's Ecologist and Principal, Mr. Jesse Dillon.

In September 2025, Cedar Creek implemented the Year 15 ecological monitoring specific to revegetation areas located in the reclamation areas, and the associated reference areas for the Site. The revegetation evaluation was conducted on September 23, 2025, under the direct supervision of Cedar Creek's Ecologist and Principal, Mr. Jesse Dillon.

Figure 1-1 and Figure 1-2 display the extent of the reclamation areas and the Year 14 and 15 sample point locations, as well as the fenced and unfenced reference areas on the Site. All raw data supplementing the information in this report can be found in **Appendix A**.

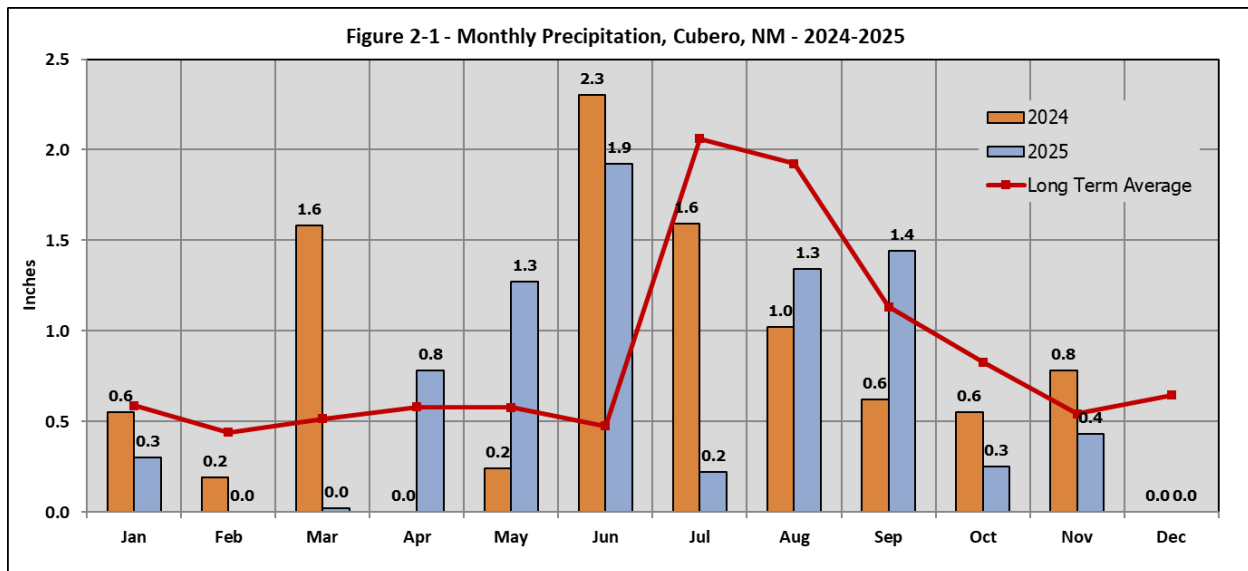


2.0 Background

Information related to the historical reclamation activities and site-specific details regarding the meteorological and geological setting for the Site are presented below in Sections 2.1 (Reclamation), 2.2 (Precipitation), and 2.3 (Growth Media).

2.1 Reclamation

The reclamation and re-vegetation monitoring work has assumed that the post mining land use at the JJ No. 1/L-Bar Mine is livestock grazing, which is consistent with the surrounding property. The objective of revegetation efforts is to create a sustainable vegetation community that supports the post mining land use. As of November 2025, the CLG Board closed the Land Grant from grazing effective January 1, 2026, for a period of two years, predicated by the removal of the cattle from the area. It may be beneficial to the vegetation establishment for the grazing pressure to be removed at this time. Reclamation procedures and treatments have generally followed the Closure Specifications, included as Appendix C of the Closeout/Mitigation Plan (INTERA, 2008). After the initial reclamation effort, interim maintenance (erosion repair and inter-seeding) was implemented in several areas in 2016. Rill repairs were carried out on the borrow and stockpile areas and additional topsoil from an arroyo on Site was added to these areas. An approved seed mix, supplementing the original post-reclamation seed mix with the addition of a salt tolerant species, alkali sacaton (*Sporobolus airoides*), was hand-broadcast and raked into the soil where erosion repairs were completed. In addition, hand-broadcast inter-seeding was conducted in each of the fenced reclamation areas.



2.2 Precipitation

The monthly precipitation from 2024 in Cubero, New Mexico (15 miles to the west-southwest of the project area) compared with the long-term average is shown on **Figure 2-1**. Cumulative precipitation during the first three quarters of 2024 (Jan-Sep) was 8.1 inches, which is 97.5% of the long-term average

(8.3 inches) for the same period. The primary growing season for the warm season species observed at the Site is June through September. Cumulative precipitation during the growing season of 2024 was 5.5 inches, which is 98.9% of the long-term average (5.6 inches) for the same period. Therefore, vegetation survey findings are reflective of average plant production and vigor.

The monthly precipitation from 2025 in Cubero, New Mexico (15 miles to the west-southwest of the project area) compared with the long-term average is shown on **Figure 2-1**. Cumulative precipitation during the first three quarters of 2025 (Jan-Sep) was 7.3 inches, which is 87.8% of the long-term average (8.3 inches) for the same period. The primary growing season for the warm season species observed at the Site is June through September. Cumulative precipitation during the growing season of 2024 was 4.9 inches, which is 87.9% of the long-term average (5.6 inches) for the same period. Therefore, vegetation survey findings are reflective of slightly below average plant production and vigor.

2.3 Growth Media

As presented in the *2016 Year Six Revegetation Evaluation Project, JJ No. 1/L-Bar Mine Report* (INTERA, 2017), Cedar Creek made observations that indicated the growth media in the region were precluding or limiting vegetation performance, both on and off site. The underperforming areas were predominately dark, bluish gray soils derived from Mancos Shale that forms outcrops at the Site. These Mancos Shale derived soils are found in borrowed and relocated soil, subsoil left in borrow locations, and undisturbed native ground. Based on visual observations of salts in the field and knowledge of weathering/erosion characteristics of the materials, the shale materials found throughout the Site likely exhibit elevated salts. These field observations were supported by soil samples collected from the Site in 2014, which revealed extremely high salinity and sodicity, as shown in **Table 2-1**.

Table 2-1 L-Bar - Growth Media Evaluation - 2016								
Soil Laboratory Results - Colorado Analytical Laboratories - 06/03/14								
Laboratory # 140603085-01								
Laboratory Test ---->	-----Paste-----		Organic	CEC	Sodium	Exchangeable	Sodium Adsorption	Salinity / Sodicity Classification
Units ---->	pH	EC	Matter	Estimate	(Na)	Sodium (ESP)	Ratio (SAR)	
Sample ID		mmhos/cm	%	Meq/100g	Meq/100g	%	Estimate, Unitless	
Borrow Area	4.8	9.2	3.3	11.8	3.58	30.34	27	Saline - Sodic
Stockpile	7	8.6	2.8	41.4	4.51	10.89	8.8	Saline
Near VS-3	7.7	7.6	3.2	15.3	3.38	22.09	19	Saline - Sodic
Near VS-5	7.6	8.1	3	14.8	2.74	18.51	15.9	Saline - Sodic

*EC Threshold < 4 *Esp Threshold < 15 *SAR Threshold < 13

Samples from the Stockpile area were classified as saline with electrical conductivity (EC) of 8.6 mmhos/cm, more than double the level required to impact native vegetation. Soil samples from the borrow area, VS-3, and VS-5 are all classified as saline-sodic, exhibiting values well above the classification thresholds. As a result, the soil samples collected at the Site are considered saline soils. The concentration of soluble salts in saline soils interferes with the germination and growth of plants. High soil salinity affects plant growth by:

- Reducing the plant's ability to take up water (an osmotic effect),
- Causing toxicities (usually chloride and sodium) which produce nutrient imbalances by changing the plant's ability to take up other nutrients, and
- Causing lower germination from seed.

3.0 Revegetation Monitoring and Success Evaluations

The revegetation performance criteria are described in detail in the *Amendment to Closeout/Mitigation Plan, Methodology for Determination of Revegetation Success, JJ No.1/L-Bar Mine* (INTERA, 2018). As discussed therein, revegetation success will be determined by vegetation cover and diversity standards as well as woody plant density based on the fenced reference area success criteria. Monitoring will occur through periodic detailed vegetation surveys (sampling) of revegetated units, and sampling is to occur in accordance with the monitoring schedule included in **Table 3-1**.

Table 3-1 Revegetation Monitoring Schedule

Year	Action
2016	Year Six Monitoring and Success Standard Sampling
2017	-
2018	-
2019	Year Nine Monitoring
2020	-
2021	Year 11 Evaluation
2022	Year 12 Evaluation
2023	Year 13 Evaluation
2024	Year 14 Bond Release Evaluation
2025	Year 15 Bond Release Evaluation

Note – Per the approved Modification (23-1), the success standard may now include two of the last four years of evaluations, and the monitoring schedule will be extended, as necessary, to meet the modified success standard.

Per the schedule, all reclamation areas were monitored during Year Six and Year Nine. Due to climate and soil challenges that have been discussed with MMD and as documented in Modification 23-1, bond release evaluations were not conducted in Year 11 or Year 12 and will be conducted in future years. Annual revegetation monitoring will occur until success criteria are met and bond release evaluations are deemed appropriate.

4.0 Year 14 Revegetation Evaluation Results

Figure 4-1 and **Table 4-1** provide summary data from the 2024 Year 14 revegetation evaluation, consisting of sample points collected from the vent shafts, stockpile, and borrow areas. The reclamation results are compared to both the fenced and unfenced reference area data. The fenced reference area is comprised of undisturbed ground within the fenced vent shaft, stockpile, and borrow areas (**Figure 1-1**). The unfenced reference area is comprised of representative areas located adjacent to vent shaft, stockpile, and borrow areas (**Figure 1-1**). No evidence of cattle grazing was observed on the reclamation or the fenced reference area during the Year 14 revegetation evaluation. Vegetation ground cover results on **Figure 4-1** are characterized by the longevity (annual or perennial) and lifeform (grass, forb, shrub, sub-shrub, succulent, or tree). Overall cover in the reclamation area increased from 2023 (19.7%) to 2024 (22.8%), but decreased in both the fenced reference area (24.0% to 16.7%) and unfenced reference area (15.2% to 10.6%) from 2023 to 2024. The increase in cover in the reclamation area was primarily driven by an increase in woody species cover, while the decrease in cover in the reference areas was driven by a decrease in perennial grass and woody plant cover. Both changes are likely related to random sampling. Only two species of nuisance weeds were detected in 2024 including Russian thistle (*Salsola tragus*) and burningbush (*Bassia scoparia*), and there was little change in nuisance weed cover since 2023.

Throughout the project area, a total of 16 plant taxa were encountered by sampling metrics within the reclaimed areas (**Table 4-1**) including eight grasses, five forbs, two shrubs, and one sub-shrub. The fenced reference area exhibited 14 encountered species including six grasses, three forbs, two shrubs, one sub-shrub, one tree, and one succulent. The unfenced reference area exhibited eight encountered species including two grasses, three forbs, one shrub, one sub-shrub, and one succulent.

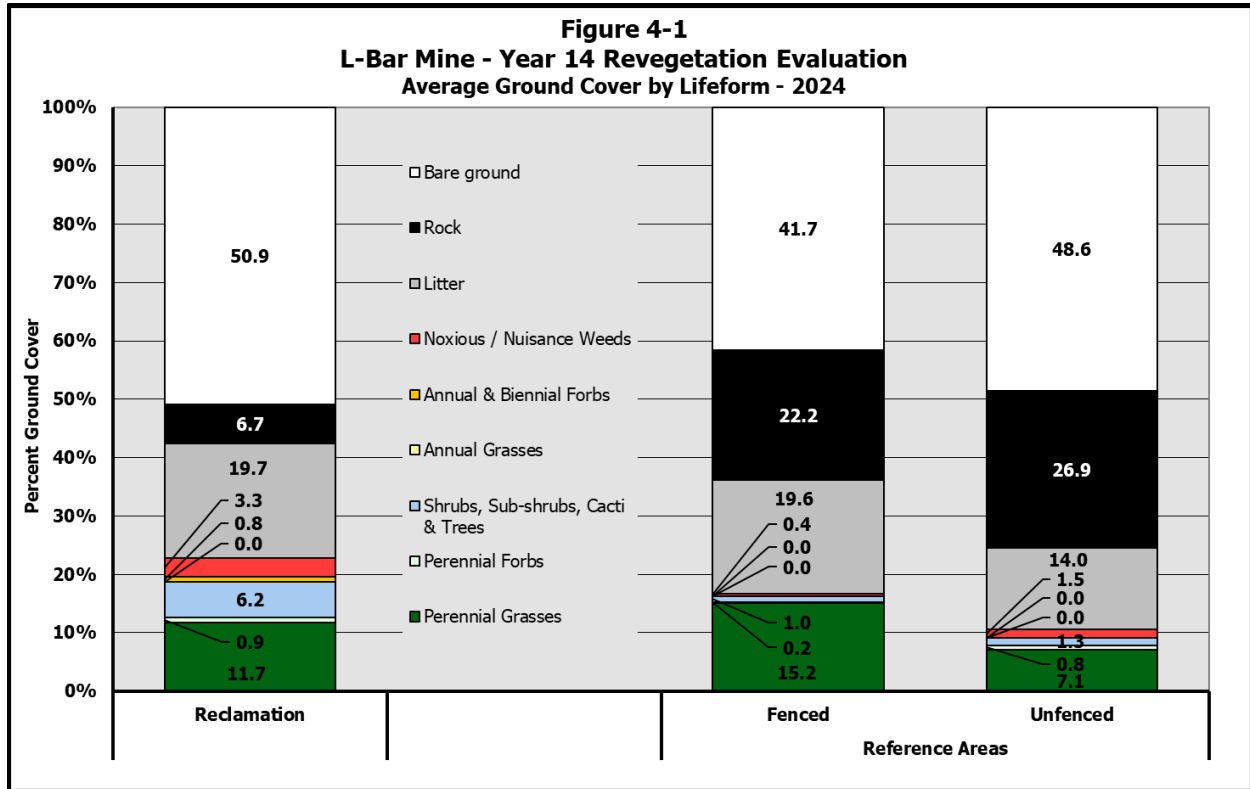


Table 4-1 Average Cover Summary 2024				
Percent Ground Cover Based on Point-Intercept Sampling				
Grasses		Area →	Reclamation	Reference Areas
				Fenced Unfenced
P	<i>Bouteloua curtipendula</i>	Sideoats Grama	0.0	0.3 -
P	<i>Bouteloua gracilis</i>	Blue Grama	-	0.3 -
P	<i>Elymus elymoides</i>	Squirreltail	0.1	0.2 -
P	<i>Hilaria jamesii</i>	Galleta	8.8	10.9 3.5
P	<i>Munroa squarrosa</i>	False Buffalo Grass	0.0	- -
P	<i>Panicum sp.</i>	Panicgrass	0.2	0.4 -
P	<i>Pascopyrum smithii</i>	Western Wheatgrass	0.4	- -
P	<i>Sporobolus airoides</i>	Alkali Sacaton	1.4	3.1 3.7
P	<i>Sporobolus cryptandrus</i>	Sand Dropseed	0.7	- -
Forbs				
A	<i>Atriplex argentea</i>	Silverscale Saltbush	0.8	- -
N	<i>Bassia scoparia</i>	Burningbush	0.2	0.1 -
P	<i>Helioomerus multiflora</i>	Showy Goldeneye	0.3	- 0.5
N	<i>Salsola tragus</i>	Russian Thistle	3.1	0.3 1.5
P	<i>Sphaeralcea ambigua</i>	Desert Globemallow	0.6	0.2 0.3
Shrubs, Sub-shrubs, Cacti & Trees				
P	<i>Atriplex canescens</i>	Fourwing Saltbush	5.8	0.4 0.1
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed	0.3	0.1 0.1
P	<i>Juniperus osteosperma</i>	Utah Juniper	-	0.3 -
P	<i>Lycium pallidum</i>	Pale Wolfberry	0.1	0.1 -
P	<i>Opuntia sp.</i>	Pricklypear	-	- 1.1
P	<i>Yucca glauca</i>	Soapweed Yucca	-	0.1 -
			Mean	
Total Plant Cover			22.8	16.7 10.6
Rock			6.7	22.2 26.9
Litter			19.7	19.6 14.0
Bare ground			50.9	41.7 48.6
Total Desirable Vegetative Cover			19.5	16.3 9.2
Total Perennial Cover			18.8	16.3 9.2
Summary by Lifeform:				
Perennial Grasses			11.7	15.2 7.1
Annual Grasses			0.0	0.0 0.0
Perennial Forbs			0.9	0.2 0.8
Annual & Biennial Forbs			0.8	0.0 0.0
Noxious / Nuisance Weeds			3.3	0.4 1.5
Shrubs, Sub-shrubs, Cacti & Trees			6.2	1.0 1.3
Diversity (Number of Species with ≥1% Average Cover):				
Number of Important Species =			3	2 3
Sample Adequacy Calculations:				
Mean =			22.8	16.7 10.6
Variance =			131.9	79.6 27.2
n =			40	20 20
n_{min} =			43.1	50.6 42.7

P=Perennial, A=Annual or Biennial, N=Nuisance, Bold= >1% Average Cover

Table 4-2 and **Figure 4-2** present the results from woody plant density sampling on the reclamation and the reference areas in 2024. There were four shrubs, two sub-shrubs, and one succulent encountered on the reclamation during 2024 sampling. The fenced reference area exhibited three shrubs, one sub-shrub, one tree, and two succulents, while the unfenced reference area exhibited two shrubs, one sub-shrub, one tree, and one succulent. As stated in *Closeout/Mitigation Plan, JJ No. 1/L-Bar Mine* (INTERA, 2008), sub-shrubs and cacti do not contribute to the woody plant density success comparison.

Table 4-2 Summary of Woody Plant Density 2024					
Life-form	Scientific Name	Common Name	Woody Plants Per Acre		
			Reclamation	Reference Areas	
				Fenced	Unfenced
S	<i>Artemisia tridentata</i> wyo.	Big Sagebrush	-	4.0	-
S	<i>Atriplex canescens</i>	Fourwing Saltbush	1046.1	125.5	111.3
S	<i>Atriplex confertifolia</i>	Shadscale	3.0	-	-
S	<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush	2.0	-	-
S	<i>Chrysothamnus viscidiflorus</i>	Yellow Rabbitbrush	-	-	2.0
SS	<i>Eriogonum</i> sp.	Buckwheat	5.1	-	-
SS	<i>Gutierrezia sarothrae</i>	Snakeweed	19.2	68.8	60.7
T	<i>Juniperus osteosperma</i>	Utah Juniper	-	18.2	2.0
S	<i>Lycium pallidum</i>	Pale Wolfberry	2.0	44.5	-
Su	<i>Opuntia</i> sp.	Pricklypear	3.0	26.3	135.6
Su	<i>Yucca glauca</i>	Yucca	-	20.2	-
Lifeform			Shrub (S)	1053.2	113.3
			Sub-shrub (SS)	24.3	60.7
			Succulent (Su)	46.5	135.6
			Tree (T)	0.0	2.0
Woody Plants Per Acre			1080.5	307.6	311.6

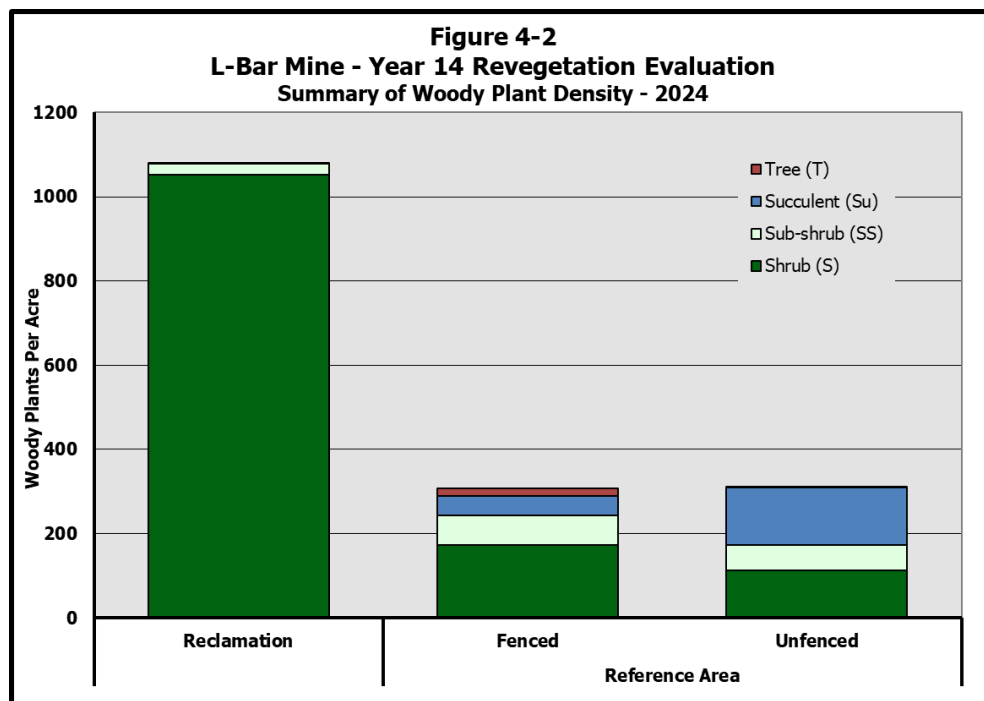


Figure 4-3 presents the perennial vegetation cover from Year 6 (2016), Year 9 (2019), Year 11 (2021), Year 12 (2022), Year 13 (2023), and Year 14 (2024) for both the reclamation and fenced reference area. In Year 14, perennial cover continued to trend higher, while perennial cover in the fenced reference area trended lower than average.

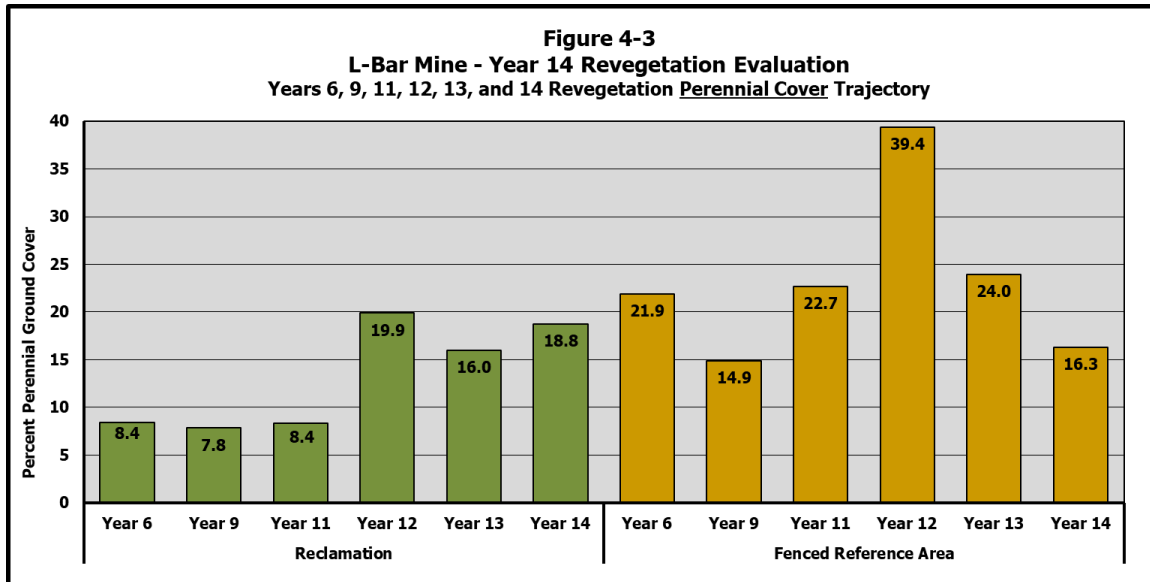
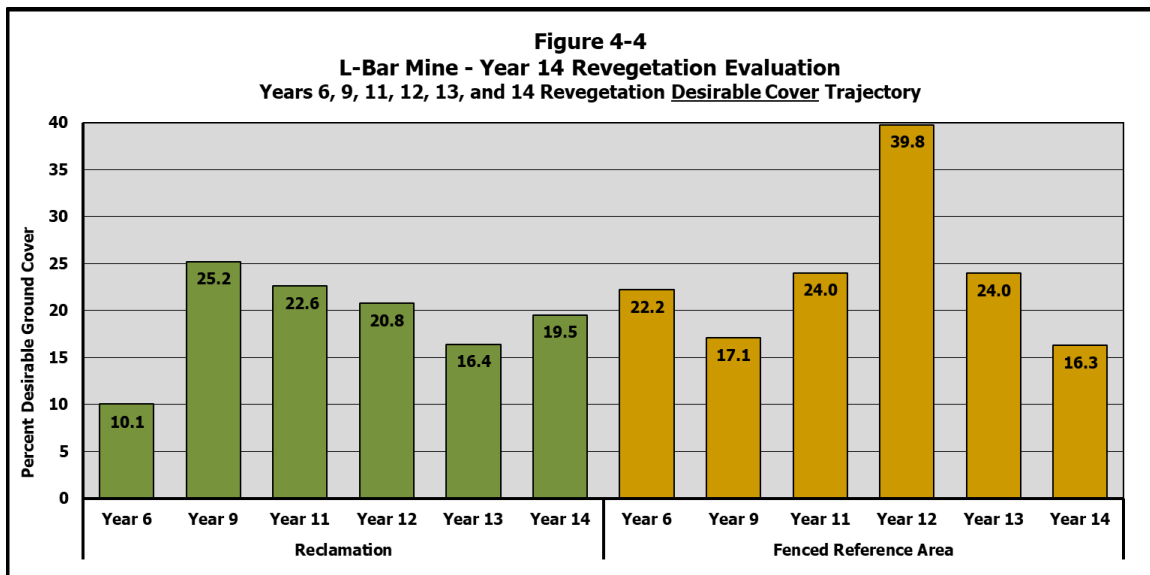


Figure 4-4 presents the desirable vegetation cover from Year 6 (2016), Year 9 (2019), Year 11 (2021), Year 12 (2022), Year 13 (2023), and Year 14 (2024) for both the reclamation and fenced reference area. In the reclamation area, desirable cover has remained generally stable since 2019 and showed a small increase in 2024. Within the fenced reference area, desirable cover mirrors the same pattern of perennial cover, which trended below average in 2024.



4.1 Reclamation Area

Within the reclamation areas, 40 sample sites with co-located ground cover transects and woody plant density belts were evaluated during the Year 14 revegetation evaluation. Ground cover in the reclamation consisted of 22.8% live vegetation, 6.7% rock, 19.7% litter, and bare ground exposure of 50.9% (**Table 4-1**). Perennial cover across the reclamation unit averaged 18.8%, whereas annual and biennial cover averaged 0.8% (exclusive of noxious and nuisance weeds). Desirable cover consisted of 19.5% live vegetation. Dominant taxa were galleta (*Hilaria jamesii*), fourwing saltbush (*Atriplex canescens*), and Russian thistle with 8.8%, 5.8%, and 3.1% cover, respectively. The reclamation area exhibited three important species ($\geq 1\%$ average cover), comprised of two grasses and one shrub. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the reclamation unit was 43.1 (**Table 4-1**). Woody plant density averaged 1080.5 stems per acre with fourwing saltbush and snakeweed (*Gutierrezia sarothrae*) as the dominant species, comprising 1046.1 and 19.2 stems per acre, respectively (**Table 4-2**). Full shrubs and trees account for 1053.2 stems per acre.

4.2 Fenced Reference Area

Within the fenced reference area, 20 sample sites with co-located ground cover transects and woody density belts were evaluated during the Year 14 revegetation evaluation. Ground cover on the fenced reference area consisted of 16.7% live vegetation, 22.2% rock, 19.6% litter, and bare ground exposure of 41.7% (**Table 4-1**). Perennial cover across the unit averaged 16.3%, whereas annual and biennial cover averaged 0.0% (exclusive of noxious and nuisance weeds). Desirable cover consisted of 16.3% live vegetation. Dominant taxa were galleta and alkali sacaton (*Sporobolus airoides*) with 10.9% and 3.1% cover, respectively. The fenced reference area exhibited two important species ($\geq 1\%$ average cover), both being perennial grasses. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the fenced reference area was 50.6 (**Table 4-1**). Woody plant density averaged 307.6 stems per acre with the dominant species consisting of fourwing saltbush, snakeweed (*Gutierrezia sarothrae*), and pale wolfberry (*Lycium pallidum*), comprising 125.5, 68.8, and 44.5 stems per acre, respectively (**Table 4-2**). Full shrubs and trees account for 192.2 stems per acre.

4.3 Unfenced Referenced Area

Within the unfenced reference area 20 sample sites with co-located ground cover transects and woody density belts were evaluated during the Year 14 revegetation evaluation. Ground cover on the unfenced reference area consisted of 10.6% live vegetation, 26.9% rock, 14.0% litter, and bare ground exposure of 48.6% (**Table 4-1**). Perennial cover across the unit averaged 9.2%, whereas annual and biennial cover averaged 0.0%. Desirable cover consisted of 9.2% live vegetation. Dominant taxa were alkali sacaton, galleta, and Russian thistle with 3.7%, 3.5% and 1.5% cover, respectively. The unfenced reference area exhibited three important species ($\geq 1\%$ average cover), comprised of two grasses and one succulent. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the reclamation unit was 42.7 (**Table 4-1**). Woody plant density averaged 311.6 stems per acre with pricklypear and fourwing saltbush as the dominant species, comprising 135.6 and 111.3 stems per acre, respectively (**Table 4-2**). Full shrubs and trees account for 115.3 stems per acre.

5.0 Year 15 Revegetation Evaluation Results

Figure 5-1 and **Table 5-1** provide summary data from the 2025 Year 15 revegetation evaluation, consisting of sample points collected from the vent shafts, stockpile, and borrow areas. The reclamation results are compared to both the fenced and unfenced reference area data. The fenced reference area is comprised of undisturbed ground within the fenced vent shaft, stockpile, and borrow areas (**Figure 1-1**). The unfenced reference area is comprised of representative areas located adjacent to vent shaft, stockpile, and borrow areas (**Figure 1-1**). No evidence of cattle grazing was observed on the reclamation or the fenced reference area during the Year 15 revegetation evaluation. Vegetation ground cover results on **Figure 5-1** are characterized by the longevity (annual or perennial) and lifeform (grass, forb, shrub, sub-shrub, succulent, or tree). Overall cover in the reclamation area decreased from 2024 (22.8%) to 2025 (18.0%), and also decreased in both the fenced reference area (16.7% to 14.4%) and unfenced reference area (10.6% to 7.3%) from 2024 to 2025, respectively. The decrease in cover in all units was primarily driven by diminished growing season precipitation.

Throughout the project area, a total of 19 plant taxa were encountered by sampling metrics within the reclaimed areas (**Table 5-1**) including six grasses, four forbs, two shrubs, and one sub-shrub. The fenced reference area exhibited 13 encountered species including six grasses, one forb, one shrub, two sub-shrubs, two succulents, and one tree. The unfenced reference area exhibited 9 encountered species including five grasses, two forbs, one shrub, and one succulent.

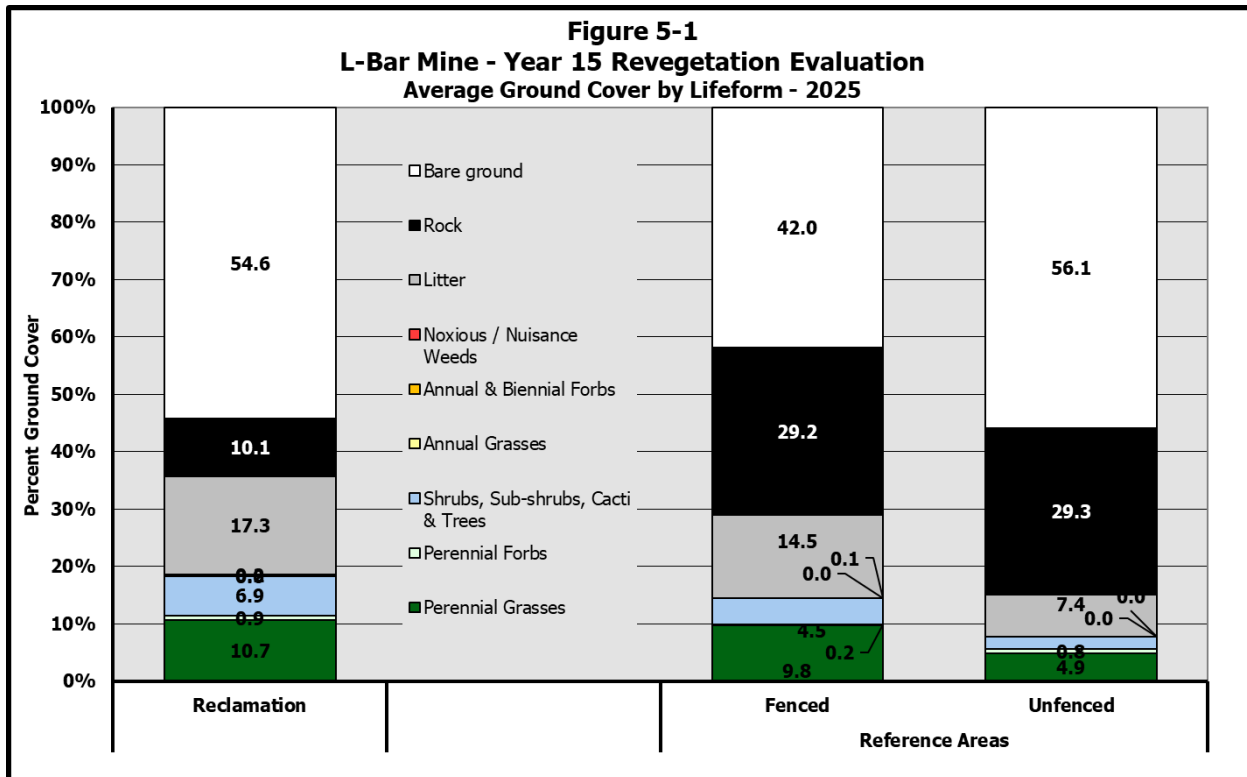


Table 5-1 Average Cover Summary 2025

Percent Ground Cover Based on Point-Intercept Sampling

Area —>		Reclamation	Reference Areas		
			Fenced	Unfenced	
Grasses					
P	<i>Bouteloua curtipendula</i>	Sideoats Grama	-	0.3	-
P	<i>Bouteloua gracilis</i>	Blue Grama	0.1	0.9	0.3
P	<i>Chloris virgata</i>	Windmill Grass	0.2	0.4	-
P	<i>Hilaria jamesii</i>	Galleta	6.2	4.4	3.0
P	<i>Panicum sp.</i>	Panicgrass	2.5	1.9	0.2
P	<i>Sporobolus airoides</i>	Alkali Sacaton	1.4	2.1	1.4
P	<i>Sporobolus cryptandrus</i>	Sand Dropseed	0.4	-	0.1
Forbs					
N	<i>Bassia scoparia</i>	Burningbush	0.0	-	-
N	<i>Chenopodium album</i>	Goosefoot	0.0	0.1	-
P	<i>Heliomerus multiflora</i>	Showy Goldeneye	-	-	0.1
N	<i>Salsola tragus</i>	Russian thistle	0.2	-	-
P	<i>Sphaeralcea grossulariifolia</i>	Gooseberryleaf Globemallow	0.3	-	0.2
Shrubs, Sub-shrubs, Cacti & Trees					
P	<i>Atriplex canescens</i>	Fourwing Saltbush	6.7	0.9	0.3
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed	0.1	0.1	-
P	<i>Juniperus osteosperma</i>	Utah Juniper	-	2.1	-
P	<i>Krascheninnikovia lanata</i>	Winterfat	-	1.1	-
P	<i>Lycium pallidum</i>	Pale Wolfberry	0.2	-	-
P	<i>Opuntia polyacantha</i>	Plains Prickly Pear	-	0.4	1.8
P	<i>Yucca glauca</i>	Yucca	-	0.1	-
			Mean		
Total Plant Cover			18.0	14.4	7.3
Rock			10.1	29.2	29.3
Litter			17.3	14.5	7.4
Bare ground			54.6	42.0	56.1
Total Desirable Vegetative Cover			17.8	14.3	7.3
Total Perennial Cover			17.8	14.3	7.3
Summary by Lifeform:					
Perennial Grasses			10.7	9.8	4.9
Annual Grasses			0.0	0.0	0.0
Perennial Forbs			0.3	0.0	0.3
Annual & Biennial Forbs			0.0	0.0	0.0
Noxious / Nuisance Weeds			0.2	0.1	0.0
Shrubs, Sub-shrubs, Cacti & Trees			6.9	4.5	2.1
Diversity (Number of Species with ≥1% Average Cover):					
Number of Important Species =			4	5	3
Sample Adequacy Calculations:					
Mean =			18.0	14.4	7.3
Variance =			102.2	21.6	27.5
n =			40	20	20
n _{min} =			53.5	18.5	92.1

P=Perennial, A=Annual or Biennial, N=Nuisance, Bold= >1% Average Cover

Table 5-2 and **Figure 5-2** present the results from woody plant density sampling on the reclamation and the reference areas in 2025. There were three shrubs, one sub-shrub, three succulents, and one tree encountered on the reclamation during 2025 sampling. The fenced reference area exhibited one shrub, three sub-shrubs, three succulents, and one tree while the unfenced reference area exhibited one shrub, one sub-shrub, one succulent, and one tree. As stated in *Closeout/Mitigation Plan, JJ No. 1/L-Bar Mine* (INTERA, 2008), sub-shrubs and cacti do not contribute to the woody plant density success comparison.

Table 5-2 Summary of Woody Plant Density 2025					
			Woody Plants Per Acre		
Life-form	Scientific Name	Common Name	Reclamation	Reference Areas	
				Fenced	Unfenced
S	<i>Atriplex canescens</i>	Fourwing Saltbush	916.6	230.7	66.8
S	<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush	2.0	-	-
Su	<i>Cylindropuntia imbricata</i>	Tree Cholla	1.0	12.1	-
SS	<i>Eriogonum leptophyllum</i>	Slender Leaf Buckwheat	-	20.2	-
SS	<i>Gutierrezia sarothrae</i>	Snakeweed	128.5	48.6	111.3
T	<i>Juniperus osteosperma</i>	Utah Juniper	4.0	76.9	2.0
SS	<i>Krascheninnikovia lanata</i>	Winterfat	-	119.4	-
S	<i>Lycium pallidum</i>	Pale Wolfberry	2.0	-	-
Su	<i>Opuntia polyacantha</i>	Plains Pricklypear	5.0	46.5	137.6
Su	<i>Yucca glauca</i>	Yucca	2.0	36.4	-
Lifeform			Shrub (S)	920.7	66.8
			Sub-shrub (SS)	128.5	111.3
			Succulent (Su)	8.0	137.6
			Tree (T)	4.0	2.0
Woody Plants Per Acre			1061.2	590.8	317.7

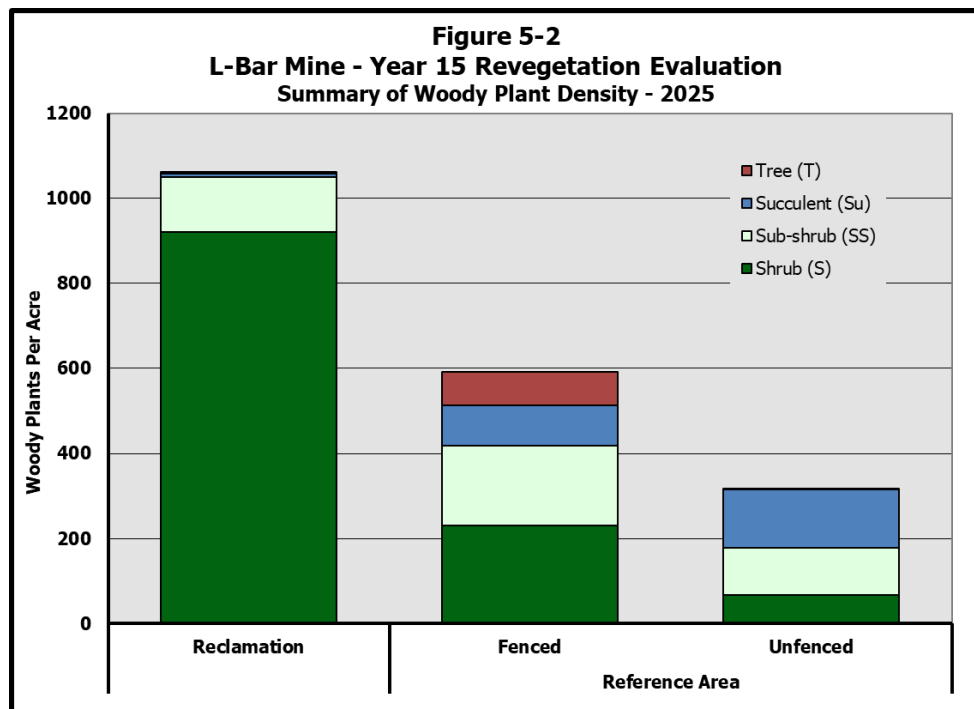


Figure 5-3 presents the perennial vegetation cover from Year 6 (2016), Year 9 (2019), Year 11 (2021), Year 12 (2022), Year 13 (2023), Year 14 (2024), and Year 15 (2025) for both the reclamation and fenced reference area. In Year 15, perennial cover diminished slightly, while perennial cover in the fenced reference area trended lower than average.

