Environment, Inc.

LARRY E. O'BRIAN FOUNDER

STEVAN L. O'BRIAN PRESIDENT

7985 VANCE DRIVE, SUITE 205A ARVADA, COLORADO 80003 303-423-7297 FAX 303-423-7599

June 6, 2017

Mr. Eric Scott Division of Reclamation, Mining and Safety 1313 Sherman St, Suite 215 Denver, CO 80203

Dear Eric;

Re: Colorado Crushing, Inc. - Perrino Pit Permit # M-2017-007 - Adequacy Response #1

On behalf of our client Colorado Crushing, Inc., I will respond to your May 5, 2017 adequacy review letter in the order and number format presented in that document. I have added each point to be addressed from your letter so when reviewing our response we do not have to keep referring back to your adequacy letter.

As part of this response I have revised the appropriate places in the application text that are changed as a result of removing the river bottom area or were revised to address the revised access point. I have enclosed a version of the changed exhibit pages in redline format so you can easily see the changes I made to the application packet. The red underlined text is new text and the red lined thru was removed or corrected. I have also enclosed those pages changes in normal text but added the page number with a note on the revised date. If the Division wishes, I can supply an new electronic version of the entire application packet with the changes incorporated in it so everything is in one file.

EXHIBIT C - Pre-mining and Mining Plan Map(s) of Affected Lands (Rule 6.4.3):

No clear distinction has been made in the permit application or submitted maps between the permitted area and affected area as defined by Rule. Therefore, DRMS will not allow the northern permit boundary to be defined as the "center of the Huerfano River". Not only would this be impossible to mark and maintain appropriately, it directly conflicts with the statements in the mining plan, reclamation plan, and other required permits exhibits (pages 11, 17 and 55) that no U.S. Army Corps of Engineers 404 permit is necessary, as there are no water bodies on the site or wetland areas that will be disturbed by mining or reclamation. The applicant will be required to set an appropriate northern permit boundary, out of the course of the river, which will be able to be permanently marked and maintained. The permittee may also make a clear distinction between permit boundary and affected area, and clearly delineate the affected area within the application and all appropriate figures.

After my discussion with the Division and Rocky Ryan of Colorado Crushing, Inc., it was decided to set the northern permit/affected land line to the southern ROW line of the power line. The ROW is 25 feet wide on each side of the power poles and then set the dig line 25 feet inside that the permit line. The 25 foot, setback will be used for relocation of the private road and a place to stockpile topsoil if needed. This means that no mining will take place on the existing slope from the top of the terrace to the Huerfano River. All maps have been revised to show the new permit line. This reduces the mine size from 96.34 to 81.40 acres ±. The 14.94 acres removed contain the slope into the river bottom, the river and the riparian area along the river from the permit.

There is also no documentation provided, such as a wetland delineation study, to support the assertion that no wetland areas will be disturbed - even though the permit boundary as submitted includes approximately 6.5 acres of riparian corridor along the south bank of the Huerfano River. If the permittee wishes to include the riparian corridor in the affected area, they will need to provide sufficient documentation to demonstrate that sensitive environments will not be impacted.

No documentation is needed as the plan was to not disturbed the riparian area or wetlands along the river. This is now a moot point since the permit/affected lands line has been moved to the upper terrace and the riparian corridor area has been removed from the permit area.

It also appears that the east-west roadway that traverses across the northern part of the site (labeled "private road" on the submitted maps and presumably intended to be removed during mining) may actuality be County Road 615 - see attached map. This issue will need to be clarified with supporting documentation and appropriately addressed in the application (Exhibit S).

Melanie Bounds, the Huerfano County Public Works Manager, has informed us that the road we marked as private is NOT a County Road as shown on the Google Earth photo you attached. County Road 615 ends approximately 0.51 mile east of the northeast corner at the APC mine entrance. Attached is a map that Ms. Bounds provided showing the location of the county roads on the east and west sides of the mine area. The legend on the map explains the county roads are red, and the private roads are green. Since it is not a county road, no Structure Agreement is needed.

Any changes made to the currently submitted permit boundary or affected area will need to be reflected appropriately on all figures and text submitted in the application.

All map exhibits have been revised to show the new northern limits of the permit area, the revised ownership lines and the new access point. I have also revised pages 1 & 2 of the application form, page 1 for the new permit area and page 2 for the new coordinates for the NE entrance. Text revisions were made in **Exhibits A thru F, I and J** to reflect the change in the permit area.

EXHIBIT G - Water Information (Rule 6.4.7):

It is DRMS's understanding that the current mine plan intends to "daylight" the excavated area by mining down the elevation of the existing terrace along the north side of the permit area. The application states that " ...we expect the floor of the mine to be at lease (sic) 3 feet above the bank of the river." If no berm will remain to separate the pit from the liver, DRMS will need a commitment to a well-defined elevation for the pit floor and appropriate documentation that the proposed final pit configuration will not adversely impact the flood plain management of the Huerfano River.

With the change in the northern permit line, we are leaving a berm between the mine floor and the river corridor but the plan remains to stay a minimum of 2 feet above the highest ground water level or 3 feet above the bank of the river which ever is the highest. We do not expect to reach bed rock on this site.

If the final elevation of the proposed pit floor will be within the 100-year floodplain, and the pit floor is exposed to the river, the permittee will need to include appropriate measures to prevent excessive erosion during a flood event and to insure long term stability of the reclaimed area.

With the change in the northern permit line, the pit floor will not be within the 100-year floodplain. We do not plan to disturbed the slope from the mine limits into the river bottom and we will not do any erosion control on the slope.

EXHIBIT L - Reclamation Costs (Rule 6.4.12): DRMS will determine the reclamation bond based on the provided information when all adequacy issues have been finalized.

We look forward to reviewing your cost estimate.

EXHIBIT M - Other Permits and Licenses (Rule 6.4.13): As long as the permitted/affected area includes the Huerfano River, it is likely that the applicant will be subject to U.S.A. C.O.E. permitting requirements.

The Huerfano River corridor has been removed from the permit area, therefore COE permits are not required, and our statement is now correct.

EXHIBIT S - Permanent Man-Made Structures (Rule 6.4.19): Please note that roadways and above ground or underground utilities (if present) within 200 feet of the proposed affected area are considered permanent manmade structures. **In** accordance with Rule 6.4.19, when mining operations will adversely affect the stability of any significant, valuable and permanent man-made structure located within 200 feet of the affected area, the applicant may either:

a.) Provide a notarized agreement between the applicant and the person(s) having an interest in the structure, that the applicant is to provide compensation for any damage to the structure; or

b.) Where such an agreement cannot be reached, the applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation.

Please provide evidence (certified letter to structure owners) that a notarized agreement between the structure owners and the applicant was pursued. If an agreement is unable to be reached a geotechnical assessment may be provided to demonstrate that the structures shall not be damaged.

Structure agreement were mailed to all owner of structures within 200 feet of the permit line on February 22, 2017.

Only 2 of the agreements were returned one by San Isabel Electric Association and one by Dennis & Ennis Perrino. Copies are attached for the file.

You must provide information sufficient to demonstrate that the stability of any structures located within two hundred (200) feet of the operation or affected land will not be adversely affected.

Attached is a geotechnical stability analysis showing that the proposed slopes are stable and will not cause slope failures outside the affected lands. The closest structure not owned by the Perrino's is a fence post just outside the southwest corner, all others are at a greater distance, so if this one will not be impacted then the rest will not have a problem.

DRMS notes, that damage waiver agreements appear to have been sent to the appropriate structure owners, with the possible exception of Huerfano County for County Road 615. The County Road issue will need to be addressed as appropriate. DRMS will require copies of the executed structure agreements from all relevant parties, or a geotechnical evaluation that demonstrates that the proposed mine plan will not adversely impact structures within 200 feet before the application can be approved.

County Road 615 is not within 200 feet of the permit line and no structure agreement is needed for the private road on the Perrino Property. We have a use agreement for the Pino road that includes maintaining and leaving the road for their use when mining ends.

Additional **Information:** You will also need to provide the Division with proof of notice publication and notice to all property owners within 200 feet of the affected area. Any letters from other commenting agencies/entities received by the Division to date, have been included with this correspondence for you to review.

Copies of the adjoining mailing notice return receipts or proof of mailing to the address of record are attached for the file. One letter was returned as unclaimed and one Return Receipt card was not returned. A copy of the Proof of Publication in the World Journal, Huerfano County's official notice paper is included for the file.

Colorado Parks and Wildlife

I wish to thank Officer Trujillo and his staff for the time they took to supply information when reviewing this permit application, both in supplying the Wildlife Statement during permitting and in response to the Divisions inquiry.

History Colorado

Thank you for the information and if human remains are found when mining is taking place the Huerfano County Sheriff will be contacted.

Colorado Division of Water Resources.

Colorado Crushing, Inc. understands the requirements explained in their review comments. The water is purchased from the Town of Walsenburg and hauled to the site as needed. If there any questions, Lenna Rauber will be contacted to confirm the use.

Sun River Ranch Objection

Colorado Crushing, Inc., has obtained permission and has a signed road use agreement, to enter the mine from a private road in the northeast corner. A copy of the road agreement with Mr. & Mrs. Pino is attached for the Divisions records. At this time Colorado Crushing, Inc. is removing the use of the Perrino's southwest exit road from consideration in the application and adding the use of the new exit out the northeast corner of the site. **Exhibits D & E** (revised) which now reflect the change. I have included copies for the file.

I hope these responses have addressed the adequacy questions you had. I will place a copy of this packet with the Huerfano County Clerks office as required and proved proof of placement. If you have any questions please call.