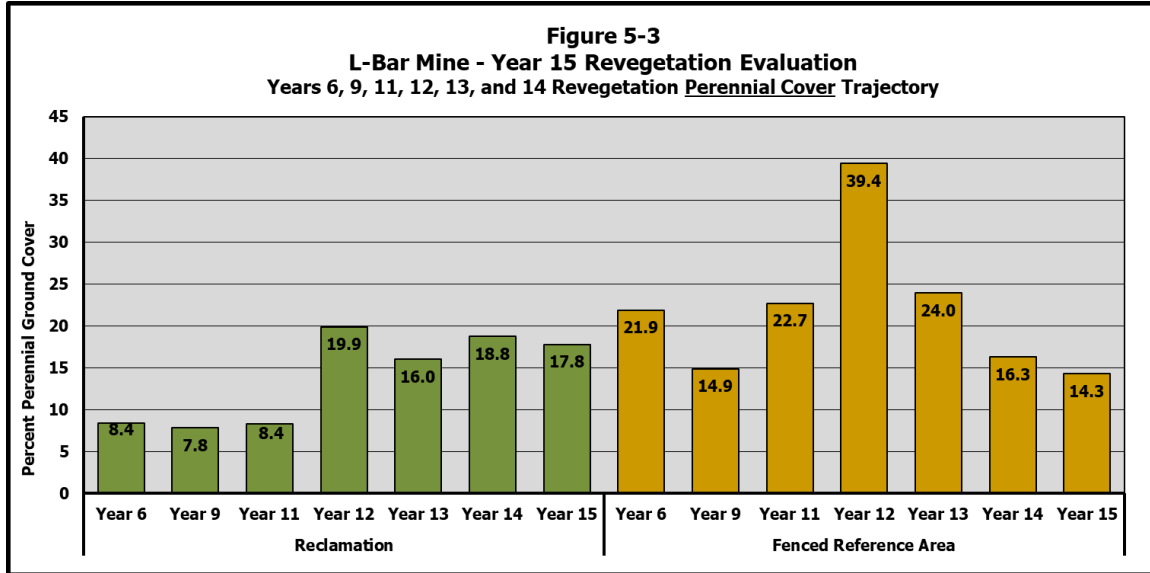
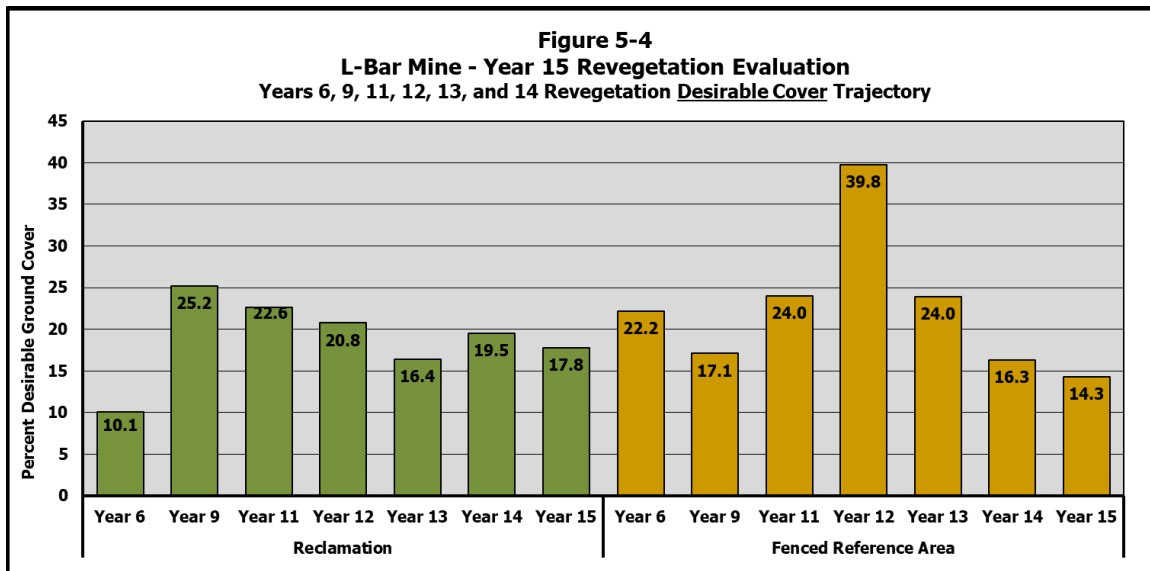


Figure 5-4 presents the desirable vegetation cover from Year 6 (2016), Year 9 (2019), Year 11 (2021), Year 12 (2022), Year 13 (2023), Year 14 (2024), and Year 15 (2025) for both the reclamation and fenced reference area. In the reclamation area, desirable cover has remained generally stable since 2019 and showed a small decrease in 2025. Within the fenced reference area, desirable cover mirrors the same pattern of perennial cover, which trended below average in 2025.



5.1 Reclamation Area

Within the reclamation areas, 40 sample sites with co-located ground cover transects and woody plant density belts were evaluated during the Year 15 revegetation evaluation. Ground cover in the reclamation consisted of 18.0% live vegetation, 10.1% rock, 17.3% litter, and bare ground exposure of 54.6% (**Table 5-1**). Perennial cover across the reclamation unit averaged 17.8%, whereas annual and biennial cover averaged 0.2% (exclusive of noxious and nuisance weeds). Desirable cover consisted of 17.8% live vegetation. Dominant taxa were fourwing saltbush (*Atriplex canescens*) and galleta (*Hilaria jamesii*) with 6.7% and 6.2% cover, respectively. The reclamation area exhibited four important species ($\geq 1\%$ average cover), comprised of three grasses and one shrub. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the reclamation unit was 53.5 (**Table 5-1**). Woody plant density averaged 1061.2 stems per acre with fourwing saltbush and snakeweed (*Gutierrezia sarothrae*) as the dominant species, comprising 916.6 and 128.5 stems per acre, respectively (**Table 5-2**). Full shrubs and trees account for 924.7 stems per acre.

5.2 Fenced Reference Area

Within the fenced reference area, 20 sample sites with co-located ground cover transects and woody density belts were evaluated during the Year 15 revegetation evaluation. Ground cover on the fenced reference area consisted of 14.4% live vegetation, 29.2% rock, 14.5% litter, and bare ground exposure of 42.0% (**Table 5-1**). Perennial cover across the unit averaged 14.3%, whereas annual and biennial cover averaged 0.1% (exclusive of noxious and nuisance weeds). Desirable cover consisted of 14.3% live vegetation. Dominant taxa were galleta, alkali sacaton (*Sporobolus airoides*), and Utah Juniper (*Juniperus osteosperma*) with 4.4%, 2.1%, and 2.1% cover, respectively. The fenced reference area exhibited five important species ($\geq 1\%$ average cover), with three perennial grasses, one sub-shrub, and one tree. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the fenced reference area was 18.5 (**Table 5-1**). Woody plant density averaged 590.8 stems per acre with the dominant species consisting of fourwing saltbush and winterfat (*Krascheninnikovia lanata*), comprising 230.7 and 119.4 stems per acre, respectively (**Table 5-2**). Full shrubs and trees account for 307.6 stems per acre.

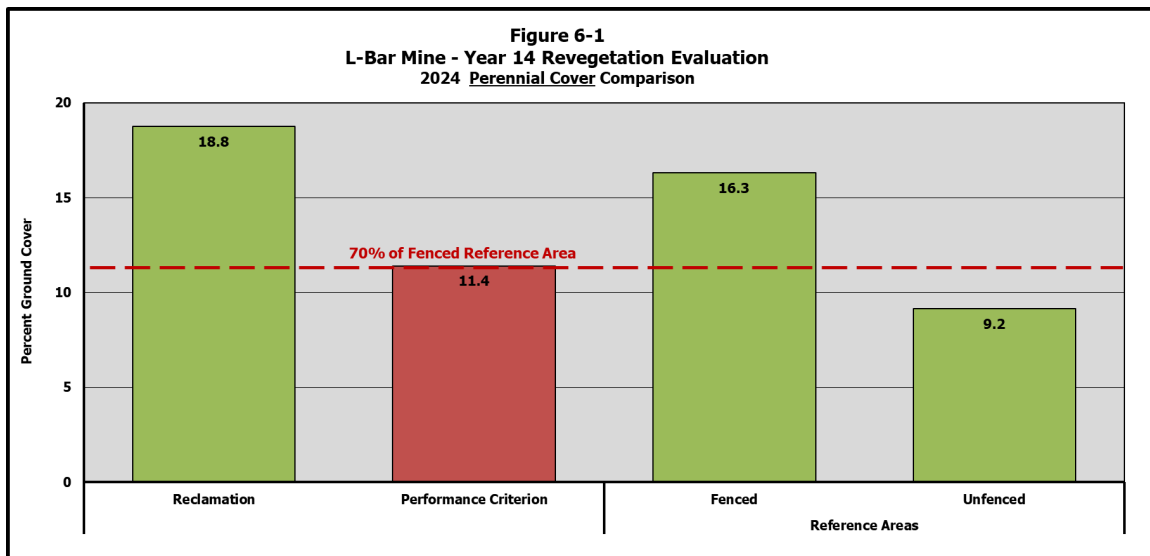
5.3 Unfenced Referenced Area

Within the unfenced reference area 20 sample sites with co-located ground cover transects and woody density belts were evaluated during the Year 15 revegetation evaluation. Ground cover on the unfenced reference area consisted of 7.3% live vegetation, 29.3% rock, 7.4% litter, and bare ground exposure of 56.1% (**Table 5-1**). Perennial cover across the unit averaged 7.3%, whereas annual and biennial cover averaged 0.0%. Desirable cover consisted of 7.3% live vegetation. Dominant taxa were galleta, Plains Prickly Pear (*Opuntia polyacantha*), and alkali sacaton with 3.0%, 1.8% and 1.4% cover, respectively. The unfenced reference area exhibited three important species ($\geq 1\%$ average cover), comprised of two grasses and one succulent. The minimum number of samples needed to demonstrate sample adequacy for ground cover on the reclamation unit was 92.1 (**Table 5-1**). Woody plant density averaged 317.7 stems per acre with pricklypear and snakeweed as the dominant species, comprising 137.6 and 111.3 stems per acre, respectively (**Table 5-2**). Full shrubs and trees account for 68.8 stems per acre.

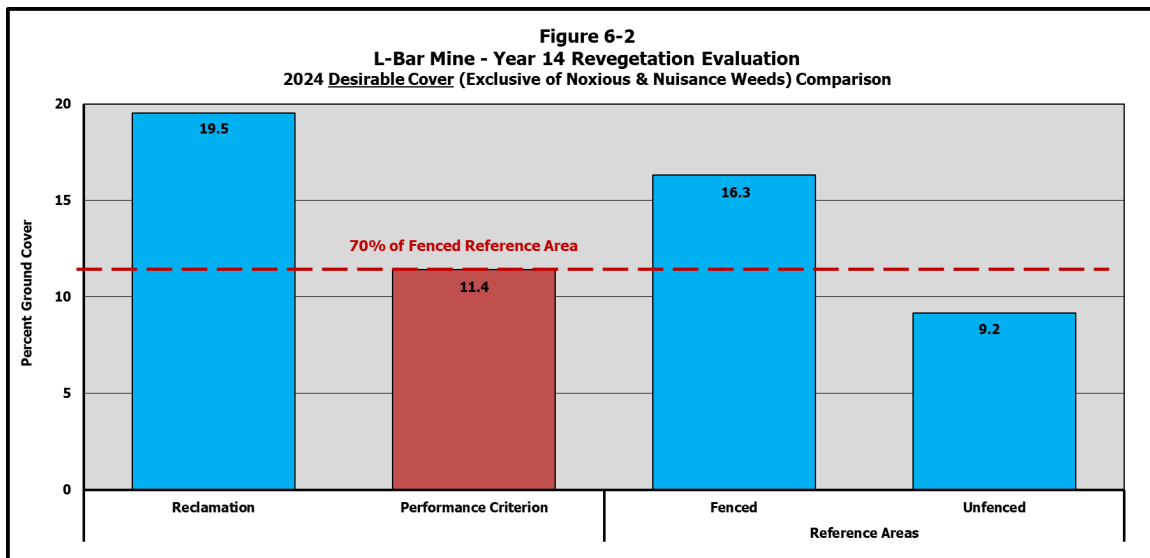
6.0 Conclusions

6.1 Year 14 - 2024

The perennial vegetative cover on the reclamation compared to the fenced and unfenced reference area is shown in **Figure 6-1**. The reclamation (18.8% perennial cover) exceeds the vegetation cover success criteria of 11.4% perennial cover. The 2024 performance criterion of 11.4% is based on 70% of the fenced area perennial cover of 16.3%. Statistical success is demonstrated using a reverse null, one sample t-test.



The desirable vegetation cover on the reclamation compared to the fenced and unfenced reference areas is shown in **Figure 6-2**. The reclamation (19.5% desirable cover) exceeds the proposed performance criterion of 11.4%; based on 70% of the desirable cover in the fenced reference area. Statistical success is demonstrated using a reverse null, one sample t-test.



The woody plant density from the reclamation unit compared with the fenced and unfenced reference areas is shown on **Figure 6-3**, excluding non-qualifying sub-shrubs and succulents that do not contribute to the success standard. The qualifying woody plant density on the reclamation (1053 full shrubs and trees per acre) well exceeds the success criterion for 2024 of 115 full shrubs and trees per acre (60% of the 192 full shrubs and trees per acre found on the fenced reference area). A mathematical comparison is suitable to demonstrate success.

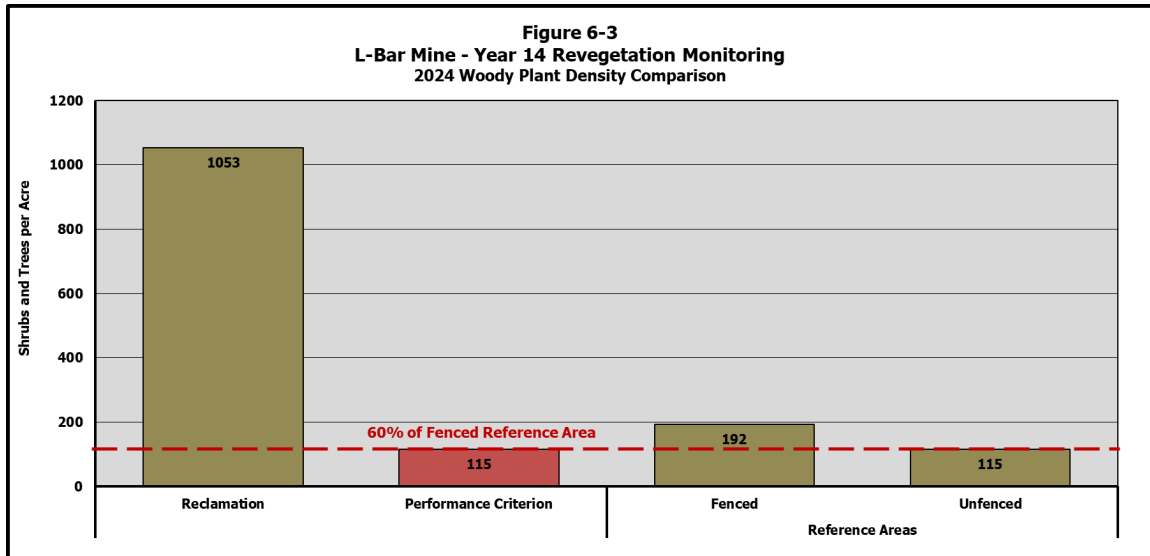
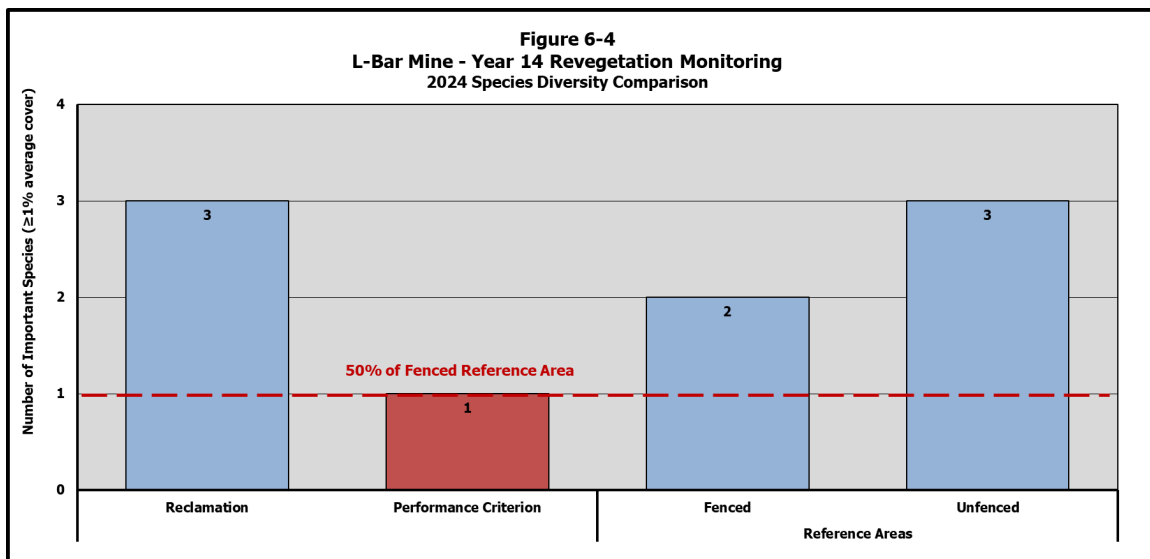


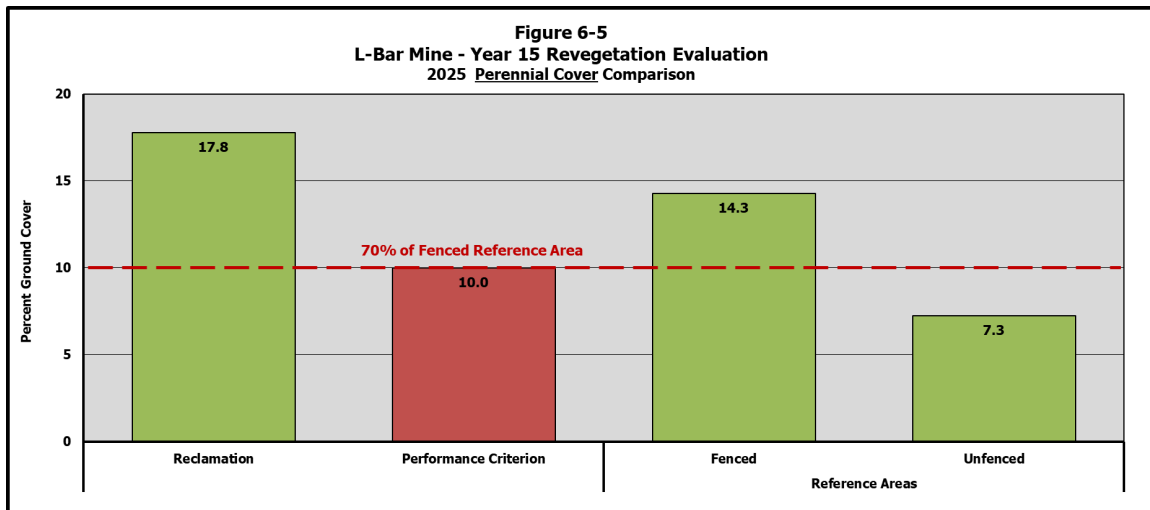
Figure 6-4 displays the species diversity results from the reclamation compared with the fenced and unfenced reference areas. The number of important species ($\geq 1\%$ average cover) on the reclamation was three, comprised of two grasses and one shrub. Year 14 results from the reclamation exceed the required one important species, based on 50% of the two important species from the fenced reference area. A mathematical comparison is suitable to demonstrate success.



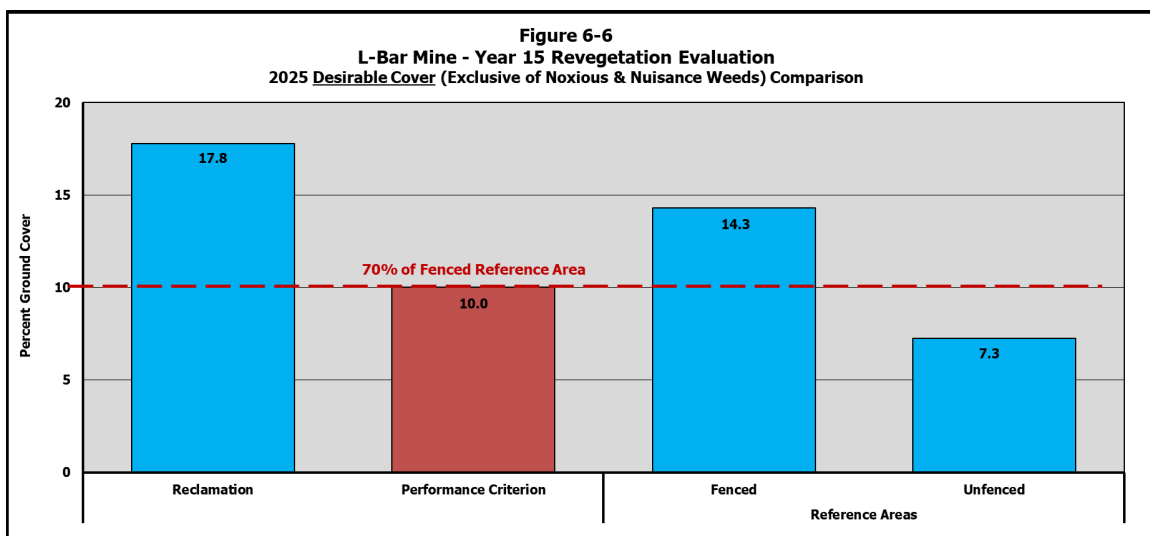
The vegetation in the reclamation area exceeded all four applicable standards in Year 14 including perennial cover, desirable cover, woody plant density, and species diversity.

6.2 Year 15 - 2025

The perennial vegetative cover on the reclamation compared to the fenced and unfenced reference area is shown in **Figure 6-5**. The reclamation (17.8% perennial cover) exceeds the vegetation cover success criteria of 10.0% perennial cover. The 2025 performance criterion of 10.0% is based on 70% of the fenced area perennial cover of 14.3%. Statistical success is demonstrated using a reverse null, one sample t-test.



The desirable vegetation cover on the reclamation compared to the fenced and unfenced reference areas is shown in **Figure 6-6**. The reclamation (17.8% desirable cover) exceeds the proposed performance criterion of 10.0%; based on 70% of the desirable cover in the fenced reference area. Statistical success is demonstrated using a reverse null, one sample t-test.



The woody plant density from the reclamation unit compared with the fenced and unfenced reference areas is shown on **Figure 6-7**, excluding non-qualifying sub-shrubs and succulents that do not contribute to the success standard. The qualifying woody plant density on the reclamation (925 full shrubs and trees per acre) well exceeds the success criterion for 2025 of 185 full shrubs and trees per acre (60% of the 308 full shrubs and trees per acre found on the fenced reference area). A mathematical comparison is suitable to demonstrate success.

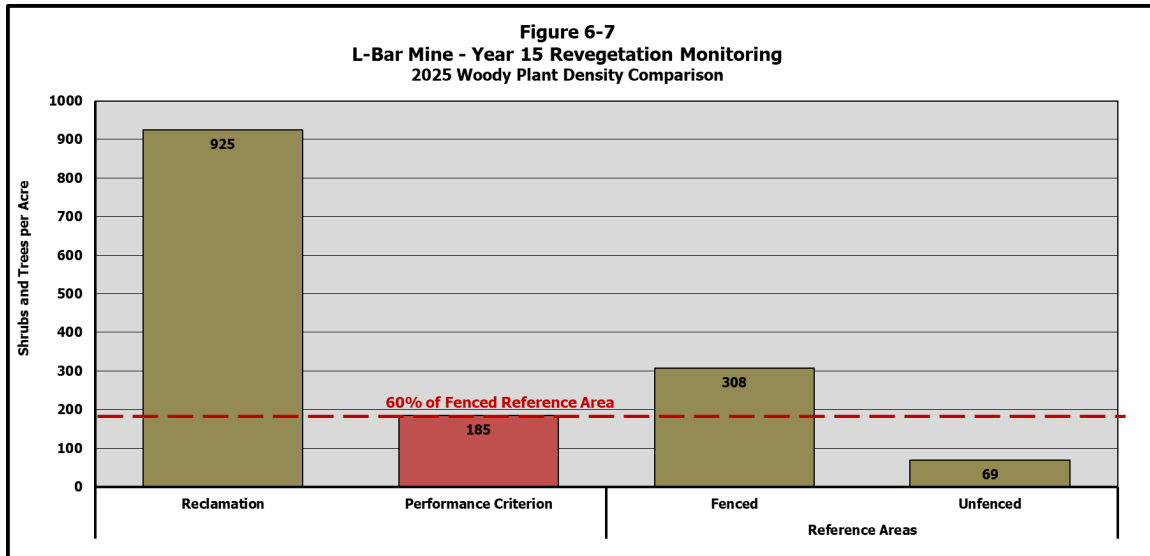
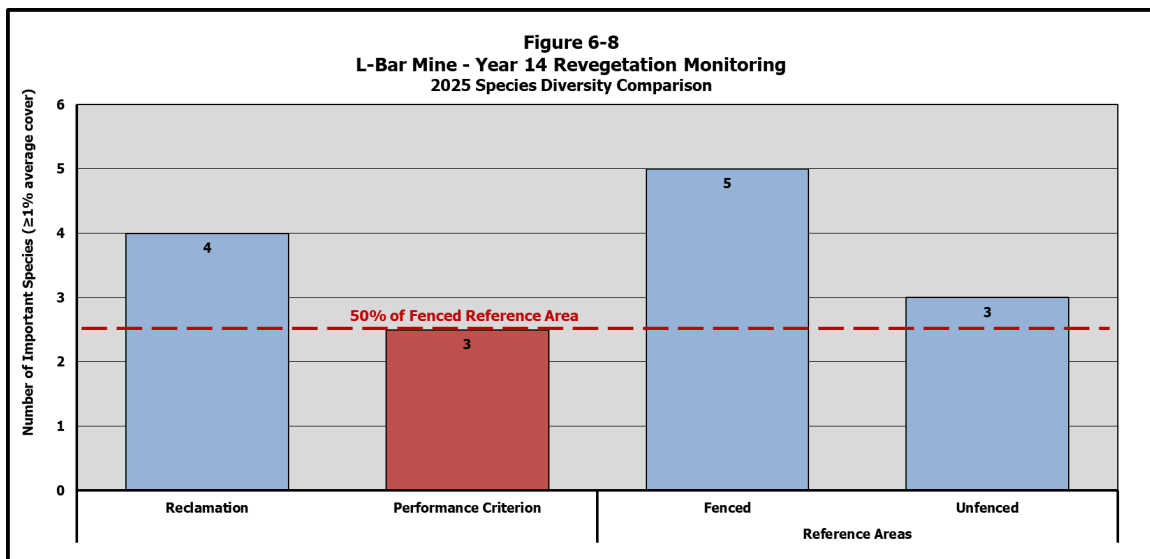


Figure 6-8 displays the species diversity results from the reclamation compared with the fenced and unfenced reference areas. The number of important species ($\geq 1\%$ average cover) on the reclamation was four, comprised of three grasses and one shrub. Year 15 results from the reclamation exceed the required three important species, based on 50% of the five important species from the fenced reference area. A mathematical comparison is suitable to demonstrate success.



The vegetation in the reclamation area exceeded all four applicable standards in Year 15 including perennial cover, desirable cover, woody plant density, and species diversity.

7.0 Recommendation

Since the reclamation areas pass all four applicable standards for two consecutive years, Year 14 in 2024 and Year 15 in 2025, it is recommended that New Mexico Mining and Minerals Division release the bond related to revegetation performance of the L-Bar / JJ Mine #1. Post mining land use may shift, at the discretion of the CLG.

8.0 References

- EMNRD, 2023. Modification 23-1 to Permit No. CI007RE, Approval of Revegetation Success Permit Modification for JJ No. 1 Mine, SOHIO Western Mining Company, Permit No. CI007RE, JJ No. 1 Mine, Cibola County, New Mexico. October 10, 2023.
- INTERA, 2008. Closeout/Mitigation Plan, JJ No. 1/L-Bar Mine, Cibola County, New Mexico. Prepared for Sohio Western Mining Company c/o Rio Tinto Energy America. October 2008.
- _____, 2011. JJ No. 1/L-Bar Mine, Closeout/Mitigation As-Built Report, Cibola County, New Mexico. Prepared for Rio Tinto. July 2011.
- _____, 2016a. Methodology for the Determination of Revegetation Success for the JJ No. 1/L-Bar Mine. Prepared for SOHIO Western Mining Company (Rio Tinto). June 12, 2016.
- _____, 2016b. Proposed Methodology for the 6-Year Quantitative Survey for Determination of Revegetation Success, JJ No. 1/L-Bar Mine; SOHIO Western Mining Company (Rio Tinto), Permit No. C1007RE. Letter to Mining and Minerals Division. July 22, 2016.
- _____, 2017. 2016 Year Six Revegetation Evaluation Project, JJ No. 1/L-Bar Mine, SOHIO Western Mining Company c/o Rio Tinto. March 2017.
- _____, 2018. Amendment to Closeout/Mitigation Plan, Methodology for Determination of Revegetation Success, JJ No. 1/L-Bar Mine, Cibola County, New Mexico. Prepared for Rio Tinto. February 2018.
- USDA, NRCS. 2016. The PLANTS Database (<http://plants.usda.gov>, 21 December 2016). National Plant Data Team, Greensboro, NC 27401-4901 USA.

APPENDIX A

YEAR 14 REVEGETATION EVALUATION DATA

L-Bar Mine - Vegetation Cover - 2024																																																			
Reclamation																																																			
																																								Percent Ground Cover Based on Point-Intercept Sampling											
Transect No.→	1	2	3	4	5	6	7	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	Average Cover	Frequency									
Grasses																																																			
P <i>Bouteloua curtipendula</i>																								1																	0.0	3									
P <i>Elymus elymoides</i>																								3																	0.1	5									
P <i>Hilaria jamesii</i>																																									8.8	80									
P <i>Munroa squarrosa</i>																																									0.0	3									
P <i>Panicum sp.</i>																																									0.2	8									
P <i>Pascopyrum smithii</i>																																									0.4	10									
P <i>Sporobolus airoides</i>																																									1.4	28									
P <i>Sporobolus cryptandrus</i>																																									0.7	13									
Forbs																																																			
A <i>Atriplex argentea</i>																																									0.8	45									
N <i>Bassia scoparia</i>																																									0.2	5									
P <i>Helomerus multiflora</i>																																									0.3	13									
N <i>Salsola tragus</i>																																									3.1	65									
P <i>Sphaeralcea ambigua</i>																																									0.6	23									
Shrubs, Sub-shrubs, Cacti & Trees																																																			
P <i>Atriplex canescens</i>																																									5.8	83									
P <i>Gutierrezia sarothrae</i>																																									0.3	15									
P <i>Lycium pallidum</i>																																									0.1	3									
																																								Mean											
Total Plant Cover	30	28	26	47	21	16	38	20	13	14	44	48	12	7	17	26	13	23	8	4	34	14	40	30	14	27	10	3	18	23	36	25	22	17	25	21	17	17	23	41	22.8										
Rock	4	5	1	1	15	4	0	3	0	3	0	3	2	0	4	7	3	9	8	6	9	6	0	2	19	22	3	3	18	0	28	1	9	28	4	11	2	5	8	11	6.7										
Litter	16	6	49	26	20	23	22	12	20	18	9	11	17	8	23	34	12	26	4	4	21	21	14	13	9	19	4	19	11	40	16	24	30	17	30	39	37	16	28	18	19.7										
Bare ground	50	61	24	26	44	57	40	65	67	65	47	38	69	85	56	33	72	42	80	86	36	59	46	55	58	32	83	75	53	37	20	50	39	38	41	29	44	62	41	30	50.9										
Total Desirable Vegetative Cover	30	28	26	47	21	16	38	20	13	14	44	48	12	7	17	26	13	23	8	4	34	14	40	30	14	27	10	3	18	23	36	25	22	17	25	21	17	17	23	41	22.8										
Total Perennial Cover	20	26	24	46	20	2	38	8	1	9	44	47	10	2	14	2	5	16	8	4	34	12	40	19	14	26	9	0	16	23	31	20	22	17	21	15	14	11	19	41	18.8										
Sample Adequacy Calculations		Plant Cover Mean = 22.80										t= 1.30										Variance = 131.91										n = 40										n _{min} = 43.12									
Diversity		Number of Species with ≥1% Average Cover = 4																																																	

P=Perennial, A=Annual or Biennial, N=Nuisance

L-Bar Mine - Vegetation Cover - 2024																								
Fenced Reference Area																								
Percent Ground Cover Based on Point-Intercept Sampling																								
Transect No.——>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Cover	Frequency	
Grasses																								
P	<i>Bouteloua curtipendula</i>	Sideoats Grama			5													3				0.3	5	
P	<i>Bouteloua gracilis</i>	Blue Grama			2	1												3				0.3	15	
P	<i>Elymus elymoides</i>	Squirreltail												1		3						0.2	10	
P	<i>Hilaria jamesii</i>	Galleta		15	8	5	11	14	8		9	28	17		3	3	13	24	12	14	25	9	10.9	85
P	<i>Panicum sp.</i>	Panicgrass			2				3							3						0.4	15	
P	<i>Sporobolus airoides</i>	Alkali Sacaton		2	16	5	6		2				1		3	2	6	5	12		2		3.1	60
Forbs																								
N	<i>Bassia scoparia</i>	Burningbush						1			2				1							0.1	5	
N	<i>Salsola tragus</i>	Russian thistle														3						0.3	15	
P	<i>Sphaeralcea ambigua</i>	Desert Globemallow																		3		0.2	5	
Shrubs, Sub-shrubs, Cacti & Trees																								
P	<i>Atriplex canescens</i>	Fourwing Saltbush	4			1							2				1				2	0.4	20	
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed															1					0.1	5	
P	<i>Juniperus osteosperma</i>	Utah Juniper																	6			0.3	5	
P	<i>Lycium pallidum</i>	Pale Wolfberry					2															0.1	5	
P	<i>Yucca glauca</i>	Plains Pricklypear	2																			0.1	5	
																						Mean		
Total Plant Cover		6	17	24	19	19	17	10	3	11	28	18	2	8	8	25	30	27	20	30	11	16.7		
Rock		27	27	15	29	16	1	1	32	21	44	35	17	27	22	31	1	19	41	28	9	22.2		
Litter		3	10	18	6	26	8	11	34	9	6	8	60	55	6	33	21	23	15	31	8	19.6		
Bare ground		64	46	43	46	39	74	78	31	59	22	39	21	10	64	11	48	31	24	11	72	41.7		
Total Desirable Vegetative Cover																						16.3		
Total Perennial Cover																						16.3		
Sample Adequacy Calculations		Plant Cover Mean = 16.65 t= 1.33 Variance = 79.61 n = 20 n _{min} = 50.62																						
Diversity		Number of Species with ≥1% Average Cover = 2																						

P=Perennial, A=Annual or Biennial, N=Nuisance

L-Bar Mine - Vegetation Cover - 2024																								
Unfenced Reference Area																								
Percent Ground Cover Based on Point-Intercept Sampling																								
Transect No.——>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Cover	Frequency	
Grasses																								
P	<i>Hilaria jamesii</i>	Galleta	3	5	8	1	2		5		4	4	3	9			2	7		10	6		3.5	70
P	<i>Sporobolus airoides</i>	Alkali Sacaton		3	9		2	3	2		2		2		6	3	6	12	6	9	4	4	3.7	75
Forbs																								
P	<i>Helioeris multiflora</i>	Showy Goldeneye						1			1	3		1	2		1						0.5	35
N	<i>Salsola tragus</i>	Russian Thistle						4	1	4		4		1	2	6	2		1			4	1.5	50
P	<i>Sphaeralcea ambigua</i>	Desert Globemallow		1				1		2		1											0.3	20
Shrubs, Sub-shrubs, Cacti & Trees																								
P	<i>Atriplex canescens</i>	Fourwing Saltbush								2													0.1	5
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed												2									0.1	5
P	<i>Opuntia sp.</i>	Pricklypear			1	3					5	10	3										1.1	25
																						Mean		
Total Plant Cover		3	9	18	4	4	9	8	8	12	22	8	11	12	9	11	19	8	19	10	8	10.6		
Rock		20	27	33	25	30	31	19	28	27	43	34	48	41	3	30	24	6	37	16	15	26.9		
Litter		7	14	13	8	14	11	16	24	17	12	6	17	16	10	23	17	13	20	9	12	14.0		
Bare ground		70	50	36	63	52	49	57	40	44	23	52	24	31	78	36	40	73	24	65	65	48.6		
Total Desirable Vegetative Cover		3	9	18	4	4	9	8	8	12	22	8	11	12	9	11	19	8	19	10	8	10.6		
Total Perennial Cover		3	9	18	4	4	5	7	4	12	18	8	10	10	3	9	19	7	19	10	4	9.2		
Sample Adequacy Calculations		Plant Cover Mean = 10.60 t= 1.33 Variance = 27.20										n = 20					n _{min} = 42.68							
Diversity		Number of Species with ≥1% Average Cover = 4																						

P=Perennial, A=Annual or Biennial, N=Nuisance

L-Bar Mine - Woody Plant Density - 2024																																																			
Reclamation																																																			
Sampling by 4m x 25m Belt Transects																																																			
Transect No.→	1	2	3	4	5	6	7	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	Average Per Belt	Per Acre									
Woody Plant Species																																																			
Atriplex canescens	Fourwing Saltbush	19	8	17	52	34	39	145	7	14	13	19	46	6	10	15	28	16	37	9	10	25	18	21	28	12	13	7	3	36	10	10	44	4	17	23	18	44	71	54	32	25.9	1046.1								
Atriplex confertifolia	Shadscale				1										2																											0.1	3.0								
Chrysothamnus nauseosus	Rubber Rabbitbrush					2																																				0.1	2.0								
Eriogonum sp.	Buckwheat					5																																				0.1	5.1								
Gutierrezia sarothrae	Snakeweed					2				1			1														2											2		3	4	0.5	19.2								
Lycium pallidum	Pale Wolfberry																					2																				0.1	2.0								
Opuntia sp.	Pricklypear					1				2																																0.1	3.0								
Total		19	8	17	53	44	39	145	7	17	13	19	47	6	12	15	28	16	37	9	10	27	18	21	28	14	13	7	3	#	11	12	44	5	17	23	18	46	71	57	36	26.7	1080.5								
Sample Adequacy Calculations		Mean = 26.70										Variance = ###										t= 1.30										n = 40										n _{min} = 150.54									

L-Bar Mine - Woody Plant Density - 2024																											
Fenced Reference Area																											
																				Sampling by 4m x 25m Belt Transects							
Transect No.→		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Per Belt		Per Acre			
Woody Plant Species																											
Artemisia tridentata wyo.	Big Sagebrush						2																0.1	4.0			
Atriplex canescens	Fourwing Saltbush					15	5	6		3		4	1	2	6		10	3	5	2			3.1	125.5			
Gutierrezia sarothrae	Snakeweed				8	3					1									3	19		1.7	68.8			
Juniperus osteosperma	Utah Juniper		1	1	3													2	2				0.5	18.2			
Lycium pallidum	Pale Wolfberry							22															1.1	44.5			
Opuntia sp.	Pricklypear			8	1		1											3					0.7	26.3			
Yucca glauca	Yucca		5		3																2		0.5	20.2			
Total		0	6	9	15	18	8	28	0	3	1	4	1	2	6	0	10	8	7	5	21	7.6		307.6			
Sample Adequacy Calculations		Mean = 7.6						Variance = 58.1						t= 1.3						n = 20						n _{min} = 177.5	

L-Bar Mine - Woody Plant Density - 2024																													
Unfenced Reference Area																													
Sampling by 4m x 25m Belt Transects																													
Transect No.→		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Per Belt		Per Acre					
Woody Plant Species																													
Atriplex canescens	Fourwing Saltbush							9	10	5	10	1	8	1		4			2	4	1		2.8	111.3					
Chrysothamnus viscidiflorus	Yellow Rabbitbrush				1																	0.1	2.0						
Gutierrezia sarothrae	Snakeweed	14	4					1						2		5				4		1.5	60.7						
Juniperus osteosperma	Utah Juniper			1																		0.1	2.0						
Opuntia sp.	Pricklypear			1	9	5	3	2	11	11	8	15	1							1		3.4	135.6						
Total		14	4	2	10	5	3	12	21	16	18	16	9	3	0	9	0	2	8	2	0	7.7	311.6						
Sample Adequacy Calculations		Mean = 7.7					Variance = 43.6					t= 1.3					n = 20					n_min = 129.6							

APPENDIX B

YEAR 15 REVEGETATION EVALUATION DATA

L-Bar Mine - Vegetation Cover - 2025																																														
Reclamation																																														
Percent Ground Cover Based on Point-Intercept Sampling																																														
Transect No.—→		1	2	3	4	5	6	7	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	Average Cover	Frequency			
Grasses																																														
P	<i>Bouteloua gracilis</i>	Blue Grama									1													2																		0.1	5			
P	<i>Chloris virgata</i>	Windmill Grass				1				2														3																		0.2	8			
P	<i>Hilaria jamesii</i>	Galleta		4		2	9	3	16	10			3	25	13	20	9	4			12			7	24	2	26		4	5	1			15	5	2	4	6			7	8		2	6.2	70
P	<i>Panicum sp.</i>	Panicgrass								5				12	2				4	7				6		4						3	6		2	33	11		2				2.5	33		
P	<i>Sporobolus airoides</i>	Alkali Sacaton		5			8							4																			6	11						13	1			1.4	23	
P	<i>Sporobolus cryptandrus</i>	Sand Dropseed								3		3		4										8	1						2	5												0.4	10	
Forbs																																														
N	<i>Bassia scoparia</i>	Burningbush																																										0.0	3	
N	<i>Chenopodium album</i>	Goosefoot											1																															0.0	3	
N	<i>Salsola tragus</i>	Russian thistle			1					1	3		1																																0.2	13
P	<i>Sphaeralcea grossulariifolia</i>	Gooseberryleaf Globemallow										1	2		1										1																				0.3	20
Shrubs, Sub-shrubs, Cacti & Trees																																														
P	<i>Atriplex canescens</i>	Fourwing Saltbush		17	7	21	2	8	2	4	4			3	2			5		1		7	6		2	4	1	20	8	18	10	1	4	3		4	17	18	10	22	18	12	6.7	80		
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed				1																																						0.1	5	
P	<i>Lycium pallidum</i>	Pale Wolfberry																																										0.2	3	
																																									Mean					
Total Plant Cover				26	8	24	20	11	18	16	9	4	7	32	35	22	10	9	9	7	13	5	14	30	8	38	13	5	26	11	23	20	35	9	5	38	22	17	21	30	31	18	22	18.0		
Rock				4	2	3	3	7	7	7	6	3	0	0	12	26	0	7	11	18	23	12	5	5	7	1	1	39	4	0	14	24	19	53	13	13	14	5	9	0	1	6	21	10.1		
Litter				21	36	26	23	16	16	29	3	16	7	28	8	6	12	12	19	11	21	9	12	41	11	28	9	4	20	30	28	8	4	0	26	12	28	14	17	24	13	26	16	17.3		
Bare ground				49	54	47	54	66	59	48	82	77	86	40	45	46	78	72	61	64	43	74	69	24	74	33	77	52	50	59	35	48	42	38	56	37	36	64	53	46	55	50	41	54.6		
Total Desirable Vegetative Cover				26	7	24	20	11	18	16	9	3	4	32	33	22	10	9	9	7	13	5	14	30	8	38	13	5	25	11	23	20	35	9	5	37	22	17	21	30	31	18	22	17.8		
Total Perennial Cover				26	7	24	20	11	18	16	9	3	4	32	33	22	10	9	9	7	13	5	14	30	8	38	13	5	25	11	23	20	35	9	5	37	22	17	21	30	31	18	22	17.8		
Sample Adequacy Calculations				Plant Cover Mean = 18.03										t = 1.30										Variance = 102.23										n = 40										n _{min} = 53.47		
Diversity				Number of Species with ≥1% Average Cover = 4																																										

P=Perennial, A=Annual or Biennial, N=Nuisance

L-Bar Mine - Vegetation Cover - 2025																												
Fenced Reference Area																												
																						Percent Ground Cover Based on Point-Intercept Sampling						
Transect No.——>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Cover	Frequency					
Grasses																												
P	<i>Bouteloua curtipendula</i>	Sideoats Grama								5												0.3	5					
P	<i>Bouteloua gracilis</i>	Blue Grama					2	4			2	4						1			4	0.9	30					
P	<i>Chloris virgata</i>	Windmill Grass		6												2						0.4	10					
P	<i>Hilaria jamesii</i>	Galleta	13	8	4	7	6		2	4		3			4			9	11	11	6	4.4	65					
P	<i>Panicum sp.</i>	Panicgrass			2				11				5	11		8						1.9	25					
P	<i>Sporobolus airoides</i>	Alkali Sacaton	1		8	1	2				7				4	2	11		5			2.1	45					
Forbs																												
N	<i>Chenopodium album</i>	Goosefoot			1																	0.1	5					
Shrubs, Sub-shrubs, Cacti & Trees																												
P	<i>Atriplex canescens</i>	Fourwing Saltbush				5					3				5		2	3				0.9	25					
P	<i>Gutierrezia sarothrae</i>	Broom Snakeweed									2											0.1	5					
P	<i>Juniperus osteosperma</i>	Utah Juniper		2		8				10	6	5		1				7		2		2.1	40					
P	<i>Krascheninnikovia lanata</i>	Winterfat					11	10														1.1	10					
P	<i>Opuntia polycantha</i>	Plains Prickly Pear			7																	0.4	5					
P	<i>Yucca glauca</i>	Yucca			1																	0.1	5					
																						Mean						
Total Plant Cover		14	10	26	19	13	13	16	11	19	20	12	5	12	13	12	13	20	16	13	10	14.4						
Rock		26	23	47	39	26	2	2	25	40	44	42	25	28	29	44	8	19	40	51	24	29.2						
Litter		13	24	15	10	20	5	13	16	10	15	7	19	13	8	17	20	43	11	5	6	14.5						
Bare ground		47	43	12	32	41	80	69	48	31	21	39	51	47	50	27	59	18	33	31	60	42.0						
Total Desirable Vegetative Cover		14	10	25	19	13	13	16	11	19	20	12	5	12	13	12	13	20	16	13	10	14.3						
Total Perennial Cover		14	10	25	19	13	13	16	11	19	20	12	5	12	13	12	13	20	16	13	10	14.3						
Sample Adequacy Calculations			Plant Cover Mean = 14.35 t= 1.33 Variance = 21.61 n = 20 n _{min} = 18.50																									
Diversity			Number of Species with ≥1% Average Cover = 5																									

P=Perennial, A=Annual or Biennial, N=Nuisance

L-Bar Mine - Vegetation Cover - 2025																									
Unfenced Reference Area																									
		Percent Ground Cover Based on Point-Intercept Sampling																							
Transect No.→		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Cover	Frequency		
Grasses																									
P	<i>Bouteloua gracilis</i>	Blue Grama			6																	0.3	5		
P	<i>Hilaria jamesii</i>	Galleta	1	2	3	2	1		2	1		4		4	9		6	5		11	6	2	3.0	75	
P	<i>Panicum sp.</i>	Panicgrass										2	2									0.2	10		
P	<i>Sporobolus airoides</i>	Alkali Sacaton					4			2				3	6		3	3		4	3	1.4	40		
P	<i>Sporobolus cryptandrus</i>	Sand Dropseed											1									0.1	5		
Forbs																									
P	<i>Heliomerus multiflora</i>	Showy Goldeneye														2						0.1	5		
P	<i>Sphaeralcea grossulariifolia</i>	Gooseberryleaf Globemallow		1			1						1									0.2	15		
Shrubs, Sub-shrubs, Cacti & Trees																									
P	<i>Atriplex canescens</i>	Fourwing Saltbush			1					3		2										0.3	15		
P	<i>Opuntia polyacantha</i>	Plains Pricklypear				3	5			13	3		12									1.8	25		
																						Mean			
Total Plant Cover		1	3	9	3	4	10	2	1	18	7	4	20	12	6	8	8	3	11	10	5	7.3			
Rock		29	24	64	34	39	34	30	25	28	38	25	25	29	20	30	28	21	37	17	9	29.3			
Litter		9	13	12	5	3	13	5	12	13	3	8	8	6	3	8	2	7	6	7	4	7.4			
Bare ground		61	60	15	58	54	43	63	62	41	52	63	47	53	71	54	62	69	46	66	82	56.1			
Total Desirable Vegetative Cover		1	3	9	3	4	10	2	1	18	7	4	20	12	6	8	8	3	11	10	5	7.3			
Total Perennial Cover		1	3	9	3	4	10	2	1	18	7	4	20	12	6	8	8	3	11	10	5	7.3			
Sample Adequacy Calculations			Plant Cover Mean = 7.25										t = 1.33			Variance = 27.46				n = 20				n _{min} = 92.10	
Diversity			Number of Species with ≥1% Average Cover = 3																						

L-Bar Mine - Woody Plant Density - 2025

Reclamation

		Sampling by 4m x 25m Belt Transects																																										
Transect No.→		1	2	3	4	5	6	7	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	Average Per Belt	Per Acre	
Woody Plant Species																																												
<i>Atriplex canescens</i>	Fourwing Saltbush	78	38	27	24	51	15	3	1	18	15	15	48	7	7	16	4	2	27	15	22	14	26	39	55	30	21	16	24	15	24	28	38			28	12	39		42	23	22.7	917.6	
<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush																															2											0.1	2.0
<i>Cylindropuntia imbricata</i>	Tree Cholla		1																																							0.0	1.0	
<i>Gutierrezia sarothrae</i>	Snakeweed	12		5																1	1			1	2	9					1	15	9				2	52	16	1	3.2	128.5		
<i>Juniperus osteosperma</i>	Utah Juniper		2																						1									1							0.1	4.0		
<i>Lycium pallidum</i>	Pale Wolfberry																																					2			0.1	2.0		
<i>Opuntia polyacantha</i>	Plains Pricklypear									1				1													1													1		0.1	5.1	
<i>Yucca glauca</i>	Yucca		1																																						1		0.1	2.0
Total		90	39	35	24	51	15	3	1	19	15	15	48	8	7	16	4	2	27	15	23	15	26	40	58	40	21	16	24	##	25	47	48	0	0	28	12	41	52	61	24	26.3	1062.3	
Sample Adequacy Calculations		Mean = 26.25 Variance = 394.71 t= 1.30 n = 40 n _{min} = 97.35																																										

L-Bar Mine - Woody Plant Density - 2025

Fenced Reference Area

		Sampling by 4m x 25m Belt Transects																					
Transect No.——>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Per Belt	Per Acre
Woody Plant Species																							
<i>Atriplex canescens</i>	Fourwing Saltbush	11		1		28		4			1				13	7	12	16	2	18	1	5.7	230.7
<i>Cylindropuntia imbricata</i>	Tree Cholla	2						1											3			0.3	12.1
<i>Eriogonum leptophyllum</i>	Slender Leaf Buckwheat																			10		0.5	20.2
<i>Gutierrezia sarothrae</i>	Snakeweed	9	2								1			1		1				10		1.2	48.6
<i>Juniperus osteosperma</i>	Utah Juniper	3	5	3	3					6	8	3						4		2	1	1.9	76.9
<i>Krascheninnikovia lanata</i>	Winterfat						38	21														3.0	119.4
<i>Opuntia polyacantha</i>	Plains Pricklypear			2	16			1				1						3				1.2	46.5
<i>Yucca glauca</i>	Yucca		11	2	3													1		1		0.9	36.4
Total		25	18	8	22	28	38	27	0	6	10	4	0	1	13	8	12	24	5	41	2	14.6	590.8
Sample Adequacy Calculations		Mean = 14.6				Variance = 158.3				t = 1.3				n = 20				n _{min} = 130.9					

L-Bar Mine - Woody Plant Density - 2025

Unfenced Reference Area

		Sampling by 4m x 25m Belt Transects																						
Transect No.——>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average Per Belt	Per Acre	
Woody Plant Species																								
<i>Atriplex canescens</i>	Fourwing Saltbush			4	5				1	5	1	1			1	12		2	1			1.7	66.8	
<i>Gutierrezia sarothrae</i>	Snakeweed	3	3	42							4								2	2	1		2.8	111.3
<i>Juniperus osteosperma</i>	Utah Juniper																			1			0.1	2.0
<i>Opuntia polyacantha</i>	Plains Pricklypear				2	5	13	2	1	19	10	4	7		1		1	1		1	1		3.4	137.6
Total		3	3	46	7	5	13	2	2	24	15	5	7	0	2	12	1	3	4	2	1		7.9	317.7
Sample Adequacy Calculations		Mean = 7.9				Variance = 116.1				t= 1.3				n = 20				n _{min} = 332.2						

Attachment B
Erosion Mitigation Completion Report
June 2026

Erosion Mitigation Completion Report

JJ No. 1 / L-Bar Mine
Cibola County, New Mexico



Prepared by:



INTERA Incorporated
2440 Louisiana Boulevard NE
Albuquerque, NM 87110

J U N E 2 0 2 6

Erosion Mitigation Completion Report

JJ No. 1 / L-Bar Mine
Cibola County, New Mexico

Prepared for:

The logo for Rio Tinto, featuring the company name in a bold, red, serif font.

Rio Tinto
4700 Daybreak Parkway
South Jordan, UT 84095

Prepared by:



INTERA Incorporated
2440 Louisiana Boulevard NE
Albuquerque, NM 87110

J U N E 2 0 2 6

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Table 1.	Erosion Mitigation Repair Quantities
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Acronyms and Abbreviations

Ac	acres
BMP	Best Management Practices
Cedar Creek	Cedar Creek Associates, Inc.
CLG	Cebolleta Land Grant
DOE	U.S. Department of Energy
ECB	erosion control blanket
EMNRD	Energy, Minerals and Natural Resources Department
EWLLC	Enviroworks, LLC
ft	foot/feet
INTERA	INTERA Incorporated
MMD	Mining and Minerals Division
sf	square feet
Report	Erosion Mitigation Completion Report
Site	JJ No. 1 Mine, Cibola County, New Mexico
SWMC	SOHIO Western Mining Company

1.0 Introduction

This Erosion Mitigation Completion Report (Report) was prepared by INTERA Incorporated (INTERA) on behalf of SOHIO Western Mining Company (SWMC) to document erosion mitigation activities completed in November 2025, at the former JJ No. 1 Mine (JJ Mine or Site), also known as the L-Bar Mine, in Cibola County, New Mexico.

The JJ No. 1 Mine, an underground uranium mine which produced uranium ore from approximately 1976 to 1981, was closed and reclaimed in 1986/1987 (INTERA, 1986; 1989). The L-Bar Mill was demolished in 1986/1987, the mill and tailings areas were reclaimed between 1986 and 1989, an interim radon barrier was placed in 1989 over the tailings and contiguous mill area, and the final radon barrier cover was completed in 2000. The covered tailings and mill area, including the area of the mine headframe and one of the 12 vent shafts (VS-1), was transferred to the U.S. Department of Energy (DOE) Office of Legacy Management in December 2004. Outside of the transferred area, the former JJ Mine included 11 capped steel vent shafts and associated cement pads, steel gravel shoots, and two-track trails between the vent shafts. Closure of the remaining 11 vent shafts was executed as part of final site reclamation, to permanently remove and reclaim the surface features and eliminate potential hazards to humans or wildlife. The Cebolleta Land Grant (CLG), the owner of the Site property, expressed interest in retaining the two-track trails for access to the Site areas which have historically been used for livestock grazing. Therefore, two-track roads were not reclaimed beyond the removal of waste rock residue. It is anticipated that livestock grazing and wildlife habitat will continue as the post-closure land use.

The New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Mining and Minerals Division (MMD) reviewed and approved the As-Built Report (INTERA, 2011), which included the following conditions:

- SWMC will inspect reclaimed lands for signs of erosion and mitigate significant erosion features to prevent further degradation of the Site. As specified in the Stormwater Pollution Prevention Plan, Site visits will be conducted monthly for erosion monitoring purposes and will coincide with the revegetation monitoring Site visits. Additional inspections will occur at reclaimed areas after storm events of one-half inch or greater in any one-day period to look for evidence of erosion and/or damage. Inspections will continue until specific units are released per a Director's Order or under the New Mexico Mining Act. The erosion monitoring program will continue for 12 years or as long as required by MMD.

INTERA contracted Cedar Creek Associates, Inc. (Cedar Creek) in early 2016 to develop a methodology for determining revegetation success in accordance with the Closeout/Mitigation Plan, JJ No. 1/L-Bar Mine (INTERA, 2008) and JJ No. 1/L-Bar Mine Closeout/Mitigation As-Built Report (INTERA, 2011). The methodology for determining revegetation success was submitted to the MMD in a draft plan entitled Methodology for the Determination of Revegetation Success for the JJ No. 1/L-Bar Mine dated June 12, 2016 (INTERA, 2016a) and in a subsequent letter entitled Proposed Methodology for the 6-Year Quantitative Survey for Determination of Revegetation Success, JJ No. 1/L-Bar Mine dated July 22, 2016 (INTERA, 2016b). In February 2018, INTERA and Cedar Creek submitted Amendment to Closeout/Mitigation Plan, Methodology for Determination of Revegetation Success, JJ No.1/L-Bar Mine (INTERA, 2018). The methodology defines procedures and protocols to be utilized for revegetation

success evaluations pursuant to the mandates of Title 19, Chapter 10, Part 5 of the Mining Act Rules set forth by the MMD. Revegetation success at the Site addresses perennial (and biennial) vegetative cover and woody plant density through comparison to background reference conditions that are representative of the pre-existing vegetation communities and/or desirable ecological conditions. Evidence of success is reflected by growth of approved and/or planted species and indicates that the post-mining land use (livestock grazing with coincidental wildlife habitat) has been established.

In 2013, initial erosion was observed during routine Site monitoring. In 2016, Best Management Practices (BMP) items such as fiber rolls and strawbales were installed, along with reseeded in catchment areas. During the September 2019 Year Nine monitoring event, significant erosion was observed in several of the Reclamation Areas. On April 14, 2022, INTERA and Cedar Creek presented the 2021 revegetation and erosion status for the fenced reclaimed areas (Reclamation Areas) to MMD, and during the presentation, INTERA recommended preliminary erosion mitigation measures to address the significant features originally observed in 2019. The 2021 erosion status and recommended mitigation were based on several field inspections conducted between 2019 and 2021. In October 2021, representatives from INTERA and MMD visited the Site for routine sitewide inspections of the revegetation performance and to assess erosion. In addition, on November 12, 2021, INTERA conducted a comprehensive inspection of all Reclamation Areas, focusing on areas of increased erosion. INTERA field personnel transected each reclamation area and documented areas of erosion. Based on the 2021 inspections, INTERA confirmed stability of the following Reclamation Areas, with no erosion mitigation measures proposed: VS-2, VS-3, VS-7, VS-8, and VS-9. Erosion mitigation was recommended for the following Reclamation Areas: VS-4, VS-5, VS-6, VS-10, VS-11, VS-12, Stockpile, and Borrow Area.

In 2022, INTERA and MMD met and reached concurrence on erosion mitigation measures for several reclaimed features at the Site. The 2022 memo (INTERA, 2022) summarized the proposed erosion mitigation features for identified areas at the Site, which were based on Site inspections (2021 and 2022). Erosion mitigation was recommended and presented to MMD for the following Reclamation areas: VS-4, VS-5, VS-6, VS-10, VS-11, VS-12, Borrow Area and Stockpile Area. This approach was revised following Site inspections that showed more intense erosion at VS-10/Borrow Area, warranting a more aggressive mitigation plan. To ensure thorough erosion repairs in this area, INTERA had a LiDAR survey of the VS-10/Borrow Area completed in May 2023. This survey provided updated topographical data and aerial imagery for analysis.

The Site visits coupled with the LiDAR survey showed severe gully erosion and channeling present throughout the VS-10/Borrow Area. To address the observed erosion, INTERA recommended repairs to mitigate the erosion while attempting to minimize disturbance. Three levels ("Phases") of mitigation action were proposed in the January 31, 2024 transmittal to MMD (INTERA, 2024), as described below:

- Phase I: Strawbales and wattles will be installed in designated areas that have experienced channel formation and severe gully erosion. Existing rock check dams will be bolstered. Reseeding of specified areas will be conducted utilizing drill seeding methods with a rock mulch pavement to ensure successful, long-term germination. The rock mulch pavement shall be installed with 0.5" to 2.5" graded rock and will be semi-permanent.
- Phase II: In addition to the reseeded method and berm repairs outlined in Phase I, Phase II will include the installation of a concrete erosion control blanket (ECB), such as the Flexamat® 10NW

UV-T exposed aggregate product, on the slope of the berm where channel formation is present. The berm will be back-sloped and regraded for the installation of the concrete ECB. Designated channels will have rock armoring installed to prevent further erosion and slow down flow leaving the reclamation area.

MMD approved the January 2024 plan (INTERA, 2024) with the following conditions:

1. MMD will require one year of erosion and site monitoring after the mitigation work is completed. MMD will evaluate and approve the as-built drawings and approve the project as complete if the mitigation measures are determined by MMD to be likely to resist erosion in the future.
2. New Mexico Environment Department Mining Environmental Compliance Section and Surface Water comments, prohibiting the use of continued water use for dust suppression, must be addressed.

Following a Request for Bid process, earthwork and BMP installation work were completed by contractor Enviroworks, LLC (EWLLC) with oversight by INTERA. Phases I and II, executed in November 2024, are summarized in **Section 2**. **Section 3** summarizes post-construction conditions for each of the erosion mitigation features, as observed during inspections conducted in April and September 2025. All documents cited in this Report are listed in **Section 4**. Field notes and a comprehensive photograph log documenting the construction process are included in **Appendix A**. LiDAR data was collected by an unmanned aerial vehicle, utilizing control points consistent with post-reclamation work in 2010, by Sunrise Engineering of Salt Lake City, Utah, in April 2025. This data was utilized to develop a digital elevation model of the Site and delivered to INTERA in May 2025, along with a survey report (**Appendix B**). As-built conditions and topography of the Site are shown in **Appendix C**. Sheets from the design drawings provided in the Request for Bid documentation have been duplicated in the as-built sheet set, and any conditions are noted that differ from those specified in the design. **Appendix D** includes construction material and product data.

2.0 Erosion Mitigation Construction

Six reclaimed vent shaft areas, one reclaimed Stockpile, and the reclaimed Borrow Area required repair in order to mitigate erosion. Methods used, described above as Phases I through III, included BMP installation (strawbales, wattles, erosion matting), reseeding, rock armoring, check dam improvements, and berm repairs to match the surrounding habitat for final closure. General services included the following:

- Earthwork to repair existing stormwater run-on and runoff features.
- Maintenance to access roads associated with the reclamation areas and monitoring well locations.

Strawbales and wattles were installed in designated areas with channel formation and severe gully erosion, and existing rock check dams were bolstered. Reseeding of specified areas was conducted following surface roughening using either hand rakes or tracked equipment, and hand broadcast seeding methods to ensure successful and long-term germination.

In addition to the reseeding method and berm repairs, the primary slope stabilization measure included the installation of a concrete ECB on the slope of the berm where channel formation is present. The berm was backsloped and regraded for the installation of the concrete ECB. Designated channels were installed with rock armoring to prevent further erosion and slow down flow leaving the Reclamation area.

Quantities and installation details for erosion mitigation items are provided below in **Section 2.1**, including descriptions and references to relevant photographs. A summary of the repair work completed in each reclamation area is provided in **Section 2.2** and depicted in the As-Built Drawing Set (**Appendix C**). The Site Plan (Sheet 3) and each subsequent Reclamation Area As-Built Condition and Topography Sheet (Sheets 4 – 11) include the modeled “flowpath” from the topographical surface. A “stream network” was modeled utilizing the Arcpro spatial flow accumulation tool. Utilizing a network density threshold of 100,000 upstream cells needed to initiate a stream. In general, erosion mitigation measures align with on Site flow. **Table 1** summarizes the comprehensive data, including the erosion control item quantity within each reclamation area.

2.1 Erosion Mitigation Measures

Strawbale Installation:

Twenty-five (25) total strawbales were installed at the Site; added to deep channels to help slow erosion and prevent channels from expanding. The vent shaft areas selected for strawbale installation were VS-4, VS-10, VS-11, VS-12, and the Stockpile Area (see **Appendix A**, Photographs 32, 36, 50, 52, and 57). ½-inch steel rebar was utilized to secure the bales in place.

Fiber Roll Wattle Installation:

Approximately 3,110 linear feet (ft) of Eco Log Fiber Roll Wattles (“wattles”) was added in various lengths along the contours of the surface in areas where rill erosion was progressing and along the

downslope edge of seeded areas (see Sheet 13). The wattles were supplied by Titan Engineering Construction Products. The vent shaft areas selected for wattle installation were VS-5, VS-6, VS-10, VS-11, and VS-12 (see **Appendix C**, Sheets 4–9). Additional wattles were also installed at the former Stockpile and Borrow Areas (see **Appendix C**, Sheets 10 and 11). The fiber rolls are 9-inches in diameter and ship in 25-foot lengths. The products and installation are depicted in the photograph log (see **Appendix A**, Photographs 4–6, 9, 10, 17, 22, 23, 25, 49, 50, 53, 55, 60–63, 65, and 69–71.)

Erosion Matting:

34,415.5 square feet (sf) of biodegradable erosion control matting, BioNet® C125BN™ (see **Appendix D**), was installed to protect newly seeded areas (see **Appendix C**, Sheet 13, and **Appendix D**). The matting, supplied by North American Green / Western Green, was comprised of a long-term double-net coconut matrix (see **Appendix A**, Photographs 2 and 3). The reclaimed vent shaft areas selected for erosion matting are VS-4, VS-5, VS-6, VS-10, VS-12, and the reclaimed former Stockpile and Borrow Areas (see **Appendix C**, Sheets 4–10). See Photographs 12, 13, 16, 22, 23, 49, 51, 54–56, 60–63, and 65 in **Appendix A** for installed conditions.

Berm Repairs:

The existing slope transition from the reclaimed former Borrow Area to the reclaimed VS-10 area previously had a maximum slope of -48.8% (2:1 grade), in 2023. The newly graded slope is now consistent west to east and has a maximum slope of -30.2% (3:1 grade) (see **Appendix C**, Sheet 16). EWLLC utilized material from the western portion of the slope and pushed it to the east (see Photograph 37). The reclaimed VS-12 area was regraded from the access road transition to the fenced reclamation area, and a rock check dam was installed above the outfall to the Arroyo del Valle (see Photograph 59). The on-Site borrow material was placed, roughly compacted, and seeded prior to installation of the concrete ECB panels.

Erosion Control and Slope Stabilization:

Significant gully erosion developed between the Borrow Area and VS-10 and contributed to channel formation downslope of VS-10, requiring mitigation. Erosion channels were approximately 5–7 ft deep at the 170-ft slope crest, and approximately 3–5 ft deep near outfall at the lower fence line along the southern end of VS-10. The western portion of the slope was previously armored with rock ranging in size from 6-inches to 18-inches, which provided erosion protection; however, much of the slope face was bare following reseeding efforts in 2016. Erosion mitigation at this slope included regrading the slope with on-Site borrow material from the western edge prior to the installation of a concrete erosion control blanket on the channelized slope at the transition from the reclaimed former Borrow Area to the reclaimed VS-10 area. The Flexamat® concrete ECB (see **Appendix D**) was comprised of eight (8) panels and a total areal extent of 5,464 sf (see **Appendix D**, Sheet 15). Photographs 38–44 in **Appendix A** depict the installation of the concrete ECB. Per the specification and installation guidelines provided by Flexamat®, the concrete ECB was anchored in an 18-inch by 18-inch trench at a 90-degree angle at the crest of the slope and backfilled with on-Site soils. Along the sides, the concrete ECB was anchored in a 12-inch trench at a 45-degree angle and backfilled with on-Site soils. Each panel was anchored at 2-ft increments using U-anchor pins (see Photograph 43). The panels consisted of a geogrid and 10-ounce nonwoven geotextile, which extended 8-inches and 12-inches, respectively, on one edge to underlay the

adjacent panel (see Photograph 39). The installation differed from the takeoff sheet provided by Flexamat® in that the top edge of the concrete ECB aligned with the crest of the slope in one longitudinal line (see Photographs 44 and 51), and extended at varying lengths (see Photographs 44 and 46), rather than starting at varying points and extending to one longitudinal line.

Rock Armoring:

Regrading was accomplished utilizing existing on-Site material present on the western edge of the slope. Due to the movement of this material, additional rock was installed to armor the exposed slope following reseeding methods. This was completed in part due to the observed established vegetation on the slope armored with native rock (see Photograph 45). Similarly sized, 6"–12" rock was added to slopes at reclaimed vent shaft areas VS-5, VS-6, VS-10, and VS-12 (see Photographs 31, 32, 45, 46, 58, and 59). Additional rock was placed within the channel along the western edge of the reclamation area at the reclaimed VS-4 area (see Photograph 32). Approximately 112 cubic yards (cy) or 168 tons of 6"–12" rip rap was utilized for rock armoring.

Media Lunas:

Media lunas were installed upslope and downslope of the flow paths in the designated areas specified in the design drawings (see **Appendix C, Sheet 14**). A media luna is a crescent-shaped, rock apron structure constructed to control erosion by slowing, spreading, or collecting water runoff. The structures trap sediment, increase soil moisture, promote vegetation growth, and turn concentrated erosive flow into dispersed sheet flow. A curved rock apron, approximately 170 ft in length, tipping down, provided a collection point at the top of the slope of the Borrow Area (see Photograph 66). A curved rock apron, approximately 170 ft in length, tipping up, spread the runoff from the channels at the top of the crest of the slope above VS-10, upslope from the concrete ECB (see Photograph 51). A supplemental sheet flow collector media luna, 80 ft in length, was installed on the eastern portion of the reclaimed former Borrow Area (see **Appendix C, Sheet 10**). An additional supplemental sheet flow collector media, 35 ft in length, was installed on the western portion of the reclaimed former Borrow Area. The media lunas were constructed with approximately 57 cy or 85.5 tons of 6"–12" rip rap.

Rock Check Dam Improvement/Additions:

Aggregate material was added to check dams needing improvements at VS-4, VS-6, VS-10, and VS-12 (see **Appendix C, Sheet 14**). EWLLC removed the area of debris and sediments in existing rock check dam footprints and hand excavated surface trenches to key in the new rock check dams. Approximately 28 cy or 42 tons of material was utilized for rock check dam improvement.

Reseeding:

Seed was applied to the ground surface with minimal vegetation and added to areas that were disturbed during the erosion mitigation work within all of the Reclamation Areas including VS-4, VS-5, VS-6, VS-10, VS-11, VS-12, the former Borrow Area, and the Former Stockpile. Reseeding in areas of deep channels and expansive rilling will slow down erosion and prevent channeling from worsening. Affected areas were prepared prior to seeding efforts, and direct seeding methods were employed. The seed mixture was comprised of sixteen (16) native species, including grasses, forbs and shrubs (see **Appendix C, Sheet 12**). The seed mixture was certified to be free of noxious weeds by Cutris and Curtis Seed of Clovis, New Mexico. The seed was bagged into 1-acre (Ac) broadcast bags at 39.525 bulk pounds (see **Appendix D**).

Six bags of seed were placed utilizing hand-broadcasting methods. The ground surface was prepared prior to broadcasting with hand rakes and existing noxious vegetation was cleared to scarify surface. A total area of 2.3 Ac was seeded, using 226 pounds of seed—double the recommended seeding rate for pure live seed. The areas prone to erosion and sheet flow were reseeded and then covered with the BioNet® C125BN™, as specified. Additional seed was also added to areas with minimal vegetative cover, primarily within the upper portion of the former Borrow Area. No water was added following seed placement. Natural precipitation occurred within 30 days of installation.

2.2 Reclamation Area Repair Work Summary

Erosion mitigation repair work was completed at reclaimed vent shaft areas VS-4, VS-5, VS-6, VS-10, VS-11, and VS-12, and former reclaimed Borrow and Stockpile Areas (see **Appendix C**, Sheet 3) which are described below.

VS-4

Erosion mitigation within the reclaimed VS-4 area included reseeding, erosion control matting, rock check dam repair, rock armoring, and strawbale installation, as depicted in **Appendix C**, Sheet 4. An area totaling 1,610 sf (0.04 Ac) was seeded and covered with biodegradable erosion control matting. Approximately 40 cy of rip rap was utilized to armor the slope on the western edge of the reclamation area. This area was approximately 484 sf (0.01 Ac). Six strawbales were installed within deeper channels within lower portions of the flow paths.

VS-5

Erosion mitigation within the reclaimed VS-4 area included reseeding, erosion control matting, rock check dam repair, rock armoring, and wattle installation as depicted in **Appendix C**, Sheet 5. An area totaling 2,100 sf (0.05 Ac) was seeded and covered with biodegradable erosion control matting. Approximately 10 cy of rip rap was utilized to armor the slope on the northern edge of the reclamation area, which is downgradient from drainage outside of the reclamation area. This area was approximately 245 sf (0.006 Ac). Approximately 610 linear ft of the wattles were installed, primarily within the southern slope edge and western side of the reclamation area, downgradient from the armored slope.

VS-6

Erosion mitigation within the reclaimed VS-6 area included reseeding, erosion control matting, rock check dam repair, rock armoring, and wattle installation, as depicted in **Appendix C**, Sheet 6. An area totaling 1,800 sf (0.04 Ac) was seeded and covered with biodegradable erosion control matting. Approximately 50 cy of rip rap was utilized to both line the upper portion of an existing channel and bolster rock check dams at the terminus of the channel, along the northern edge of the reclamation area. The channel is downgradient from drainage outside of the reclamation area. Approximately 225 linear ft of the wattles were installed, primarily within the eastern slope edge and on the downslope side of the reseeded areas.

VS-10 and former Borrow Area

Erosion mitigation within the reclaimed VS-10 and former Borrow Area was extensive and included reseeding, erosion control matting, rock check dam repair, rock armoring, concrete ECB installation,

media luna construction, and wattle and strawbale installation, as depicted in **Appendix C**, Sheets 7 and 10. A cumulative area totaling 22,505 sf (0.52 Ac) was seeded and covered with biodegradable erosion control matting. Additional seed was placed on the ground surface within Borrow Area, including areas that were tracked by equipment during the work, resulting in a total area of 79,055 sf (1.81 Ac) that was reseeded. 11 strawbales were installed in existing channels, mostly on the eastern edge of the reclamation area. The concrete ECB was installed on the graded and prepped slope which transitions from the former Borrow Area to the VS-10 area. Slope preparation included scarifying with the tracked equipment and seeding. On each side of the concrete ECB, rip rap was utilized to stabilize the surface of the slope that was disturbed during grading work. The existing rock check dams, located west of the lower VS-10 slope, were bolstered utilizing on-Site material. Additional rip rap was utilized to construct a supplemental sheet flow collector media luna above the rock check dams. One primary sheet flow collector (approximately 170 ft long) media luna was constructed at the top of the catchment area within the reclaimed former BA. One primary sheet flow spreader (approximately 170 ft long) was constructed upgradient from the crest of the transition slope armored with the concrete ECB. Two supplemental sheet flow collector media lunas with approximate lengths of 80 and 35 ft each were installed on the eastern and western sides, respectively, of the reclaimed former Borrow Area, between the two primary media lunas. Approximately 1,125 linear ft of the wattles were installed across the surficial channels observed within the reclaimed former Borrow Area, downgradient from the reseeded areas. They were generally installed along the slope contour to promote sediment infilling and seed retention. Wattles installed in 2010 and 2016 were placed perpendicular to the surficial contour, which was not successful in promoting vegetation establishment.

VS-11

Erosion mitigation within the reclaimed VS-11 area included reseeded, rock check dam repairs, and wattle and strawbale installation, as depicted in **Appendix C**, Sheet 8. In general, this reclamation area had established vegetation. Due to the slope grade and established vegetation the 10,677 sf (0.25 Ac) areal extent was seeded without clearing or coverage with the biodegradable matting. Approximately 625 linear ft of the wattles were installed, primarily within the northern and eastern slope edges, downslope side of the reseeded areas.

VS-12

Erosion mitigation within the reclaimed VS-12 area included reseeded, rock check dam repairs, regrading, channel and slope armoring, and wattle and strawbale installation, as depicted in **Appendix C**, Sheet 9. An area totaling 2,600 sf (0.06 Ac) was seeded and covered with biodegradable erosion control matting. Approximately 25 cy of rip rap was utilized to armor a north-facing slope which transitioned to an existing channel. The channel is downgradient from drainage outside of the reclamation area and received drainage from the adjacent access road. An existing berm was regraded to reduce the flow from entering into the reclamation area. Approximately 200 linear ft of the wattles were installed, primarily within the eastern slope edge and on the downslope side of the reseeded areas.

Former Stockpile Area

Erosion mitigation within the reclaimed former Stockpile area included reseeded, erosion control matting, and wattle and strawbale installation. as depicted in **Appendix C**, Sheet 11. An area totaling

3,800 sf (0.09 Ac) was seeded and covered with biodegradable erosion control matting. Approximately 325 linear ft of the wattles were installed.

3.0 Post-Construction Conditions

The erosion mitigation repairs were inspected in April 2025 and during the vegetation inspection in October 2025. Photographs of typical features and post construction conditions are included in **Appendix A** (Photographs 72–99).

Strawbale Installation:

Strawbales were installed at VS-4, VS-10, VS-12, and the Borrow Area (see Photograph 74). During post-construction inspections, most of the strawbales were observed to be intact. However, by April 2025, the strawbale at VS-12 started to degrade (see Photograph 81).

Fiber Roll Wattle Installation:

Wattles were installed at the reclaimed VS-4, VS-5, VS-6, VS-10, VS-11, and VS-12 areas, as well as at the former Stockpile and Borrow Areas (see Photographs 79, 82, 90 and 94). By September 2025, some of the wattles started to fill in with sediment (see Photograph 84).

Erosion Matting:

BioNet® C125BN™ was installed to protect seeded areas within the reclaimed vent shaft areas VS-5, VS-6, VS-10, and VS-12, and at the reclaimed former Stockpile and Borrow Areas (see Photographs 73, 74, 76, and 79). By September 2025, some vegetation was penetrating the degradable matting (see Photographs 91 and 96).

Berm Repairs:

The berm repairs and armoring at the reclaimed VS-12 area appear to be intact and functional at diverting the flow from the access roads (see Photograph 97).

Erosion Control and Slope Stabilization:

The concrete ECB installed on the regraded, armored slope located at the transition from the reclaimed former Borrow Area to the reclaimed VS-10 appears to be intact and functional at stabilizing the slope and providing a substrate for vegetation to establish (see Photographs 76–79, 82, 86–90, and 93). There is some scouring present at the western corner of the concrete ECB at the slope toe (see Photographs 86 and 87).

Rock Armoring:

The 6"–12" rock added to slopes at reclaimed vent shaft areas VS-6, VS-10, and VS-12 and the channel at the reclaimed vent shaft VS-4 area is intact and functional at armoring the surface and providing a substrate for vegetation to establish (see Photographs 74, 76–80, 82, 88–90, and 97).

Media Lunas:

The media lunas installed upslope and downslope of the flow paths in the designated areas specified in the design drawings, as well as the supplemental media luna, appear to be intact and functional at directing the sheet flow within the reclaimed former Borrow Area (see Photographs 75, 85, and 92–95).

Vegetation was present during the September 2025 inspection upslope from the sheet flow collector media lunas (see Photographs 92, 94, and 95).

Rock Check Dam Improvement/Additions:

Aggregate material was added to check dams needing improvements at VS-4, VS-6, VS-10, and VS-12. The bolstered rock check dams appear to be intact (see Photographs 98 and 99).

Reseeding:

In general, vegetation germinates and proliferates following the precipitation in the latter half of the year. Plant species consistent with those seeded in November 2024 were observed in September 2025. The Revegetation Bond Release Evaluation 2024-2025 provides details on the vegetation observed on Site in September 2024 and 2025 (INTERA, 2026).

4.0 References

- INTERA Incorporated (INTERA). 2026. Revegetation Bond Release Evaluation 2024-2025.
- INTERA. 2024. Letter from Ashley Arrossa to Clint Chisler, New Mexico Environment Department Mining Environmental Compliance Section. Re: 2024 Erosion Mitigation Implementation Plan for JJ No.1 Mine, Permit N. CI007RE. January 31.
- INTERA. 2018. Amendment to Closeout/Mitigation Plan, Methodology for Determination of Revegetation Success, JJ No.1/L-Bar Mine.
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- INTERA. 2016b. Methodology for the 6-Year Quantitative Survey for Determination of Revegetation Success, JJ No. 1/L-Bar Mine. July 22.
- INTERA. 2011. Closeout/Mitigation As-Built Report. JJ No. 1/L-Bar Mine, Cibola County, New Mexico.
- INTERA. 2009. Closeout/Mitigation As-Built Report. JJ No. 1/L-Bar Mine, Cibola County, New Mexico.
- INTERA. 2008. Closeout/Mitigation Plan Report. JJ No. 1/L-Bar Mine, Cibola County, New Mexico.
- INTERA. 1989. L-Bar Uranium Mine Reclamation and Closure Plan. Prepared for BP America. Modifications to 1986 Reclamation and Closure Plan.
- INTERA. 1986. L-Bar Uranium Mine and Mill Reclamation and Closure Plan. Prepared for BP America. Original Reclamation and Closure Plan submitted to US Nuclear Regulatory Commission.

TABLES

Table 1. Erosion Mitigation Repair Quantities

JJ No. 1 / L-Bar Mine
Cibola County, New Mexico

Reclamation Area	Reseeding (sf)	Reseeding (Ac)	Erosion Matting (sf)	Erosion Matting (Ac)	Concrete Erosion Control Blanket (sf)	Rock Check Dam Repair	Slope Grading	Rip Rap* (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-4	1,610	0.04	1610.00	0.04	0.00	Yes	-	40	6	0	-
VS-5	2,100	0.05	2100.00	0.05	0.00	-	-	10	-	610	-
VS-6	1,800	0.04	1800.00	0.04	0.00	Yes	-	50		225	-
VS-10	11,255	0.26	3849.00	0.09	5464	Yes	Yes	70	11	375	170
VS-11	10,600	0.24	0.00	-	0.00	-	-	-	4	625	-
VS-12	2,600	0.06	2600.00	0.06	0.00	Yes	Yes	25	1	200	-
Former Borrow Area	67,800	1.56	18656.49	0.43	0.00	-	-	-	-	750	285
Former Stockpile	3,800	0.09	3800.00	0.09	0.00	-	-	-	3	325	-
Totals	101,565	2.33	34415.49	0.79	5464	-	-	195	25	3110	455

Notes:

Ac = acre

cy = cubic yard

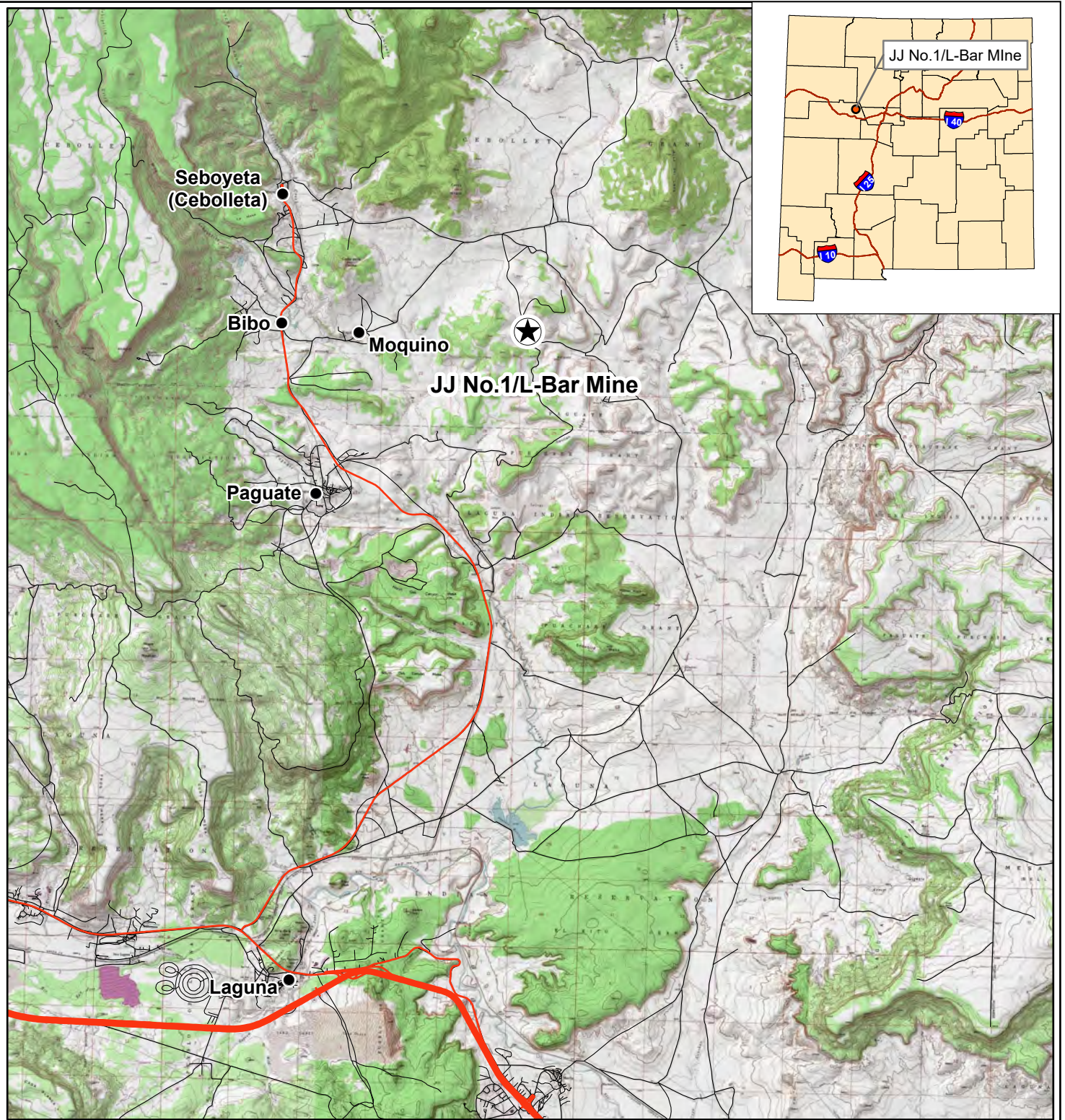
ea = each

lf = linear foot/feet

sf = square feet

* = material utilized for rock armoring and media luna

FIGURES



Legend

- ★ Mine Location
- Community
- Primary Road
- Interstate 40
- Secondary Road

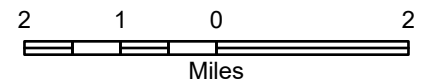


Figure 1
Site Location Map
 JJ No.1/L-Bar Mine,
 Erosion Mitigation Completion
 Report

APPENDIX A

Field Notes and Photograph Log

L-BAR

9-5-2024

to

ELAM EMBROIDERED
EQUINE

10/28/24 JJ Mine Reclamation Repair/Restoration ^{MARCA}
1215 INTERA CM. River, A. Access) on-site Mitigation.
EnviroWorks, LLC (EW) on-site. Front-end
loader & excavator delivered to site &
being driven to VS-1.

Weather: Sunny, breezy, 70's F.

Objectives: Move EW equipment to site &
stage in designated areas.
Site overview for EW & Rio Tinto

1255 INTERA off-site to meet Rio Tinto
Safety Rep. (Crew Stringer)

1305 INTERA & Rio Tinto back on-site.
TOSM.

Lew led the Rio Tinto Take 5 and
Critical Risk control discussions, including
documenting with their apps (Safety
Culture and Forwood).

Following the safety discussions, Lewis
and support crew went to start with
road grading on the Access Roads that
lead up to MV-3/VS-4/VS-5/VS-6.

Ashley and Molly accompanied Lew in
his truck to give a ~~brief~~ brief Site tour
and overview.

1400 Chris Scherer (EW/LLC) is waiting for
the other trailer to arrive with the
loader to stage it.

1545 DOE (vehicle #2528X) on-site to check weather
station on DOE property.

1550 Excavator heading up to MW-3 Staging Area.

1605 ~~Dozer~~ ^{(a) Mini Excavator} Loader arrived at Muster Point

1610 Skid Steer and Loader Front-End on Site at Muster Point

1630 INTERA, Rio Tinto, B EWLUC signed out for the day. Headed off-site back to ABQ.

Summary: EWLUC equipment delivered to the site: Excavator, mini-^{hoe}~~excavator~~, front-end loader, grader, 3 Dozer
- Graded access Road to MW-3 Staging area.