LIST OF ATTACHMENTS TO THIS RESPONSE:

Revised Application Pages 1 & 2 Exhibit C - Pre Mining Map Exhibit C-1 - Mining Plan Map Revised Mining Plan pages and Timetable Revised Reclamation Plan pages & Timetable Exhibit F-1 - Reclamation Map, option 1 Exhibit F-2 - Reclamation Plan Map, option 2 Exhibit I - Soils -revised text & soils map Exhibit J - Vegetation - revised text Adjoining Landowner Notice Receipt Proof of Publication Proof of mailing of Structure agreements 2 - Signed Structure agreements San Isabel Electric & D. Perrino Geotechnical analysis Redline copy of changed pages

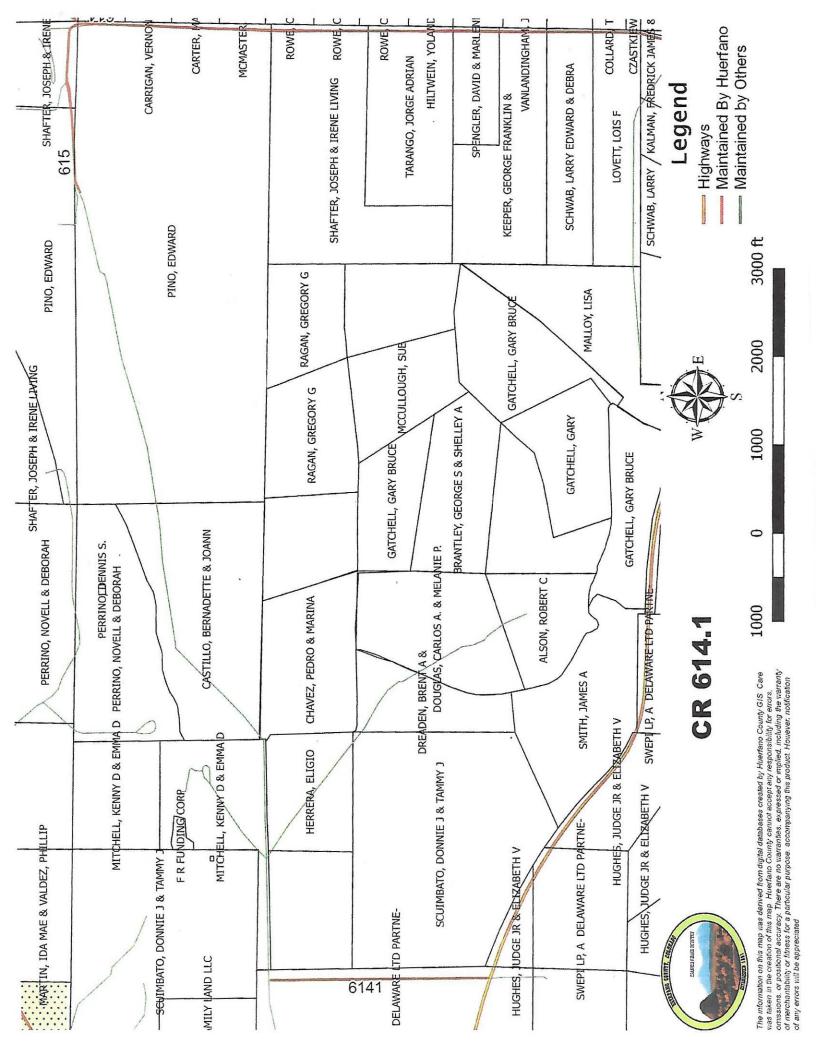
Sincerely, Environment, Inc.

have

Stevan L. O'Brian President

cc Colorado Crushing, Inc. Huerfano County Clerk file

enclosures



STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106



CONSTRUCTION MATERIALS REGULAR (112) OPERATION RECLAMATION PERMIT APPLICATION FORM

| CH | ECK ONE: There is a File Number Already Assigned to this Operation | | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| | $\operatorname{Permit} \# M$ (Please reference the file number currently assigned | to this operati | on) |
| | New Application (Rule 1.4.5) Amendment Application (| Rule 1.10) | |
| | Conversion Application (Rule 1.11) | | |
| | Permit # <u>M</u> (provide for Amendments and Conversions of exis | sting permits) | |
| form subr appl the | e application for a Construction Materials Regular 112 Operation Reclamation Permit contains the n; (2) Exhibits A-S, Addendum 1, any sections of Exhibit 6.5 (Geotechnical Stability Exhibit; and mit your application, be sure to include one (1) <u>complete signed and notarized ORIGINAL</u> dication form, two (2) copies of Exhibits A-S, Addendum 1, appropriate sections of 6.5 (Geotechnical Stability Exhibits application fee described under Section (4) below. Exhibits should <u>NOT</u> be bound or in a 3-rit/2" X 11" or 8 1/2" X 14" size. To expedite processing, please provide the information in the form | nd (3) the appli and one (1) co ical Stability E ng binder; map | cation fee. When you opy of the completed xhibit, and a check for os should be folded to |
| | GENERAL OPERATION INFORMATION | | |
| | Type or print clearly, in the space provided, <u>ALL</u> information reques | ted below. | |
| 1. | Applicant/operator or company name (name to be used on permit): Colorado Crushin 1.1 Type of organization (corporation, partnership, etc.): Corporation Operation name (nit, mine or site name): Perrino Pit | g, Inc. | |
| 2. | Operation name (pit, mine or site name): Perrino Pit | | |
| 3. | Permitted acreage (new or existing site): | 81.40 | permitted acres |
| | 3.1 Change in acreage (+) | | acres |
| | 3.2 Total acreage in Permit area | 81.40 | acres |
| 4. | Fees:4.1New Application4.2New Quarry Application4.4Amendment Fee4.5Conversion to 112 operation (set by statute) | \$2,696.00 \$\$\$\$#\$200 \$2\$229590 \$2\$259590 | quarry application amendment fee |
| 5. | Primary commoditie(s) to be mined: Gravel Sand Borrow | | |
| | 5.1 Incidental commoditie(s) to be mined: 1 lbs/Tons/yr 2 | / | lbs/Tons/yr |

| 5.2 | Anticipated end use of primary commoditie(s) to be mined: | Specification aggregates, fill material |
|-----|-----------------------------------------------------------|-----------------------------------------|
|-----|-----------------------------------------------------------|-----------------------------------------|

4. / lbs/Tons/yr 5. / lbs/Tons/yr

5.3 Anticipated end use of incidental commoditie(s) to be mined:

3. / lbs/Tons/yr

| 6. | Name of owner of subsurface rights of affected land: If 2 or more owners, "refer to Exhibit O". |
|----|---------------------------------------------------------------------------------------------------------------|
| 7. | Name of owner of surface of affected land: Dennis & Caroline Perrino |
| 8. | Type of mining operation: ✓ Surface Underground |
| 9. | Location Information: The center of the area where the majority of mining will occur: |
| | COUNTY: Huerfano |
| | PRINCIPAL MERIDIAN (check one): 6th (Colorado) 10th (New Mexico) Ute |
| | SECTION (write number): S 2 |
| | TOWNSHIP (write number and check direction): T_27 North \checkmark South |
| | RANGE (write number and check direction): R <u>68</u> East <u>V</u> West |
| | QUARTER SECTION (check one):NENWSESW |
| | QUARTER/QUARTER SECTION (check one):NENWSE 🖌 SW |
| | GENERAL DESCRIPTION: (the number of miles and direction from the nearest town and the approximate elevation): |
| | 11.8 miles north west of Walsenburg Colorado, off HWY 69. Site elevation 6350' |

- 2 -

10. **Primary Mine Entrance Location** (report in either Latitude/Longitude <u>OR</u> UTM):

| Latitude/Longitude: | | | | |
|-----------------------------------------------------------------------------------|--|--|--|--|
| Example: (N) $39^{\circ} 44' 12.98''$ (W) $104^{\circ} 59' 3.87''$ | | | | |
| Latitude (N): deg <u>37</u> min <u>44</u> sec <u>01.57</u> (2 decimal places) | | | | |
| Longitude (W): deg <u>104</u> min <u>57</u> sec <u>30 - 13</u> (2 decimal places) | | | | |
| OR | | | | |
| Example: (N) 39.73691° (W) -104.98449° | | | | |
| Latitude (N) (5 decimal places) | | | | |
| Longitude(W) (5 decimal places) | | | | |
| OR | | | | |
| Universal Tranverse Mercator (UTM) | | | | |
| Example: 201336.3 E NAD27 Zone 13 4398351.2 N | | | | |
| UTM Datum (specify NAD27, NAD83 or WGS 84) WGS 84 Zone 13 | | | | |
| Easting | | | | |
| Northing | | | | |

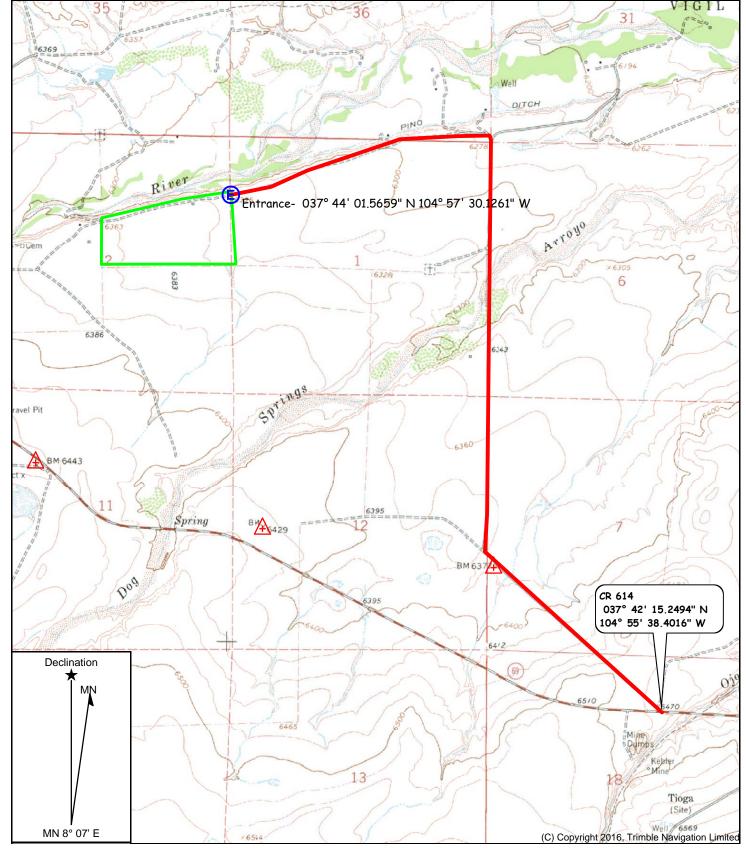
EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the SE¼NE¼, and parts of the NE¼NE¼, and SW¼NE¼, Section 2, Township 27 South, Range 68 West, of the Sixth Principal Meridian, Huerfano County, Colorado.