[Handwritten signature]

0812/24 JJ Mine Reclamation Repair / Erosion ME/AS

0850 INTERA CMR, A.A. (on-site).
3 Environmental LLC (ENLLC) on-site.
BioTinto (Crew Stringer) on-site

Weather: High winds later in the morning.
20-25 mph. Sunny High in upper 50's.

Objectives: Stage materials @ proposed
staging areas (MW-3 & VS-10)
- Road grading & access roads up to MW-3
- Unloading of materials & transfer to
staging areas

0900 Low lead TOSM. Discussed weather,
traffic control & comms. Stretch session
w/ INTERA, BioTinto, & ENLLC.

- Moving up to MW-3 staging area. Laying
down visquine to store equipment @
end of each day.

0822 INTERA marking out vent shaft
monuments w/ 8ft x 8ft pin flag
boundary.

0920 Chris Schaefer (ENLLC) on-site. Bought trailer
w/ him & got stuck @ low water crossing @ 14.
Stopped work to correct. Take 5. Front-end
loader w/ forksifts attached w/ chains to
back of trailer & followed behind truck
to get trailer out of crossing. Discussed
action items & will drive around low-water
crossing to avoid getting stuck in the
future w/ delivery of materials.

10/29/24 JJ Mine Reclamation Repair / Erosion ME/AS

1000 ENLLC move back up to MW-3 staging
area.

1030 Chris and EW crew headed to City Rd 1 to
meet trailer materials.
Larry and Jimmy heading to VS-11 to
grade road after picking up grader.

1130 Molly and Ashley finished unlocking the
4-strand access "gates" at VS-10/BA and
VS-11. We marked out the ~~gate~~ contour
location for the wattle placement of
the upper up-gradient line. The lower
wattle will be placed halfway between the
existing wattle and upper pin flags.

Additional BMP Repairs:

- + Add haybales at SE slope crest where
there is piping under the wattle.
- + Add seed to bare spots.

1210 Measured wind speed w/ INTERA owned
Ex-tech Mini-Thermo Anemometer. Sustained
wind speeds recorded @ 15 mph coming
from the southwest.

1220 INTERA headed to City Rd 1 to meet
EW crew. @ meet with Larry to see
the roadwork repairs ~~needed~~ and shovel
on the road headed to VS-11. Review of
road repairs heading to VS-12/MW-1.

10/29/2024 JJ Mine Reclamation
1330 Molly and Ashley to mark wattle
locations at VS-5 and VS-6.
Wind gusts at 32 mph.

Alca
MR

Locks at VS-5 / VS-6 need lubrication /
maintenance. Unable to open.

No major changes or additions to the
repairs shown on the map at VS-6.
At VS-5, there is a ~~new~~ channel
in a NW-SE direction. We placed some
orange flagging at the top of the
channel to mark where to move/arrange
some rocks for a rock check, along the
fence line. In addition, we changed some
of the fiber roll / wattle alignment and
placement in the northern area.

EWLUC continuing to unload / stage
fiber rolls and matting.

1510 Low Stringer off-site. Headed to Alca planning to
stop by INTERA office to pick up work area
signs & D-size site map.

1620 EW crew finished staging fiber rolls &
matting @ both staging areas. Filling
up equipment w/ fuel.

1630 EWLUC and INTERA headed off site.

(M)

MR/ACA
The INTERA (Mittler, A. Aracena) on-site.
Environics LLC (EWLUC) crew & Rio Tinto
(Low Stringer) on-site.

Weather: Low 30's, chilly, low wind

Objectives: Begin installing wattles @ VS-11 &
installing seed mixture.

More materials to be delivered today.

0700 TISM w/ EWLUC crew & Rio Tinto.

0720 Ashley headed up to MW-3 staging area
to have call w/ Konrad to discuss work
for Friday (11/1).

0750 Molly & Larry & Joe (EWLUC) headed to VS-11.
Molly showed EWLUC where the wattles will be
installed & where seed mixture needs to be
added. EWLUC begin moving wattles & equipment
to VS-11.

0845 Chris Scherer (EWLUC) on-site. Bought UTV
(Polaris Ranger XP-1000) & staged @ MW-3. One
truckload (in cy) of 4-6" angular rock for
media lumps delivered & stored @ center
staging area.

0900 Ashley + Molly hanging reclamation area
signage on fenceposts of work areas.
Background

0945 Background gamma readings taken w/ ERG rental
Wellum Model B. See field form.

10/31/24 JJ Mine Reclamation Repair/Erosion AKA/MR

1020 Eddie Michael stopped by. Ashley & Molly told him the areas of work.

1030 Eddie Michael off site
Ashley & Molly headed to VS-11.

1142 2nd truckload of rock on site (media luna).
Delivered to center staging area.

1200-1400 EWLLC finished installing wattles
@ VS-11. INTERA will measure lengths &
record GPS coordinates w/ FET rental
Trimble TX Series tomorrow (11/1/24).

- Ashley, Molly, Chris & Jose walked VS-5
area to show where wattles, matting
& seeding need to be placed/installed.

- EWLLC begin installing wattles &
sub-grade prep @ VS-5

- 3rd truckload of rock (media luna)
delivered to center staging area.

1430 EWLLC begin staging wattles/matting
@ VS-6. Larry bladed access road
from MW-3 to VS-6 & stockpile.

1600 EWLLC begin packing up for the day.
Did not finish installing all wattles
@ VS-5 & will plan to continue there
tomorrow. Ranger UTV did not start
on site so loading back onto
trailer.

1100 EWLLC, Rio Tinto, & INTERA off site

10/31/24 JJ Mine Reclamation Repair/Erosion AKA/MR

0700 INTERA CA. Arco SSA, M. Ritter on-site
EWLLC & Rio Tinto on-site.

Weather: 25°F, High in 60's, Max wind gusts projected
@ 8 mph.

Objectives: Continue installing wattles, biodegradable
matting & seed mixture @ reclaimed vent
shaft areas (VS-5, VS-6, VS-11).

- Receive truck deliveries of 4-6" angular
rock & stone @ center staging area.

- Record GPS coordinates of installed
materials.

0705 TGS M w/ EWLLC & Rio Tinto. Completed
Vehicle Collision, vehicle impact on person,
pre-operational vehicle checklist, Daily Toolbox
& Take 5 Forms on Safety Culture & Forward
ccv apps

0735 EWLLC headed to VS-11 to begin apply seed
mixture in designated areas.

0850 Molly, Ashley & Larry (EWLLC) to MW-2 & MW-5
access roads to show Larry where to blade/
grade at.

0910 Molly & Ashley @ VS-11. EWLLC completed
installing seed mixture. Plan to use FET
Trimble Series TX to collect GPS points
for wattles & seed mix.

0930 4th truckload of rock (media luna) delivered
to center staging area. Molly on-site.

10/31/24 JJ Mine Erosion/Reclamation Repair
1100 EWLLC skid steer had a hydraulic
line break & hydraulic fluid leak
on access road from MW-3 to MW-4.
Lew conducted Take 5 w/ Jimmy &
visquine was placed on ground &
impacted soil was placed on tarp.
Any remaining impacted soil will be
added to the tarp after the skid
steer can be moved. A mechanic
will be onsite around 1300 to
repair the line.

1300-1430 Molly marked out seeding/marking locations
@ VS-6.

EWLLC completed installation of matting & wattles @
VS-5. Molly walked through what materials need
to be installed & where w/ EWLLC. Begin trenching for
wattles.

1440 Chris EWLLC onsite. Delivered new skid
steer & UTV to site. Molly, Ashley, Chris & Larry
to VS-10 to discuss re-grading plans
for Flexamat installation to occur
next week.

Went to VS-12 to discuss plans for
seeding/matting & re-grading of berm.
Molly will mark up VS-12 cut-sheet for
Kontad to use on 11/1/24.

1555 Lew stringer off-site. Headed to
ABA to purchase helmets to be worn
when using UTV.

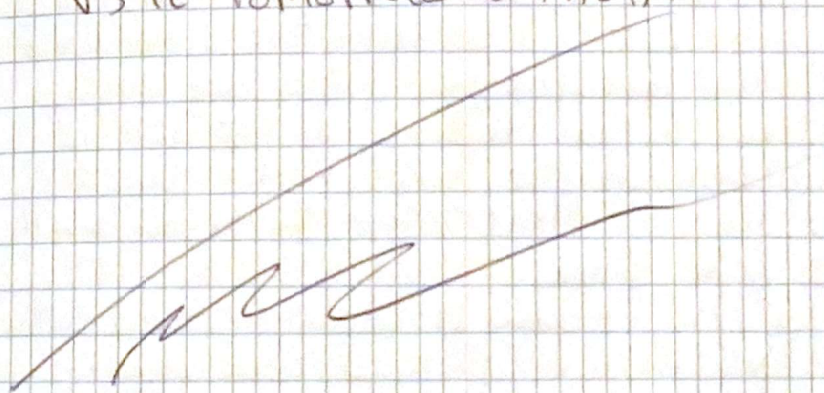
10/31/24 JJ Mine Reclamation Repair/Erosion
1615 INTERA & EWLLC off-site. Two rows of
wattles were installed @ VS-6. Will continue
working there tomorrow. Larry will be
working @ VS-12 tomorrow.

Summary: Installed seeding @ VS-11 GPS points
were recorded for seeding, wattles &
monument.

- Wattles, seeding & marking installed @
VS-5. Only rock armoring remains to
be installed.

- Wattles installed @ VS-6. Seeding
marking, rock armoring remains to
be installed.

- Plan to continue working @ VS-6 &
VS-12 tomorrow (11/1/24).



11/1/24

0630 Konrad onsite, Enviroworks Crew Onsite
Weather: Clear, Cold 31° to 26°
Objective: Continue Erosion Mitigation Activity

0707 Lew Stringer onsite
Larry talking about assignments of work that will take place today
Go up to Equipment Area so Crew Can Complete the equipment Inspections
Larry in Komatsu Excavator Heading to VS-12 for Erosion Mitigation Work
The small excavator & skid steer have gone over to VS-6 with the mini excavator rebuilding the upper weir that had collapsed, the skid steer has put on the Rock bucket and is removing the small rocks below the Vent shaft where the seeding will take place

1000 Crew is now broadcasting seed at VS-6 in the prepared area below the Vent shaft, Larry has moved to VS-10
After spreading the seed the Fiber Rolls were installed over the seed rolling it down from top to bottom being keyed in to wattle trench on both ends

11/1/24

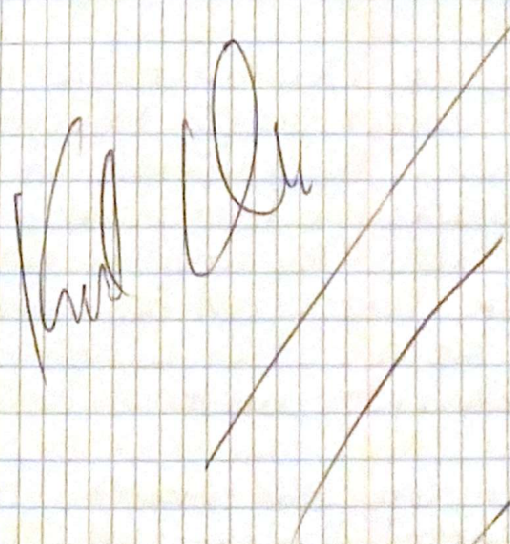
1130 Larry heading back to parking area
rest of crew all fixing the fence @ VS-6. AT VS-6 Seeding and Fiber Roll area is approx 24' X 30' and 2 ea wattles installed
Note: Sprayed Lock Lubrication in VS-6 Lock and it now opens

Crew locking things up
Larry fueled the Big Excavator

1200 Crew heading offsite from parking area

Head over to VS-10 and take picture and send to Ashley

1215 Konrad offsite



11/4/24 Id Mine Reclamation/Repair Erosion

MR

0630 INTERA (M. R. H. R.) on-site

Weather: 37°F, rain/sleet. Roads are muddy.

Objectives: Receive Flexamat UV-T Plus concrete erosion control blanket rolls.

0640 Road conditions are not suitable for work. Plan to receive delivery of Flexamat UV-T Plus rolls.

0645 Larry Begay (EWLLC) on-site.

Low Stringer (Ristinko) on-site.
(CQC)

0740 Flexamat truck on-site. 5 rolls on truck.

TGSM, EWLLC crew on-site. Plan to go up and get necessary heavy equipment to unload the Flexamat rolls. Will unload rolls onto EWLLC's trailer & then stage back @ center. Precip has stopped.

0830 Truck hove down by Flexamat truck using chains w/ tie down straps to unload rolls onto EWLLC trailer. 4-pts of contact maintained when transporting roll. Staging rolls by media using rock @ center. Dozer w/ forklift attachments being used @ center to unload roll from trailer.

1007 All rolls unloaded off trailer. Flexamat off-site. One pallet of U-anchors was delivered w/ rolls.

1/4/21

MR

1150 Call w/ A. A. Rossa. Discussed unloading of rolls & agreed to end work early today. More precip. is forecasted from 1200-1300. Plan to start @ 0700 tomorrow (1/5/21).
- EWLLC & RTC off-site.

Summary: 5 out of 7 Flexamat UV-T PLUS rolls delivered & staged.

- 202 U-anchors delivered & staged (1 pallet)
- Ended work early due to weather.
- 6-12" angular rock & biodegradable matting & straw bales scheduled for delivery tomorrow.

1200 Mully off site. Headed to ABQ.



11/5/24 JJ Mine Reclamation / Repair Erosion mp
0650 INTERA (M. R. Her) on-site. Enviroworks (EW)
& RioTinto (RT) on-site.

Weather: 28°F, Sunny, frost on ground

Objectives: Visit w/ MMR

- Receiving wattles, biodegradable matting, straw bales & rock
- Seeding/matting/wattles instal @ reclaimed Borrow Area (BA)

0700 TGSM w/ EW & RT.

- EW headed up to MW-3 to warm up equipment & complete inspections.
- Molly to reclaimed BA to place flagging for work areas.

0800 A. Arrossa on-site. EW working @ reclaimed BA.
Molly & Ashley conducting site walk through
- Checked on progress @ reclaimed BA, VS-10,
VS-12, VS-5 & VS-6.

1100 Biodegradable matting delivery to site. EW crew headed to County Rd 1 to receive materials

1200 EW mechanic on-site. Plan to work on Skid steer that blew a tire last Thursday (10/31/24).

Discussed HBS Forms w/ Lew. He stated that we can attach photos of EW's equipment inspections to the Daily Toolbox meeting.
- Two (2) rolls of biodegradable matting that was delivered last week was deteriorated & can not be used. EW to inspect all future deliveries.

11/5/24 U Mine Reclamation/Repair Erosion MR

1215 Clint Chisler & Kevin Barnes (MMO)
on-site. TGSN w/ them, Ashley, Molly & Lew.

- EW back working @ reclaimed BA.

Continue installing matting, seeding, & wattles.

- Ashley, Clint, & Kevin plan to visit
areas of work: VS-5, VS-6, VS-10/BA, VS-11
& VS-12.

1320 Equipment Share Mechanic on-site. Plan to
look @ EW rented side-by-side

1420 Clint & Kevin off-site.

1520 A. Arrossa off-site. Confirmed w/ EW
that 2 bags of seeding were delivered
to the Edgewood office. They will bring
the bags w/ them tomorrow.

- EW on last bag of seeding @ reclaimed BA.

1530 Equipment share mechanic off-site. Could
not get side-by-side started. They will deliver
a new one tomorrow.

- EW begin clearing up work areas & moving
equipment back to staging area @ MW-3.

Installed seeding then matting & wattles on
top. Trenches were dug for wattle installation
& matting was reeled in @ top & bottom of
rolls.

- Installed approx

1545 EW & RTC off-site.

1550 M. Ri Her off-site.

11/6/24 JJ Mine Reclamation/Erosion Repair MK
0700 INTERA CM, RATER on-site. Enviro works ^{ETW}
Rio Tinto Closure (RTC) on-site.

Weather: 60°F, Light Flurries.

Objectives: Install wattles @ reclaimed
Borrow Area (BA).

0705 TGSM: Headed up to MIN-3 for
equipment inspection

0730 Call w/ A. Arrossa. Snow has now
been steadily coming down. She
agrees to let EW place wattles @
reclaimed BA but use no equipment.
Plan to work for next couple of
hours & then end early due to
weather & road conditions.
- EW did not bring the additional
two (2) bags of seed mix w/ them.

0813 EW setting up @ reclaimed BA.

0934 Begin wrapping up @ reclaimed BA.
EW installed 200 ft of wattles
following the contours of the surface.
Wattles were keyed in w/ ~4" trench
& staked into the ground every 4 ft.

1000 EW & RTC headed to County Rd. 1
EW to call Chris Scherer about their
schedule for Thurs/Fri. Blaw has a
meeting @ 1000.

1005 M-RATER off-site. Headed to ABO

11/11/24 Ju Mine Reclamation/Erosion repair MP
also ENTERA (M. R. Her) on-site. Enviroworks (EW)
on site

Weather: 37°F, Sunny. Some snow left
on ground. Roads are

0700 TGSN w/ EW. Rio Tinto Closure (RTC) will
be on-site later this morning

0710 EW headed up to Equipment staging
area to complete equipment inspections.
Molly headed to County Road 1 to
wait for Flexamat.

Objectives: Continue seeding, matting &
whittles @ reclaimed Borrow Area
(BA) - Brought two (2) bags of seed
- Receive Flexamat VVT Plus rolls
- Mechanics to work on skid steer
 ↳ Side-by-side
- Straw Bale delivery

0900 Larry Beggs (EW) headed to Biba to check
on Flexamat delivery

0940 EW bringing more biodegradable matting from
staging area to reclaimed BA. Work area is
cleared of debris (rocks, veg, etc) prior to
seeding then installing matting - keyed in
w/ anchor trench (~4") @ top of slope
then stapled into ground.

11/11/24 JJ Mine Reclamation/Repair Erosion ME
0850 EW moving to VS-6. Had to stop activities
@ reclaimed BA due to muddy conditions
inside the fenced reclamation area.
Plan to install remaining seeding, matting
& wattles @ VS-6.

1050 Call w/ A. Arrossi. Discussed site conditions
& she agreed that it makes sense
to end the day early if necessary.
Ashley will call Mark Kingsley (EW)
to order 2000 more bags of seed mix
& inquire about Flexamat delivery.
Molly marked out area for more
seed/mat/wattles @ VS-6.

1200 EW getting shed steer for last area of
seeding/matting @ VS-6. Ground has hardened
& dried up compared to this morning.

1400 Straw Bales delivered to site. Approx ~ 27 bales
EW staging bales inside fence @ VS-10
Low Stringer (RTC) on site.

1400 Equipmentshare mechanic on site. Plan to work on
EW rented side by side.

1515 Equipmentshare mechanic headed off site.
Got side-by-side issue diagnosed. Plans to
come back out tomorrow morning.

1520. EW & RTC headed off site. See Daily Field Form
on 11/12/24 for summary.

1530 Molly off site. Headed to Bibo.

11/12/24 JJ Mine Reclamation/Repair Erosion ME
0850 INTERA (M. Alter) on site. Environmental LLC
(EN) & Low Stringer (RTC) on site

Weather: 34°F, sunny. High in low 60's w/
wind picking up in the afternoon.

Objectives: Install rock armoring @
VS-5 & VS-6

Install rock for check dam bulwark
@ VS-5

Install ^{new} straw bales @ VS-11

Grade access road below VS-12
to MW-S

0700 TCSM w/ RTCB EW.

0715 EW headed up to Equipment Storage
area to conduct equipment inspections

0730 EW crew needed to install strawbales @ VS-11
Loader begins staging 6'x2' angular rock
@ VS-5 & VS-6.

0800 Molly placed flagging @ VS-4 & VS-10 for strawbale.
Shaved EW crew strawbale spec sheet &
where bales will be installed.
Loader is staging rock @ VS-4.
Shed steer moved over to VS-10 to help
move bales closer to where they will
be installed @ VS-10.

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Monday

Date: 11/11/24

WEATHER CONDITIONS				
Temperature (F)		Wind Speed/Direction		Description (sunny, cloudy, rain, etc.):
68.5	F	0	mph	Sunny, snow on ground
PERSONNEL (NAME/COMPANY)				
•				•
•				•
•				•
•				•
•				•
•				•
•				•
VENT SHAFT AREAS - WORK PERFORMED				
VS-4	None			
VS-5	None			
VS-6	Completed install of seeding, biodegradable matting & wattles			
VS-11	None			
VS-12	None			
VS-10	None			
Borrow Area	Continued install of seeding, biodegradable matting & wattles → stopped due to muddy conditions			
Stockpile	None			
DAILY WORK SUMMARY				
• Completed install of seeding/matting/wattles @ VS-6. - Still need to add rock to check dams & armored channel. • Continued install of seeding/matting/wattles @ BA. Had to stop working due to muddy conditions → need the skid steer to continue clearing the area. • 21 strawbales delivered. Staged inside fence @ VS-10.				

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-6	seed	no. 75 bag	No	Yes
VS-6	matting	6 rolls	NO	Yes
VS-6	weathies	80 ft	No	Yes
VS-6 BA	seed	no. 75 bag	No	No
BA	matting	3 rolls	No	No
BA	weathies	~70	No	NO

11/12/24 JJ Mine Reclamation/Repair Erosion

1120 VS-6 erosion mitigation features are all installed.

- Wattles
 - Seeding
 - Biodegradable matting
 - 6-12" angular rock
- Molly calibrating FEI rental Trimble Geo 7X Series to collect GPS points for as-builts.
- EW crew headed to County Road 1 set up to receive Flexamat VRT Plus rolls. Larry to drive out to Biba Bar to intercept driver.

1203 Molly finished collecting GPS points @ VS-6.

- EW crew finished installing strawbales @ VS-10 & VS-4.
- Staging 6-12" rock @ VS-5
- Equipment share mechanic on site working on side-by-side

1240 Larry checked in - still no Flexamat truck driver. Mark Kingsley (EW) attempting to call truck driver.

1356 Larry got ahold of the Flexamat truck driver - he is having issues w/ his exhaust & will not make it to the site today.

- Planning for a tomorrow AM delivery.
- 6-12" angular rock installed @ designated location @ VS-5.
 - EW crew began adding 6-12" angular rock to designated area @ VS-4.
 - Equipment share off site. Side-by-side still not repaired.

11/12/24 JJ Mine Reclamation/Repair Erosion

MR

1510 Molly collected GPS points @ VS-5. EW finishing up placing 6-12" angular rock to bolster existing rock armoring @ VS-4.

- Discussed w/ Larry the tentative schedule for tomorrow (11/13/24)

BBEW & RTC checked off site.

Summary No Flexamat delivery - tentatively will arrive tomorrow (11/13/24) AM

- Rock armoring (6-12" angular) installed:
 - VS-4, VS-5, VS-6
- Check claim installation/Bolster (6-12")
 - VS-6
- Strawbales installed
 - VS-4, VS-11
- GPS Points taken
 - VS-5, VS-6
- Two (2) truckloads of 6-12" angular rock delivered

*All features installed according to specs created/enforced by INTERA *

1535 Molly off site. Headed to ABA. Will stage crate w/ site docs for A. Arreola.

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Tuesday

Date: 11/12/24

WEATHER CONDITIONS				
Temperature (F)		Wind Speed/Direction		Description (sunny, cloudy, rain, etc.):
<u>56</u>	<u>F</u>	<u>22</u>	<u>mph WSW</u>	<u>Sunny, windy in PM</u>
PERSONNEL (NAME/COMPANY)				
M. Richter - INTERA L. Stringer - RTC L. Beggs R. Berrientos E. Huerta J. Reyes J. Bunne L. Gonzales - EW				
} - EW				
VENT SHAFT AREAS - WORK PERFORMED				
VS-4	- Straw bales installed near rock armoring & East fence - 6-12" angular rock added to armoring			
VS-5	6-12" angular rock added to West slope			
VS-6	6-12" angular rock added to bolster check dams, construct 1 new check dam & bolster armoring			
VS-11	Straw bales added to erosion channel			
VS-12	NA			
VS-10	Straw bales installed Wattles installed South of monument			
Borrow Area	NA			
Stockpile	NA			
DAILY WORK SUMMARY				
- Two (2) truckloads of 6-12" angular rock delivered. - VS-5, VS-6, & VS-11 have all erosion mitigation features installed. - VS-4 had straw bales & 6-12" angular rock installed in designated areas. - VS-10: straw bales & wattles installed				

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-11	strawbales	3	No	Yes
VS-4	strawbales	6	NO	
VS-6	6-12" angular rock	~54 cy	Yes	Yes
VS-5	6-12" angular rock	~10 cy	YES Yes	Yes
VS-10	strawbales	7	NO	Yes*
VS-10	wattles	70 ft	NO	No

* May decide to add bales to channel forming west of Flexamat area *

11/13/2024 JJ Mine Erosion Mitigation AKA

0700 A. Azevessa (AKA) of INTERA on site at the turn off from Cty Rd 1. Upon arrival, EWLLC, Low (RTC) and the Concrete Erosion Control Blanket delivery also on site. * (ECB)

Daily Safety meeting conducted, led by AKA. Discussed planned tasks, critical risks and site hazards such as vehicle impact on person, working around heavy equipment/suspended loads, weather, communication.

0720 Started to unload ECBs from delivery trailer.

The roads heading into the site are hard packed from traffic and recent precipitation. The first Low Water Crossing (LWC) from Cty Rd 1 has some damage from the trailers.

Some (2-3) of the Articulated Concrete Blocks may need to be repaired.

0730 AKA heading to VS-10 area to inspect slope. Using box level measured 39-45% slope. It will need to be taken back further. Took progress photos of BA/VS-10 from VS-11. Inspected VS-12. Diversimber needs to be built along road to direct ~~and~~ run-on/run-off.

830 Equipment share on Cty Rd 1 to work on / pick up the side by side LCV.

JJ Mine Erosion Mitigation AKA 11/13/2024

Checked on status of additional seed delivery. One additional bag is arriving to Edgewood today. AKA asked EWLLC to order 2 more. Total of 112 tons rock delivered. Called off the delivery going forward. CLE members: EDUARDO + EFRON ROMERO. Former miners here to check on the cattle turning around at muster.

0910 Mechanic leaving with side by side.

After looking at BA/VS-10, it seems like there needs to be additional wattles and matting placed. AKA talked with José about rock placement for upper media luna and the wattles. AKA talked to Larry about the slope at VS-10 needing to come back and marked the edges with pin flags. The slope length is approximately 55 ft on the east side/edge.

1100 Lowe and ~~Jim~~ Jimmy are bringing rock up to BA for the media lunas. AKA talked to EWLLC about u-anchors and ECB panel placement. Edgar, José and Enrique installing more wattles at VS-10 on BA. 3 extra pallets of wattles.

1400 Looked at VS-4, EWLLC to complete seeding and matting to finish tract reclamation area. One extra straw bale. AKA checked VS-5 and VS-6 looks good. May need to rake around where equipment drove.

DAILY FIELD LOG

JJ No.1 / L-Bar

Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Wednesday (11)

Date: 11/13/2024

WEATHER CONDITIONS				
Temperature (F)		Wind Speed/Direction		Description (sunny, cloudy, rain, etc.):
33-	F°		mph	
PERSONNEL (NAME/COMPANY)				
• A. Armossa / INTERA • L. Stringer / RTC • L. Begay / EW LLC • Louie • José • Enrique • Jimmy		• Edgar • • • • • •		
VENT SHAFT AREAS - WORK PERFORMED				
VS-4	seeding, mat installation @ Subgrade prep for seeding extra straw bale - move to SP?			
VS-5	None. complete			
VS-6	none. complete			
VS-11	none. complete			
VS-12	none - waiting for additional seed.			
VS-10	wattle @ slope grading @ 3:1			
Borrow Area	wattle installation, matting installation, rock placement @ upper media Luna.			
Stockpile	none - waiting for additional seed.			
DAILY WORK SUMMARY				
Non operational UTV / side by side taken off site. Road grading done heading to MW-5.				

11/13/24 JJ Mine Erosion Mitigation

AKA

1430 - Equipment share removed the broken down skid steer from the road heading down to MW-4.
Removed the spill kit and residual oils.

1530 Crew heading off site.

①

JJ Mine Erosion Mitigation

11/14/2024

0740 INTERA, RTC, EULC on site
Safety Share/Toolbox meeting conducted by AKA. Plan to do a Take 5 before handling ECB.

0745 Larry working on the slope at V5+10. The crew is seeding at V54.

0905 Molly and Ashley checked the slope grade, which ranged from 25-30% = 3.2-4.0 ft. We want to avoid creating a bulge or bowl, so have directed Larry to blend the western edge and create a flat bench at the bottom. The mini excavator is moving the rock at the bottom.

0940

1030 Molly and Ashley marking the length (total) of the ECB at the crest and numbering the panel locations.

General steps will be:

- + Excavate 12" x 45° anchor trench along western vertical edge.
- + Excavate 18" x 90° anchor trench at the top, approximately 3 ft from the crest (flat runoff). Initially, just excavate ~20 ft length.
- + Distribute seed along slope face and top flat portion.
- + Track in seed
- + Bring first 7.5' roll/panel to area.

1130 Ashley spoke w/ Flexarmat manufacturer rep to ask about installation process regarding anchor trench sequencing.

11/14/24 JJ Mine Reclamation/Repair Erosion
1120 Seeding complete on slope of Flexamat
area @ VS-10.

AKA/
MR

1140 Break for lunch. First (1st) Flexamat panel brought
to staged @ VS-10.

1230 Take 5 w/ RIC, EN crew & INTERA.
discussed hold points, critical risks & install
process.

1315 1st Flexamat V-T panel laid down. West anchor
trench dug @ 45° angle @ ~12". Rearrange mat
as needed.

- Used dozer to control descent of panel as
it was being unrolled → panel got off center
near the bottom 1/3 of the slope. EW crew
used rebar hooks to realign panel.
- Plan to utilize track hoe for the second (2nd)
panel to control the descent down the slope.
2nd panel will be overlaid ~~on~~ West edge
will be overlaid on top of 1st panel East
edge.

1530 Begin set up for 2nd panel.

1340 EW crew straightening out 2nd panel.
Track hoe worked better than dozer
for keeping the roll in line w/ the 1st panel.
- Will continue to line up panels @ top of slope.

1400 Setting up for 3rd panel.

1415 3rd panel installed. Straightened out as the panel
was being unrolled w/ track hoe holding the roll.

11/14/24 JJ Mine Reclamation/Repair Erosion
1450 Begin setting up 4th panel

AKA/MR

1515 4th panel installed.
All panels still need to have U-anchors
installed & toe/crest anchor trench 18"
& backfilled ~~with~~ compacted

1535 Lew off site.

1540 EW crew off site. Molly & Ashley headed off site.

Summary:

- EW completed installing erosion mitigation features
@ VS-4. Seeding/mulching - straw bales
- Rock armoring
- EW completed regrading VS-10 slope
→ Slope was seeded
- EW installed four (4) Flexamat V-T Plus panels
(panels #1-4). Will plan to install U-anchors
tomorrow (11/15/24)
- EW installed seeding/biodegradable mulching
@ BA.
- Rocks were placed in erosion channels
down slope at VS-10 berm.

Molly

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Thursday

Date: 11/14/21

WEATHER CONDITIONS				
Temperature (F)		Wind Speed/Direction		Description (sunny, cloudy, rain, etc.):
50	F	2	mph	Sunny
PERSONNEL (NAME/COMPANY)				
- Molly / INTERA - Ashley / INTERA - Lew / RTC - Larry / INTERA - Louis - Jose - Enrique		- Jimmy - Edgar		
VENT SHAFT AREAS - WORK PERFORMED				
VS-4	Seeding/matting			
VS-5	NA			
VS-6	NA			
VS-11	1 strawbale broken apart & placed on seed			
VS-12	NA			
VS-10	Re-grade slope, install four (4) Flexamat UV-T panels, seed slope			
Borrow Area	Seeding/matting			
Stockpile	NA			
DAILY WORK SUMMARY				
- VS-4: erosion mitigation features installed - VS-11: Used one (1) strawbale to cover seeded areas - VS-10: Re-grade slope - range from 3:2-4:1. Applied seed mix to slope prior to installing four (4) Flexamat UV-T Plus				

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-4	Seeding	1/2 bag	No	Yes
VS-11	strawbale	1	No	Yes
VS-10	Seeding	1/4 bag	No	No
VS-10	Flexamat	4 panels	No	No
BA	Seeding	1/4 bag	No	No
BA	matting	2 rolls	No	No

11/15/24 JJ Mine Reclamation/Repair Erosion
0700 INTECA (M. R. Her) on-site. ENV crew (EW)
crew on site.

Weather: 34°F, Sunny. High in 60's

Objectives: Finish installing Flexamat UV-T Plus
panels - anchor trench sides to toe/crest
- install V-anchors
- Rake slope @ VS-12 to allow snow
to melt
- Rock armoring to check dam bolstering
@ VS-10

0705 TGS M led by M. R. Her w/ EW crew

0710 EW crew begin set-up/equipment inspection
Mally headed to VS-4 to take GPS coords.
w/ FSI Trimble Geo TX Series

0815 Mally placed pin flags for seeding/mulching @
Stockpile.
- 5m Flexamat panel being installed @ VS-10.

0835 Begin setting up 6m Flexamat ^{MR} ~~panel~~

0936 7th final Flexamat panel installed. EW to
begin digging anchor trenches for toe/crest/side
& installing V-anchors every 2ft along
overlapped seams.

- Toe/crest anchor trenches = 18" deep @ 90°
- Side anchor trench = 12" deep @ 45°

1006 Louis (EW) ^{MR} ~~staging~~ staging biodegradable
mats @ Stockpile, VS-10 & VS-12.

11/15/24 JJ Mine Reclamation/Repair Erosion MR
1118 EW crew having difficulty hammering V-anchors.
Going to try moving the placement of anchors
one (1) to two (2) cells back to avoid bending
anchors.

1115 EW placing 4-6" angular rock west of Flexamat
panel #1. Armoring slope that was impacted by
grading.
- East side trench dug. West side anchor trench
backfilled & compacted w/ excavator tracks.
Working on filling/compacted anchor trench @
crest.

1135 Begin digging toe anchor trench.

1232 Toe anchor trench complete. Begin backfilling/compacting
toe/crest anchor trenches.
- Rock armored (4-6" angular) West slope where
surface was impacted by grading.

1315 Finished backfill/compaction of all anchor trenches.
EW crew staging equipment for Monday.

1355 EW crew & Mally off-site. Headed back to ARB.

Summary: Flexamat UV-T Plus panels (7) installed
along graded slope @ VS-10. Anchored in
w/ V-anchors & anchor trenches backfilled &
compacted along edges & crest/toe.
- VS-10 Rock check dams bolstered w/
6-12" angular rock
- Western edge of graded slope w/o Flexamat
armored w/ 4-6" angular rock

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Friday

Date: 11/15/24

WEATHER CONDITIONS				
Temperature (F)		Wind Speed/Direction		Description (sunny, cloudy, rain, etc.):
60	F	4	mph	Sunny
PERSONNEL (NAME/COMPANY)				
• Molly - INTERA • Larry - EWLLC • Louis • Jose • Edgar • Jimmy • Enrique		• • • • • • •		
VENT SHAFT AREAS - WORK PERFORMED				
VS-4		GPS points taken		
VS-5		NA		
VS-6		NA		
VS-11		NA		
VS-12		Staging matting		
VS-10		Three (3) Flexamat UV-T Plus panels install Rock armoring		
Borrow Area		Seed/matting		
Stockpile		Placed pin flags for feature install		
DAILY WORK SUMMARY				
VS-12: Staged matting stockpile: Staged matting, marked out work areas BA: Continue seed/matting VS-10: Finished installation of Flexamat - anchor trench dug, backfilled/compacted. Rock armored west of panels & bolstered check dams				

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-10	Rock 4-6"	15 cy	No	NO
VS-10	Flexamat	3 panels	NO	NO
VS-10	Rock 6-12	15-20 cy	NO	NO

11/19/24 JJ mine Reclamation/Repair Erosion MR
C50 INTERA CMR (Her) on site. EWLLC on site

Weather: 38°F, High in 50's w/ High winds in the afternoon

Objectives: Continue installing Erosion Mitigation Features @ VS-10

0700 TOSM w/EWLLC led by MR.

0710 EWLLC headed to Equipment staging area to conduct pre-op. inspection

0730 EWLLC crew headed to VS-10. Will continue Sealing/matting & begin East rock armoring of Flexamat

& constructing media lunas

0955 EWLLC adding two (2) more rolls of matting/seeding to BA. Will then move on to seeding matting VS-10.

- Media luna above slope constructed. Keyed into surface w/ ~4" anchor trench & seeding placed prior to construction.

- Molly headed to VS-12 to place pin flags.

1203 Rock staged @ VS-12 (4-6" angular). EWLLC break for lunch.

1240 EWLLC back to work. Plan to work @ VS-12.

1420 Molly looked @ the stockpile @ VS-10 for places to install more rock. Placed pin flags & showed Larry where to install rock (4-6") @ VS-10.

Repair Erosion MR
E-ENLLC on site

High winds in the

ling Erosion
@ VS-10

MR.

ment staging
p. inspection

VS-10. Will continue
fast rock armoring
of Flexamat

rolls of matting/
over on to seeding

constructed.
~4" anchor trench
construction.
place pin flags.

angular. ENLLC break

n to work @ VS-12.

VS-10 for placed
Flags & showed Larry
@ VS-10.

11/18/24 JJ Mine Reclamation/Repair Erosion -mk
E-ENLLC begin packing up for the day.

ENLLC & INTERA off-site. Molly headed to
Bibo

Summary: Completed install of seeding/matting
@ BA

-Completed rock armoring/check dam installation
@ VS-10

-Began wattle, seeding, matting, & rock
armoring @ VS-12

-All erosion mitigation features installed
according to INTERA specifications



DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Monday

Date: 11/18/21

WEATHER CONDITIONS		
Temperature (F)	Wind Speed/Direction	Description (sunny, cloudy, rain, etc.):
<u>55</u> F	<u>15</u> mph	
PERSONNEL (NAME/COMPANY)		
• Molly - INTERA • Larry - EWLLC • Louis • Jimmy • Jose • Edgar • Enrique		
VENT SHAFT AREAS - WORK PERFORMED		
VS-4	NA	
VS-5	NA	
VS-6	NA	
VS-11	NA	
VS-12	Rock armoring for West side & wattles installed	
VS-10	Two (2) media lunas - Rock armored East slope - Seeding/matting.	
Borrow Area	Completed Seeding/matting. - Rock armored rills downslope of wattle	
Stockpile	NA	
DAILY WORK SUMMARY		
- BA: Seeding/matting complete. Added rock armoring to deep rills - VS-10: Rock armored (4-6") East slope, constructed media lunas - VS-12: Bolstered rock armored channel & installed wattles		

DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-10	Rock (4-6")	~40 cy	NO	No
VS-10	Seeding		NO	No
VS-10	matting Seeding		NO	No
VS-10	strawbales	3 bales	NO	No
VS-12	rock (4-6")	~30 cy	NO	Yes

11/19/24 JD Mine Reclamation/Repair Erosion MR
OGSS INTERA (M. Riter) on-site. EWLLC on-site

Weather: 35°F. High projected in 50's w/
High winds: 730 mph SSW

Objectives: Continue installation of erosion
mitigation features @

-VS-12, VS-10 & Stockpile

0700 TGSM led by MR. Chris Scherer
(EWLLC) will be on-site later this
morning to walkthrough work
areas

0715 EWLLC headed to equipment staging
area to conduct inspection before
heading to VS-10 / VS-12.

0800 Chris Scherer on-site came to take Jimmy to another
site.

0950 Molly marked wattle locations w/ pin flags @ VS-10.

Molly & Larry looked @ Evap tank @ MW-1. Larry will
move T-posts & barbed wire around tank.

Larry completed grading access road from
VS-12 to MW-5.

1000 EWLLC begin seeding/matting/wattle installation
@ VS-10. Ground was prepared beforehand to
clear rocks/debris/etc.

- Erosion mitigation features installed @ VS-12
Larry re-building berm by the access road.

1155 Larry finished rebuilding the berm @ VS-12.

on/repair Erosion m
n-site. EWLLC on-site

led in 50's w/
ph 35W
Installation of erosion
res @
& Stockpile

MR. Chris Scherer
on-site later this
through work

Equipment Staging
inspection before
2.

Take Jimmy to another

w/ pin flags @ VS-10.
R @ MW-1. Larry will
around tank.
access road from

ting/wattle installation
ed beforehand to

res installed @ VS-12
by the access road.

The berm @ VS-12.

11/19/24 JJ Mine Reclamation / Repair Erosion m
1200 EWLLC break for lunch.

1230 EWLLC back @ VS-10. Larry dragging
harrow attached to side-by-side along
roads & reclamation areas where
erosion mitigation features were
installed.

1420 EWLLC completed seeding/matting/wattle
installation @ VS-10.

Molly Showing José, Edgar, & Enrique
where to place seeding/matting/wattles @
Stockpile

1440 Jose informed Molly that they are out of
wooden stakes for wattles. Larry confirmed
that they will bring more w/ them
tomorrow.

1510 EWLLC off-site. Molly off-site. Headed to
Bibo.

Summary: Completed installation of erosion
mitigation features @

- VS-10 & VS-12
- Re-built berm along access road by VS-12.
- Used harrow to drag along worked
areas, staging area & equipment laydown
yard.



DAILY FIELD LOG
JJ No.1 / L-Bar
 Mine Site Closure Reclamation Repair / Erosion Mitigation

Day: Tuesday

Date: 11/19/24

WEATHER CONDITIONS		
Temperature (F)	Wind Speed/Direction	Description (<u>sunny</u> , cloudy, rain, etc.):
<u>50</u>	<u>F</u>	<u>20</u> mph
PERSONNEL (NAME/COMPANY)		
• Molly - INTERA • Larry - EW LLC • Louis • Edgar • Jose • Enrique • Jimmy		
VENT SHAFT AREAS - WORK PERFORMED		
VS-4	NA	
VS-5	NA	
VS-6	NA	
VS-11	NA	
VS-12	Install matting/wattles/seeding & straw bales	
VS-10	Install matting/wattles/seeding & straw bales	
Borrow Area	NA	
Stockpile	Stage straw bales	
DAILY WORK SUMMARY		
VS-12: completed install of seeding/matting/wattles & straw bale ↳ re-built berm along access road. VS-10: completed install of seeding/matting/wattles & straw bale Dragged harrow along access roads, staging area & equipment laydown area		

DAILY FIELD LOG
JJ No.1 / L-Bar
Mine Site Closure Reclamation Repair / Erosion Mitigation

MATERIALS INSTALLED				
Vent Shaft Area	Erosion Control Feature	Quantity Installed	GPS Coordinates Taken	Work Complete?
VS-12	seeding	~2,661 sf	Will take on 11/20	Yes
VS-12	matting	~2,661 sf	Take on 11/20	Yes
VS-12	wattles	~266 ft	Take on 11/20	Yes
VS-12	strawbale	1 bale	No - will do on 11/20	Yes
VS-10	seeding		11 17	Yes
VS-10	matting		↓	Yes
VS-10	wattles			Yes
VS-10	strawbale	1 bale		Yes

11/20/24 WJ Mine Reclamation/Repair Erosion MR
0700 INTERA (M.B. Her) on-site. EWLCC on-site

Weather: 25°F, Sunny. High projected in 40's

Objectives: Complete installation of erosion mitigation features @ Stockpile

- Pick-up for EWLCC track-hoe to dozer

0705 TGSM led by MR

0715 EWLCC headed to Equipment Staging area to conduct inspections.

0730 EWLCC moving track hoe to County Rd. 1
- Crew begin seeding/matting @ Stockpile
- Begin moving grader to County Rd. 1.