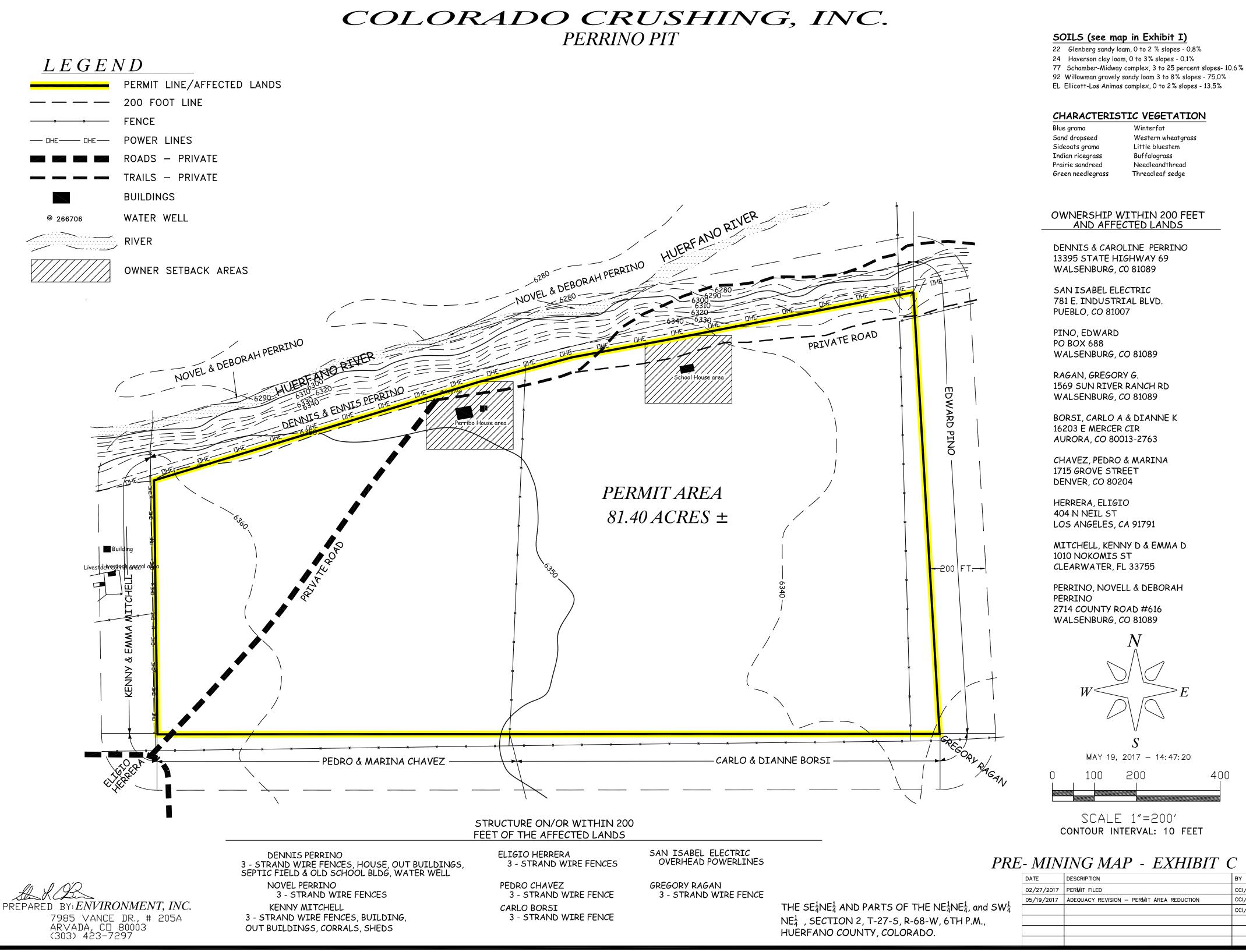
Containing 81.40 acres more or less.

Entrance location: 37°44'01.566"N, 104°57'13.126"



Quad. Name: BLACK HILLS (CO) Date: 05/18/17 Scale: 1 inch = 2,000 ft.

THE SE/4NE/4 AND PARTS OF THE NE/4NE/4, SW/4NE/4 & NW/4NE/4, SEC. 2, T-27-S, R-68-W, 6TH P.M., HUERFANO COUNTY, COLORADO COLORADO CRUSHING, INC. PERRINO PIT MAP EXHIBIT B-1- VICINITY MAP Revised May 2017



SOILS (see map in Exhibit I)

- 22 Glenberg sandy loam, 0 to 2 % slopes 0.8%
- 92 Willowman gravely sandy loam 3 to 8% slopes 75.0%
- EL Ellicott-Los Animas complex, 0 to 2% slopes 13.5%

CHARACTERISTIC VEGETATION

Western wheatgrass Little bluestem Buffalograss Needleandthread Threadleaf sedge

OWNERSHIP WITHIN 200 FEET AND AFFECTED LANDS

DENNIS & CAROLINE PERRINO 13395 STATE HIGHWAY 69 WALSENBURG, CO 81089

781 E. INDUSTRIAL BLVD.

1569 SUN RIVER RANCH RD

BORSI, CARLO A & DIANNE K

CHAVEZ, PEDRO & MARINA

MITCHELL, KENNY D & EMMA D CLEARWATER, FL 33755

PERRINO, NOVELL & DEBORAH 2714 COUNTY ROAD #616 WALSENBURG, CO 81089

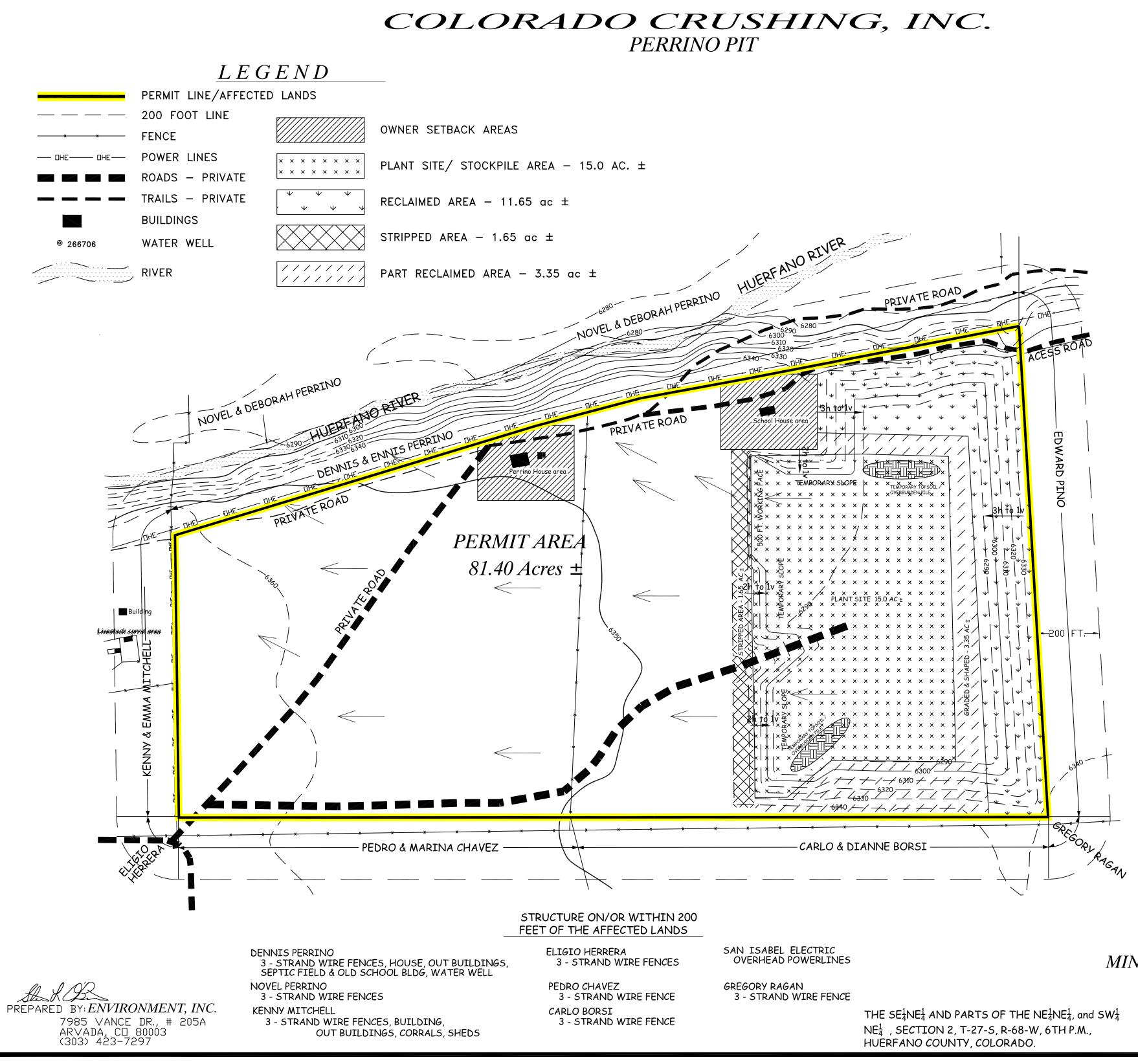
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SCALE 1"=200' CONTOUR INTERVAL: 10 FEET

PRE-MINING MAP - EXHIBIT C

| DATE | DESCRIPTION | BY |
|------------|-------------------------------------------|----------|
| 02/27/2017 | PERMIT FILED | CCI/ENV. |
| 05/19/2017 | ADEQUACY REVISION - PERMIT AREA REDUCTION | CCI/ENV. |
| | | CCI/ENV. |
| | | |
| | | |
| | | |



SOILS (see map in Exhibit I)

- 22 Glenberg sandy loam, 0 to 2 % slopes 0.8%
- 24 Haverson clay loam, 0 to 3% slopes 0.1%
- 77 Schamber-Midway complex, 3 to 25 percent slopes- 10.6 % 92 Willowman gravely sandy loam 3 to 8% slopes - 75.0%
- EL Ellicott-Los Animas complex, 0 to 2% slopes 13.5%

CHARACTERISTIC VEGETATION

Blue grama Sand dropseed Sideoats grama Indian ricegrass Prairie sandreed Green needlegrass

Winterfat Western wheatgrass Little bluestem Buffalograss Needleandthread Threadleaf sedge

OWNERSHIP WITHIN 200 FEET AND AFFECTED LANDS

DENNIS & CAROLINE PERRINO 13395 STATE HIGHWAY 69 WALSENBUR, CO 81089

SAN ISABEL ELECTRIC 781 E. INDUSTRIAL BLVD. PUEBLO, CO 81007

PINO, EDWARD PO BOX 688 WALSENBURG, CO 81089

RAGAN, GREGORY G. 1569 SUN RIVER RANCH RD WALSENBURG, CO 81089

BORSI, CARLO A & DIANNE K 16203 E MERCER CIR AURORA, CO 80013-2763

CHAVEZ, PEDRO & MARINA 1715 GROVE STREET DENVER, CO 80204

HERRERA, ELIGIO 404 N NEIL ST LOS ANGELES, CA 91791

MITCHELL, KENNY D & EMMA D 1010 NOKOMIS ST CLEARWATER, FL 33755

PERRINO, NOVELL & DEBORAH PERRINO 2714 COUNTY ROAD #616 WALSENBURG, CO 81089

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SCALE 1"=200' CONTOUR INTERVAL: 10 FEET

MINING PLAN MAP - EXHIBIT C-1 DATE DESCRIPTION BY 02/27/2017 PERMIT FILED CCI/ENV. CCI/ENV. 05/19/2017 ADEQUACY REVISION - PERMIT AREA REDUCTION CCI/ENV.

MINING PLAN AND TIMETABLE

LOCATION

This is an open pit mine located approximately 11.6 miles northwest of Walsenburg, Colorado and 1.0 mile west of County Road 614. From I-25 north of Walsenburg, Exit I-25 at Exit 56 -Red Rock Road, west 2.5 miles to SHWY 69. Then northwest on SHWY 69 for 5.00 miles to CR 614 (intersection coordinates 37d42'15.25", 104d55'38.40"). Then northeast 2.6 miles on CR 614 to a private road that run east-west above the Huerfano River, then east about 1.0 mile to the mine entrance. The entrance to the mine is at 37d44'01.566"", 104d57'30.126". Mining access will be via this existing private road that is owned by Edward Pino to access his property from CR 614. It is currently 20 feet wide and the location is shown on the map exhibits supplied with this application. The used of the northeast entrance for the mining operations is via a use agreement between Colorado Crushing, Inc. and Mr. & Mrs Pino. The prive roads on the mine site will be used also. Periodic grading will be necessary to keep the road in its present condition. It will remain after mining is complete for landowner access. Please refer to EXHIBIT B - VICINITY MAP for the property configuration and the relationships to surrounding geological features.

CURRENT CONDITIONS

Map Exhibit C shows the outline of the Affected Lands; the touching landowners; the 200 foot ownership; structures; current topography, and hydrologic features of the property. Surrounding property uses include rangeland on all sides. The land along the south side is used by the property owners as undeveloped open lands and to the north across the Huerfano River the property owners have irrigated grasslands. The Perrino's have a ranch yard and house on the northwest side of the permit area and own a school house on the access road east of the house area. At this time both structures will remain so we plan to establish a mining setback of 200 feet from the main structures in those areas.

Along the north side of the terrace is a near vertical face that exists along the transition area from the rangeland down to the river bottom. The area north of that is river bottom land. This face appears to have been created by past flood events on the Huerfano River. It is marked by erosion channels where water has run off the rangeland into the river bottom. No disturbance will take place north of the permit line in the river bottom or on the existing slope into the river.

The site is currently used as rangeland and consists of a gravel terrace paralleling the southern side of the Huerfano River valley. The usable materials on this site ranges from 5 to 50+ feet deep. The soil covering the gravel averages 0 to 5 inches deep with a layer of overburden ranging from 0 inches to 9 feet deep.

The permit boundary starts in the southwest corner at a point east of the north/south fence north of the gate. The fence lines on the west, south and east sides do not lie on the ownership lines, so they will be located and then a shallow ditch will be placed around the mine area to delineate the permit boundary. The north line for the Affected Lands/Permit Line is the southern R.O.W. line for the San Isabel Electric Association powerline. The powerline ROW is 25 feet each side of the power poles.

The existing on site road is gravel with graded runoff ditches on each side. It is 20 feet wide with a slight crown to allow for drainage. The haul road that exits on the site in the northeast corer will be maintained for use as a haul route and access for the property owners along it. Any runoff from the road will be retained on site and allowed to soak into the ground or evaporate. The road will be maintained for the life of the mine and a scale and scale house will be placed on the road near the access point. A Road Use Agreement with Mr. & Mrs. Pino requires that the road be improved, maintained during mining and remain when its need ends.

SOILS AND OVERBURDEN

The SOILS MAP in EXHIBITIshows the soil types as delineated by the National Resource Conservation Service (NRCS) obtained from the internet WSS web site. The information contained in EXHIBITI/J will provide background levels for the site as reclamation begins on the entire area.

There are 5 types of soils found on the site. These soils are typical throughout the Huerfano River valley. They have no unusual qualities and three of the soils will not be disturbed by mining.

The single undisturbed soil is designated as map units: 22-Glenberg sandy loam, 0 to 2% slopes The other two, 77-Schamber-Midway complex, 3 to 25% slope and 92-Willowman, Complex 0 to 2% slopes cover the area to be mined. See the soils map in the NRCS report for how the soils are distributed on the permit area. More detail information including, the soils description and engineering qualities, can be found starting on page 25 in this application.

Based on the soils report and on site observations there are sufficient quantities of soil available to reclaim the disturbed lands to their present condition. The soils in this area when salvaged and replaced should be capable of growing vegetation consistent with what is there now. The average depth of topsoil on the site according to the NRCS report is 0 to 5 inches deep. Using 3.0 inches as the average we calculate there should be a minimum of $8,070 \text{ YD}^3$ of growth medium available for resoiling the disturbed area. In addition, there is from 0 inches to 9 feet of overburden on most of the site. Much of this overburden will be retained and used to rebuild slopes. If needed, it could be transformed into growth medium to supplement topsoil needs. Be assured that enough growth medium will be retained on the site to assure reclamation and revegetation is successful. The topsoil and overburden stockpiles will be located around the excavation (their approximate locations are shown on the MINING PLAN MAP) to reduce the haul distances when reclamation starts. If the soil and overburden stockpiles remain undisturbed for more than one year a cover crop of Western Wheatgrass at a rate of 2 poundspls/100 sq-ft will be planted on them.

MINING PLAN

Of the 81.40 acres \pm in the permit area a maximum of 76.66 acres \pm will be disturbed by the mining operation. Presented in this mining plan are detail plans for developing the mine under The first will be to create slopes around 2 different options. the site as shown on the EXHIBIT F-1 - RECLAMATION PLAN MAP. This option leaves the Perrino House Area and the School House Area as undisturbed islands in the mining area with 3h to 1v slopea on the 3 mined sides of the islands. Option 2 would remove the Perrino House Area and the School House Area, and leaves a 3h to 1 v slope along the north side of the permit as shown on the EXHIBIT F-2-RECLAMATION PLAN MAP. The existing slope along the north line will not be disturbed. A 25 foot setback will be maintained along the powerline in addition to the 25 feet side ROW so mining will not take place within 50 feet for the power poles.

The method of mining discussed below will fit each option unless otherwise stated. Please use the **RECLAMATION PLAN MAPS** during review of the following text for the areas discussed. They show how the site would look, depending on what option is used.

Mining will begin in the southeast corner of the site and will continue, as shown on the Mining Plan Map, to the west and north. The Plant Site/stockpile area will start on the surface, but once bedrock is reached it will be moved to the floor of the mined area so it is screened below the surrounding areas. Map Exhibit C-1 shows how the site would look when the mine reaches full production.

There will be 20.0 acres disturbed at any-one-time. Of this 20 acres, the processing/stockpile area will cover approximately 15.0 acres, there will be 1.65 ac. stripped, and 3.35 acres where mining is done and partially reclaimed. The highwall is 1700 feet long with 1200 feet being temporary graded to 2h to 1v. As the mining face extends across the property, we will maintain a 500 foot long, near vertical working face. The remaining highwall be kept at an interim grade of 2h to 1v. The plan is to continue to mine into the gravel deposit at the mining face, working south and west until the permit limits are reached.

For Option 1 there will be a 25-foot digline setback maintained from the permit boundary so there is adequate space on the level above the slope for property line access, setback maintenance, grading and shaping. The setback from the house and school house will be 200 feet. If option 2 is used then the setbacks on the East, South & West will still be 25 feet, but the Perrino House Area and School House Area will be removed. The mine floor will slope towards the north to preserve the existing flow characteristics of land.

Typically mining at Colorado Crushing's, mining operations are done in cycles. These cycles involve moving a crushing plant into a mine and beginning to process material until there is a six month to 1 year supply of rock stockpiled. Once an adequate supply is processed, the crusher and equipment are moved to another mine. The stockpiles will be used throughout the year by the company. As mining ends on a section of the working face it is temporally graded to 2:1 so it is stable when there are no activities in the mine. Any resoiling and revegetation needed is completed when the area where material is removed will not be redisturbed. This cycle continues until the mine is played out. Each time the mine is re-enter mining begins by setting up the plant and stripping the area to be mined during this cycle. The topsoil and overburden will be stockpiled along the mine perimeter setbacks or on the mine floor, i.e. in places where it will not be disturbed until needed. The approximate location of the overburden and topsoil piles are shown on the MINING PLAN MAP.

Mining will begin on a section of the slopes created at the end of the last mining cycle until a near vertical face is open. This face will be worked to the north and south until it extends across the property and at that time mining will progress to the west. As mining progresses thru the site the processing plant will be set near the open face to reduce the haul distance from the mine face.