0833 Molly @ VS-12 to collect GPS points w/
FEE Rental Trimble Geo Tx Series.

0900 Molly @ BA/VS-10 to collect GPS points.

1020 Molly headed up to Stockpile to show where
wattles can be installed.

- EWLCC completed installing seeding/matting
@ Stockpile

- Larry is working on re-building fence around poly tank for GW purge water @ MW-1.

1136 Molly drove down road from MW-1 to MW-5

→ successfully drove down & back up. For MR

- Took photos from vantage point @ VS-11.

on/Repair Erosion
on-site EWLCC on-site

1. projected in 40's
location of erosion
res @ Stockpile
c track-hoe to

equipment staging
inspections.

2. hoe to County Rd. 1
y/matting @ Stockpile
er to County Rd. 1.

lect GPS points w/
Tx Series.

collect GPS points.

to show where

1.
ing seeding/matting

on re-building fence
w purge water @ MW-1.

from MW-1 to MW-5
B back up. For ^{me}
ge point @ VS-11.

11/23/24 JD Mine Reclamation/Repair Erosion MR2
1340 EWLCC completed installation of seeding/matting
wattle @ Stockpile.

- EWLCC installed U-anchors @ crest of
slope for Flexamat.

- Moving back to VS-10 to place remainder
of seed/matting below the Flexamat on
the East side (downslope)

- Molly collected GPS points @ Stockpile.

- One (1) pallet (~200ft) of wattle
leftover 3 stages @ MW-3 w/ warden
stakes.

1420 Covered wattles w/ poly tarp.

EWLCC finished installing seeding/matting @ VS-10.

- Begin cleaning up.

1445 EWLCC & Molly headed off-site. Headed back
to ABS.

Summary: Completed installation of erosion
mitigation features @:

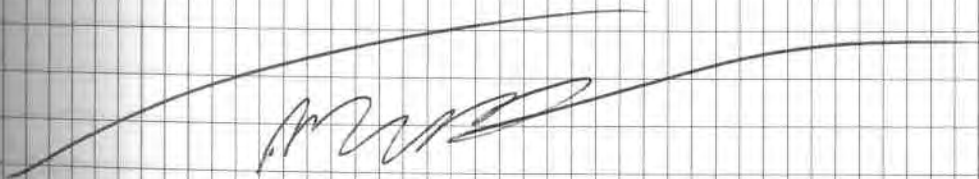
VS-10 & Stockpile

- Constructed new fence around poly tarp
@ MW-1

- Used harrow on roads & staging areas

- cleaned up trash

- Collected GPS points @ VS-10, VS-12, BA
& Stockpile



4/22/25 UAV 2025 Survey

MR

0728 INTERA (M. Riter) @ Bibb Bar to meet
Nick Kaczmarczyk (Sunrise Engineering)

Weather: High in 70's. Currently 48°F, Sunny.
Objective: Sunrise Engineering to conduct
aerial survey of L-Bar site ~140 acres.
- Molly to inspect Vent shaft (VS) areas
where erosion mitigation features were
installed in Fall 2024.

0745 Nick @ Bibb. TGSN.

0800 Molly & Nick headed to site.

0820 on-site. Locating control point near
Stockpile (BH 11-233-06). Control point ~20
ft East of NE Stockpile fence corner.
Begin tie-in @ BH 11-233-06. Plan to fly drone
from high point @ stockpile.

0903 Molly inspecting Stockpile, VS-5 & VS-6
Nick headed to BH 11-233-04 to tie into.

0950 Molly inspecting VS-4.

1000 Nick headed to BH 11-233-03 to tie into.
Molly inspecting BA/VS-10, VS-11, VS-12.

1115 Molly completed VS area inspections. Nick
headed to BH 11-233- to tie into.

MR

Bo Bar to meet
(Engineering)

48°F, Sunny.
to conduct
site ~140 acres.
alt (VS) areas
features were

le.

al point near
rol point ~20
ence corner.
an to fly drone

-5 B VS-6
3-04 to tie into.

03 to tie into.
11, VS-12.

ctions. Nick
to tie into.

4/22/25 UAV 2025 Survey

MR

1315 Nick finished tying into control points
throughout the survey area. Setting up to
begin first flight path w/ drone.
Plan to fly entire area in one orientation
today & tomorrow fly same path
perpendicular to today's flight path.

1347 begin survey. Start point on top of stockpile.
Three (3) GPS sensors set up for real-time
kinematic (RTK) correction.
Currently trying to maintain ~250 ft height.

1525 First (1st) UAV survey complete. Packing up
for the day.

1630 Molly & Nick headed off-site.

Summary: INTERA conducted inspections of
reclaimed VS areas w/ recent erosion
mitigation feature installation

- Sunrise Engineering set up / tied into
roll survey monument control points.
Completed first UAV survey ~140 acres.
Plan to fly same area in perpendicular
path tomorrow.



4/23/25

UAV 2025 Survey

MR

0720 INTERA (M.R. Her) @ Biba bar.

Weather: 49°F, Sunny. High in low 80's.

Objectives: Sunrise Engineering to complete 2nd UAV drone flight of ~140 acre survey area

0757 Nick Kaczmarczyk @ Biba Bar, TOSM,
(Sunrise Engineering).

0805 Molly & Nick headed to site.

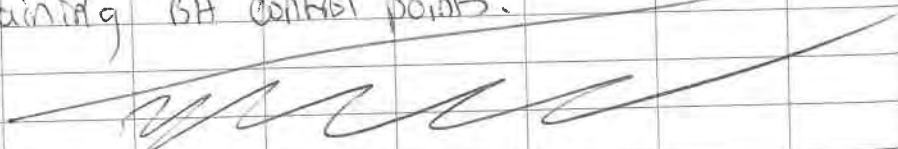
0815 Molly & Nick on site @ stockpile. Setting up for 2nd UAV drone flight.

0930 Begin 2nd UAV drone survey. Three (3) GPS sensors set up near stockpile for RTK positioning & BH 14-233-26 is the base control point. Flight path is perpendicular to yesterday's > allows for better overlap/coverage when post-processing the data.

1105 2nd UAV drone survey complete. Begin packing up. Plan to tie into remaining control points before finishing for the day.

1330 Completed control point tie-ins. Molly & Nick headed off site.

Summary: Completed UAV drone survey. Tied into remaining BH control points.





Photograph 1. Start of mobilization activities, October 29, 2024. Low Water Crossings—installed by the Department of Energy, which manages the L-Bar Site—impacted equipment transport to the staging area, near the No. 1 mine shaft.



Photograph 2. Photo of the long-term, double-net, coconut matrix, biodegradable erosion control matting, BioNet® C125BN™, placed on the areas requiring reseeding. Supplied by North American Green / Western Green.



Photograph 3. BioNet® C125BN™, in the staging area. Supplied by North American Green / Western Green.



Photograph 4. Photo of the Eco Log wood chip compost wattles and socks. Supplied by Titan Engineered Construction Products. Each sock length totaled 25-feet (ft).



Photograph 5. The Eco Log wood chip compost wattles and socks in the staging area.



Photograph 6. Four wood stakes were placed in each 25-ft length.



Photograph 7. View of the Reclaimed Borrow Area from the Reclaimed VS-11 Area.



Photograph 8. The access road to Reclaimed VS-11 area was graded to facilitate staging supplies for BMP installation.



Photograph 9. Installation of the Eco Log at Reclaimed VS-11 area.



Photograph 10. View of the eastern slope at Reclaimed VS-11 area with a section of Eco Log installed. The wattles were keyed into the soil and placed along the contour, down slope from existing wattles.



Photograph 11. View of the top area of Reclaimed VS-11 area as Eco Logs are staged and after the skid steer equipment prepped the surface.



Photograph 12. View of the BioNet® C125BN™ erosion control matting. The matting was placed onto the prepped surface after seeding was completed.



Photograph 13. View of the BioNet® C125BN™ erosion control matting. The matting was placed onto the prepped surface after seeding was completed.



Photograph 14. View of the reclaimed Borrow Area and reclaimed VS-10 area from the reclaimed VS-11 area, looking east-northeast (11-05-2024).



Photograph 15. The slope transition from the reclaimed Borrow Area to the reclaimed VS-10 had significant erosion, especially at the center, with a 3H:1V grade. Material was borrowed from the western slope portion (background) towards the foreground to the eastern portion of the slope to maintain an even 5H:1V grade (11-05-2024).



Photograph 16. View of biodegradable erosion control matting installation on prepared subgrade/surface, following broadcast seed application. Established vegetation was left in place (11-05-2024).



Photograph 17. View of biodegradable erosion control blanket and Eco Log, as installed down slope from VS-6 (11-05-2024).



Photograph 18. View of biodegradable erosion control blanket and Eco Log, as installed at VS-5 (11-05-2024).



Photograph 19. View of slope requiring seeding and erosion protection at the reclaimed VS-12 area (11-05-2024).



Photograph 20. View of the reclaimed Borrow Area to reclaimed VS-10 transition slope, as seen from the reclaimed VS-12 boundary, looking northwest (11-05-2024).



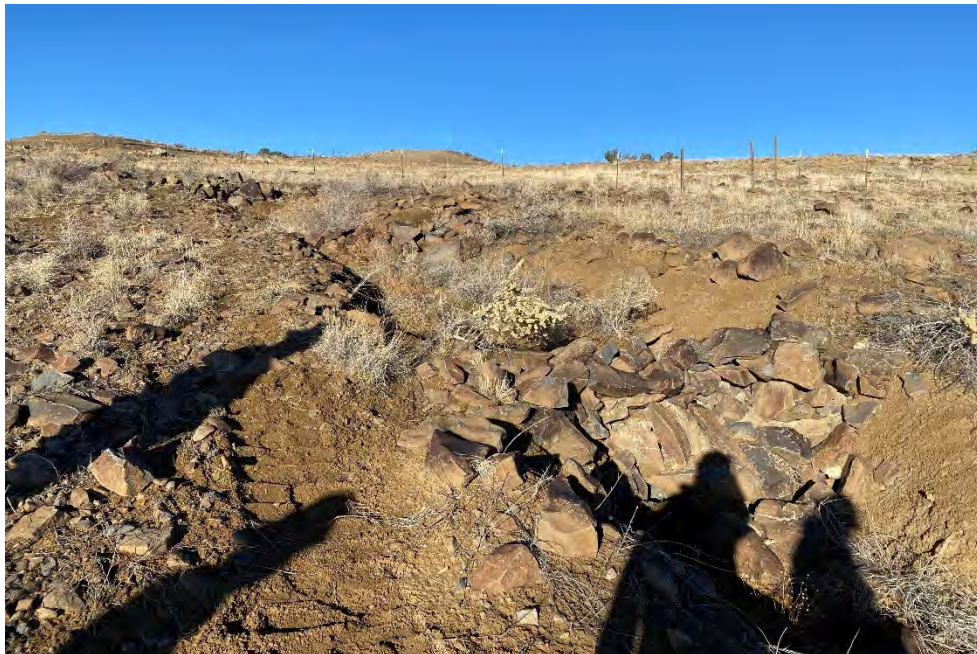
Photograph 21. View of the reclaimed Borrow Area and reclaimed VS-10 area from the reclaimed VS-11 area, looking east-northeast (11-14-2024).



Photograph 22. Installation of biodegradable erosion control matting, below the hardscaping armor at Reclaimed VS-12 area.



Photograph 23. View looking NNE at a portion of biodegradable erosion control matting, as installed, with the Eco Log wattles along the edges. The matting and wattles were placed parallel to the contour of existing topography onto a prepped surface (rocks removed).



Photograph 24. Rock check dam maintenance utilizing on-Site available materials at reclaimed VS-6 area.



Photograph 25. Eco Log fiber rolls, installed on the eastern portion of the upper catchment area of the Reclaimed Borrow Area.



Photograph 26. View of bolstered rock check dams, installed and repaired at Reclaimed VS-6.



Photograph 27. View of bolstered rock check dams, installed and repaired at Reclaimed VS-6.



Photograph 28. View of installed biodegradable seed mat at Reclaimed VS-6.



Photograph 29. View of installed biodegradable seed mat at Reclaimed VS-6.



Photograph 30. View of installed biodegradable seed mat at Reclaimed VS-6.



Photograph 31. 6–12-inch rip rap rock was installed upgradient of the existing rock armor at the Reclaimed VS-12 area.



Photograph 32. Strawbales were installed by driving two #4 rebar stakes into the center of each bale. View of Reclaimed VS-4 Area.



Photograph 33. View of Reclaimed VS-4 Area following seeding and biodegradable mat installation.



Photograph 34. View of Reclaimed VS-4 Area following seeding and biodegradable mat installation.



Photograph 35. View of Reclaimed VS-4 Area following seeding and biodegradable mat installation.



Photograph 36. View of strawbale installation at the Reclaimed VS-4 Area.



Photograph 37. View of the regraded and prepared slope at the Reclaimed VS-10 Area, looking to the southwest.



Photograph 38. The concrete erosion control blanket (ECB) was anchored in an 18-inch x 18-inch trench at the crest of the slope.



Photograph 39. The concrete ECB was anchored in a 12-inch trench, at a 45-degree angle at the outer edges of the slope.



Photograph 40. Installation of the concrete ECB.



Photograph 41. The concrete ECB was anchored in an 18-inch x 18-inch trench at the crest of the slope. Eight sectioned panels were installed, west-east. The easternmost panel was 8-ft wide, and the remaining panels were 15.5-ft wide.



Photograph 42. The concrete ECB was anchored in an 18-inch top trench at a 90-degree angle and in two 12-inch side trenches at 45-degree angles at the outer edges of the slope.



Photograph 43. Panels were installed using U-anchors at 2-ft increments and overlapped 12–18 inches.



Photograph 44. View of the concrete ECB installation, looking northwest, upslope.



Photograph 45. Regrading was accomplished utilizing existing on-Site material present on the western edge of the slope. Due to the movement of this material, additional rock was installed to armor the exposed slope following reseeding methods.



Photograph 46. Regrading was accomplished utilizing existing on-Site material present on the western edge of the slope. Due to the movement of this material, additional rock was installed to armor the exposed slope following reseeding methods. View looking to the north-northeast.



Photograph 47. View of bolstered rock check dams, installed and repaired at Reclaimed VS-10.



Photograph 48. View of the reclaimed Borrow Area and reclaimed VS-10 area from the reclaimed VS-11 area, looking east-northeast (Composite image, 11-26-2024).



Photograph 49. View looking northwest from the area reseeded below the armored slope at the reclaimed VS-10 area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting.



Photograph 50. Eco Log fiber rolls were placed along the contours of the slope at the Reclaimed VS-11 area. Seed was broadcast between the fiber rolls and covered with straw material.



Photograph 51. View looking northeast from the area reseeded above the armored slope at the reclaimed VS-10 area where the surface was disturbed. The area was roughened, reseeded, then covered with the biodegradable matting. The media luna sheet flow spreader was installed upslope from the edge of the matting and concrete ECB.



Photograph 52. Strawbales were placed within channels along the drainage on the eastern side of the Reclaimed VS-10 area.



Photograph 53. New Eco Log fiber rolls were installed along the contours of the former and reclaimed Stockpile Area.



Photograph 54. View looking northwest from the reseeded lower slope at the reclaimed VS-12 area. The area was roughened, reseeded, then covered with the biodegradable matting.



Photograph 55. Eco Log fiber rolls were placed on the downslope edge of the matting at the reclaimed VS-12 area.



Photograph 56. View looking southeast from the reseeded slope at the reclaimed VS-12 area. The area was roughened, reseeded, then covered with the biodegradable matting.



Photograph 57. Strawbales were placed within channels along the drainage on the eastern side of the Reclaimed VS-12 area.



Photograph 58. View looking east-northeast from the armored channel at the reclaimed VS-12 area.



Photograph 59. View looking northwest from the regraded upper slope at the reclaimed VS-12 area. The channel was armored with 6–12-inch rip rap.



Photograph 60. View looking upslope from the area reseeded below the armored slope at the reclaimed VS-10 area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting.



Photograph 61. View looking west from the area reseeded below the armored slope at the reclaimed VS-10 area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting.



Photograph 62. View looking east from the area reseeded below the armored slope at the reclaimed VS-10 area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting.



Photograph 63. View looking east from the area reseeded below the armored slope at the reclaimed VS-10 area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting.



Photograph 64. Rock check dam maintenance utilizing on-Site available materials at reclaimed VS-10 area.



Photograph 65. View looking west from the area reseeded in the reclaimed Borrow Area. The area was roughened, reseeded, then covered with the biodegradable matting. Eco Log fiber rolls were placed on the downslope edge of the matting. Established woody shrubs were left in place.



Photograph 66. View looking northwest from the within the upper portion of the reclaimed former Borrow Area toward the media luna sheet flow collector.



Photograph 67. Rock check dam maintenance utilizing on-Site available materials at reclaimed former Borrow Area.



Photograph 68. View of the reclaimed Borrow Area and reclaimed VS-10 area from the reclaimed VS-11 area, looking east-northeast



Photograph 69. Eco Log fiber rolls were keyed into the surface and installed along the contours of the slope.



Photograph 70. Eco Log fiber rolls were keyed into the surface and installed along the contours of the slope.



Photograph 71. Eco Log fiber rolls were keyed into the surface and installed along the contours of the slope.



Photograph 72. View of slope located at reclaimed VS-5 (foreground) and VS-6 (background) with Eco Log and biodegradable matting (April 2025).



Photograph 73. View of slope located at reclaimed VS-6 with Eco Log and biodegradable matting (April 2025).



Photograph 74. View of slope armored channel at reclaimed VS-4, with strawbale and biodegradable matting (April 2025).



Photograph 75. View of sheet flow collector media luna (April 2025).



Photograph 76. East-northeastern view of sheet flow spreader, biodegradable matting, and regraded, armored slope located at the transition from the reclaimed former Borrow Area to the reclaimed VS-10 (April 2025).



Photograph 77. Southeastern view, downslope, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (April 2025).



Photograph 78. West-northwestern view of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (April 2025).



Photograph 79. Northwestern view, upslope, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (April 2025).



Photograph 80. View looking southeast from the upper slope at the reclaimed VS-12 area. The slope was armored with 6–12-inch rip rap (April 2025).



Photograph 81. Strawbales placed within channels along the drainage on the eastern side of the Reclaimed VS-12 area have started to degrade (April 2025).



Photograph 82. Northwestern view, upslope, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (April 2025).



Photograph 83. View of the reclaimed former Stockpile (April 2025).



Photograph 84. Northwestern view of the reclaimed former borrow area with vegetation, progression of sediment infill to the Eco Log fiber rolls and degrading erosion control matting (September 2025).



Photograph 85. View of the eastern portion of the sheet flow collector media luna. Some vegetation and rilling (September 2025).



Photograph 86. Northwestern view, upslope, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (September 2025). Vegetation present on the concrete ECB. Some scouring noted at the slope toe.



Photograph 87. View of the scouring present at the slope toe and concrete ECB anchor trench.



Photograph 88. Northeastern view, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (September 2025).



Photograph 89. Southeastern view, downslope, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (September 2025).



Photograph 90. Northwestern view, from the VS-10 monument, of the regraded, armored slope located at the transition from the reclaimed former borrow area to the reclaimed VS-10 (September 2025).



Photograph 91. Southeastern view, of the slope down gradient from the reclaimed VS-10 (September 2025).



Photograph 92. Northeastern view, of the supplemental sheet flow collector media luna down gradient from the upper media luna within the reclaimed former Borrow Area (September 2025).



Photograph 93. View of the reclaimed Borrow Area and reclaimed VS-10 area from the reclaimed VS-11 area, looking east-northeast.



Photograph 94. View of the sheet flow collector media luna at the transition from the reclaimed Borrow Area and reclaimed VS-10 area with established vegetation upslope (September 2025).



Photograph 95. View of the sheet flow collector media luna at the transition from the reclaimed Borrow Area and reclaimed VS-10 area with established vegetation upslope (September 2025).



Photograph 96. View looking southeast from the reseeded slope at the reclaimed VS-12 area. The area was roughened, reseeded, then covered with the biodegradable matting (September 2025).



Photograph 97. View looking southeast from the within the VS-10 reclamation area to the reclaimed VS-12 area, including the armored slope, biodegradable matting, and Eco Log fiber rolls (September 2025).



Photograph 98. View of rock check dam bolstering installed downslope of the reclaimed VS-10 area (September 2025).



Photograph 99. View of rock check dam bolstering installed at the reclaimed VS-6 area (September 2025).

APPENDIX B

Sunrise Engineering Survey Report

*Creating solutions that work
and relationships that last*

AERIAL TOPOGRAPHIC SURVEY REPORT

21 MAY 2025

| *Creating solutions that work
and relationships that last*



6875 South 900 East, Salt Lake City, Utah 84047

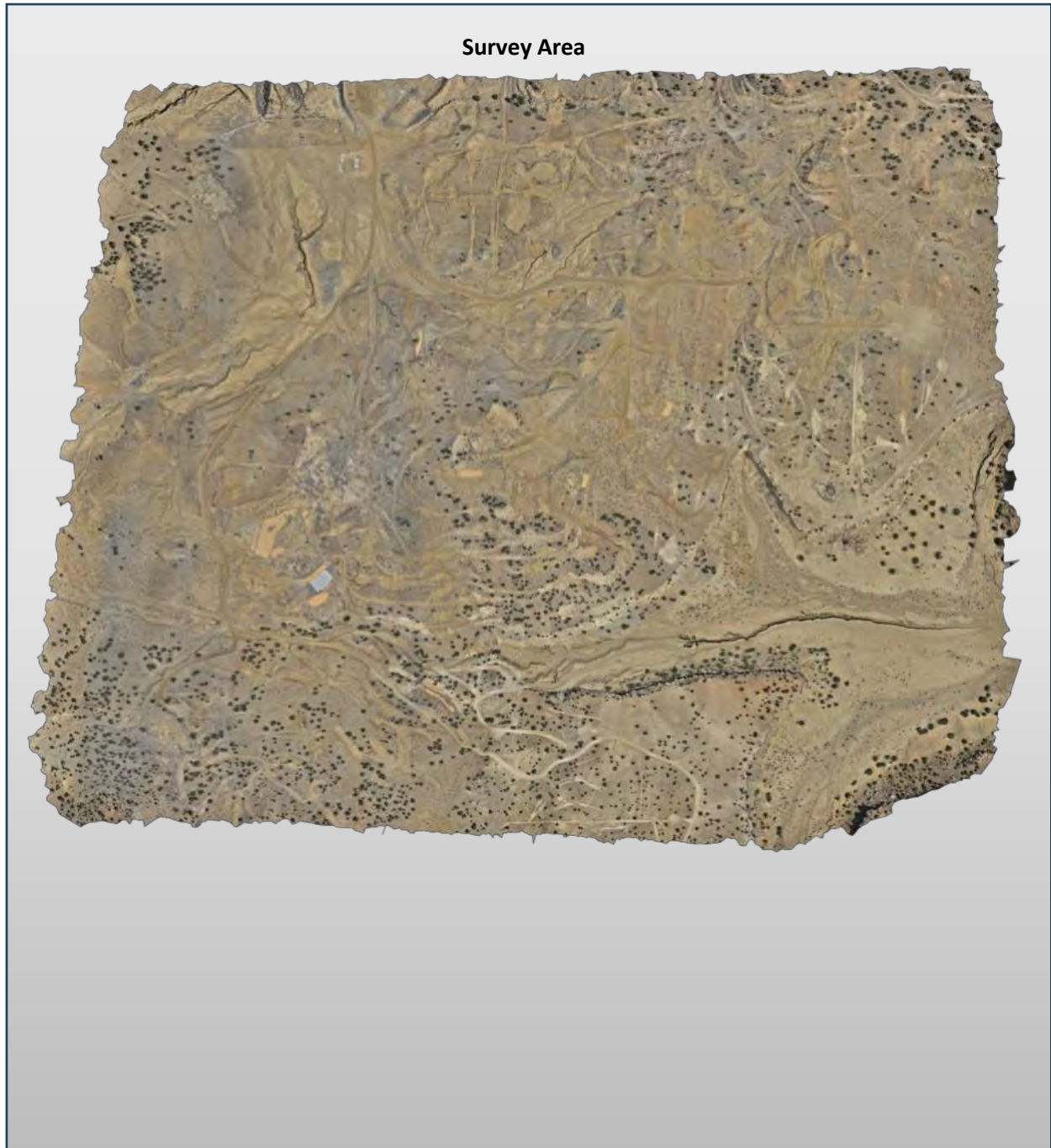
801.523.0100 | FAX: 801.523.0100

sunrise.eng.com

1. Project Overview

Objective of the Survey:

Sunrise Engineering was asked to conduct a high-resolution aerial survey for Rio Tinto Closures. The primary goal was to capture detailed orthophotography and LiDAR data for topographical analysis. The field survey took place between the 22nd April 2025 and the 23rd April 2025. The aerial survey covered 295 acres of rural land. Data was processed to produce orthophotos, a 3D point cloud, and a digital elevation model (DEM).



2. Survey Deliverables

The final deliverables from this survey included:

- **Orthophotos:** 1 Inch-resolution, georeferenced imagery.
- **Point Cloud Data:** XYZ coordinates providing detailed 3D data, Reduced to 6 Inch Spacing.
- **Surface Model:** Created from the DEM with 1 foot contour intervals.
- **Digital Elevation Model (DEM):** A grid-based DEM used for surface modeling.
- **Survey Points:** Used to supplement the data collected with the UAV.

3. Datum and Coordinate System Summary

Horizontal Datum	NAD83 (North American Datum of 1983)
Vertical Datum	NAVD88 (North American Vertical Datum of 1988)
Coordinate System	New Mexico West Zone (3003)
Ground Scale Factor	1.0003601707
Scale Point	0,0 (No Truncation)
Geoid Model	Geoid 09
Coordinate System	US Survey Feet

4. Data Collection Process

Equipment Used:

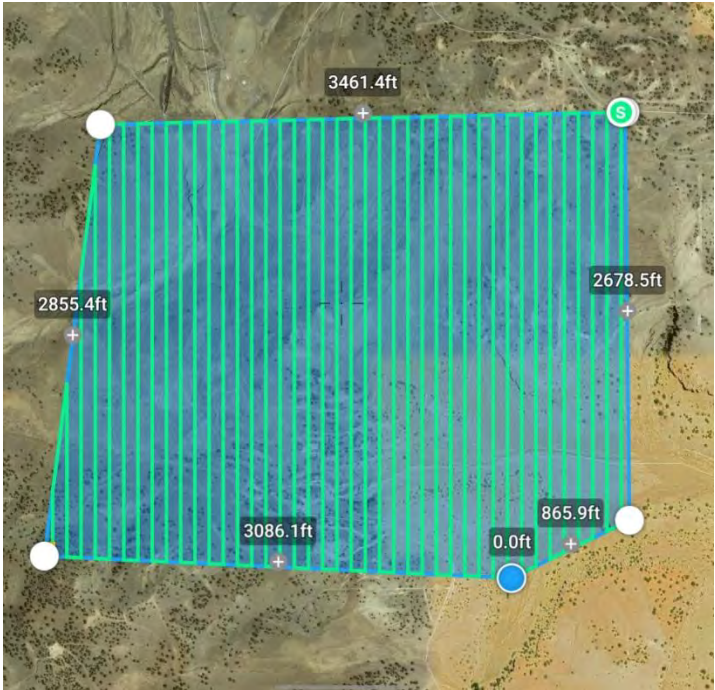
- UAV: DJI Matrice 300 RTK equipped with DJI L2 LiDAR and RGB sensors.
- GPS Units: Trimble R10 for Ground Control Point (GCP) collection.

Survey Methodology:

The survey utilized UAV-mounted LiDAR and photogrammetric systems. Flight paths were planned for optimal coverage with a 66% overlap at an AGL of 200 feet to ensure data accuracy.

Data Processing Workflow:

The captured images and LiDAR data were processed using best practices for photogrammetry and LiDAR. The point cloud was processed to remove noise and vegetation, providing a clean representation of the ground surface.



5. Ground Control Summary

- **Check Points:** 15 Check points were used across the site to validate the surface model.
- **Ground Collection Methodology:** Ground points were surveyed using RTK

6. VRMSE Summary

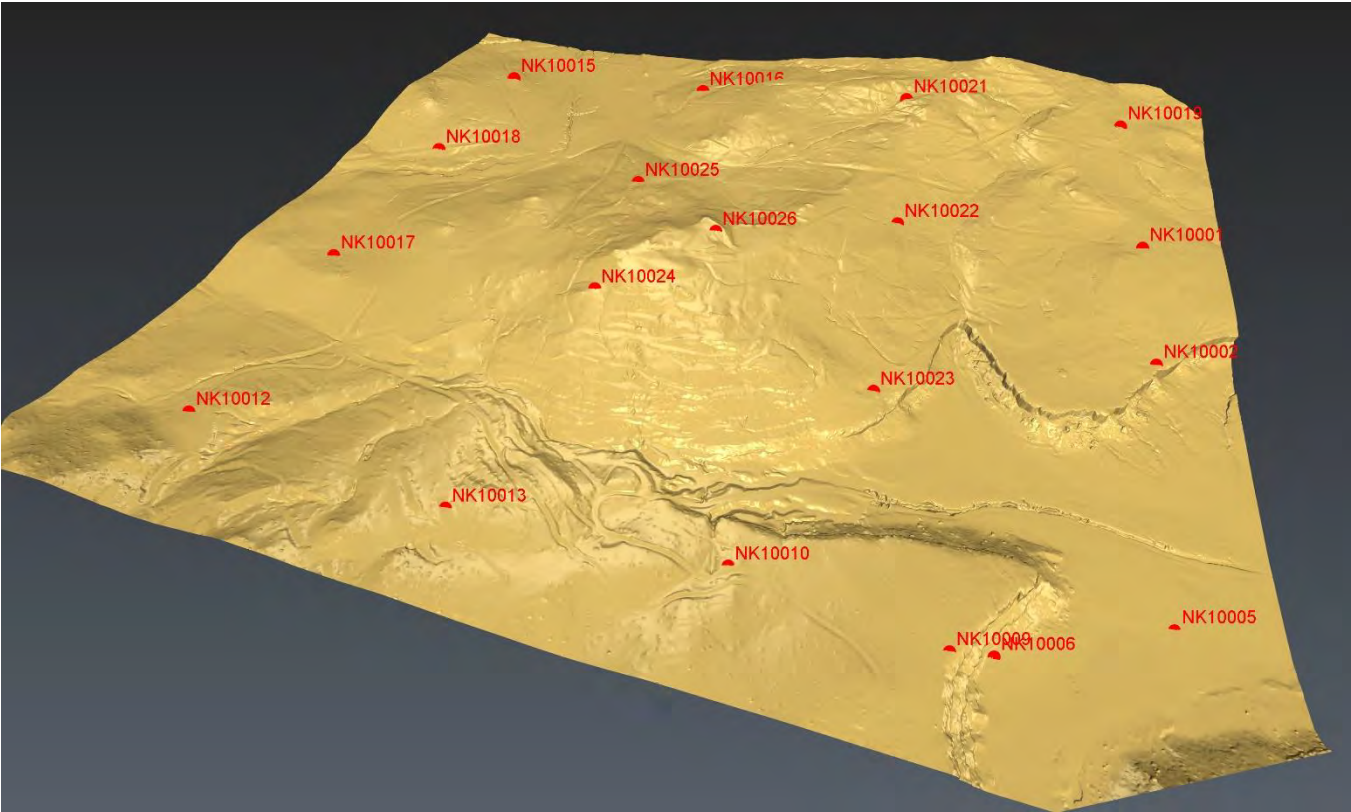
Accuracy Assessment:

The Vertical Root Mean Square Error (VRMSE) was calculated for the DEM to assess vertical accuracy. The overall VRMSE for the project was 0.08 feet, ensuring that the data met industry standards.

VRMSE Values In Feet:

Mean	0.05
Standard Error	0.02
Median	0.03
Standard Deviation	0.08
Minimum	-0.09
Maximum	0.21
VRMSE	0.08
Count	15

Check Point Location Exhibit



4. Data Collection Process

Equipment Used:

- Drone/UAV: DJI Matrice 300 RTK equipped with DJI L2 sensors.
- GPS Units: Trimble R10 for Ground Control Point (GCP) collection.

Survey Methodology:

The survey utilized UAV-mounted LiDAR and photogrammetric systems. Flight paths were planned for optimal coverage with a 66% overlap to ensure data accuracy.

Data Processing Workflow:

The captured images and LiDAR data were processed using best practices for photogrammetry and LiDAR. The point cloud was processed to remove noise and vegetation, providing a clean representation of the ground surface.

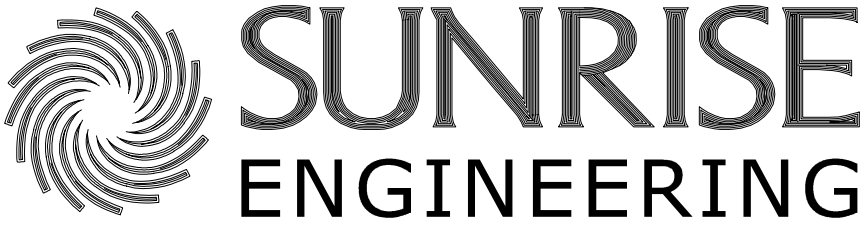
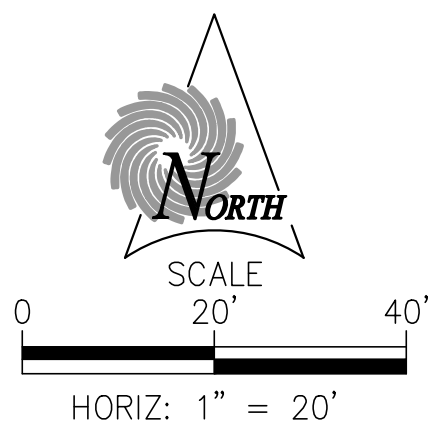
4. Control Point Table

Name	Measured Northing	Measured Easting	Measured Elevation	Delta Northing	Delta Easting	Delta Elevation
BH11-233-01	1519651.038	2872687.684	6422.429	-0.091	-0.012	0.024
BH11-233-02	1517766.596	2872718.119	6346.229	-0.021	-0.02	0.022
BH11-233-03	1517804.958	2877900.882	6286.824	-0.059	-0.026	-0.029
BH11-233-05	1521527.271	2877881.237	6392.954	-0.072	-0.025	0.095
BH11-233-07	1519770.379	2873650.761	6408.479	-0.112	-0.037	-0.052
BH11-233-08	1517631.506	2873566.645	6413.474	-0.033	-0.029	-0.003
BH11-233-09	1520607.54	2874513.28	6328.185	-0.017	0.161	-0.233
BH11-233-10	1521531.729	2875874.53	6353.163	-0.04	-0.016	0.008
BH11-233-11	1517614.226	2875965.47	6331.599	-0.067	-0.026	-0.022
BH11-233-12	1520557.349	2872720.021	6348.248	-0.009	-0.063	-0.037
AVERAGE				-0.0521	-0.009	-0.0227

Attachments:

- 1 Inch resolution tiled orthophotos
- DEM Geotiff
- 3D point cloud (LAZ format)
- PDF Exhibit
- AutoCAD Civil 3D Package
- Ground control data file
- LandXML Surface Model

JJ MINE TOPOGRAPHICAL SURVEY
LAGUNA, NM
MAY 2025



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APPENDIX C

As-Built Drawings

POST CLOSURE EROSION MITIGATION COMPLETION REPORT

JJ NO.1 / L-BAR MINE

PREPARED FOR NEW MEXICO MINING AND
MINERALS DIVISION
JUNE 2026

SHEET INDEX:

<u>SHEET NO.</u>	<u>TITLE</u>
1	COVER SHEET AND INDEX
2	GENERAL NOTES AND LEGEND KEY
3	SITE MAP
4	VS-4 AS-BUILT CONDITIONS AND TOPOGRAPHY
5	VS-5 AS-BUILT CONDITIONS AND TOPOGRAPHY
6	VS-6 AS-BUILT CONDITIONS AND TOPOGRAPHY
7	VS-10 AS-BUILT CONDITIONS AND TOPOGRAPHY
8	VS-11 AS-BUILT CONDITIONS AND TOPOGRAPHY
9	VS-12 AS-BUILT CONDITIONS AND TOPOGRAPHY
10	FORMER BORROW AREA AS-BUILT CONDITIONS AND TOPOGRAPHY
11	FORMER STOCKPILE AS-BUILT CONDITIONS AND TOPOGRAPHY
12	SEED MIXTURE AND CERTIFICATION
13	AS-BUILT BIODEGRADABLE MATTING, FIBER ROLL WATTLE, STRAW BALE AND ROCK CHECK DAM REPAIR PHOTOGRAPHS AND KEYED NOTES DETAILS
14	ROCK CHECK DAM AND MEDIA LUNA TYPICAL DETAILS
15	FLEXAMAT PLUS UV-T SLOPE ARMORING INSTALLATION PHOTOGRAPHS AND TYPICAL DETAILS
16	BORROW AREA & VS-10 AS-BUILT SLOPE PROFILES

Date: 6/10/2026

Ref: KENCO.C006.LBAR

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COVER SHEET AND INDEX



JJ No. 1 / L-Bar Mine

SHEET 1

1. SPATIAL DATA REFERENCING: SUNRISE ENGINEERING, SALT LAKE CITY, UT. DATE OF IMAGERY: APRIL 22 -23, 2025. ORTHOPHOTOGRAPHY AT 1-INCH RESOLUTION. HORIZONTAL DATUM NAD83 (NORTH AMERICAN DATUM OF 1983) VERTICAL DATUM. NAVD88 (NORTH AMERICAN VERTICAL DATUM OF 1988) COORDINATE SYSTEM GROUND SCALE FACTOR SCALE POINT NEW MEXICO WEST ZONE (3003), 1.0003601707, 0,0 (NO TRUNCATION) GEOID MODEL, GEOID 09 COORDINATE SYSTEM, US SURVEY FEET. SEE APPENDIX B, SURVEY REPORT, 21 MAY 2025.
2. ALL WORK ON THIS PROJECT WAS PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. ALL FEATURES WERE CONSTRUCTED IN MATERIAL CONFORMANCE TO THE DRAWINGS, UNLESS OTHERWISE INDICATED.
4. EROSION MITIGATION WAS DESIGNED TO MINIMIZE DISTURBANCE TO EXISTING SITE. THE CONTRACTOR REPAIRED ANY EXCESSIVELY DISTURBED OR DESTROYED EXISTING AND ESTABLISHED VEGETATION. THE CONTRACTOR EMPLOYED MEANS AND METHODS OF CONSTRUCTION SO THAT THE EXISTING SITE FEATURES WERE MINIMALLY DISTURBED AND THE SITE MAINTAINED THE MATURE LOOK OF THE EXISTING SITE FEATURES.
5. IT WAS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FOR SAFE WORKING CONDITIONS IN CONFORMANCE WITH OSHA REQUIREMENTS.
6. IN EXECUTION OF CONSTRUCTION, CONTRACTOR AND ANY SUBCONTRACTORS MAINTAINED ESTABLISHED VEGETATION AT THE SITE, AND DID NOT EXCAVATE, CLEAR, GRUB, OR OTHERWISE DISTURB AREAS THAT WERE NOT THE IMMEDIATE FOCUS OF THE CONSTRUCTION PLANS. CONTRACTOR RE-SEEDED AREAS DEEMED BY OWNER AND/OR ENGINEER TO BE EXCESSIVELY DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION.
7. THE CONTRACTOR MAINTAINED THE CONDITION OF ALL ACCESS ROADS DURING CONSTRUCTION.
8. THE CONTRACTOR DID NOT ALLOW ANY LITTER, CONSTRUCTION DEBRIS, OR POLLUTANTS TO ENTER ANY WATER COURSE ON THE JOB SITE. DE MINIMUS (LESS THAN 25 GALLONS) SPILLS FROM EQUIPMENT MAINTENANCE WERE CLEANED UP WITHIN 24 HOURS AND DISPOSED OF OFF SITE.
9. MITIGATION FEATURES SHOWN ON SITE PLANS ARE INDICATIVE OF LOCATION OF THE FEATURE(S) AND MAY NOT BE SHOWN TO SCALE.
10. FENCED/UNFENCED REFERENCE AREAS REFER TO POST CLOSURE MONITORING AREAS. FENCED REFERENCE AREAS ARE COMPRISED OF UNDISTURBED GROUND

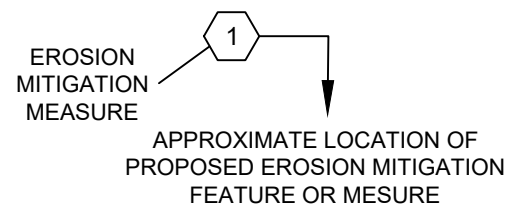
WITHIN THE FENCED VENT SHAFT, STOCKPILE, AND BORROW AREAS. UNFENCED REFERENCE AREAS ARE COMPRISED OF REPRESENTATIVE AREAS LOCATED ADJACENT TO VENT SHAFT, STOCKPILE, AND BORROW AREAS.

11. A STREAM NETWORK WAS DEVELOPED UTILIZING THE ArcGIS Pro SPATIAL FLOW ACCUMULATION TOOL. THE TOOL SPECIFIED A NETWORK DENSITY OF 100,000 UPSTREAM CELLS NEEDED TO INITIATE A STREAM.
12. EROSION CONTROL PRODUCT DETAILS ARE INCLUDED IN APPENDIX D, EROSION MITIGATION COMPLETION REPORT.