This pit will be operated year-around by Colorado Crushing, Inc., weather permitting. There may be periods when the demands for material are slow and no mining will take place at which time the mine will become an *Intermediate Operation*. Stockpiles of material will be maintained on the site and as the need arises, it will be hauled to our project sites or sold to the public.

This will be a single stage operation, but the amount of disturbance will be limited to 20.0 acres or less at any-onetime. This will allow us to use approximately 15.0 acres as a processing plant/stockpile area and approximately 5 acres for the active mining area. As mining progresses around the property the bank slopes will be mined or shaped to the required grades where they are in their final location. This will reduce the amount of work that has to be done to reclaim the site. Reclamation will begin once we have enough room for the stockpiled material and the newly mined section, to be reclaimed so it will not have to be disturbed again.

Review of MAP EXHIBIT C-1 shows how we expect the site to look when mining is approximately 38% done. Note, the floor of the excavation is flat and the exterior slopes into the mined area are graded 3:1 where reclaimed, 2:1 when temporary grading is done and near vertical where mining is taking place. There is adequate overburden and reject materials that can be used to backfill the exterior slopes if needed, even if Option 1 reclamation is followed.

We have developed two Options for the reclamation plans for this mine so in the future we will only need to file a Technical Revision to implement the changes for Option 2 if needed. Mining equipment may include but is not limited to, frontend loaders, scrapers, bulldozers, dump trucks and a water truck. Processing equipment may include but is not limited to conveyors, crushers and screen plants. A scale and scale house as well as a shop and maintenance building may also be built at the mine during its life. No blasting will take place at this mine.

As much as possible, the surface drainage will be maintained in the same direction as it now exists. The proposed sloping plan for the excavated area should eliminate any concerns of erosion occurring on the site.

On a typical operation of this type we may use up to 3 ac-ft of water per year. Most of the water used for dust control will be used on haul roads. Please refer to **EXHIBIT G-WATER** for the discussion of how water will be used at the site and the source of said water.

There are no ditches crossing the site and no surface or subsurface water will be impacted by the mining operation. All interior pit slopes will be maintained with a pit-ward attitude so that historic drainage patterns can be maintained. This same slope management plan will prevent any offsite slides or other disruptions. Isolation berms or ditches will be constructed around the active mining area to prevent off site stormwater from contacting the disturbed area. All stormwater contacting the disturbed area will be retained on site and allowed to evaporate or soak into the underlying gravel. No U.S. Army Corps of Engineers 404 permit is necessary, as there are no water bodies on the site nor are there any wetland areas that will be disturbed by mining or reclamation.

MINING TIMETABLE

This estimated mining timetable is based on an average year and Colorado Crushing, Inc. expects a specific year to vary widely from the average. If there are changes in the mining timetable we will discuss the reasons for the change in the annual report that follows the change and modify it at that time.

| | | ACRES ± | | | |
|--------|-----------|---------|-------|-------|--------|
| OPTION | ESTIMATED | TOTAL | TOTAL | MINED | MINED |
| | YEARS | AREA | MINED | 100% | SLOPES |
| #1 | 28-38 | 81.40 | 73.54 | 47.52 | 26.02 |
| #2 | 29-39 | 81.40 | 76.66 | 26.02 | 22.69 |

ESTIMATED MINING TIMETABLE

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RECLAMATION PLAN AND TIMETABLE

RECLAMATION PLAN

The proposed future use of this site is to return it to it's existing use of rangeland. Mining will create a depression in the terrace deposit that leaves a hole in the Terrace and creating a flat floor in the excavated are approximately 3 feet above the bank of the Huerfano River. This makes the reclamation plan very simple in that the mined area will have to be shaped, resoiled and then revegetated with grass seed once mining is complete. Review of various options shown on the **RECLAMATION PLAN MAPS** in this application packet depicts how we believe the site will look once mining is complete.

As noted in the MINING PLAN we are proposing two options for reclaiming the site. The method used to reclaim each option are the same, the difference in being the amount of sloping needed and a revegetated area increase. In Option 1, the Perrino House Area and School House Area setback area will remain undisturbed and 3h to 1 v slope will extend to the floor of the mine to allow access to them as shown on MAP EXHIBIT F-1. In Option 2, the Perrino House Area and School House Area will be removed and those areas will be mined as shown on MAP EXHIBIT F-2. The amount of sloping, resoiling and revegetation will be different between the two options as shown in the Reclamation Timetable. Basically, in Option 2 the floor area will increase by approximately 6.45 acres.

As mining progresses the slopes along working face of the mining area will be temporally graded 2:1 to stabilize them until it is time for resumption of mining or they are final graded for final reclamation. By creating the temporary slopes as mining progresses, we are reducing the amount of work necessary to reclaim the site if mining stopped prematurely.

Since the slopes around the perimeter of the mined area will be steeper than their final slopes, only minor amounts of backfill slope work will be necessary as mining ends. Five Hundred feet of the working face will be left nearly vertical and will need to be cut/fill sloped if mining ended early. The excess overburden and reject materials being stockpiled will insure that adequate material is on site, to complete the sloping plan. This sloping plan will also insure, that if mining ceases before the resource is exhausted, only a minor amount of work would have to be done to finish reclamation on the disturbed area. The placement of the soil stockpiles around the perimeter of the mined area or direct placement on the final slopes as stripping takes place helps reduce the cost to reclaim the site if mining ended midway thru the site. It also means that the topsoil, only has to be handled once and reclamation will run concurrent with mining.

There are sufficient amounts of topsoil on the site so the mined area can be resoiled to a maximum average depth of three (3) inches. Additional growth medium (processing fines) will be salvaged during processing to supplement the topsoil if needed. All topsoil encountered will be saved from the stripping process and the operator <u>will not</u> haul additional soils onto the site for revegetation. Existing soils in place have been capable of producing a sparse cover of grasses suitable for grazing purposes when not abused. The vegetation information was obtained from site visits and data provided in the vegetation information obtained from the NRCS soil survey web page. A copy if that report is in **EXHIBIT'S land J** and describes the current cover in the terms of yearly production and will serve as background information as reclamation progresses. Our site specific investigations suggest the range quality is on the average side.

As outlined in the MINING PLAN, up to 76.66 acres + of the permitted area will be disturbed as a result of mining. Since there are no stages in the permit, reclamation will run concurrent with mining. The plan calls for having no more than 20.0 acres + disturbed at any-one-time. As mining progresses across the property some parts of the property will remain undisturbed while other areas will be either stripped, mined, The MINING PLAN MAP partially reclaimed or totally reclaimed. EXHIBIT C-1 shows how the pit will look when approximately 38% is stripped, mined and partially reclaimed. The **RECLAMATION PLAN** MAPS - EXHIBIT F-1, & F-2 show how the area will look when reclamation is complete depending on what option is used. The area will be returned to at least it's present vegetative condition when reclamation is complete.

Careful analysis of the growth medium and salvaged soil will permit the operator to carry out a soil additive program and to

monitor the prescribed seeding plan and to determine if the plan requires revision. Under normal weather conditions, an adequate moisture reserve will be present for establishment of the proposed seed mixture. No irrigation is planned for this site because we will be attempting to create a diverse dryland site that is non-water dependent. No revegetation will take place on access roads.

REVEGETATION PROGRAM

The revegetation program to be implemented by the Colorado Crushing, Inc. is detailed below. The topsoiling plan presented above and this revegetation program is devised after careful review of the existing soil conditions and present vegetation, both on the site and in the NRCS report. "Revegetation will be carried out in such a way so as to establish a diverse, effective and long-lasting vegetative cover that is capable of selfregeneration without continued dependence on irrigation, soil amendments or fertilizers." The plan is designed to create a vegetative cover that is at least equal in extent to the cover of the natural vegetation before mining. The use of species native to the area is included. Since the intended use of the reclaimed land as rangeland, any slopes created will be commensurate with this final land use.

Seed will be drilled wherever possible, when drilling is not possible, the seed will be broadcast. The revegetation plan provides for the greatest probability of success in plant establishment and vegetative development by considering environmental factors such as seasonal patterns of precipitation, temperatures and wind. Other considerations, such as soil texture, fertility, slope stability and the direction in which slopes face, have been considered. A weed control plan is included in the Appendix section of this packet for your review.

The roads will remain on the site to provide access for planting crews and for the supervision and inspection of the reclamation plan. This road will provide the owner's with access to the surrounding property when reclamation is complete.

SEEDBED PREPARATION

When mining on an area is complete, reclamation will begin. The stockpiled soils will be spread, smoothed of large clods,

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worked until moderately fine. On the areas where seed is broadcast the surface will be left fairly rough to trap the seed and keep it from being affected by wind. This technique is used on other facilities in the state that are similar to this site. It works very well as reclamation has been successful on all of them.

SEEDING TIME

The grass seed mixture will be planted from early fall thru mid-spring (November 1 to April 30). The time of planting will be controlled by when the resoiled areas are ready for planting. If fall planting is convenient, the seeding will be done before the first freeze (about the time Winterwheat is planted). If spring planting is called for, it will be done in March or April weather permitting after the last frost. Both periods assure there will be adequate residual ground moisture available for the newly planted seeds.

GRASSES

The following seed mix was developed by the NRCS office in Walsenburg, Colorado to be used by Colorado Crushing, Inc. on other mining operations in Huerfano County.

| Non-Irrigated grass seed | reco | mmendation |
|---------------------------|------|------------|
| Seed | Rate | PLS/acre |
| Western Wheatgrass (Arrik | ba) | 10.0 |
| Sideoats grama (Vaughn) | | 6.5 |
| Blue Grama (Lovington) | | 0.5 |
| Winter Wheat | | 25.0 |
| | | 42.0 |

Using this mixture, when drilled, will provide approximately 71 seeds per square foot. It is a native mixture that should restore the site to its existing vegetation conditions. The winter wheat acts as a cover crop for the grasses. If the seed is broadcast, the amount will be doubled and spread on a rough surface. The seeded areas will then be dragged or raked thoroughly to set the seed.

Experience shows that on other operations the seeded area will have a heavy cover of weeds after the first year. The

inclusion of winter wheat will reduce this probability. It will tend to shade the seedbed, retain snow in the winter and act as a wind break for the newly emerging grasses. The second year there are fewer weeds as the grasses start to take hold. By the third year the weeds are mostly gone and the grass has established itself so it will grow in future years.

WEED CONTROL

The revegetated areas will be monitored closely each spring for the first two years to determine if noxious weeds are invading the area. Colorado Crushing, Inc, will implement a weed monitoring and control plan for this mine and have included a copy in the Appendix for your review. Weed control will be initiated if the problem becomes serious or if an excessive weed cover is still present at the end of the second year. In no way should this be taken to mean that we will try to eradicate all the weeds from the site. Some weeds are beneficial to the game species in the area, they provide important protection from the elements during winter and nesting sites during the spring. Total eradication of weeds from the site is not necessarily desirable, so we will be using controls on the noxious weeds and letting the rest grow in select areas for limited times as long as they do not hamper the grass growth. It may be necessary to control weeds by mowing after the first year, the feasibility of chemical weed control methods will be studied should other forms not work. Control of noxious weeds is important to the state so USDA Extension Service recommendations will be followed to control them.

IRRIGATION

No irrigation is planned for the revegetated area in the pit. It makes the vegetation dependent on water and does not promote a vegetation cover that is diverse and capable of self regeneration.

RECLAMATION PERFORMANCE STANDARDS

The operator intends to mine the property in compliance with the Reclamation Performance Standards of Rule 3. Grading will be done to create a final topography that is compatible with the intended final land use. Most slope areas will be created by

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backfilling to the final slope rate. These slopes will be 3:1 and we will attempt to retain the present drainage pattern across the property. A sign that conforms to the requirements in Rule 3.1.12 (1996) is in place at the entrance to this facility.

The material used to create the slopes will be native overburden or reject material found on the site at this time. It will consist of sand, gravel, overburden and topsoil. The pit will be reclaimed so that a suitable grade for drainage exists that matches the premining pattern. All surface runoff from reclaimed areas will be directed into the existing mine area.

All grading will be done in a manner to control erosion and to protect areas outside the affected lands from slides or other damage. All backfilling and grading will be completed as soon as feasible after mining is completed in any given area. All refuse will be hauled away or disposed of in a manner that will control unsightliness and protect the drainage system from pollution. There are no acid-forming or toxic materials involved in this operation. If petroleum products are stored at the site, it will be done as prescribed by applicable laws. Any storage tanks will be surrounded by a berm or be in self contained facilities adequate to retain any fluid spilled should a tank rupture. In addition, there is adequate absorbent materials on site to contain any spills that would occur outside the containment structure. There are no drill or auger holes on the land. Maximum slopes will be within the limits set forth in the Rules and Regulations of the Board and will be capable of being traversed by machinery.

The operator does not expect prevailing hydrologic conditions to be disturbed. Colorado Crushing, Inc. will comply with applicable Colorado water laws and regulations (as the operator understands them) governing injury to existing water rights to minimize any disturbance which might occur to the prevailing hydrologic balance of the affected land and surrounding area and to the quality and quantity of water in surface and ground-water systems both during and after the mining operation and during reclamation. Any water used in the operation of the processing plants and for dust control will come from water sources described in **WATER-EXHIBIT G**.

No dredging takes place at this facility, there are no temporary siltation structures involved in this operation and no mining will be done in a river or waters of the United States. A U.S. Army Corps of Engineers Permit is not required for this operation because there are no wetlands on the site that will be disturbed. Retention ponds may be constructed on the site to collect stormwater before it leaves the site. These ponds will be removed when and area is reclaimed. There will be no earthen dams on the mined area.

The mining and reclamation plans consider existing wildlife conditions and final reclamation will not change the area for wildlife use. The mining and reclamation plans allow for the safety and protection of wildlife remaining on the mine site, at the processing site and along all access roads to the site. In general we have found there is little long term disturbance to native wildlife species around gravel mining operations. The big game species tend to use mining sites and newly vegetated areas after operations have stopped for the day. The smaller species tend to move to undisturbed areas. The Colorado Parks and Wildlife Division has noted that there are no threatened or endangered species on the site, in their letter a copy is provided in Exhibit H.

Topsoil in the area (average 3 inches) is of good to fair quality, so when it is removed to reach the mineral deposit, it will be segregated and stockpiled. If the topsoil and overburden piles remain undisturbed for more than a year, a vegetative cover of 2 lbs-pls/100 FT² Western Wheatgrass or other means will be employed to prevent erosion from wind and water and keep them free of contaminants so that they remain useful for sustaining vegetation when reclamation begins. The stockpiles will be located in areas where disturbances by ongoing mining operations will be at a minimum, i.e., along setbacks on the pit perimeter or mine floor. The topsoil will be handled as little as possible until it is replaced onto disturbed areas. The operator will take measures necessary to insure the stability of the replaced topsoil on graded slopes and spreading it as evenly as possible. Fertilizer and other soil amendments will be used as discussed in this plan.

RECLAMATION TIMETABLE

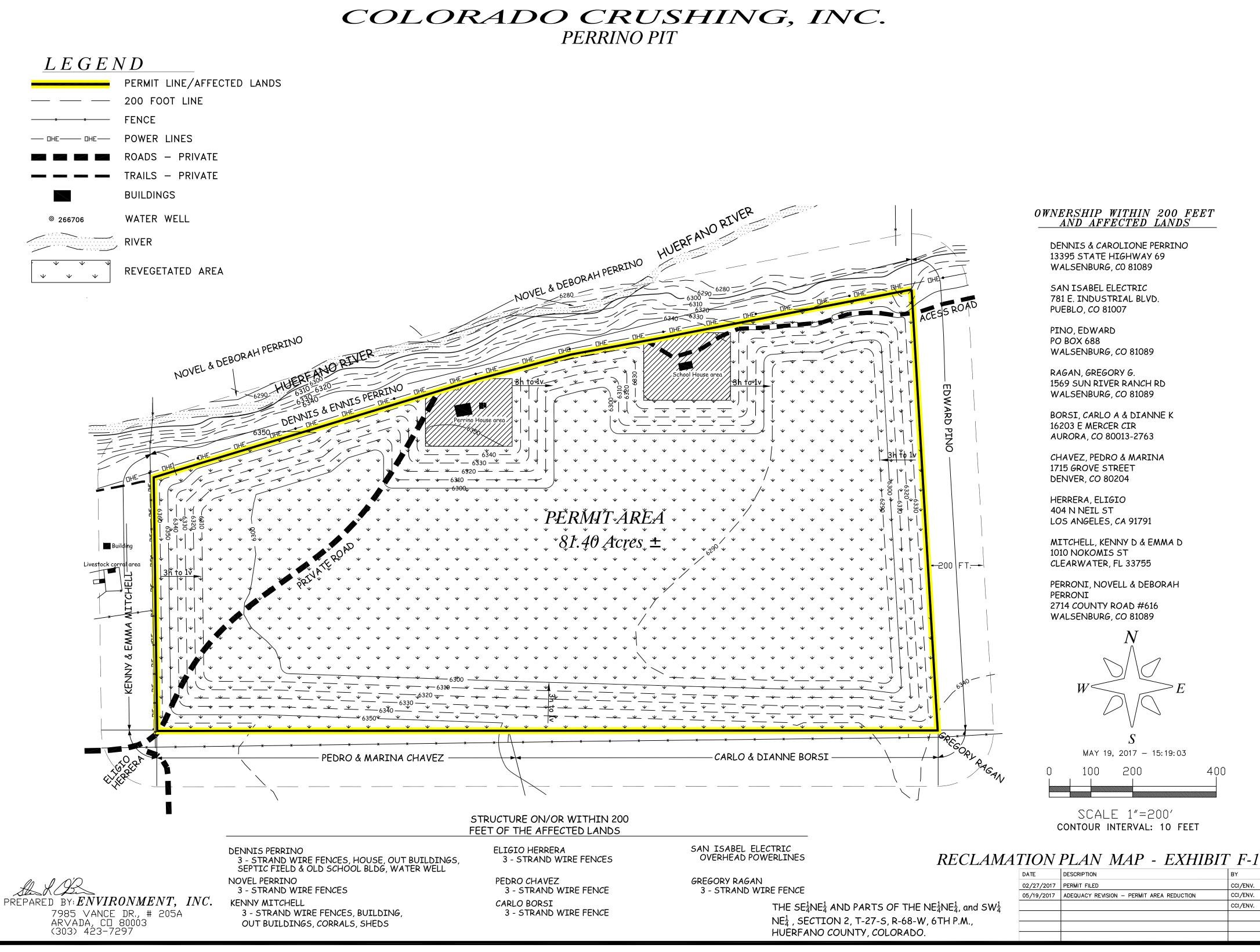
Reclamation will begin once enough area has been opened so that any reclamation completed will not be disturbed as mining