LEGEND

	AS BUILT CONTOUR INTERVAL (2 FOOT) ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
	ROAD
	FLOWPATH
	RECLAIMED VENT SHAFT (VS)
	PREEXISTING UNFENCED/FENCED REFERENCE AREA
	PREEXISTING FENCE LINE/ RECLAMATION
	SEEDING AREA
	MATTING
	FIBER ROLL WATTLE
	ROCK ARMORING
	FLEXAMAT UV-T PLUS
	CHECK DAM REPAIR
	MEDIA LUNAS
	STRAW BALES

DETAIL/KEYED NOTES CALLOUTS



Date: 6/10/2026

Ref: KENCO.C006.LBAR

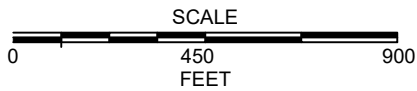
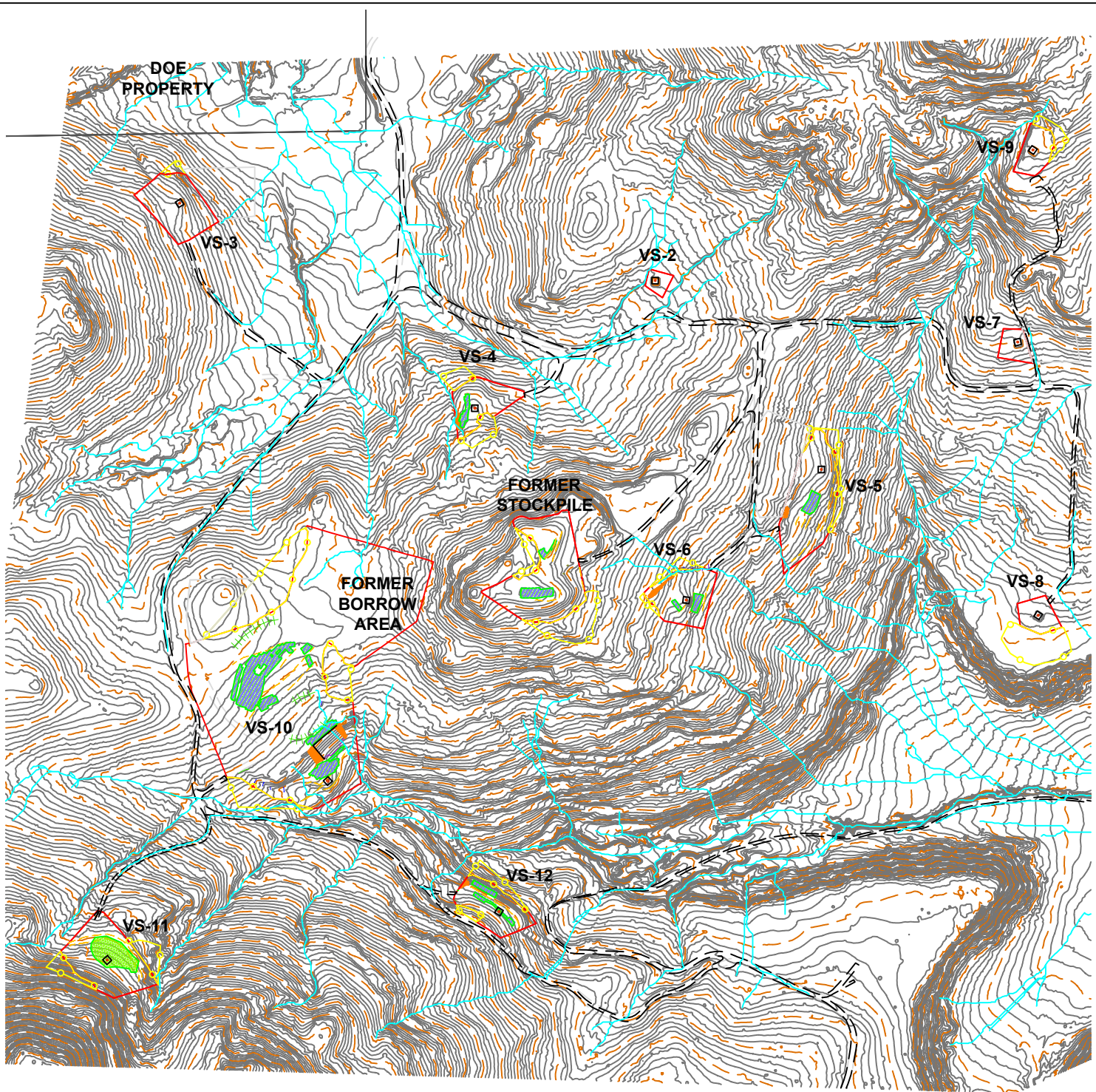
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GENERAL NOTES AND LEGEND KEY



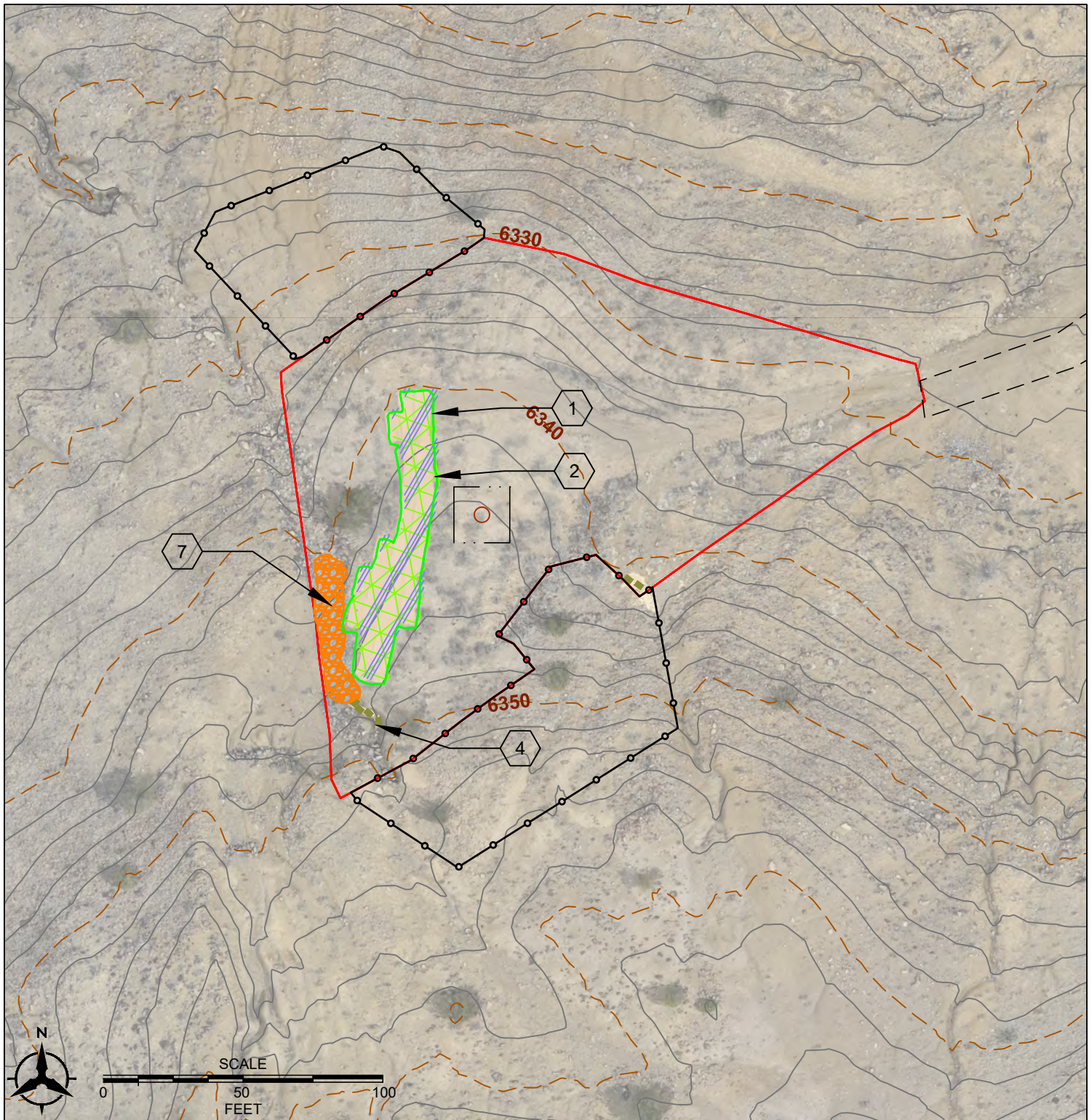
JJ No. 1 / L-Bar Mine

SHEET 2



BASE MAP:
SunRise Engineering Survey (April 2025), SEE NOTE 1 ON SHEET 1.

Date: 6/10/2026	SITE MAP	
Ref: KENCO.C005.LBAR		
File: Sheets_State-Plane_RTC-JJMINE-JUN042026.dwg		
	JJ No. 1 / L-Bar Mine	SHEET 3



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-4	1610	1610	-	Yes	-	40	6	0	-



KEYED NOTES:

1. SEE SEED MIXTURE, SHEET 12
2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SUPPLIER SPECIFICATIONS, APPENDIX D. SEE SHEET 13.
4. STRAW BALES INSTALLED ACCORDING TO APPROVED SPECIFICATIONS. SEE SHEET 13.
7. EXISTING RIP RAP BOLSTERED WITH 6-12" AGGREGATE. SEE SHEET 13.

Date: 6/10/2026

Ref: KENCO.C006.LBAR

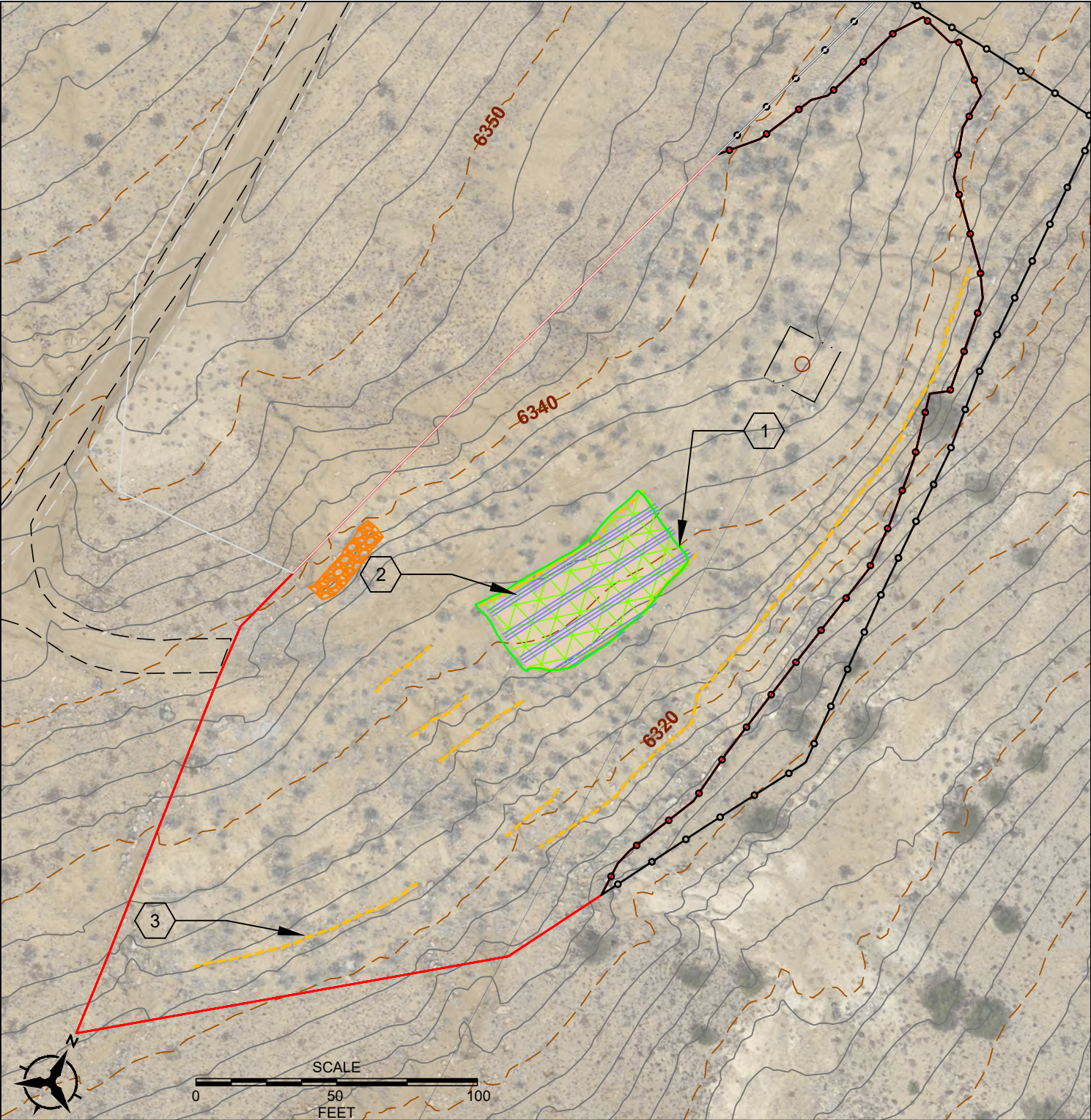
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VS-4 AS-BUILT CONDITIONS AND TOPOGRAPHY

JJ No. 1 / L-Bar Mine

SHEET 4



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-5	2100	2100	-	-	-	10	-	610	-

- KEYED NOTES:
1. SEE SEED MIXTURE, SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SUPPLIER SPECIFICATIONS APPENDIX D. SEE SHEET 13.
 3. NEW FIBER ROLL WATTLES INSTALLED ACCORDING TO SUPPLIER SPECIFICATIONS, APPENDIX D. SEE SHEET 19.

Date: 6/10/2026

Ref: KENCO.C006.LBAR

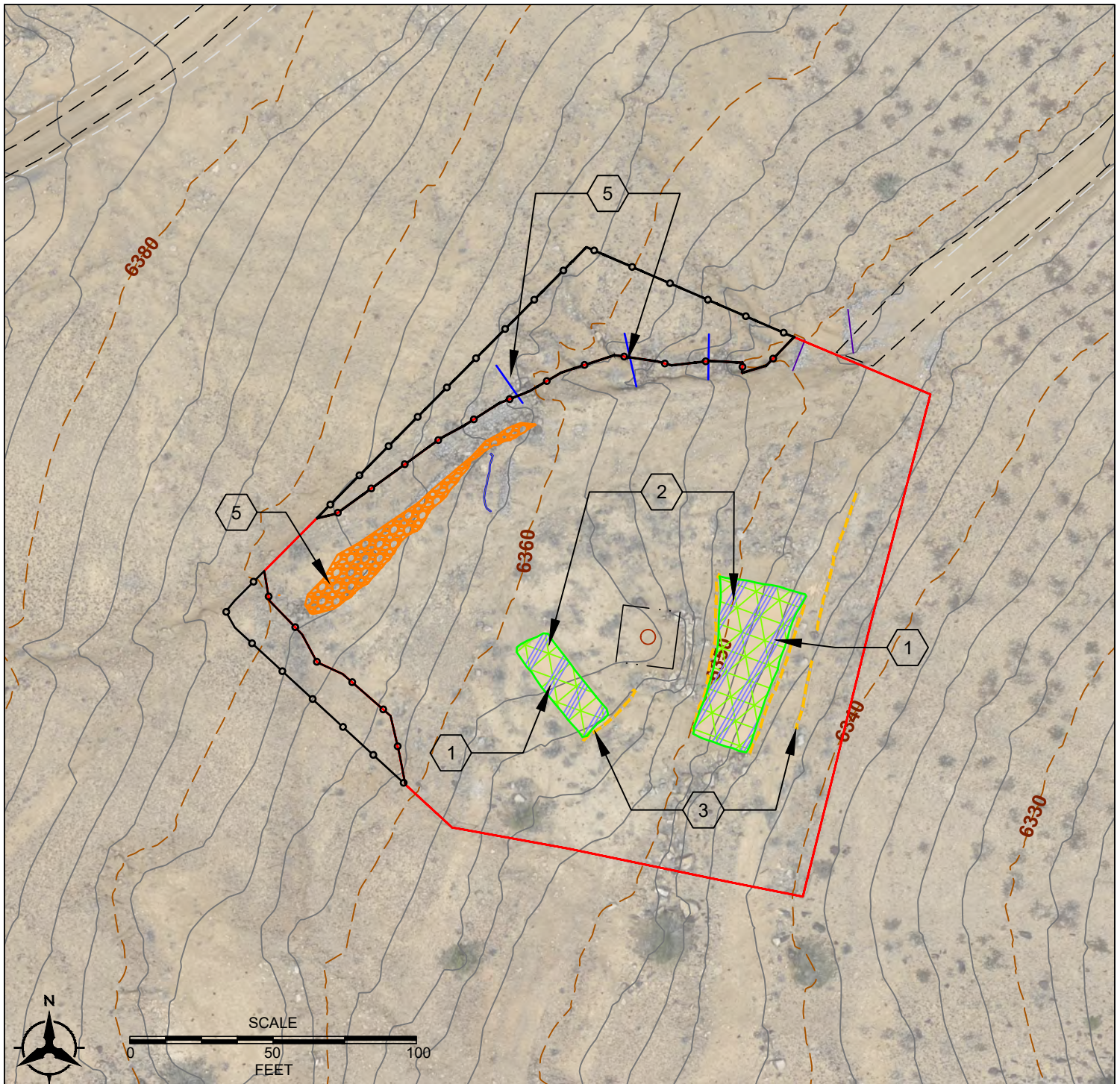
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VS-5

AS-BUILT CONDITIONS AND TOPOGRAPHY

JJ No. 1 / L-Bar Mine

SHEET 5



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-6	1800	1800	-	Yes	-	50		225	-

- KEYED NOTES:**
1. SEE SEED MIXTURE SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 3. FIBER ROLL WATTLES INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 5. EXISTING ROCK CHECK DAMS WERE BOLSTERED USING 6-12" RIP RAP. SEE SHEETS 13 AND 14.

Date: 6/10/2026

Ref: KENCO.C006.LBAR

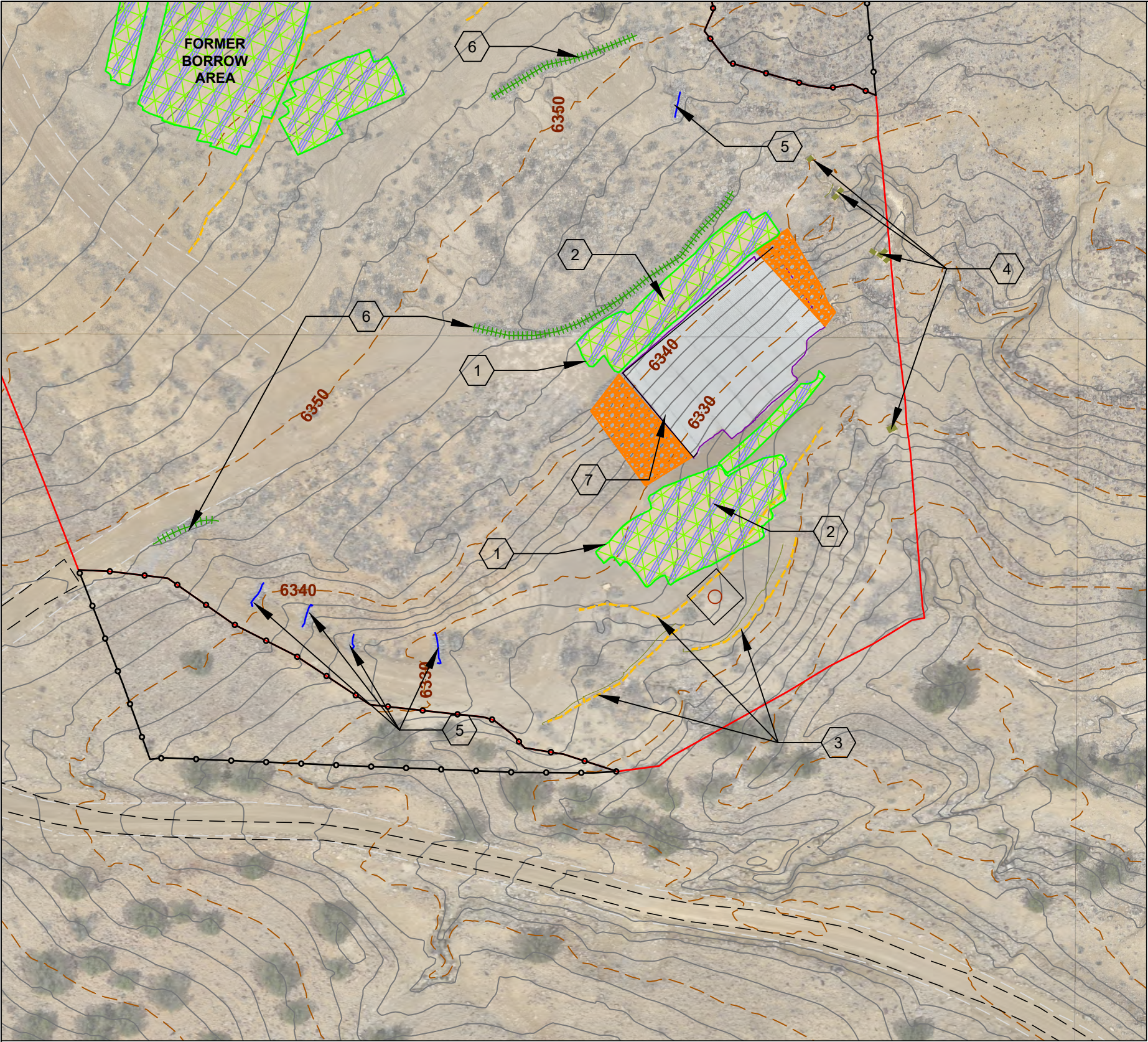
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VS-6 AS-BUILT CONDITIONS AND TOPOGRAPHY

JJ No. 1 / L-Bar Mine

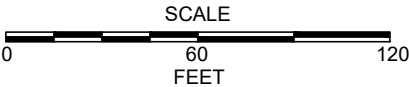
SHEET 6



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control Blanket (sf)	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-10	11255	3849	5464	Yes	Yes	70	11	375	170

- KEYED NOTES:
1. SEE SEED MIXTURE SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SUPPLIER 3. FIBER ROLL WATTLE INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 4. STRAW BALES INSTALLED ACCORDING TO APPROVED SPECIFICATIONS. SEE SHEET 13.
 5. EXISTING ROCK CHECK DAMS REPAIRED TO SPECIFICATIONS. SEE SHEETS 13 AND 14.
 6. MEDIA LUNAS INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS ON SHEET 14.
 7. CONCRETE EROSION CONTROL BLANKET INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 15.

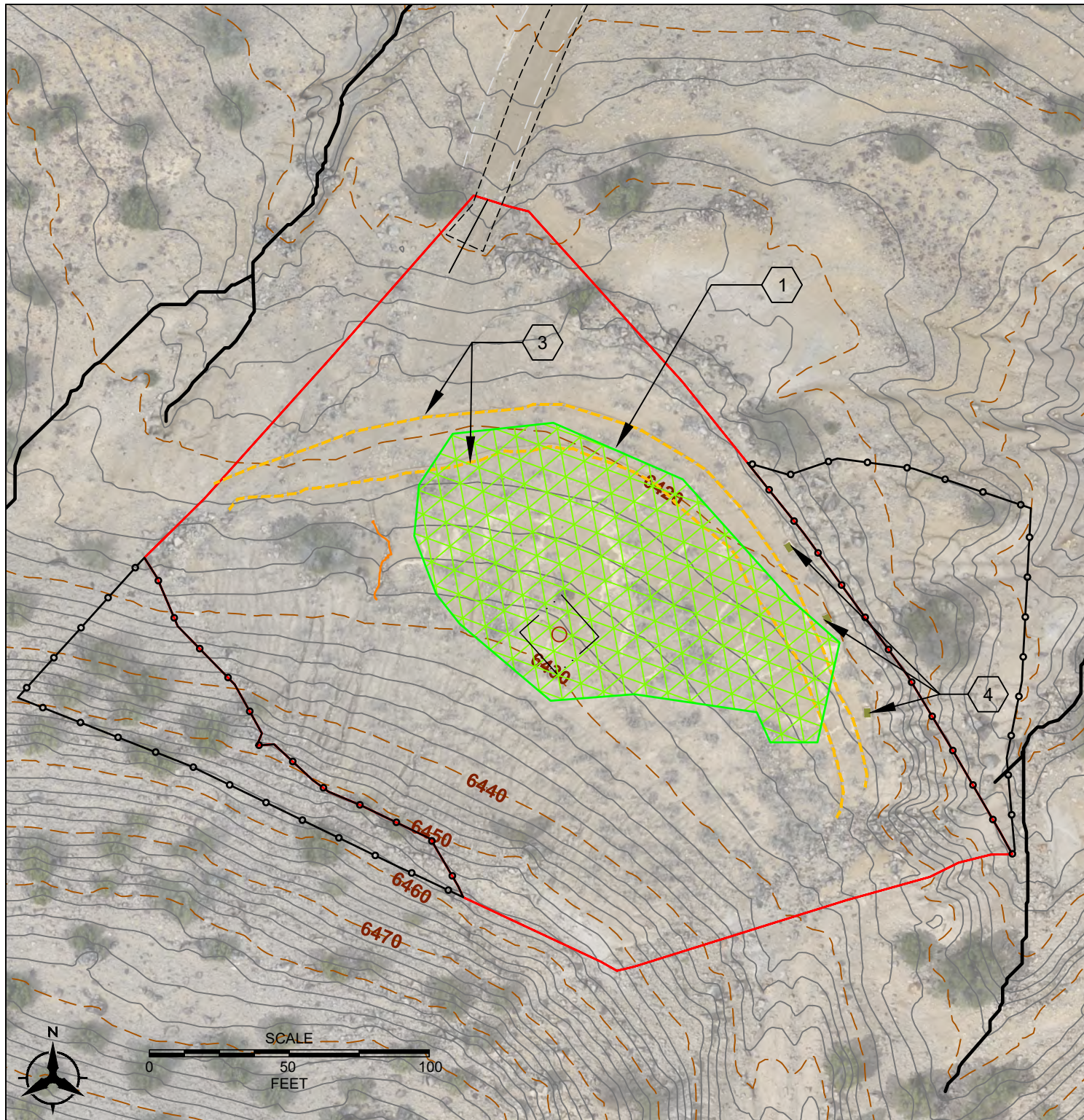


Date: 6/10/2026
Ref: KENCO.C006.LBAR
File: Sheets_State-Plane_RTC-JMINE-JUN042026.dwg

VS-10
AS-BUILT CONDITIONS AND TOPOGRAPHY



JJ No. 1 / L-Bar Mine



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-11	10600	-	-	-	-	-	4	625	-

KEYED NOTES:

1. SEE SEED MIXTURE SHEET 12.
3. FIBER ROLL WATTLES INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D, SEE SHEET 13.
4. STRAW BALES INSTALLED ACCORDING TO APPROVED SPECIFICATIONS. SEE SHEET 13.

Date: 6/10/2026

Ref: KENCO.C006.LBAR

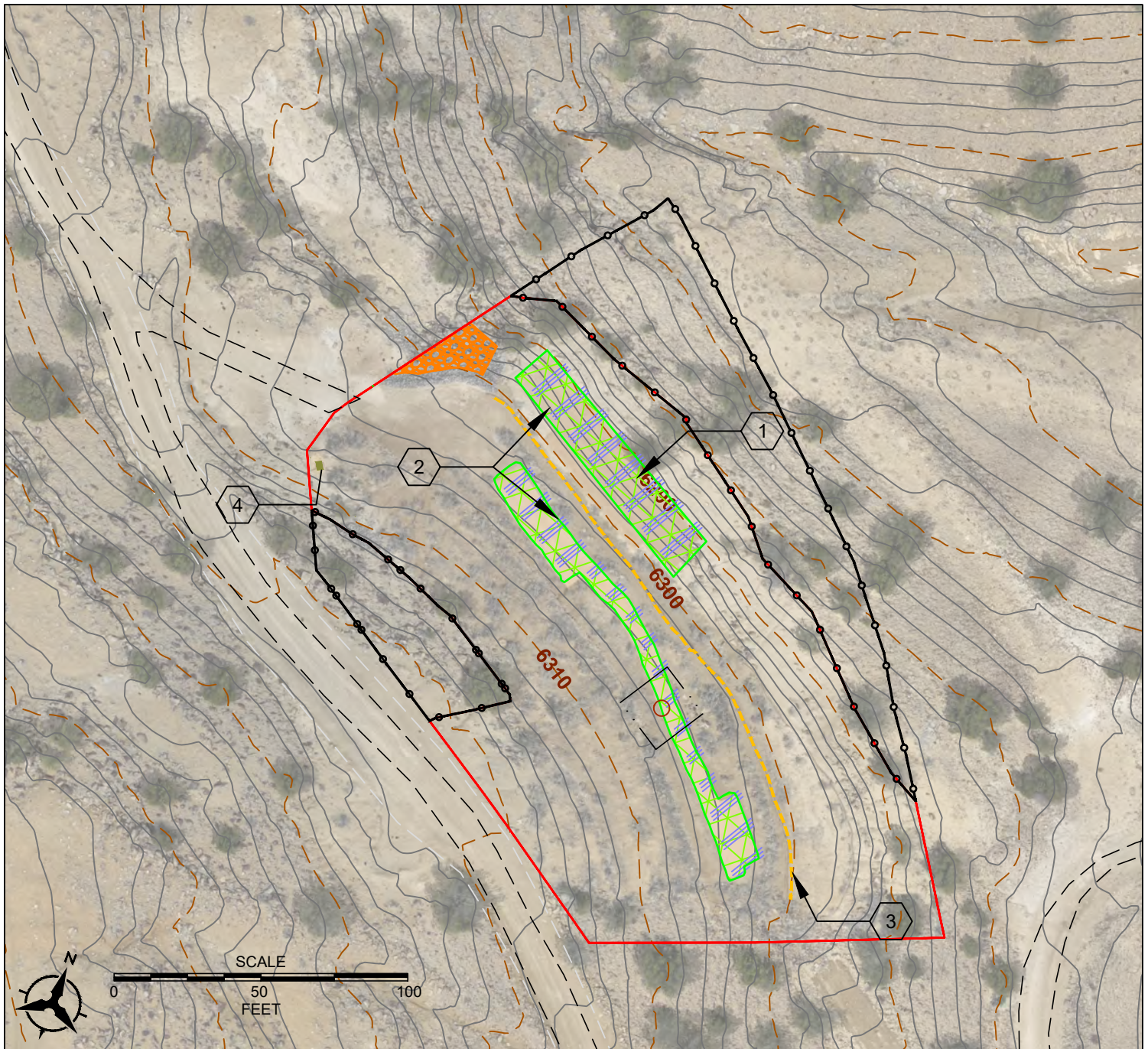
File: Sheets_State-Plane_RTC-JMINE-JUN042026.dwg



VS-11 AS-BUILT CONDITIONS AND TOPOGRAPHY

JJ No. 1 / L-Bar Mine

SHEET 8



INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-12	2600	2600	-	Yes	Yes	25	1	200	-

- KEYED NOTES:**
1. SEE SEED MIXTURE SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SUPPLIER SPECIFICATIONS, APPENDIX D. SEE SHEET 13.
 3. FIBER ROLL WATTLES INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 4. STRAW BALE INSTALLED ACCORDING TO APPROVED SPECIFICATIONS. SEE SHEET 13.
 5. ROCK CHECK DAMS BOLSTERED WITH 6"-12" AGGREGATE. SEE SHEETS 13 AND 14.

Date: 6/10/2026

Ref: KENCO.C006.LBAR

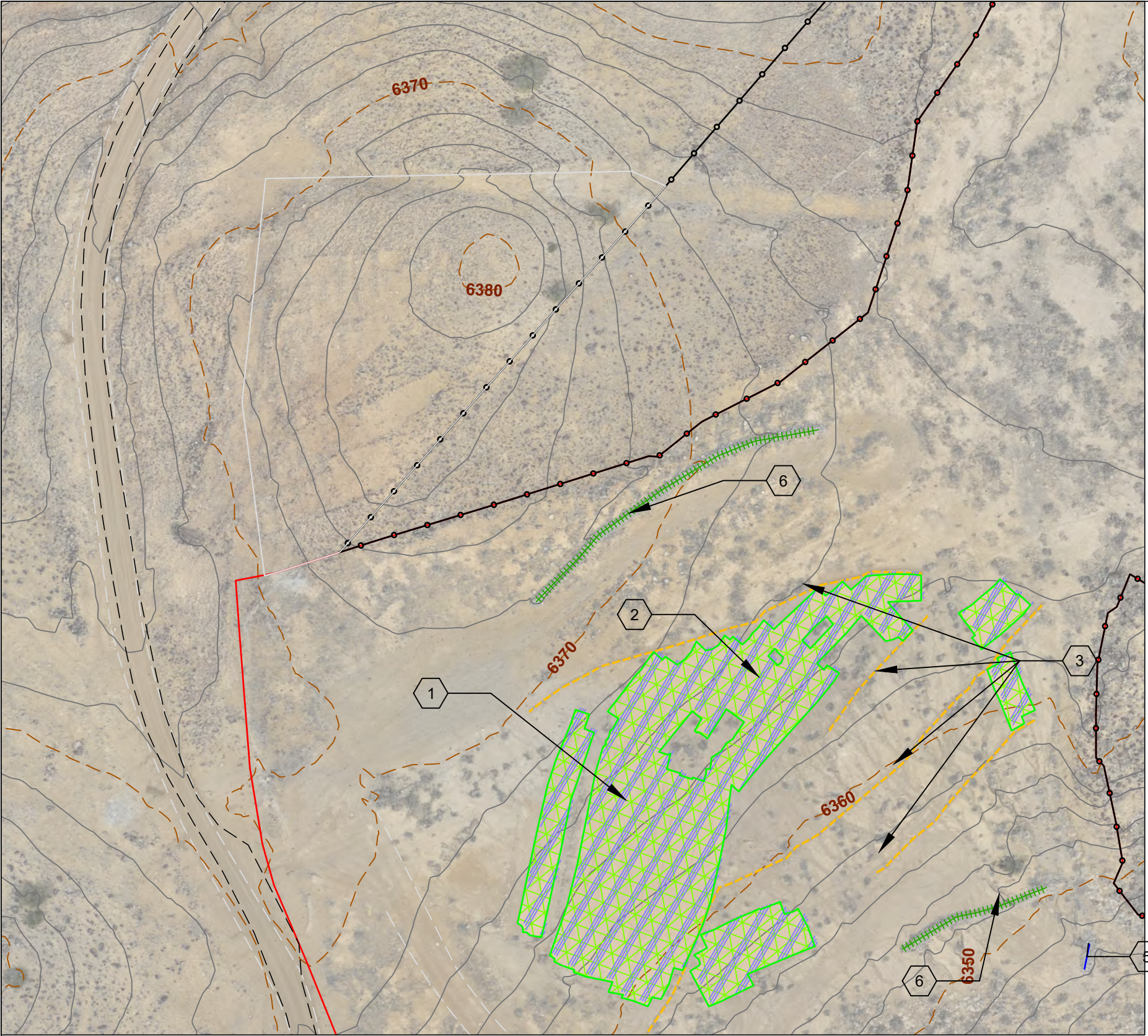
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VS-12 AS-BUILT CONDITIONS AND TOPOGRAPHY



JJ No. 1 / L-Bar Mine

SHEET 9



INSTALLED MATERIAL SUMMARY									
Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
Former Borrow Area	67800	18657	-	-	-	-	-	750	285

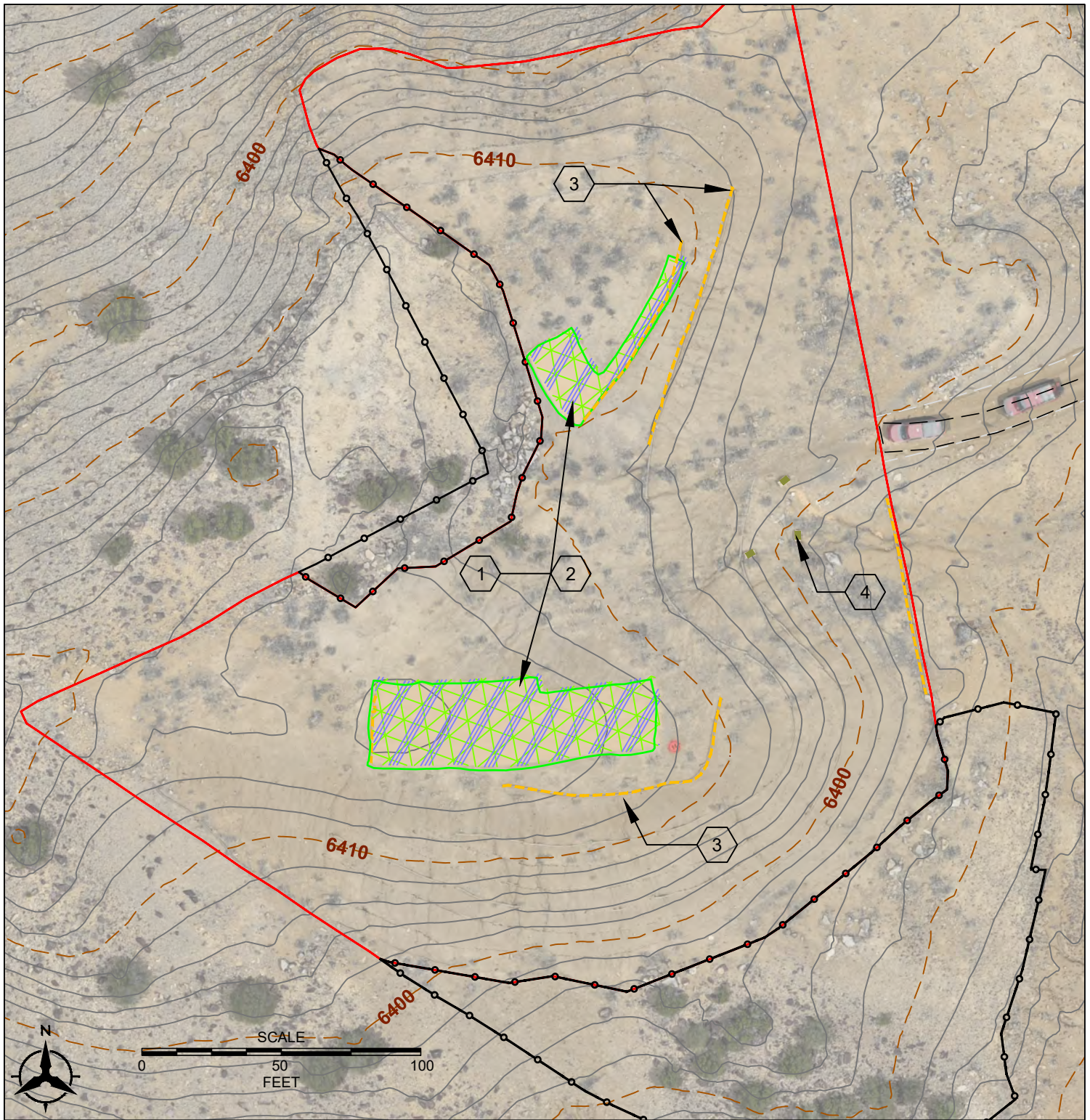
- KEYED NOTES:
1. SEE SEED MIXTURE SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SUPPLIER
 3. FIBER ROLL WATTLE INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 5. ROCK CHECK DAMS BOLSTERED WITH 6-12" AGGREGATE. SEE SHEETS 13 AND 14.
 6. MEDIA LUNAS INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS ON SHEET 14.

Date: 6/10/2026
Ref: KENCO.C006.LBAR
File: Sheets_State-Plane_RTC-JIMINE-JUN042026.dwg

FORMER BORROW AREA
AS-BUILT CONDITIONS AND TOPOGRAPHY



JJ No. 1 / L-Bar Mine



- KEYED NOTES:
1. SEE SEED MIXTURE SHEET 12.
 2. BIODEGRADABLE MATTING INSTALLED ALONG SLOPE ACCORDING TO SPECIFICATIONS IN APPENDIX D. SEE SHEET 13.
 4. STRAW BALES INSTALLED ACCORDING TO APPROVED SPECIFICATION. SEE SHEET 13.

INSTALLED MATERIAL SUMMARY

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap/Rock Armoring (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
Former Stockpile	3800	3800	-	-	-	-	3	325	-

Date: 6/10/2026

Ref: KENCO.C006.LBAR

File: Sheets_State-Plane_RTC-JMINE-JUN042026.dwg

AS-BUILT STOCKPILE EROSION MITIGATION



JJ No. 1 / L-Bar Mine

SHEET 11

1

BMP - SEEDING MIXTURE

L-Bar - Cedar Creek's Recommended Seed Mix for Broadcast Application (2021)					Recommendations			
No.	Obs. On Site	Salt Tolerance	Common Name	Scientific Nomenclature	PLS/lb.	Recomd. PLS lbs/Acre	PLS / ft ²	% of Seeds in Mix
1	XX	Mod	Western wheatgrass	Agropyron smithii	110,000	3.00	7.6	2.5%
2	XX	Low	Sideoats Grama	Bouteloua curtipendula	191,000	0.50	2.2	0.7%
3	XX	Mod	Blue Grama	Bouteloua gracilis	825,000	0.50	9.5	3.1%
4	XX	High	Galleta	Hilaria jamesii	159,000	5.00	18.3	5.9%
5		Low	Indian Ricegrass	Oryzopsis hymenoides	141,000	1.00	3.2	1.1%
6		Mod	Bottlebrush Squirreltail	Sitanion hystrix	192,000	1.00	4.4	1.4%
7	XX	High	Alkali Sacaton	Sporobolus airoides	1,758,000	2.00	80.7	26.3%
8	XX	High	Sand Dropseed	Sporobolus cryptandrus	5,298,000	1.00	121.6	39.6%
Grasses Subtotal					14.00	247.5	80.6%	
9		Low	Lewis Flax	Linum lewisii	293,000	1.00	6.7	2.2%
10		Mod	Mexican Poppy	Eschscholtzia californica	850,000	0.05	1.0	0.3%
11		Mod	Desert Globemallow	Sphaeralcea ambigua	500,000	1.00	11.5	3.7%
Forbs Subtotal					2.05	19.2	6.2%	
12		Low	Wyoming Big Sagebrush	Artemisia tridentata wyo.	2,500,000	0.25	14.3	4.7%
13	XX	High	Fourwing Saltbush	Atriplex canescens	52,000	3.00	3.6	1.2%
14		High	Shadscale	Atriplex confertifolia	64,900	1.00	1.5	0.5%
15	XX	Mod	Winterfat	Ceratoides lanata	56,700	2.00	2.6	0.8%
16	XX	Mod	Rubber Rabbitbrush	Chrysothamnus naseousus	400,000	2.00	18.4	6.0%
Shrubs Subtotal					8.25	40.4	13.2%	
Total					24.30	307.0		

Notes:

PLS = Pure Live Seed

ft2 = Square feet

lb = pound

CERTIFIED SEED MIXTURE:

SEEDING MIXTURE INSTALLED WITH HAND-BROADCASTING METHODS. SURFACE WAS PREPARED PRIOR TO INSTALLATION WITH HAND RAKING TO SCARIFY SURFACE. ALL AREAS WHERE SEEDING MIXTURE WAS APPLIED WERE THEN COVERED BY EROSION CONTROL BIO-DEGRADABLE MATTING OR STRAW FROM STRAW BALES (AT VS-11). NO WATER WAS ADDED FOLLOWING SEED APPLICATION. NATURAL PRECIPITATION OCCURRED WITHIN 30 DAYS OF INSTALLATION WITH MEASUREABLE RAINFALL AND SNOW EVENTS.

Enviroworks
Job 2483 - Acre Broadcasted Bag
Lot #: 676935
39.53

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total	Germ	Test Date
Galleta, Viva	13.18	Texas	83.88%	94%	2%	96%	4/2024	
Western Wheatgrass, Rosanna	8.25	Oregon	95.97%	92%	0%	92%	4/2024	
Winter Fat, Variety Not Stated	8.25	New Mexico	88.97%	90%	2%	92%	8/2024	
Four-wing Saltbush, Variety Not Stated	7.67	New Mexico	89.99%	99%	0%	99%	3/2024	
Rubber Rabbit Brush, Variety Not Stated	6.06	New Mexico	22.79%	24%	65%	89%	2/2024	
Alkali Sacaton, Variety Not Stated	5.89	New Mexico	98.66%	78%	8%	86%	7/2024	
Munro Globemallow, Variety Not Stated	3.05	Nevada	94.38%	83%	0%	83%	3/2024	
Bottlebrush Squirreltail, Turkey Lake	2.61	Washington	95.73%	97%	0%	97%	7/2024	
Blue Flax, Appar	2.61	Washington	98.42%	97%	0%	97%	6/2024	
Indian Ricegrass	2.61	Washington	99.09%	14%	83%	97%	7/2024	
Sand Dropseed, Variety Not Stated	2.55	Texas	81.59%	12%	87%	99%	5/2024	
Blue Grama, Variety Not Stated	1.31	New Mexico	82.10%	97%	0%	97%	7/2024	
Little Bluestem, Aldous	1.28	Nebraska	76.52%	99%	0%	99%	5/2024	
California Poppy, Variety Not Stated	0.14	Non-Domestic	83.39%	77%	14%	91%	3/2024	
Seed Total	65.46%				Bagged into 4) 1 acre broadcasted bags @			
Inert Matter:	34.46%							
Other Crop:	0.08%							
Weed Seed:	0.01%							
Noxious Weed: None			Texas Permit: 2772					

Date: 6/10/2026

Ref: KENCO.C006.LBAR

File: Sheets_State-Plane_RTC-JMINE-JUN042026.dwg

SEED MIXTURE AND CERTIFICATION



JJ No. 1 / L-Bar Mine

SHEET 12

2 BMP - MATTING

BIONET® C125BN™ (SEE APPENDIX D), WAS INSTALLED TO PROTECT NEWLY SEEDED AREAS. THE MATTING, SUPPLIED BY NORTH AMERICAN GREEN / WESTERN GREEN, WAS COMPRISED OF A LONG-TERM DOUBLE-NET COCONUT MATRIX AND ANCHORED WITH PROVIDED STAPLES AT APPROVED SPACING.