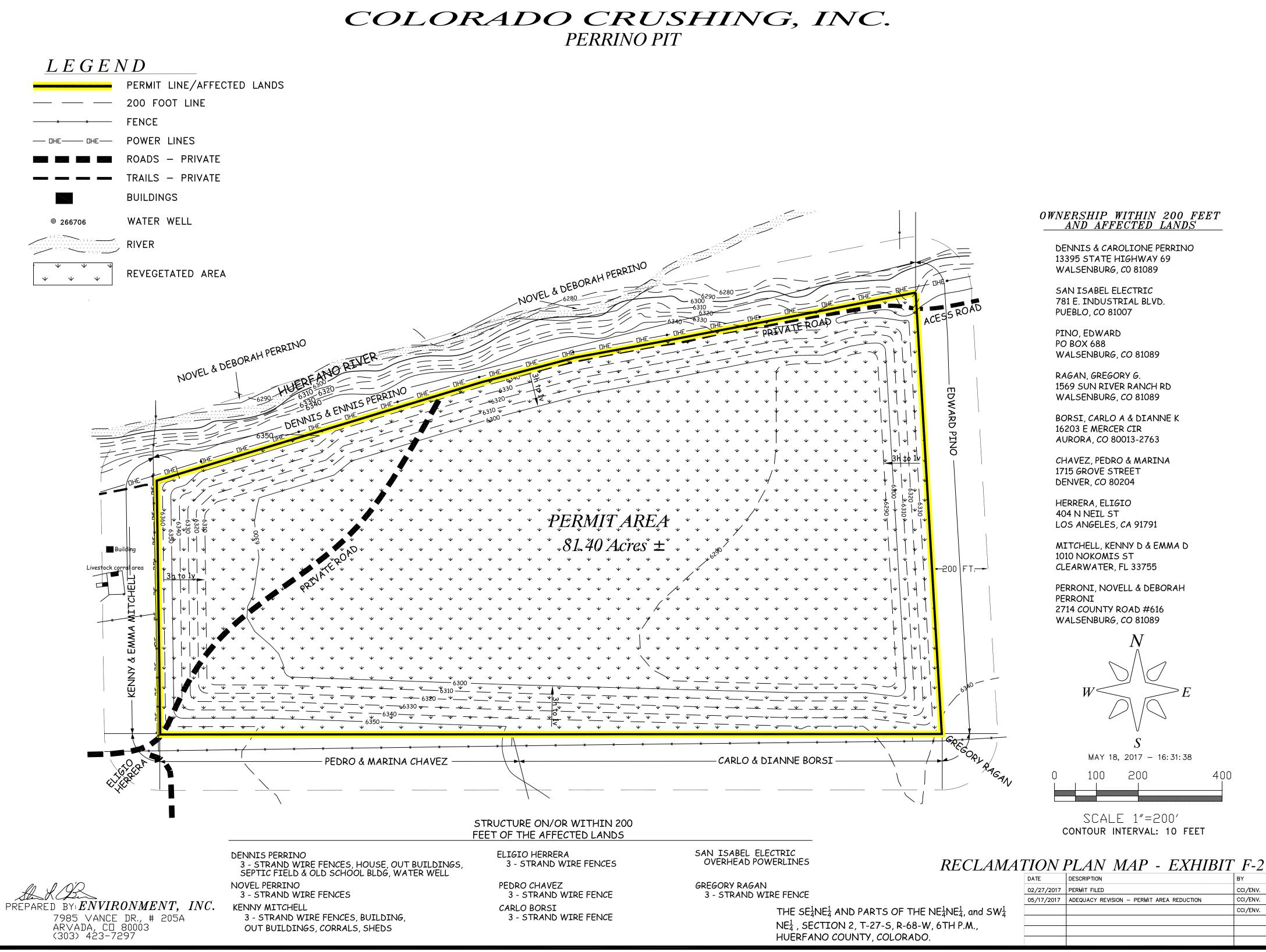
progresses. This may take 5 or more years depending on the economic conditions in the area and the amount of material mined. The operator anticipates approximately 78% of the total mined land will be reclaimed by the time mining is completed. A portion of the floor area will be complete, but the area under the plant site/stockpile area will still need work and grading of the final face area will be that last area to be reclaimed. Within one year after mining ends and the stockpiles have been removed, all resoiling and revegetation will be complete. The area will then be monitored for success of revegetation until it is released by the Board. The operator estimates that, this will happen 3 to 5 years after mining is completed.

If revegetation problems occur before release, an analysis of the site will be made and the area will be revegetated again as necessary. The seed mixture and rates may be revised as needed to complete reclamation, if a modification is required, the Division will be notified prior to making the change. This gives us the most flexibility to complete reclamation successfully.

| Acres <u>+</u> | | | | | | |
|----------------|-------|-------|--------------|------|-------------|--|
| Option | Years | Total | Revegetation | Road | Undisturbed | |
| | | Area | | | | |
| #1 | 3-5 | 81.40 | 76.25 | 1.80 | 3.20 | |
| #2 | 3-5 | 81.40 | 80.02 | 1.38 | 0.00 | |

RECLAMATION TIMETABLE





SOILS

SOILS INFORMATION

The following information was obtained from site observations and the basic soils and vegetation information found thru the USDA's National Soils information page and the Soil Survey of Huerfano County. The following soils information downloaded from the site is made part of this application. Soil units are shown on the USDA map, reproduced on page 28 following this text. The photo map shows the surrounding vegetation features and soil types. This site lies along a east/west trending terrace deposit of gravel south of the Huerfano River. There are 5 soils types found on the mine site, of these 5 only 2 will be disturbed by mining. Underling the soils is a layer of overburden varying from 4 to 60 inches deep and a layer of gravelly sand that is 12 to 50 plus feet thick.

The **77**-**Schamber-Midway complex**, **3 to 25% slopes** soil series covers approximately 10.4 acres or 10.6% of the mine area. The general soils description indicates that this soil is deep, and excessively drained. The upper most horizon is 0 to 5 inches of deep brown gravelly loamy sand. Underlaying this top most horizon is an additional 0 to 9+ feet or overburden and 40 to 50 foot thick layer of very gravely sand. We believe this material is the same type that underlies the Willowman soils. The northern end of this soil runs along the transition area between the range level and the river bottom. Much of the area has no soil since it is the open face along the river.

The 92-Willowman gravelly sandy loam, 3 to 8% slopes soil series covers approximately 72.6 acres or 75% of the mine area. The general soils description indicates that this soil is deep, somewhat well drained soil on terraces. The upper most horizon, is a 0 to 5 inches deep, brown gravelly fine sandy loam and is a slightly sticky, slightly plastic and mildly alkali soil that is usable as topsoil. Underlying this top-most horizon is an additional 3 to 5 feet thick layer of gravelly sandy loam overburden material inter bedded with calcareous layers. This overburden layer will be salvaged for use as backfill material on the mine's perimeter. SOILS MAP EXHIBIT I-1 and data (22 total pages)

grasses and 0 to 5 percent cactus and sage brush. This area has a good grass cover because the site has not been grazed for quite some time.

The species of vegetation found on the site are Blue grama, Green needlegrass, Western Wheatgrass, Needleandthread, Little blue stem, and Sideoats grama. These grass species makeup 85% to 90%, by weight, of the vegetation found on the site. COLORADO CRUSHING, INC. EXHIBIT S

PERRINO PIT - M-2017-007 STRUCTURE AGREEMENT MAILING RECEIPTS

U.S. Postal Service **U.S. Postal Service CERTIFIED MAIL® RECEIPT CERTIFIED MAIL® RECEIPT** 9523 90 Domestic Mail Only Domestic Mail Only CONTRACTOR F For delivery information For delivery information) F F OFF 1 10807 RADO CH non CIS 20 70 Postage 84019 Postana p 3.3 < 3.35 Certified Fee Cortilled Fee TUUU FEB Part 2017 1000 010 Return Receipt Fee (Endomennt Recuired) Return Receipt Fee 2.7 .15 C 2 FEB 2 2 2017 (Ende Restricted Delivery Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) 22 5 \$4-80 \$ 6.80 1 Total Postage & Fees = Total Postage & Fees гū USPS Sent To Sent % Novell & Deborah Merrond 2714 County Road #614 USF. Walsenburg, Co 81089 Carlo A & Dianne K Bo 16203 E Mercar Cir Aurora, Co 80013-2763 HTCD2 サイロノ Street & Apt. No., or PO Box No. Street & Apt. No., or PO Box No. City, State, ZiP+4 City, State, ZIP+4 PS Form 3800, July 2014 See Reverse for Instruction U.S. Postal Service" U.S. Postal Service" CERTIFIED MAIL® RECEIPT **CERTIFIED MAIL® RECEIPT** F 10 Domestic Mail Only Domestic Mail Only 11 22 For delivery infor selivery inform usps.com* C OFF 1 CI OFF ORNOO 5 \$ CAD 017 non RAL 0.81 2 C \$ \$ Postage Postage 810. DS1 0 3. Certified Fee Cartified Fee 1000 TUUU Return Receipt Fee (Endorsement Required) Return Receipt Fee (Endorsement Required) 2 3 2 2 2017 FEB 2 2 2017 (13 Restricted Delivery Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Regulard) 2870 5 \$0.80 0 U Total Postage & Form \$ (0 Total Postage & Fean Sert To Sent To Gregory G. Royan 1569 Sun River Hondis Fus Walsenburg, Co 81087 Dennis & Caroline Berroni 13395 State Bionog 29 Walsenburg, CO 81009 Ŧ 477 TUL Strent & Apt. No., Street & Apt. No .. ar PO Box No. Gity, State, 21P+4 or PO Box No. City, State, ZIP+4 PS Form 3860, July 2014 See Reverse for Instructions U.S. Postal Service" **U.S. Postal Service** CERTIFIED MAIL® RECEIPT CERTIFIED MAIL® RECEIPT ۵ Domestic Mail Only 2946 Domestic Mail Only 23 For delivery information For delivery information -Sando Ch ORI ----G OF 2 10807 10 B \$ Postage \$ Pentuge ĊŶ. **Cortified Fee** 10ju Certified Fee 1000 FEB 2 2 2017 Return Receipt Fee (Endorsement Required) Return Receipt Fee (Endorsement Required) stricted Delivery Fee lossement Required) Restricted Delivory Fee (Endorpoment Required) 5 287 \$ 6.80 Tital Postage & Fees \$ 0 . SC U 2. Total Postage & Fees Ē Sen To Kenny D & Emma O Mitchell 1010 Nokomis St Clearwater, FI, 33755 San Isabel Electrit USPS 781 E. Industrial Blvd. Pueblo West, CO 81007 Sent Va 3 PLD7 T Street Apt. Street & Apt. No., or PO an No er PO Box No. City, State, 25 City, Stato, 209+4 San Reverse for Instructi See Reverselfor Instructs

COLORADO CRUSHING, INC.PERRINO PIT - M-2017-007EXHIBIT SSTRUCTURE AGREEMENT MAILING RECEIPTS





SAN ISABEL ELECTRIC ASSOCIATION, Inc.

781 E. INDUSTRIAL BLVD., PUEBLO WEST, COLORADO

Tel: (719) 547-2160 Fax (719) 547-0732

March 17, 2017

Colorado Crushing, Inc. 7707 3R Road Beulah, CO 81023

> RE: Perroni Pit File #_____ Pit Located in Section 2, Township 27, Range 68W Huerfano County, Colorado

This letter is to advise you that San Isabel Electric Association, Inc. has no objection to the operation of said gravel pit under certain conditions.