PHOTOGRAPH DEPICTING TYPICAL WATTLE AND BIODEGRADABLE MATTING.

3 BMP - WATTLE INSTALLATION

EACH WATTLE WAS 9" IN DIAMETER AND BOUND AT EACH END AND EVERY 4' ALONG THE LENGTH OF THE ROLL WITH JUTE-TYPE TWINE. INSTALLATION WAS ALONG THE CONTOUR OF THE SLOPE, PERPENDICULAR TO THE DIRECTION OF FLOW. THE ENDS OF EACH ROLL WERE TURNED UPSLOPE. WATTLES WERE PLACED IN TRENCHES AT LEAST 2" DEEP. ROLLS WERE STAKED INTO THE GROUND USING WOOD STAKES (AT LEAST 3/4" THICK). STAKES WERE DRIVEN THROUGH THE MIDDLE OF THE WATTLE AND DEEP ENOUGH INTO THE GROUND TO ANCHOR THE ROLL IN PLACE. STAKES EXTENDED AT LEAST 12" BELOW THE GROUND SURFACE.



PHOTOGRAPH DEPICTING STRAW BALE INSTALLATION (TYPICAL).

4 BMP - STRAW BALE - INSTALLATION

STRAW BALES WERE INSTALLED IN DESIGNATED AREAS DEMARCATED BY INTERA FIELD STAFF. BALES WERE INSTALLED TO SLOW FLOW VELOCITIES AND BUILD SEDIMENT IN RILLS.

5 BMP - ROCK CHECK DAM AND RIP RAP BOLSTERING

SEVERAL OBSERVED FLOW PATHS TRAVEL ACROSS EXISTING ROCK CHECK DAMS. EXISTING ROCK ON SITE WAS USED TO BOLSTER DESIGNATED CHECK DAM AREAS. THE CENTER OF THE CHECK DAMS ARE NOT MORE THAN 24 INCHES HIGH AND AT LEAST 6 INCHES LOWER THAN THE CHECK DAM EDGES.



PHOTOGRAPH DEPICTING TYPICAL ROCK CHECK DAM REPAIR WORK.

MATERIAL SUMMARY:

Reclamation Area	Reseeding (sf)	Erosion Matting (sf)	Concrete Erosion Control	Rock Check Dam Repair	Regrading	Rip Rap* (cy)	Strawbales (ea)	Fiber Roll/Wattle (ft)	Media Lunas (lf)
VS-4	1610	1610	-	Yes	-	40	6	-	-
VS-5	2100	2100	-	-	-	10	-	610	-
VS-6	1800	1800	-	Yes	-	50	-	225	-
VS-10	11255	3849	5464	Yes	Yes	70	11	375	170
VS-11	10600	0	-	-	-	-	4	625	-
VS-12	2600	2600	-	Yes	Yes	25	1	200	-
Former Borrow Area	67800	18657	-	-	-	-	-	750	285
Former Stockpile	3800	3800	-	-	-	-	3	325	-
Totals	101565	34416	5464	-	-	195	25	3110	455

Table Notes:
sf = square feet
Ac = acre
cy = cubic yard
ea = each
lf = linear foot/feet
* = material utilized for rock armoring and media luna

Date: 6/10/2026

Ref: KENCO.C006.LBAR

File: Sheets_State-Plane_RTC-JMINE-JUN042026.dwg

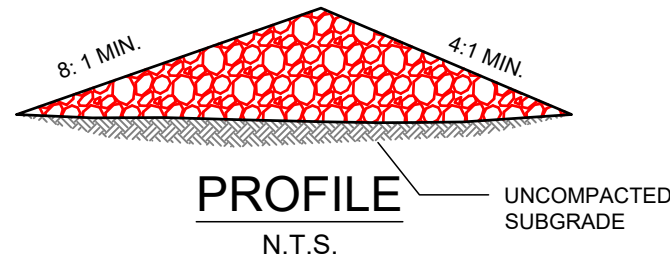
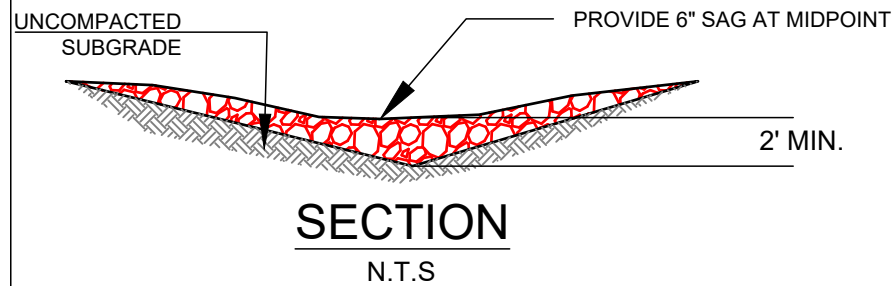
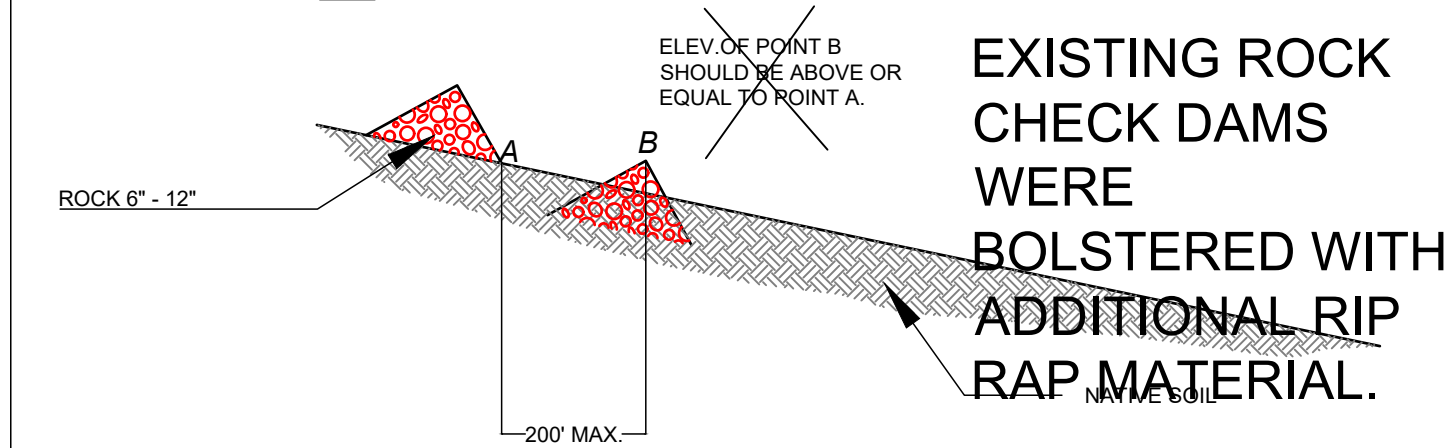
AS-BUILT BIODEGRADABLE MATTING, FIBER ROLL WATTLE, STRAW BALE AND ROCK CHECK DAM REPAIR PHOTOGRAPHS AND KEYED NOTES DETAILS



JJ No. 1 / L-Bar Mine

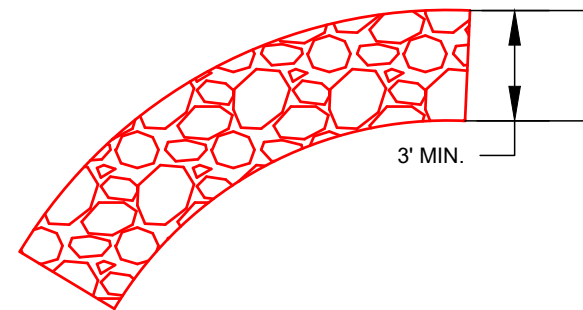
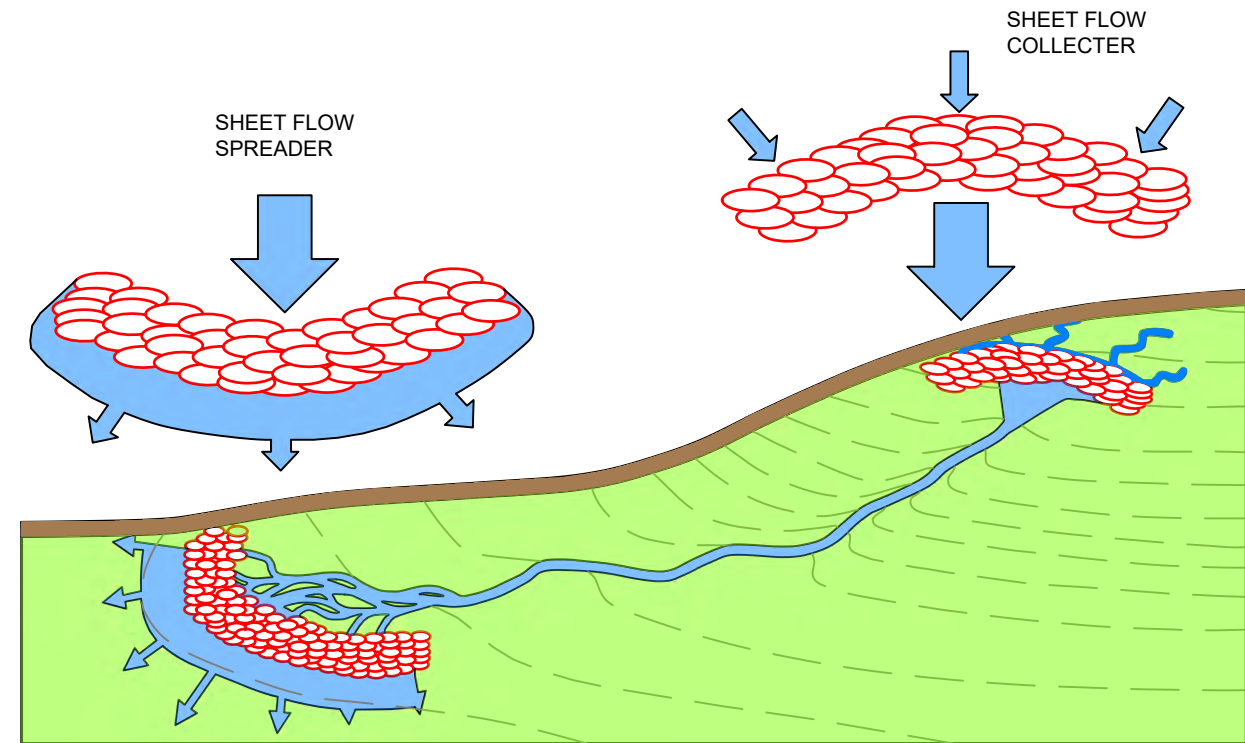
SHEET 13

5 **ROCK CHECK DAM LAYOUT**

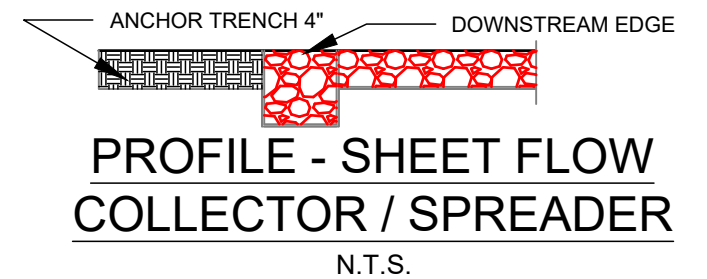


- NOTE:**
1. ROCKS USED IN CHECK DAMS HAD A MINIMUM THICKNESS OF 6" AND A MAXIMUM THICKNESS OF 12".
 2. DESIGNATED CHECK DAMS SHALL BE LENGTHENED AS NEEDED. INTERA FLAGGED EXISTING CHECK DAMS THAT REQUIRED LENGTHENING OR BOLSTERED.

6 **MEDIA LUNA LAYOUT**

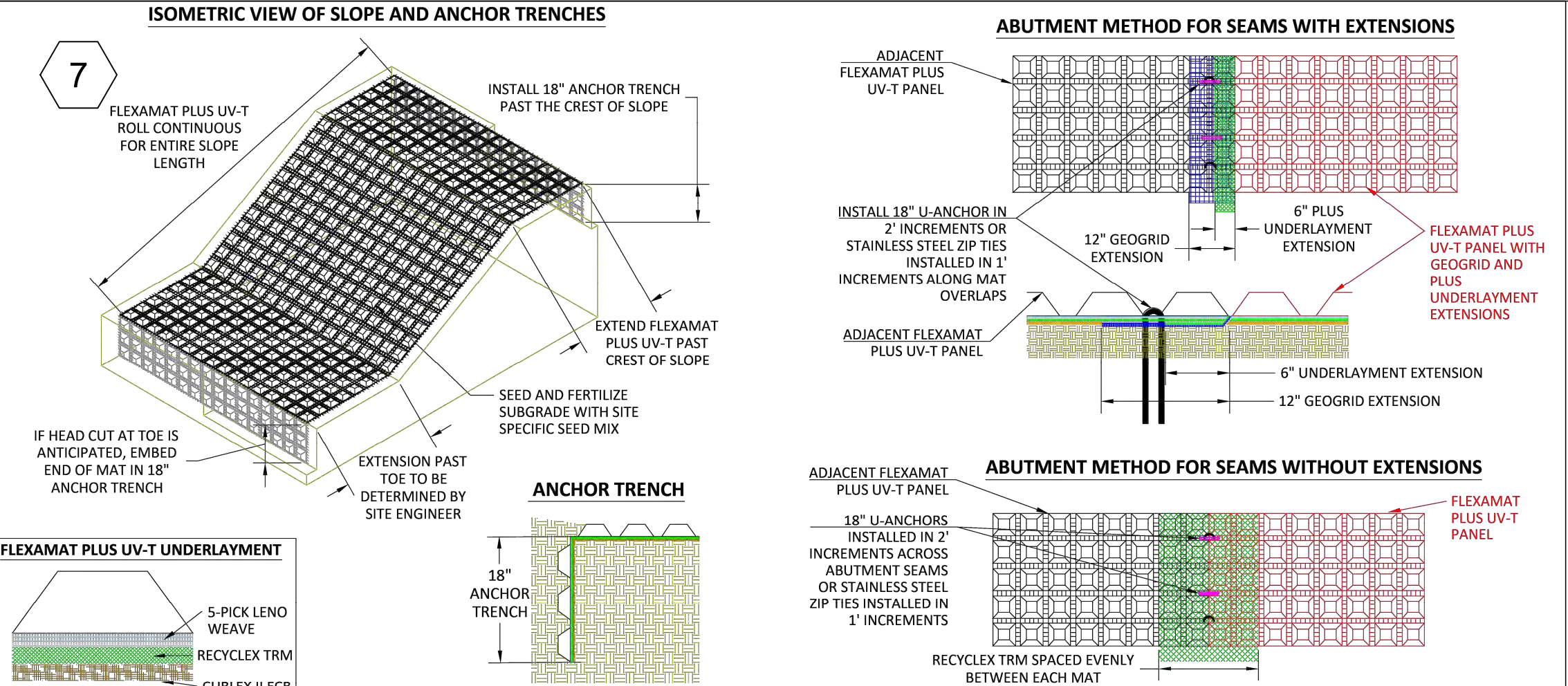


PLAN - SHEET FLOW COLLECTOR / SPREADER
N.T.S

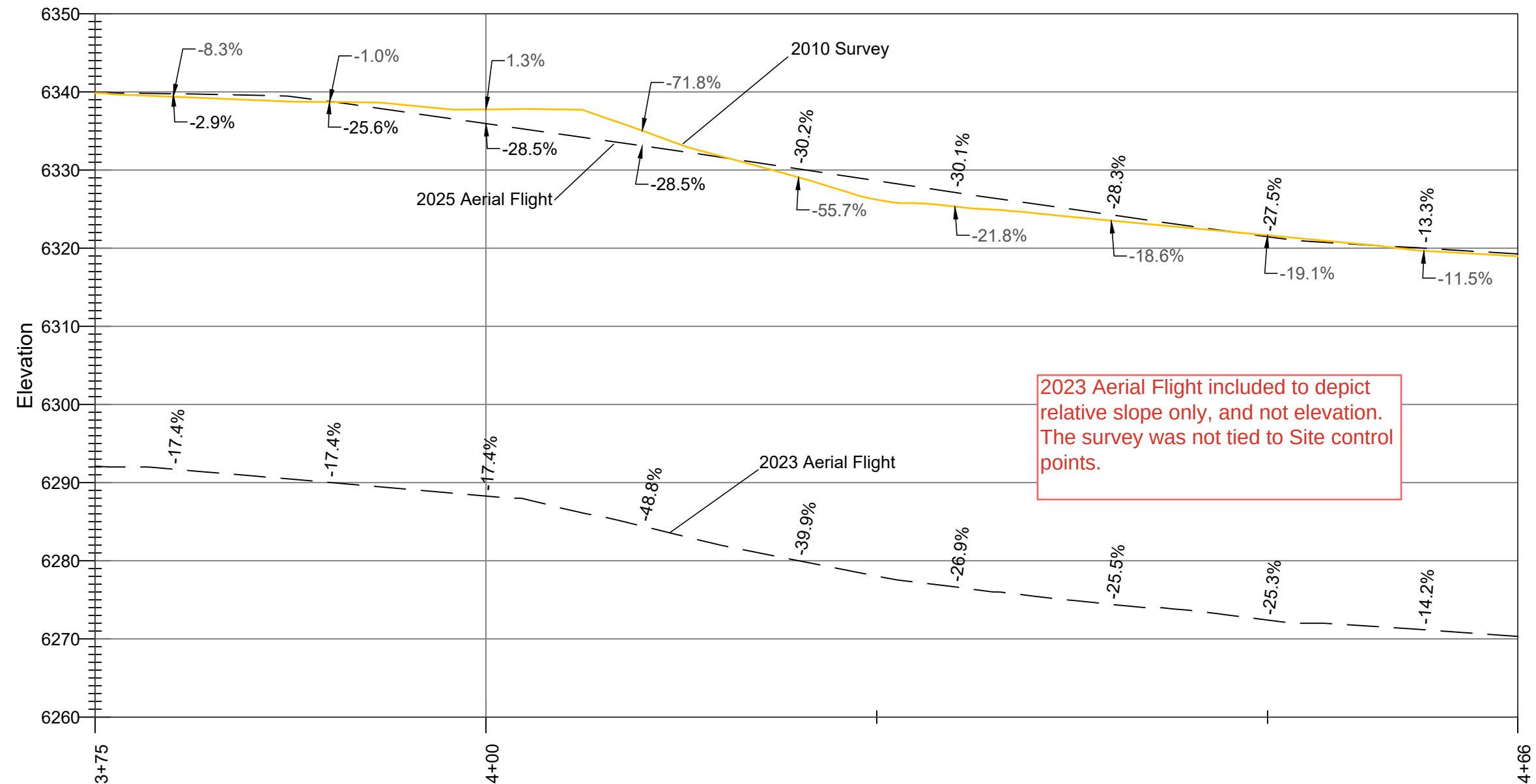


PROFILE - SHEET FLOW COLLECTOR / SPREADER
N.T.S.

- NOTE:**
1. SHEET FLOW COLLECTOR WERE CONSTRUCTED WITH A MINIMUM OF THREE ROCK LAYERS. ROCKS WERE 6-12" ANGULAR COBBLE.
 2. SHEET FLOW COLLECTOR FOLLOWED TOPOGRAPHY.
 3. SHEET FLOW SPREADERS WERE CONSTRUCTED FOLLOWING SAME METHODS FOR SHEET FLOW COLLECTOR.



Center Flow Path Profile



NOTE:
1. 2.5 VERTICAL EXAGGERATION

— — PRE-EXISTING GROUND SURFACE; INITIAL RECLAMATION
AND PERCENT SLOPE (BLACK TEXT)

— AS-BUILT GROUND SURFACE
AND PERCENT SLOPE (GREY TEXT)

APPENDIX D

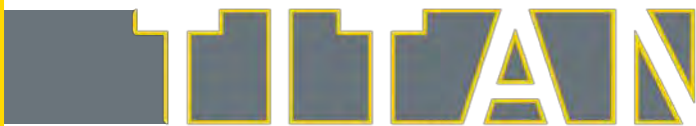
Construction Material and Product Data

Enviroworks
Job 2483 - 1 Acre Broadcasted Bag
Lot #: 67935
39.53

Item	% Pure Mix	Origin	Purity	Germ	Dormant	Total Germ:	Test Date
Galleta, Viva	13.18%	Texas	83.88%	94.00%	2.00%	96.00%	4/2024
Western Wheatgrass, Rosanna	8.25%	Oregon	95.97%	92.00%	0.00%	92.00%	4/2024
Winter Fat, Variety Not Stated	8.25%	New Mexico	98.97%	90.00%	2.00%	92.00%	8/2024
Four-wing Saltbush, Variety Not Stated	7.67%	New Mexico	99.99%	0.00%	0.00%	99.00%	3/2024
Rubber Rabbit Brush, Variety Not Stated	6.06%	New Mexico	92.79%	24.00%	65.00%	89.00%	2/2024
Alkali Sacaton, Variety Not Stated	5.89%	New Mexico	98.66%	78.00%	8.00%	86.00%	7/2024
Munro Globemallow, Variety Not Stated	3.05%	Nevada	94.38%	0.00%	0.00%	83.00%	3/2024
Bottlebrush Squirreltail, Turkey Lake	2.61%	Washington	95.73%	97.00%	0.00%	97.00%	7/2024
Blue Flax, Appar	2.61%	Washington	98.42%	97.00%	0.00%	97.00%	6/2024
Indian Ricegrass	2.61%	Washington	99.09%	14.00%	83.00%	97.00%	7/2024
Sand Dropseed, Variety Not Stated	2.55%	Texas	81.59%	12.00%	87.00%	99.00%	5/2024
Blue Grama, Variety Not Stated	1.31%	New Mexico	92.10%	97.00%	0.00%	97.00%	7/2024
Little Bluestem, Aldous	1.28%	Nebraska	76.52%	0.00%	0.00%	99.00%	5/2024
California Poppy, Variety Not Stated	0.14%	Non-Domestic	99.89%	77.00%	14.00%	91.00%	3/2024
Seed Total	65.46%	Bagged into 4) 1 acre broadcasted bags @ 39.525 bulk pounds.					
Inert Matter:	34.46%						
Other Crop:	0.08%						
Weed Seed:	0.01%						

Noxious Weed: None

Texas Permit: 2772



A NEW KIND OF RELIABLE

Engineered Construction Products



ECO LOG

Wood Chip Compost Wattles & Socks



Titan ECO LOG wattles and socks are used as an effective and economical method of sediment control for newly constructed or disturbed areas. Titan produces ECO LOG wattles and socks by tightly packing wood chip compost media into a durable, photodegradable 9 inch diameter net or fabric sock, typically in 25 foot lengths. Additional sizes include 12 inch diameter in 15 foot lengths and 18 inch diameter in 10 foot lengths. Other diameters and lengths can be produced upon request.

Titan Construction Products participates in the North American Weed Free Forage Certification Program. This certifies production facilities are noxious weed free and Titan ECO LOG wattles and socks are produced with noxious weed free materials.

Titan ECO LOG Meets the 2014 Edition New Mexico Department of Transportation Specification Section 603.2.6 for Mulch Socks and Compost Mulch Socks.

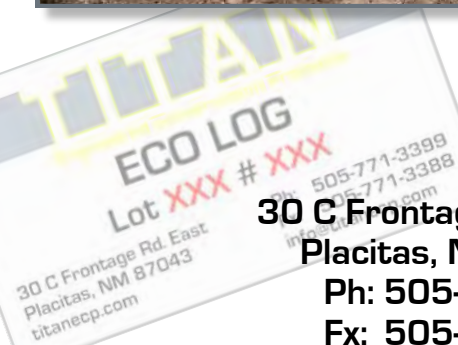
Specifications

Length	25 foot Standard Length
Diameter	9 inches $\pm 10\%$
Core Media.....	Certified Noxious Weed Free Wood Chip Compost
Roll Weight.....	180 pounds $\pm 10\%$
Weight per Linear Foot.....	No less than 7 pounds $\pm 10\%$
Netting Specifications	See Following Page

An advantage of the wood chip compost media used in the Titan ECO LOG product is the heavy unit weight, which insures intimate contact of the wattle with the ground along with resisting the force of water and sediment load. Typical installation includes four wood stakes per 25 foot length, which help keep the wattle and sock in place during its service life.

Another advantage of the wood chip compost media is it serves as an effective filter to allow the flow of water through the wattle and sock while capturing sediment. This captured sediment can provide a site for vegetative growth behind the wattle and sock. Finally when the service life of the wattle and sock is complete, the media can be left in place without the need for removal and disposal.

If you have erosion challenges on your site, while wattles and socks control the sediment caused by erosion or stormwater runoff, you may also to consider the use of erosion control products. Such products would include temporary and permanent blankets and even turf reinforcement mats. Titan offers a full line of products for various types of applications.



30 C Frontage Rd. East
Placitas, NM 87043
Ph: 505-771-3399
Fx: 505-771-3388

titanecp.com

NETTING SPECIFICATIONS

PROPERTY ⁽¹⁾	STANDARD	UNITS	TYPICAL VALUES ⁽²⁾	TEST CONDITIONS OR REMARKS
Dimensional				
Stretch Width	MN-TS-001-95 ⁽³⁾	inches (mm)	15.5 (394) +/- 0.50 (13)	2.5 lbs (1.13kg)
Tube Max Diameter	n/a	inches (mm)	9.5 (243)	Formula
Weight	MN-TS-002-95 ⁽³⁾	grams/linear foot (grams/linear meter)	10.8 (35.4) +/- 0.50 (1.6)	
# of Knots	n/a	n/a	74	
Knot Pitch (Diamond Size)	n/a	inches (mm)	0.25 (6.4)	
Degradability				
Photodegradability (Before and After Tensile Test)	ASTM D 4355 via (ASTM D 6818)	% Tensile Strength Retained MD % Tensile Strength Retained TD % Elongation Retained MD % Elongation Retained TD	104 104 100 90	Controlled Conditions Speed: 12 in/min Specimen: 4 inches Exposed for 500 hrs Recommended for 2 years outdoors ⁽⁴⁾
Presentation				
Color	n/a	n/a	Black	
Roll Length ⁽⁵⁾	n/a	feet (meters)	3,000 (914)	Core length: 20.125"
Core ID	n/a	inches (mm)	3.0 (76)	Core length: 20.125"
Roll OD	n/a	inches (mm)	17.0 (432)	Core length: 20.125"
Roll Weight (gross)	n/a	lbs (Kg)	55.3 (25.1)	
Packaging ⁽⁶⁾	n/a	rolls	12/skid, Wrapped	
Splices Allowed	n/a	units	2	

(1) Properties designated have been determined in accordance with the current issues of the specified testing methods. Methods of the American Society for Testing and Materials (ASTM) are used wherever applicable.

(2) Typical values represent average laboratory values and are intended as guides only, not as specifications.

(3) Internal test designed for Uniaxial Oriented Nets.

(4) Studies indicate that ϵ_f could be reduced by 50% and α_f by 1% in 2 years under the South Florida radiation conditions (660 KJ per cm² per year and at sea level) land elevations and weather conditions could modify these figures. In this particular case the data belong to specimen with the same properties and process conditions.

(5) The length is customizable.

(6) Customizable.

The above information is provided in good faith, and to our knowledge, true and accurate. However, since the particular uses and the actual conditions of use of our products are beyond our control, establishing satisfactory performance of our products for the intended application is the customer's sole responsibility. Masternet Ltd does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written arising from any usage in connection with the use of the information contained herein or the product itself.

Titan Construction Products, LLC
30 C Frontage Rd. East
Placitas, NM 87043

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Fx: 505-771-3388
Arizona Ph: 602-229-8900
Fx: 602-229-8901

Tensar



Tensar



EXCLUSIVE DISTRIBUTOR

PROUD MEMBER

MATERIAL PROPERTY DATA SHEET



BioNet® C125BN™

Long Term • Double Net • Coconut Matrix •
Biodegradable • Erosion Control Blanket

DESCRIPTION

C125BN Long Term Erosion Control Blanket consists entirely of coconut fibers manufactured into a matrix of uniform thickness and coverage. The coconut matrix is confined by a biodegradable, jute/scrim net on top and bottom, mechanically (stitch) bound on two-inch centers with a biodegradable, cotton thread. C125BN is intended for slope and channel erosion control applications requiring up to thirty-six months of functional longevity. The material is fully degradable. The net, thread, and the fiber matrix is biodegradable. Actual field longevity is dependent on soil and climatic conditions.



Each roll of C125BN is made in the USA and manufactured under Western Green's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness.

Material Content		
Matrix	Coconut	
Netting	Top & Bottom Net: Jute Scrim, Biodegradable, Leno Weave	Double Net
Thread	Biodegradable Cotton or Rayon	

Standard Roll Sizes				
Width	8 ft	(2.4 m)	16 ft	(4.9 m)
Length	112 ft	(34.1 m)	563 ft	(171.0 m)
Weight ± 10%	56.3 lb	(25.6 kg)	563 lb	(256.0 kg)
Area	100 sy	(83.6 m ²)	1000 SY	(836.0 m ²)

Material available in custom roll sizes

Approvals & Classification	
Classification	FHWA: Type 4.B / ECTC: Type 4.B
TTI Approvals	Class 1 Type B,D
NTPEP Number	ECP-2020-01-013

Disclaimer: The information contained herein may represent product index data, performance ratings, bench scale testing or other material utility quantifications. Each representation may have unique utility and limitations. Every effort has been made to ensure accuracy, however, no warranty is claimed and no liability shall be assumed by Western Green or its affiliates regarding the completeness, accuracy or fitness of these values for any particular application or interpretation. While testing methods are provided for reference, values shown may be derived from interpolation or adjustment to be representative of intended use. For further information, please feel free to contact Western Green.

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Index Property	Test Method	Typical	
Thickness	ASTM D6525	0.28 in.	(7 mm)
Mass/Unit Area	ASTM D6566	9.0 oz/sy	(305 g/sm)
Tensile Strength – MD	ASTM D6818	210 lbs/ft	(3.1 kN/m)
Tensile Strength – TD	ASTM D6818	190 lbs/ft	(2.8 kN/m)
Elongation - MD	ASTM D6818	15%	
Elongation – TD	ASTM D6818	15%	
Density/Specific Gravity	D792	N/A	
Light Penetration	ASTM D6567	15%	
Biomass Improvement	ASTM D7322	500%	
Water Absorption	ASTM D1117	300%	

Design Parameters		
Property	Unvegetated	Vegetated ³
RUSLE C Factor ²	0.02	N/A
Slope Maximum Gradient ¹	1H:1V	N/A
Permissible Shear Stress ²	2.5 psf (120 Pa)	N/A
Permissible Velocity ²	9.0 fps (2.7 m/s)	N/A

Manning's n Roughness (HEC-15)		
τ_{lower}	τ_{mid}	τ_{upper}
0.029	0.025	0.023

1 Maximum Gradient a recommendation for typical insllations.

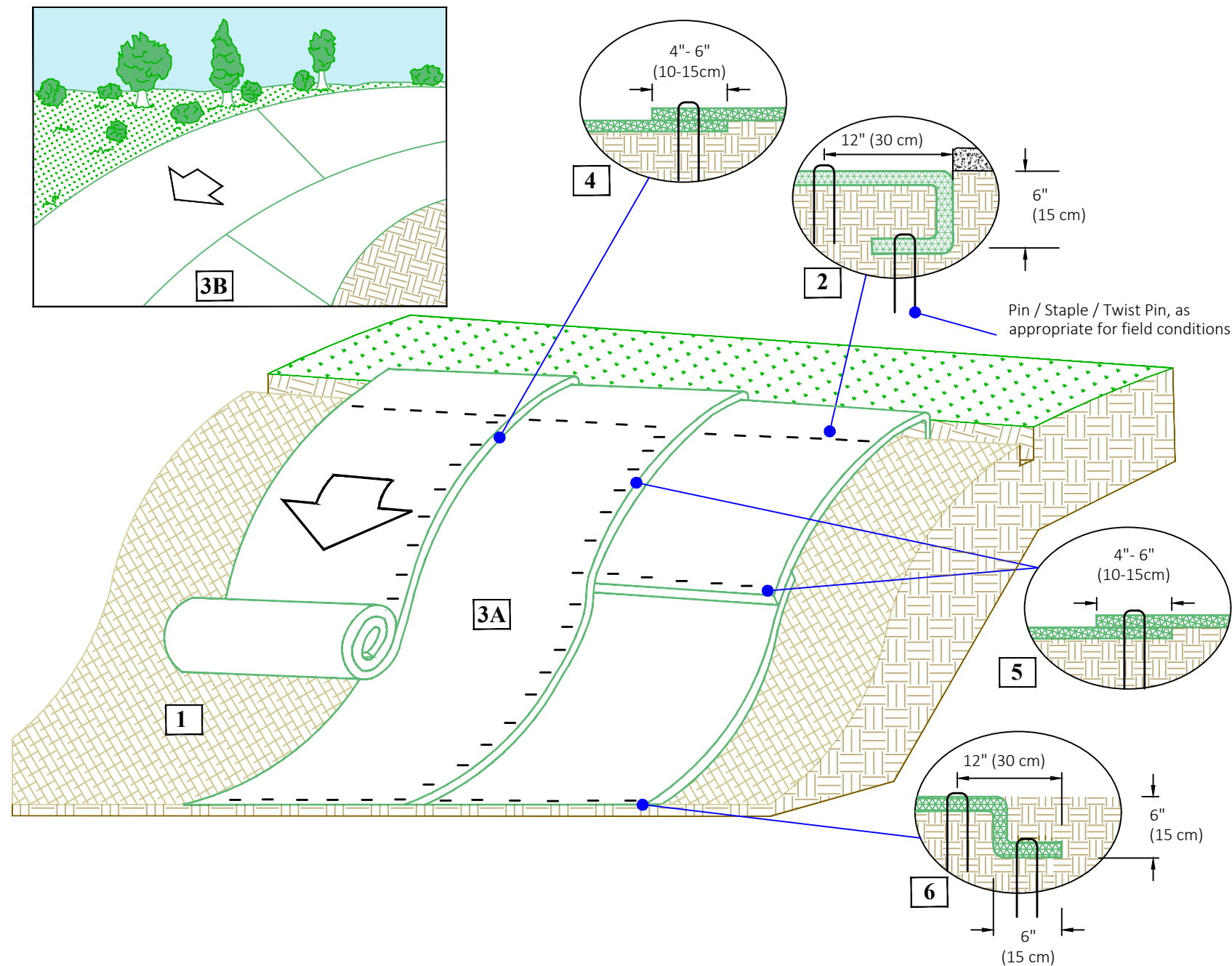
2 Hydraulic thresholds compliant with ASTM D6459/D6460 but generalized for typical applications.

3 Vegetated values dependent on established stand of vegetation

Rev. 4.2023

Scan for additional and updated product information, or [click here](#).

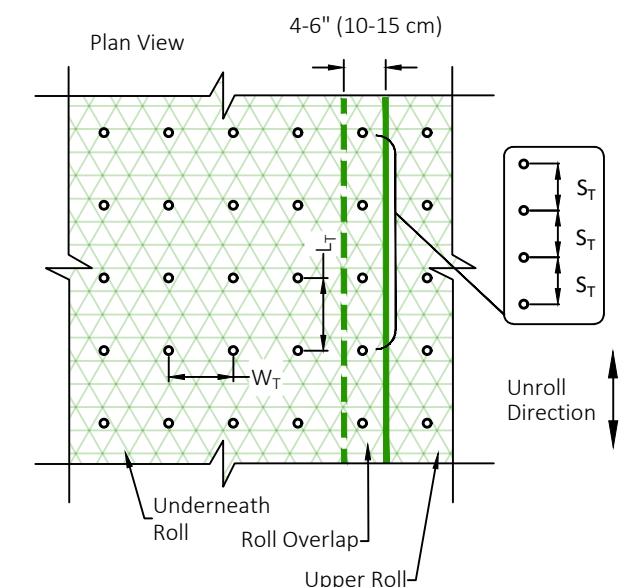




Instructions

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed. Ground surface must be free of debris, rocks, clay clods and raked smooth sufficient to allow intimate contact of the RECP with the soil over the entirety of the installation.
2. Begin at the top of the slope by anchoring the RECPs in a 6" (15 cm) deep X 6" (15 cm) wide trench. Anchor the RECPs with a row of staples/stakes/pins spaced at S_T apart in the bottom of the trench. Backfill and compact the trench after stapling and fold the roll over downslope. Secure RECPs over compacted soil with a row of staples/stakes/pins spaced at S_T apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. When laying RECPs horizontal, a maximum of two roll widths or 16 feet, whichever is less, may be applied up the slope. If two roll widths or 16 ft is insufficient to cover the slope, material shall be placed vertically. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes/pins in appropriate locations as shown in the staple pattern guide. RollMax RECPs and ECBs should utilize Staple Pattern C, TRMs and VMax materials should utilize Staple Pattern D.
4. The edges of parallel RECPs must be stapled with approximately 4" - 6" (10 - 15 cm) overlap.
5. Consecutive RECPs spliced down the slope must overlapped with the upstream mat atop the downstream mat (shingle style). The overlap should be 4" - 6" (10 - 15 cm).
6. At the terminal end, secure each mat across the width with a row of staples/stakes/pins spaced at S_T . If exposed to flow, foot traffic, wind uplift or other disruption, trench the terminal end in as shown in detail.
7. Fasteners should provide a minimum of twenty pounds of pullout resistance. Six-inch (10 cm) X one-inch (2.5 cm) eleven gauge staples are typically adequate. In loose soils, longer staples may be necessary, twist pins can provide the greatest pullout resistance. In hard or rocky soils, straight pins may be used where staples or twist pins are refused, provided the minimum pullout requirements are met. Bio-degradable fasteners shall not be used with TRM or HPTRM materials.

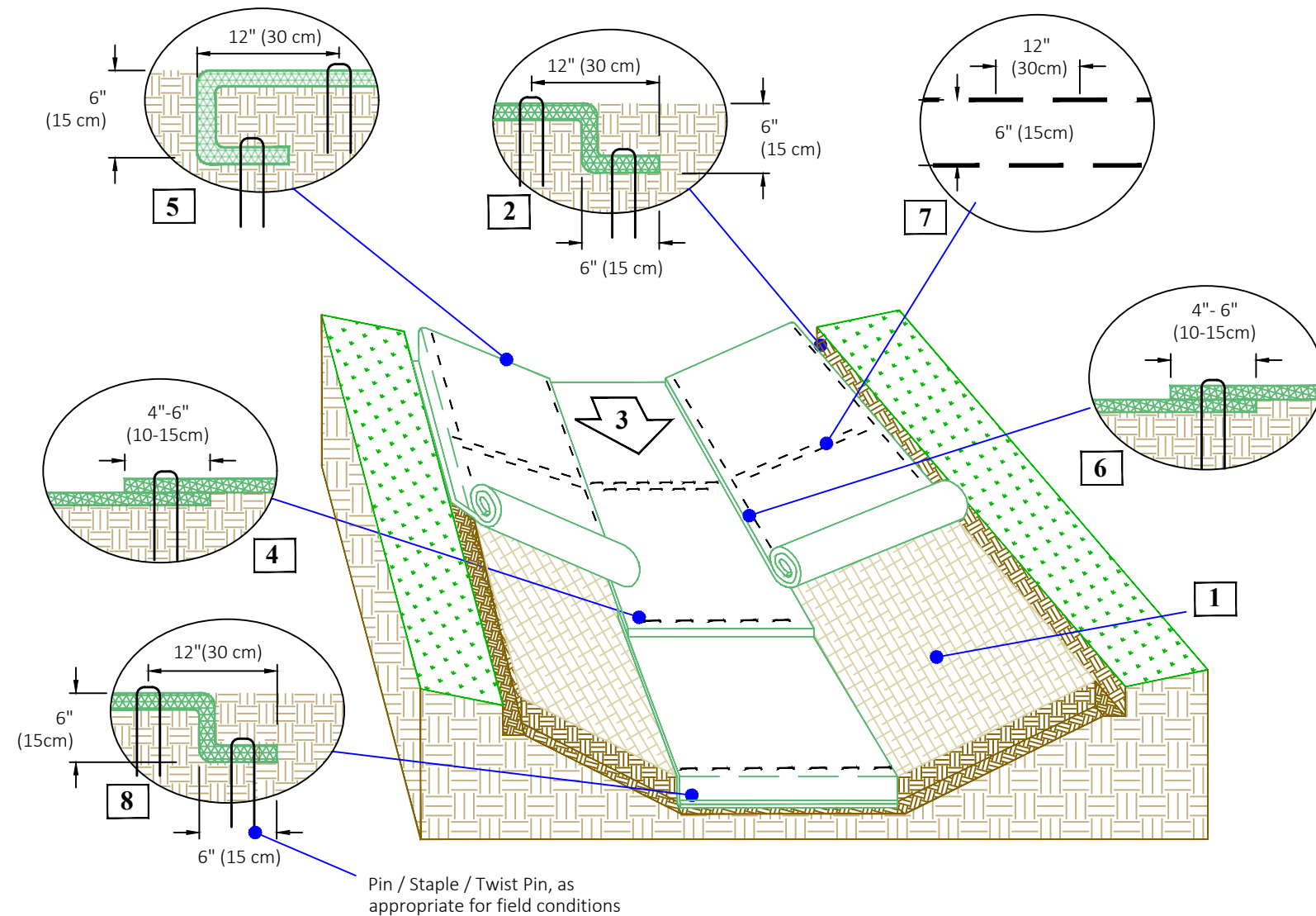
Staple Pattern Guide



- Pin / Staple / Twist Pin, as appropriate for field conditions

Dimension	Staple Pattern	
	C	D
W_T	30" (75 cm)	22" (55 cm)
L_T	30" (75 cm)	22" (55 cm)
S_T	18" (45 cm)	18" (45 cm)
Nominal Frequency	1.7 / SY	3.0 / SY
Application	ECB (Degradable)	TRM (Permanent)
Required Fastener	Min. 20# pullout	Min. 20# pullout

*Note: Staple Pattern A and B used prior to 8/2019 have been discontinued.



CRITICAL POINTS

- A. Overlaps and Seams
- B. Projected Water Line
- C. Channel Bottom/Side Slope Vertices



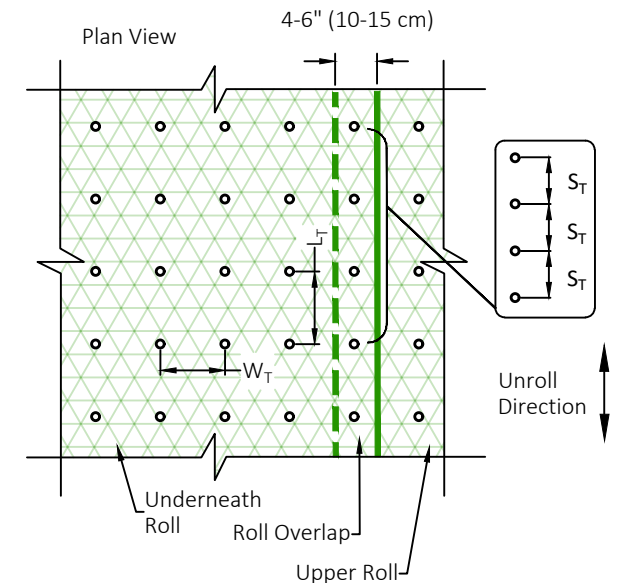
NOTES:

- *Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

Instructions

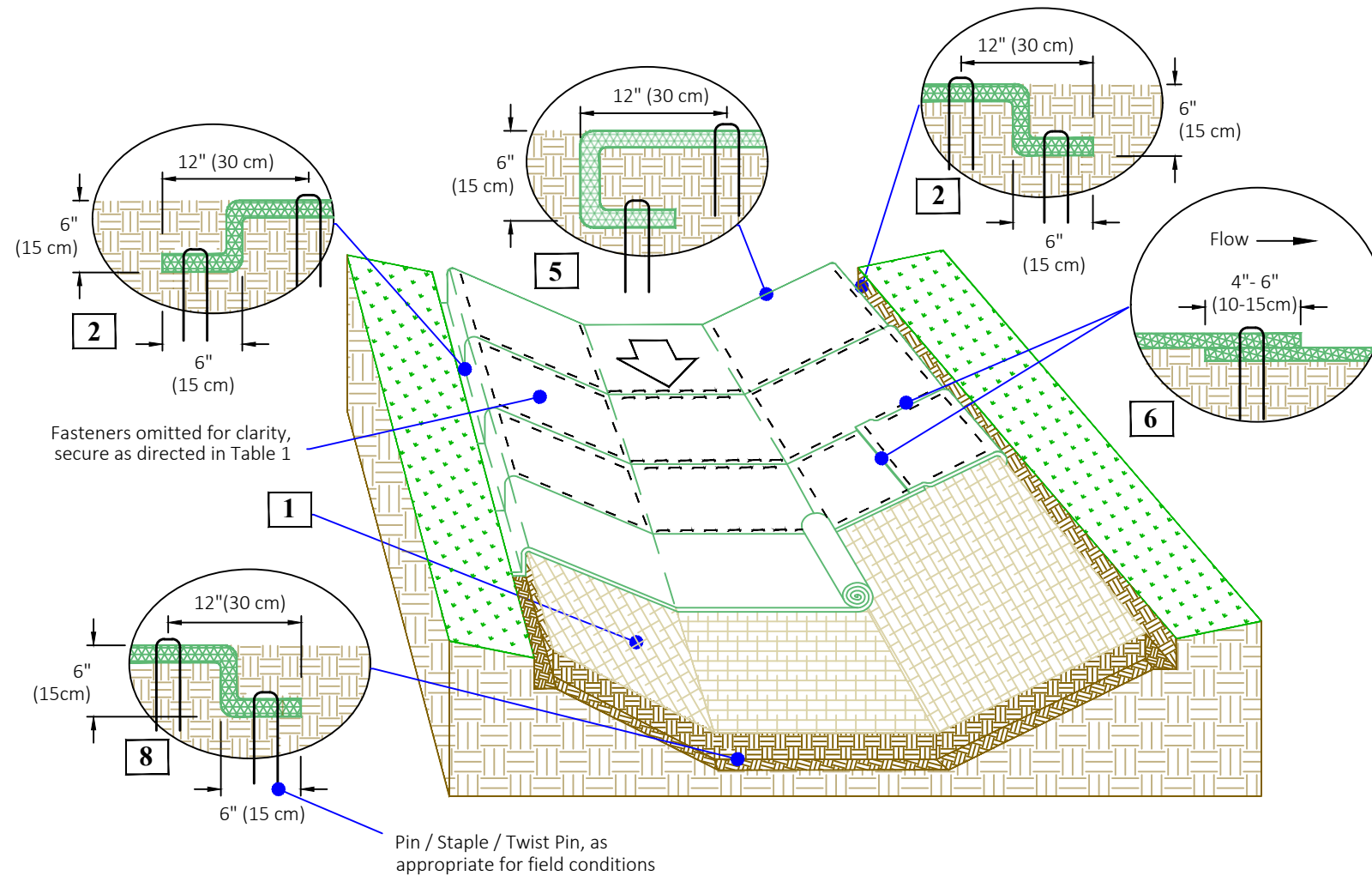
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed. Ground surface must be free of debris, rocks, clay clods and raked smooth sufficient to allow intimate contact of the RECP with the soil over the entirety of the installation.
2. Begin at the top of the channel by anchoring the RECPS in a 6" (15 cm) deep X 6" (15 cm) wide trench with approximately 12" (30 cm) of RECPS extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPS with a row of staples/stakes/pins approximately 12" (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12" (30 cm) portion of RECPS back over the seed and compacted soil. Secure RECPS over compacted soil with a row of staples/stakes/pins spaced approximately 12" (30 cm) apart across the width of the RECPS.
3. Roll center RECPS in direction of water flow in bottom of channel. RECPS will unroll with appropriate side against the soil surface. All RECPS must be securely fastened to soil surface by placing staples/stakes/pins in appropriate locations as shown in the staple pattern guide.
4. Place consecutive RECPS end-over-end (Shingle style) with a 4"- 6" (10 - 15 cm) overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPS.
5. Full length edge of RECPS at top of side slopes must be anchored with a row of staples/stakes/pins spaced at S_T apart in a 6" (15 cm) deep X 6"(15 cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPS must be overlapped approximately 4"- 6" (10 - 15 cm) and secured with staples/stakes/pins at S_T .
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 6" (15 cm) apart and 12" (30 cm) on center over entire width of the channel.
8. The terminal end of the RECPS must be anchored with a row of staples/stakes/pins spaced at S_T apart in a 6" (15 cm) deep X 6" (15 cm) wide trench. Backfill and compact the trench after stapling.
9. Fasteners should provide a minimum of twenty pounds of pullout resistance. Six-inch (10 cm) X one-inch (2.5 cm) eleven gauge staples are typically adequate. In loose soils, longer staples may be necessary, twist pins can provide the greatest pullout resistance. In hard or rocky soils, straight pins may be used where staples or twist pins are refused, provided the minimum pullout requirements are met. Bio-degradable fasteners shall not be used with VMax (TRM) or TMax (HPTRM) materials.

Staple Pattern Guide



- Pin / Staple / Twist Pin, as appropriate for field conditions

	Staple Pattern
Dimension	E
W_T	20" (50 cm)
L_T	20" (50 cm)
S_T	18" (45 cm)
Nominal Frequency	3.8 / SY
Required Fastener	Min. 20# Pullout



CRITICAL POINTS
 A. Overlaps and Seams
 B. Projected Water Line
 C. Channel Bottom/Side Slope Vertices

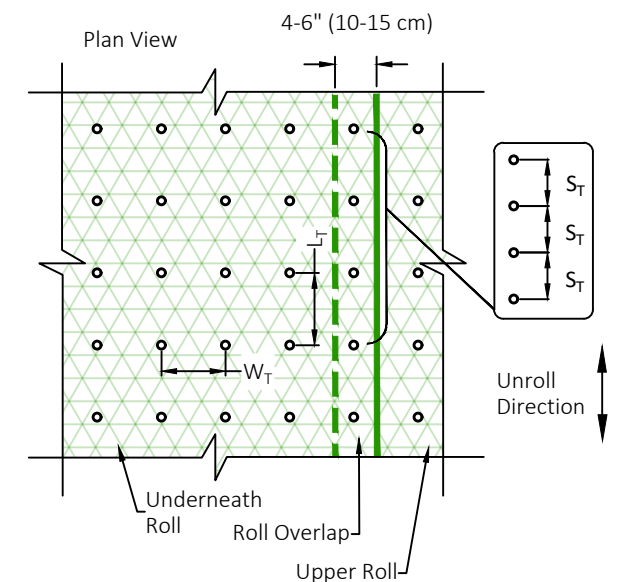


NOTES:
 *Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

Instructions

1. Prepare soil (fig. 1) before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed. Ground surface must be free of debris, rocks, clay clods and raked smooth sufficient to allow intimate contact of the RECP with the soil over the entirety of the installation. Apply seed and amendments to the compacted soil.
2. Dig anchor trench, 6" (15 cm) deep X 6" (15 cm) wide, at the upstream most edge of installation across the channel. Begin at the top of the channel by unrolling the RECP across the channel, perpendicular to the direction of flow, cut to fit. Carefully flip the RECP panel upstream, leaving it upside down. Place the upside down leading edge in the trench. Anchor the RECP panel with a row of fasteners spaced at S_T apart in the bottom of the trench. Backfill and compact the trench after fastening. With the RECP secured in the backfilled trench, flip the RECP panel over, right side up, over the backfill. The end result should mimic fig. 2. Secure RECP just downstream of trench with a row of fasteners located approximately 12" (30 cm) downstream from the trench, spaced at S_T .
3. Roll subsequent RECP panels across the channel, fitting the downstream panel under the upstream panel. RECPs shall be unrolled with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing twist pins in appropriate locations as shown in the pin pattern guide.
4. Place consecutive RECPs end-over-end (Shingle style) with a 4"- 6" (10 - 15 cm) overlap, see fig.6. Secure overlaps as shown.
5. Adjacent RECPs must be overlapped approximately 4"- 6" (10 - 15 cm) and secured with fasteners at S_T .
6. The terminal end of the RECPs must be anchored with a row of fasteners spaced at S_T apart in a 6" (15 cm) deep X 6" (15 cm) wide trench (minimum). Backfill and compact the trench after stapling.
7. Fasteners should provide a minimum of twenty pounds of pullout resistance. Six-inch (10 cm) X one-inch (2.5 cm) eleven gauge staples are typically adequate. In loose soils, longer staples may be necessary, twist pins can provide the greatest pullout resistance. In hard or rocky soils, straight pins may be used where staples or twist pins are refused, provided the minimum pullout requirements are met. Bio-degradable fasteners shall not be used with VMax (TRM) or TMax (HPTRM) materials.

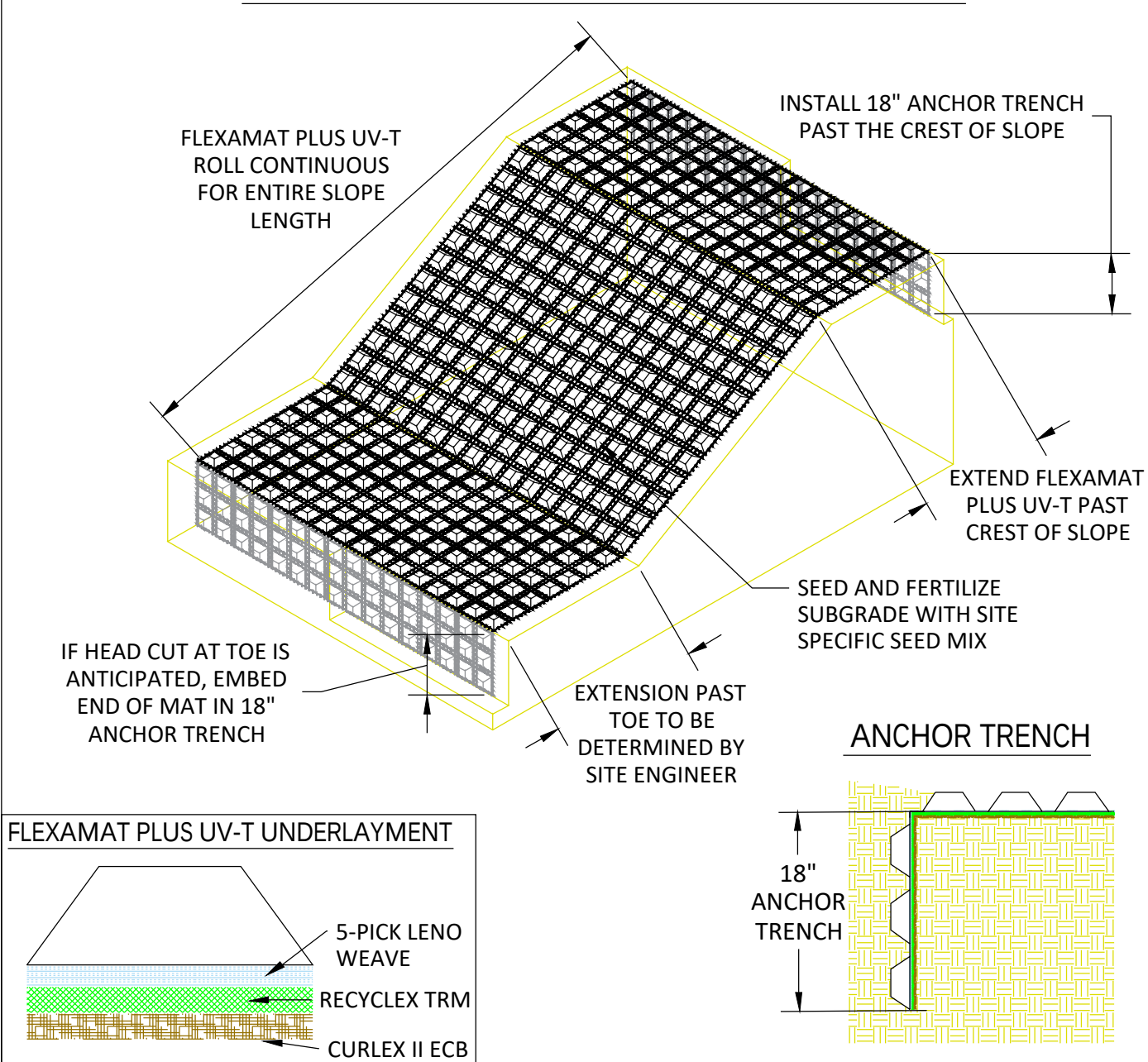
Staple Pattern Guide



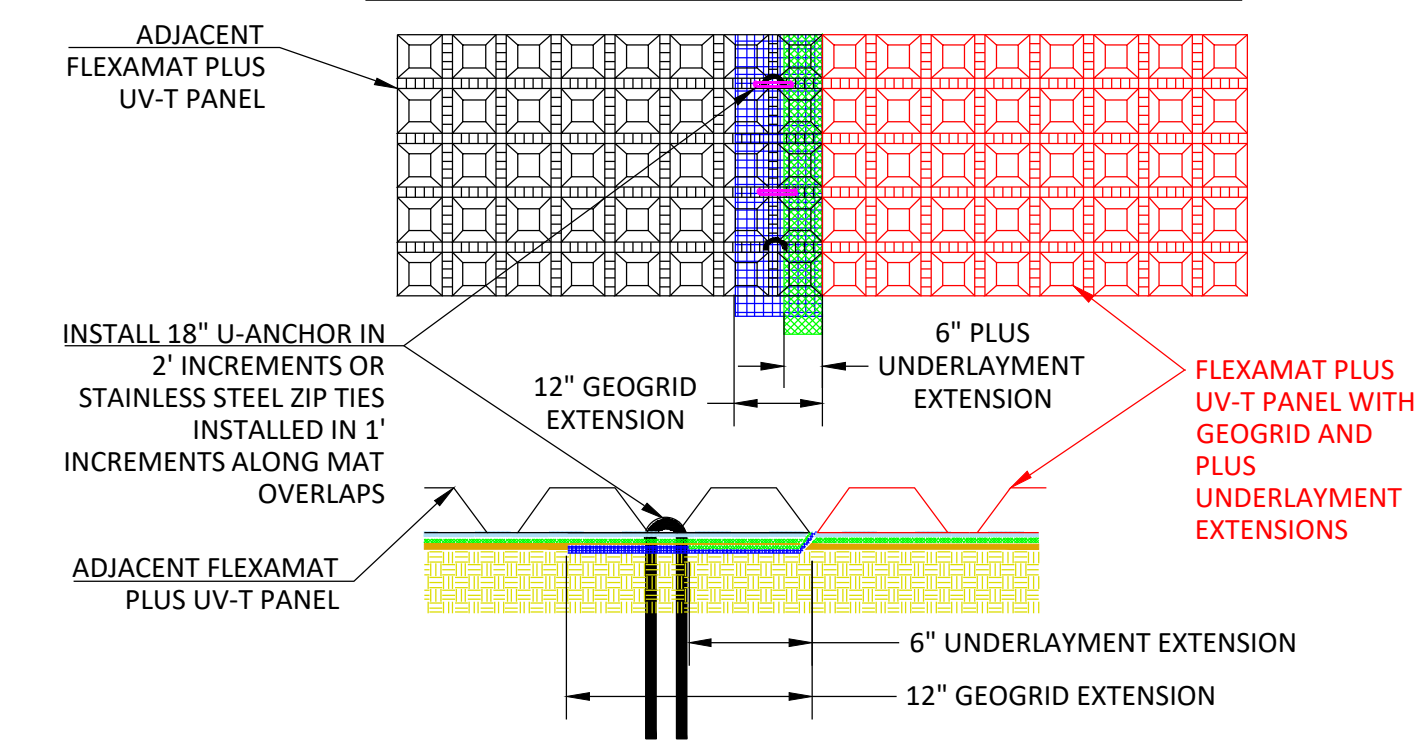
• Pin / Staple / Twist Pin, as appropriate for field conditions

	Staple Pattern
Dimension	E
W_T	20" (50 cm)
L_T	20" (50 cm)
S_T	18" (45 cm)
Nominal Frequency	3.8 / SY
Required Fastener	Min. 20# Pullout

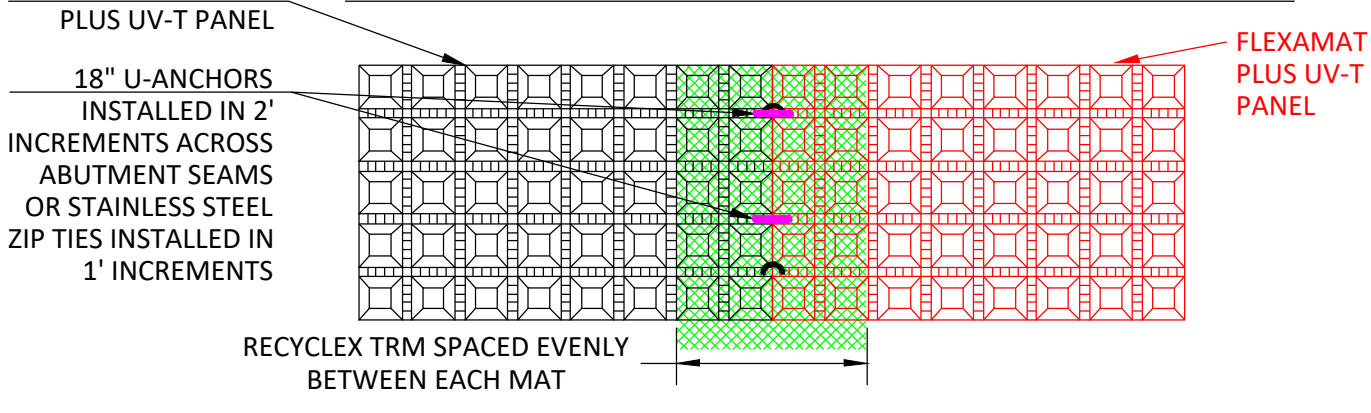
ISOMETRIC VIEW OF SLOPE AND ANCHOR TRENCHES



ABUTMENT METHOD FOR SEAMS WITH EXTENSIONS



ABUTMENT METHOD FOR SEAMS WITHOUT EXTENSIONS



FLEXAMAT PLUS UV-T - SLOPE ARMORING DETAIL

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT PLUS UV-T INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX PRIOR IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT PLUS UV-T ROLLS THAT ARE CONTINUOUS FOR ENTIRE SLOPE LENGTH. FOR SLOPES LONGER THAN 16', USE MATS WITH EXTENSIONS CUT TO THE LENGTH OF THE SLOPE. INSTALL MATS TO THAT THE MATTING EXTENDS PAST THE CREST OF SLOPE AND INTO AN 18" ANCHOR TRENCH.
 - 4.1. FOR ARMORED SLOPE LENGTHS 16' OR LESS, INSTALL A TRM SEAM EQUALLY UNDER ADJACENT MATS.
 - 4.2. ARMORED SLOPE LENGTHS LONGER THAN 16', INSTALL NEXT MAT OVER EXTENSIONS.
5. INSTALL SUBSEQUENT MATS OVER THE GEOGRID EXTENSION AND TRM UNDERLAYMENT EXTENSION OF THE PREVIOUSLY INSTALLED MAT. ENSURE THE GEOGRID AND TRM UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
6. INSTALL #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE GEOGRID AND TRM EXTENSION OVERLAP. INSTALL ANCHORS PERPENDICULAR TO THE SLOPE DIRECTLY BEHIND FIRST ROW OF BLOCKS ON THE ADJACENT MAT.
7. AT THE END OF THE ARMORED SLOPE, IF HEAD CUT IS ANTICIPATED, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL.

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Flexamat Plus Specification

1. DESCRIPTION

A Tied Concrete Block Mat with Triple Layered Underlayment. This work shall consist of furnishing and placing the system in accordance with this specification and conforming with the lines, grades, design, and dimensions shown on the plans.

2. MATERIALS

Flexamat Plus is manufactured from individual concrete blocks tied together with high strength knitted polypropylene bi-axial geogrid. Each block is tapered, beveled and interlocked and includes connections that prevent lateral displacement of the blocks within the mats when they are lifted for placement.

Tied Concrete Block Mats with Triple Underlayment shall be Flexamat Plus, manufactured by Motz Enterprises, Inc.

- 2.1. Blocks. Furnish blocks manufactured with concrete conforming to the cement requirements of ASTM C150 and to the aggregate requirements of ASTM C33. Blocks shall have a minimum weight of 3 lb. per block and placed no further than 2 in. apart. Material weight per square foot shall not exceed 10 lbs. Blocks shall have a 2.25" profile, a flat-top pyramid shape, and a coarse finish without protrusions. Concrete shall have a minimum compressive strength requirement of Table 1 and certified by a third party.

Table 1
Concrete Compressive Strength Requirements

Age	Required Compressive Strength psi
7 - Day	5000 psi
14 - Day	6000 psi
28 - Day	6900 psi

- 2.2. Polypropylene Bi-Axial Geogrid. The interlocking geogrid shall be an open knitted fabric composed of high tenacity, multifilament polypropylene yarns knitted and coated in tension with an acrylic based coating which is designed to resist degradation in environments with exposure to water and low pH (<4 pH) and high pH (>9 pH). When combined with the revetment mat, this will yield a high tenacity, low elongating, and continuous filament polypropylene geogrid that is embedded within the base of the concrete blocks. Ensure the geogrid meets the requirements of Table 2.

Table 2
Polypropylene Bi-Axial Geogrid

Property	Unit	Test	Requirement
Mass/Unit Area	oz/yd ²	ASTM D5261	6.5 oz/yd ²
Aperture Size	English units	Measured	1.4x 1.4 inch
Ultimate Wide Width Tensile Strength (MD x CMD)	lb/ft	ASTM D6637	2,055 lb/ft
Elongation at Ultimate Tensile Strength (MD x CMD)	%	ASTM D6637	6%
Wide Width Tensile Strength @ 2% (MD x CMD)	lb/ft	ASTM D6637	822 lb/ft
Wide Width Tensile Strength @ 5% (MD x CMD)	lb/ft	ASTM D6637	1,640 lb/ft
Tensile Modulus @ 2% (MD x CMD)	lb/ft	ASTM D6637	41,100 lb/ft
Tensile Modulus @ 5% (MD x CMD)	lb/ft	ASTM D6637	32,800 lb/ft

2.3.

Underlayment Materials. A four-layered system includes, in order from top to bottom, 1) Concrete block mat 2) 5-Pick Leno Weave 3) Recyclex TRM-V and 4) Curlex® II. The underlayment materials shall be packaged within the roll of the Flexamat Plus.



Five-Pick Leno Weave:

This Five-Pick Weave provides added strength and support to the underlayments.

Index Property	Units	Value
GSM	g/m ²	118 (-3 ~ +3)
Density	Picks/10cm	62 x 24 (+/- 2)
Warp Strength	N/5cm	≥ 350
Warp Elongation	%	20 - 50
Weft Strength	N/5cm	≥ 280
Weft Elongation	%	20 - 50
Warp Shrinkage	%	≤ 7
Weft Shrinkage	%	≤ 9

Recyclex® TRM:

Recyclex TRM – V is a permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green or brown bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top and bottom of each TRM is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to

retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events. Recyclex TRM – V meets Federal Government Executive Order initiatives for use of products made from, or incorporating, recycled materials. Recyclex TRM – V shall be manufactured in the U.S.A. and the fibers shall be made from 100% recycled post-consumer goods.

<u>Index Property</u>	<u>Test Method</u>	<u>Value</u>
Thickness	ASTM D 6525	0.294 in (7.47 mm)
Light Penetration	ASTM D 6567	57%
Resiliency	ASTM D 6524	86%
Mass per Unit Area	ASTM D 6566	0.50 lb/yd ² (271 g/m ²)
MD-Tensile Strength Max.	ASTM D 6818	295.2 lb/ft (4.32 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	194.4 lb/ft (2.85 kN/m)
MD-Elongation	ASTM D 6818	32.2%
TD-Elongation	ASTM D 6818	40.8%
Swell	ECTC Procedure	8%
Water Absorption	ASTM D 1117/ECTC	33.8%
Specific Gravity	ASTM D 792	1.21
UV Stability	ASTM D 4355 (1,000 hr)	80% minimum
Porosity	Calculated	97.5%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 5.86 @ 2 in/hr ^{1,2}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 5.00 @ 4 in/hr ^{1,2}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 6.33 @ 6 in/hr ^{1,2}
Bench-Scale Shear	ECTC Method 3	2.41 lb/ft ² @ 0.5 in soil loss ²
Germination Improvement	ECTC Method 4	432%

¹ SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. ² Bench-scale index values should not be used for design purposes

Curlex® II:

Curlex II erosion control blanket (ECB) consists of a specific cut of naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket is covered with degradable polypropylene netting.

<u>Index Property</u>	<u>Test Method</u>	<u>Value</u>
Thickness	ASTM D 6525	0.418 in (10.62 mm)
Light Penetration	ASTM D 6567	34.6%
Resiliency	ASTM D 6524	64%
Mass per Unit Area	ASTM D 6475	0.57 lb/yd ² (309 g/m ²)
MD-Tensile Strength Max.	ASTM D 6818	127.0 lb/ft (1.9 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	50.9 lb/ft (0.7 kN/m)
MD-Elongation	ASTM D 6818	28.64%
TD-Elongation	ASTM D 6818	29.84%
Swell	ECTC Procedure	89%
Water Absorption	ASTM D 1117/ECTC	199%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 6.84 @ 2 in/hr ^{2,3}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.19 @ 4 in/hr ^{2,3}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.56 @ 6 in/hr ^{2,3}
Bench-Scale Shear	ECTC Method 3	2.6 lb/ft ² @ 0.5 in soil loss ³
Germination Improvement	ECTC Method 4	645%

¹ Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

² SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. ³ Bench-scale index values should not be used for design purposes.

- 2.4. Mats will be rolled for shipment. Upon delivery, rolls may be left exposed for up to 30 days. If exposure will exceed 30 days, cover or tarp the rolls to minimize UV exposure.

Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection by the engineer. Replace, repair or patch the damaged areas per the manufacturer's recommendations.

3. PERFORMANCE

Full-Scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Tied-Concrete Block Erosion Control Mat meets the following requirements:

Test	Tested Value	Bed Slope	Soil Classification	Limiting Value
ASTM 6460	Shear Stress	30%	Sandy Loam (USDA)	24lb./ft ²
ASTM 6460	Velocity	20%	Loam (USDA)	30 ft./sec

4. ALTERNATIVE PRODUCTS

Such products must be pre-approved in writing by the Engineer prior to bid date. Alternative product packages must be submitted to the Engineer a minimum of fifteen (45) days prior to bid date. Submittal packages for alternate products must include, as a minimum, the following:

- 4.1. Alternative Product Properties – Product must be comprised of materials as detailed in Section 2, including both in composition, underlayment layers and performance requirements.
- 4.2. Full-Scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Tied-Concrete Block Erosion Control Mat meets the performance requirements listed in Section 3 of this specification.
- 4.3. A list of 15 comparable projects in terms of project size, application and material dimensions in the United States, where the results of the specific alternative material's use can be verified and reviewed for system integrity and sustained after a minimum of 10 years of service life.

5. EQUIPMENT

Provide the proper equipment to place the mat that will not damage the mat material or disturb the topsoil subgrade and seed bed.

6. CONSTRUCTION

Prior to installing Flexamat Plus, prepare the subgrade as detailed in the plans. All subgrade surfaces to be smooth and free of all rocks, stones, sticks, roots, and other protrusions or debris of any kind that would result in an individual block being raised more than 3/4 in. above the adjoining blocks. When seeding is shown on the plans, provide subgrade material that can sustain growth.

Ensure the prepared subgrade provides a smooth, firm, and unyielding foundation for the mats. The subgrade shall be graded into a parabolic or trapezoidal shape to concentrate flow to middle of mat or mats.

When vegetation is required, distribute seed on the prepared topsoil subgrade before installation of the concrete mats in accordance with the specifications.

Install mats to the line and grade shown on the plans and per the manufacturer's guidelines. The manufacturer or authorized representative will provide technical assistance during preparation and installation of the concrete block mats as needed.

Provide a minimum 18 in. deep concrete mat embedment toe trench at all edges exposed to concentrated flows. Recess exterior edges subject to sheet flow a minimum of 6 in.

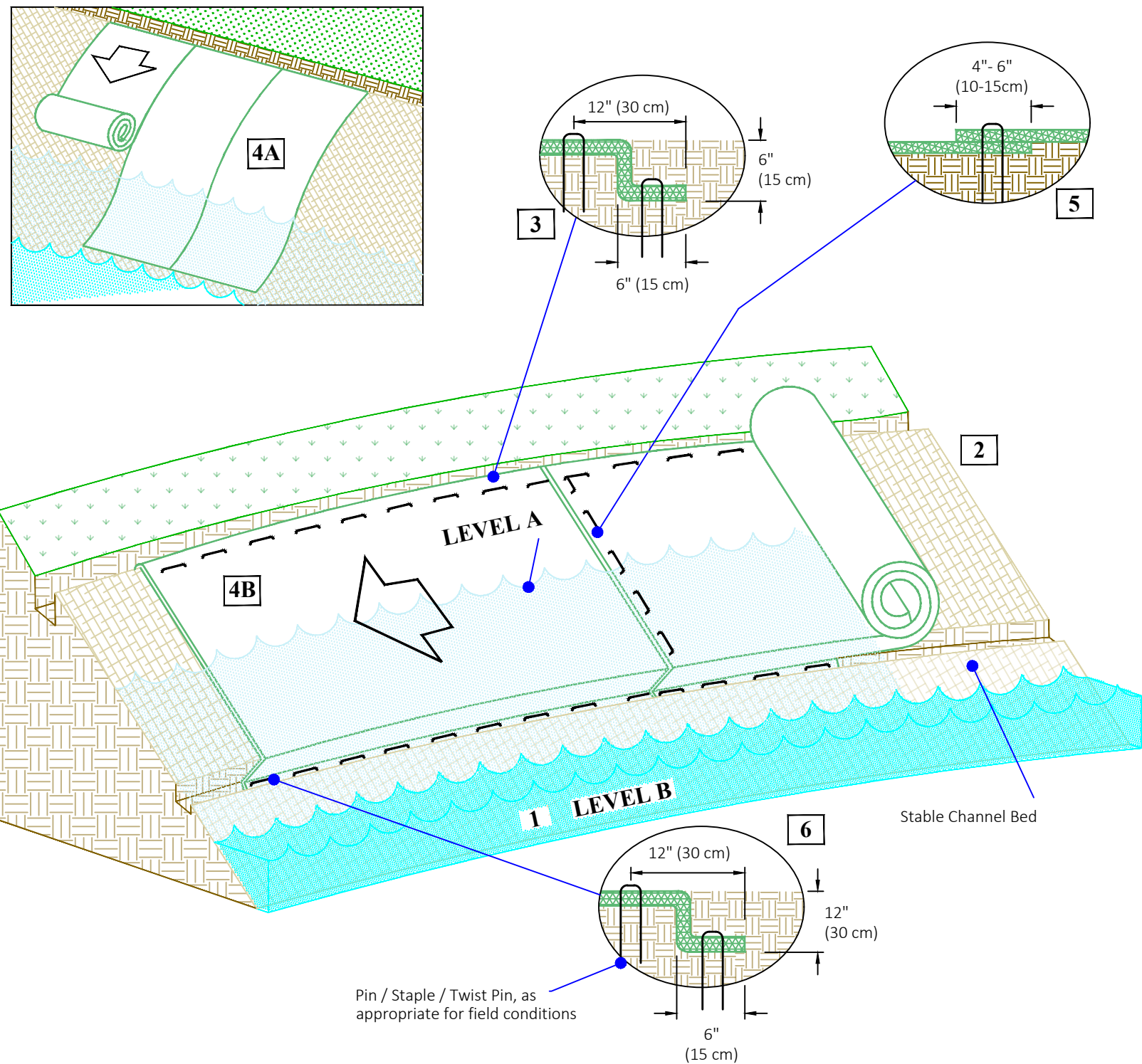
Provide fastening or anchoring as recommended by the manufacturer or engineer for the site conditions.

7. MEASUREMENT

This Item will be measured by the square foot as shown on the plans, complete in place.

8. PAYMENT

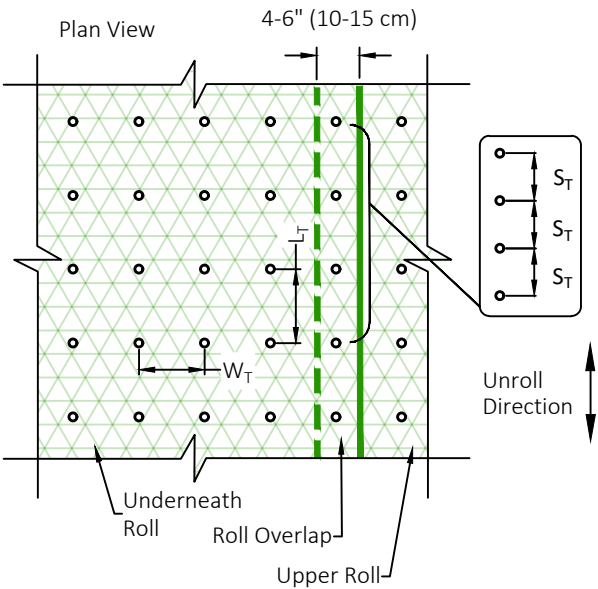
The work performed, and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Flexamat Plus". This price is full compensation for loading and transporting, placing concrete block mats; excavation and disposal; furnishing topsoil and bedding; and equipment, labor, materials, tools, and incidentals.



Instructions

1. For easier installation, lower water level from Level A to Level B before installation.
2. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed. Ground surface must be free of debris, rocks, clay clods and raked smooth sufficient to allow intimate contact of the RECP with the soil over the entirety of the installation.
3. Begin at the top of the shoreline by anchoring the RECPs in a 6" (15 cm) deep X 6" (15 cm) wide trench. Anchor the RECPs with a row of staples/stakes/pins spaced at S_T apart in the bottom of the trench. Backfill and compact the trench after stapling.
4. Roll RECPs either (A) down the shoreline for long banks (top to bottom) or (B) horizontally across the shoreline slope. RECPs will unroll with appropriate side against the soil surface. VMax TRMs should always be installed parallel to flow. All RECPs must be securely fastened to soil surface by placing staples/stakes/pins in appropriate locations as shown in the staple pattern guide.
5. The edges of all horizontal and vertical seams must be stapled with approximately 4" - 6" (10 - 15 cm) overlap. Note: *In streambank applications, seam overlaps should be shingled in the predominant flow direction.
6. The edges of the RECPs at or below normal water level must be anchored by placing the RECP's in a 12" (30 cm) deep X 6" (15 cm) wide anchor trench. Anchor the RECPs with a row of staples/stakes/pins spaced approximately 12" (30 cm) apart in the trench. Backfill and compact the trench after stapling (stone or soil may be used as backfill). For installation at or below normal water level, use of ShoreMax mat on top of the RECP or geotextile underneath is likely required for sections below the normal water line.
7. Fasteners should provide a minimum of twenty pounds of pullout resistance. Six-inch (10 cm) X one-inch (2.5 cm) eleven gauge staples are typically adequate. In loose soils, longer staples may be necessary, twist pins can provide the greatest pullout resistance. In hard or rocky soils, straight pins may be used where staples or twist pins are refused, provided the minimum pullout requirements are met. Bio-degradable fasteners shall not be used with VMax (TRM) or TMax (HPTRM) materials.

Staple Pattern Guide



• Pin / Staple / Twist Pin, as appropriate for field conditions

Staple Pattern	
Dimension	E
W_T	20" (50 cm)
L_T	20" (50 cm)
S_T	18" (45 cm)
Nominal Frequency	3.8 / SY
Required Fastener	Min. 20# Pullout

WESTERN GREEN



Project: Standard Channel Bank Layout - RECP

Shown: Isometric View of Channel, Fastener Placement, Trenching and Overlap, Some Fasteners and Vegetation
Omitted for Clarity, NTS

Date: 5/3/2022
WG: 886-540-9810
www.westerngreen.com
www.westernexcelsior.com
www.nagreen.com

Attachment C
Legal Notice
(in English and Spanish)

Legal Notice

Pursuant to the New Mexico Mining Act Rules, 19.10.5 and 19.10.9.903.A through H, SOHIO Western Mining Company (SWMC) c/o Rio Tinto Closure provides this notice of its Request for Release to the New Mexico Energy, Minerals, and Natural Resources Department Mining and Minerals Division (MMD) for permit and financial release (FA) of the former JJ No. 1 Mine (Site), Permit No. CI007RE, from the requirements of the New Mexico Mining Act and the Director's Order (December 2011). The Request for Release summarizes the completed reclamation and closure actions and subsequent Site inspections that provide evidence of compliance with the applicable New Mexico Mining Act Rules, as mentioned prior, and the Director's Order (December 2011).

Location of real property affected: The JJ No. 1 Mine site consists of approximately 18-acres owned by Cebolleta Land Grant (CLG) and is located in Cibola County, approximately 3.5 miles southeast of Seboyeta (Cebolleta), 2.25 miles east/northeast of Moquino, and 1.5 miles north of the Laguna Pueblo Reservation boundary.

General description of the historical operations: The JJ No. 1 Mine is an inactive underground uranium mine that produced uranium from approximately 1976 to 1981. The site was initially reclaimed in 1989, and final reclamation was completed in 2009-2010. The site was revegetated following reclamation and monitored for erosion and revegetation through 2025 for more than the required post-reclamation period of twelve years.

This Request for Release of the permit is available for public comment and a public request for hearing as provided below.

Permittee and mailing address: Rio Tinto Closure, 4700 Daybreak Parkway, South Jordan, UT 84095

A copy of the Request for Release is available for viewing during normal business hours at:

New Mexico Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

And also at:
Rio Tinto Closure
4700 Daybreak Parkway
South Jordan, UT 84095

This Request for Release can also be viewed or downloaded from the New Mexico Energy, Minerals and Natural Resources Department website at the link below:

[https://www.emnrd.nm.gov/mmd/wp-content/uploads/sites/\[TBD\]](https://www.emnrd.nm.gov/mmd/wp-content/uploads/sites/[TBD])

Name and address to submit written comments or requests for Public Hearing: Written comments, objections, or requests for a public hearing with regard to the application to revise this permit shall be submitted to: Director, Mining and Minerals Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 or by email at: mmd.marp@emnrd.nm.gov. Within 30 days of the date of this public notice, any interested person may file written comments to the proposed application with the Director at the above address and request a public hearing. If a hearing is timely requested, the Director shall set a hearing unless the request is clearly frivolous. The Director may hold a public hearing absent any request. If a public hearing is held, it will be advertised in accordance with 19.10.9.904 NMAC.

Legal Notice

De conformidad con las New Mexico Mining Act Rules, 19.10.5 y 19.10.9.903.A a H, SOHIO Western Mining Company (SWMC) c/o Rio Tinto Closure presenta este aviso de su Solicitud de Liberación al New Mexico Energy, Minerals, and Natural Resources Department Mining and Minerals Division (MMD) para la liberación del permiso y de la garantía financiera (FA) de la antigua JJ No. 1 Mine (Sitio), Permiso No. CI007RE, de los requisitos de la New Mexico Mining Act y de la Orden del Director (December 2011). La Solicitud de Liberación resume las actividades de reclamación y cierre completadas, así como las inspecciones posteriores del Sitio, que proporcionan evidencia del cumplimiento de las Reglas aplicables de la New Mexico Mining Act, como se mencionó anteriormente, y de la Orden del Director (December 2011).

Ubicación de la propiedad afectada: El sitio de la JJ No. 1 Mine consiste en aproximadamente 18 acres propiedad de Cebolleta Land Grant (CLG) y está ubicado en Cibola County, aproximadamente a 3.5 millas al sureste de Seboyeta (Cebolleta), 2.25 millas al este/noreste de Moquino, y 1.5 millas al norte del límite de la Reserva del Pueblo Laguna.

Descripción general de las operaciones históricas: La JJ No. 1 Mine es una mina subterránea inactiva de uranio que produjo uranio aproximadamente entre 1976 y 1981. El sitio fue reclamado inicialmente en 1989, y la reclamación final se completó entre 2009 y 2010. El sitio fue revegetado después de la reclamación y monitoreado por erosión y revegetación hasta 2025, durante un período superior al período requerido de doce años posterior a la reclamación.

Esta Solicitud de Liberación está disponible para comentarios del público y para solicitudes de audiencia pública, según se establece a continuación.

Permisionario y dirección postal: Rio Tinto Closure, 4700 Daybreak Parkway, South Jordan, UT 84095

Una copia de la Solicitud de Liberación está disponible para consulta durante el horario normal de oficina en:

New Mexico Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Y también en:
Rio Tinto Closure
4700 Daybreak Parkway
South Jordan, UT 84095

Esta Solicitud de Liberación también puede consultarse o descargarse del sitio web del New Mexico Energy, Minerals and Natural Resources Department en el siguiente enlace:

[https://www.emnrd.nm.gov/mmd/wp-content/uploads/sites/\[TBD\]](https://www.emnrd.nm.gov/mmd/wp-content/uploads/sites/[TBD])

Nombre y dirección para presentar comentarios por escrito o solicitudes de Audiencia Pública: Los comentarios, objeciones o solicitudes por escrito para una audiencia pública con respecto a la solicitud para revisar este permiso deberán presentarse a: Director, Mining and Minerals Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 o por correo electrónico a: mmd.marp@emnrd.nm.gov. Dentro de los 30 días siguientes a la fecha de este aviso público, cualquier persona interesada podrá presentar comentarios por escrito sobre la solicitud propuesta al Director en la dirección indicada anteriormente y solicitar una audiencia pública. Si una audiencia se solicita oportunamente, el Director fijará una audiencia, a menos que la solicitud sea claramente frívola. El Director podrá celebrar una audiencia pública aun cuando no se haya presentado ninguna solicitud. Si se celebra una audiencia pública, esta será anunciada de conformidad con 19.10.9.904 NMAC.