- 1. That the operations of said pit do not interfere with the operations and maintenance of existing electrical facilities.
- 2. No equipment will be operated within ten feet (10') of any energized electrical facility.
- 3. No mining operation will operate within twenty five feet (25' with a 3 to 1 slope) of any electrical facility. (Horizontal or Vertical)
- 4. The applicant will reimburse San Isabel Electric Association. Inc. for any and all costs arising from any damages to said facilities or disruption of electrical services.
- 5. Enclosed is a drawing showing the area to be left undisturbed and made part of the operation.
- 6. San Isabel Electric Association, Inc. requests extreme caution be exercised when working around or near said facilities for the protection of property owners, contractors and the general public.

Please Note

If you have any questions please contact the office at 719-547-2160.

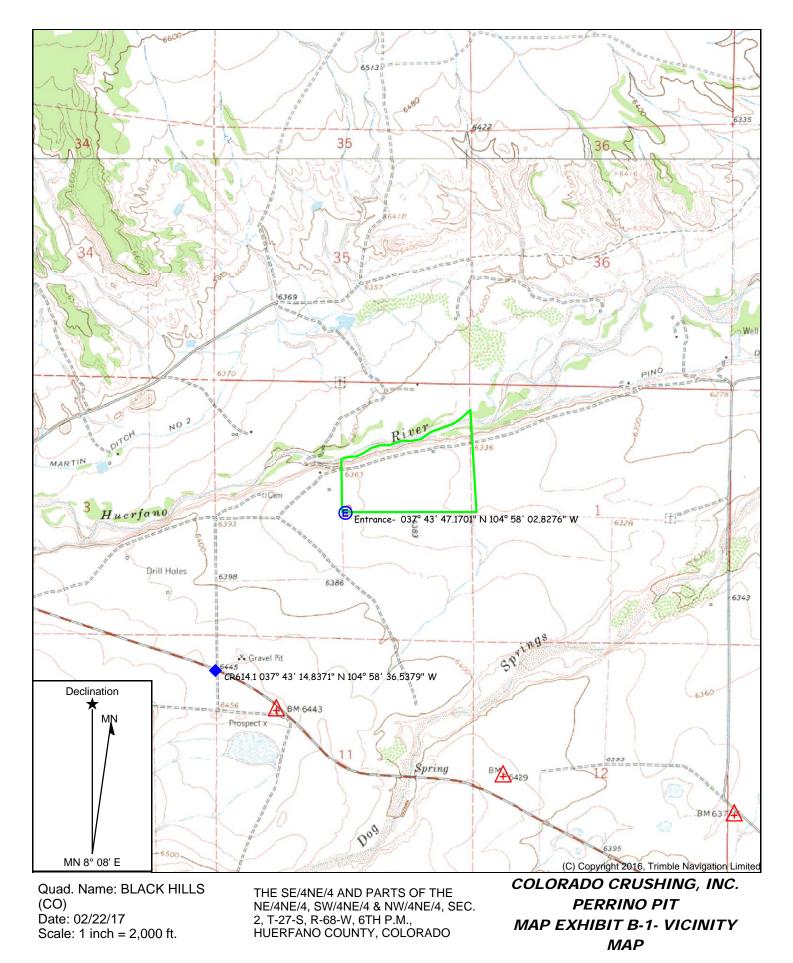


SAN ISABEL ELECTRIC ASSOCIATION, Inc.

781 E. INDUSTRIAL BLVD., PUEBLO WEST, COLORADO Tel: (719) 547-2160 Fax (719) 547-0732

Colorado Crushing, Inc. By President State of Colorado County of Huerfano The foregoing instrument was acknowledged before this 23 day of March 2017 By Damelle Betrain Notary Public My Commission Expires Augio, 29 DANIELLE M DEGRAW My Address is The Oct Hay NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20094013817 MY COMMISSION EXPIRES AUGUST 10, 2017 San Isabel Electric Association B ROW & Safety Manager State of Colorado County of Huerfano The foregoing instrument was acknowledged before this 17 day of Mara 2017 By 11 Notary Public My Commission Expires My Address is 781 8 Aublowest Blvd **KARIA GUERRERO** NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20064007035

MY COMMISSION EXPIRES FEBRUARY 21, 2018



(C) Copyright 2016, Trimble Navigation Limited

PERMITTEE/STRUCTURE OWNER AGREEMENT

State of Colorado, Mined Land Reclamation (MLR) law requires the permit applicant (operator/permittee) to agree to reimburse the owner of any permanent man-made structure(s) within 200 feet of the permitted mining area for damage done to the structure(s) as a result of the permitted operation.

Colorado Crushing, Inc. believes Dennis & Caroline Perroni own the following structure(s), located within 200 feet of the permitted mining area: 3 - strand wire fences, house, well, septic system, out buildings, gate and access roads.

Colorado Crushing, Inc. agrees to reimburse you for any damage done to the listed structures as a result of the mining operation. Your acknowledging signature and a notary seal in the spaces provided below shall satisfy the MLR law requirement. Colorado Crushing, Inc. certifies this agreement as follows:

CERTIFICATION: The Applicant Colorado Crushing, Inc. represented by Rocky Ryan, as President, does hereby certify that Dennis & Caroline Perroni shall be compensated for any damage from the proposed mining operation to the above listed structure(s) located within 200 feet of the permitted mining area described in the MLR Permit for the Perroni Pit.

NOTARY FOR PERMIT APPLICANT

| ACKNOWLEDGED BY: |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Permit Applicant: Colorado Crushing, Inc., 7707 3R Road, Beulah, CO 81023 |
| Representative: Rocky Ryan, President, office - 719-569-9479 |
| Signature: Date: Date: |
| STATE OF Colorado) STATE OF Colorado) COUNTY OF Pueblo) SS DATE DATE DE PUELIC NOTARY PUBLIC NOTARY PUBLIC NOTARY PUBLIC NOTARY PUBLIC NOTARY PUBLIC |
| STATE OF Colorado) SS COUNTY OF Pueblo) COUNTY OF Pueblo) |
|) ss COUNTY OF Pueblo The foregoing was acknowledged before me this <u>12</u> day of <u>FUD/ULT/M</u> NOTARY ID 20094013817 10.2017 NOTARY ID 20094013817 NOTARY ID 20094013817 |
| And |
| Notary Public: 1 My Commission Expires: Aug (0, 2017 |
| NOTARY FOR STRUCTURE OWNER |
| ACKNOWLEDGED BY: Structure Owner(s): Dennis & Caroline Perreir Perreir no |
| Signature: Date: 4/12/17 |
| Signature: Caroline Perrino Date: 4/12/17 |
| STATE OF Colorado |
| COUNTY OF Huerfand) ss |
| The foregoing was acknowledged before me this 12th day of and, 2017, by |
| CHLAPICI . |
| Notary Public: Junice Sal Couch My Commission Expires: Strate of a 20134092 AV 06. 2011 Notary Public: Junice Sal Couch My Commission Expires: Strate of a 2018 AV 06 & 2018 AV 06. 2011 Notary Public: Sal Couch My Commission Expires: Notary Inter of a 2018 AV 06. 2011 |

ACCESS AGREEMENT

This Agreement is entered into this $//_{-}$ day of May, 2017, by and between EDWARD PINO Soland find(OWNER), whose address is 166 County Road 615, Walsenburg, Colorado 81089 and COLORADO CRUSHING, INC.(HOLDER), whose address is 7707 3R Road, Beulah, Colorado 81023.

- 1. Owner grants, sells, and conveys to Holder the right of ingress and egress along an existing 2-track trail over Owner's property north and south along Owner's common boundary with Dennis and Ennis Perrino, and east and west along the north boundary of Owner's property running parallel with County Road 615 to County Road 614. The easement for such access granted by Owner shall be a 30 foot wide roadway over and across Owner's property as described above. The easement will be used for hauling of gravel and other Material in large trucks.
- The term of this Agreement shall run for a period of fifteen (15) years commencing on the date the Holder has obtained all necessary governmental approvals and permits. Holder may terminate this Agreement upon thirty (30) days' notice to Owner.
- 3. Holder shall pay Owner the sum of per year for up to 25,000 tons hauled across the easement. If Holder hauls more than 25,000 tons in a 12 month period, Holder shall pay Owner per ton for gravel hauled. The tonnage will be calculated based on the scale weight of each load of gravel and Material hauled.
- 4. Owner shall have the right during business hours and upon reasonable notice once per month to check the books and records of Holder for the purpose of verifying the amount hauled.

- 5. Holder shall have full right of ingress and egress over and on the above described access casement for the purposes of hauling Material. Holder shall also have the right to construct such roads as may be necessary for the purposes of hauling the gravel and Material.
- 6. Owner covenants that he/she has full title to the Property including ownership of the surface and has full authority to grant this access easement. Owner shall indemnify and hold harmless Holder from any claims of third parties regarding any claims to the described easement.
- 7. Owner, his agents, successors or anyone claiming by or through Owner shall not interfere with Holder's reasonable use of the easement and this agreement shall be binding on Owner, his heirs and successors.

COLORADO CRUSHING. BY:

Rockford Ryan, its President

Pana

Edward Pino, Owner

Solyny Pino, Owner

ECEIPTS

PERRINO PIT M-2017-007

5/18/17

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PERRINO PIT M-2017-007 5/18/17

USPS Tracking Results FAQs > (http://faq.usps.com/?articleId=220900)

Track Another Package +

Eligio Herrera

Tracking Number: 70111570000215211129

Remove X

On Time Updated Delivery Day: Monday, March 20, 2017 () Product & Tracking Information

See Available Actions

Delivered

Postal Fe Product: C First-Class Re Mail®

Features: Certified Mail[™] Return Receipt

See tracking for related item: 9590952106150006881724 (/go/TrackConfirmAction?tLabels=9590952106150006881724)

DATE & TIME

STATUS OF ITEM

LOCATION

March 20, 2017, 11:59 am Delivered, Left with Individual

WEST COVINA, CA 91791

Your item was delivered to an individual at the address at 11:59 am on March 20, 2017 in WEST COVINA, CA 91791.

March 20, 2017, Out for Delivery 8:46 am

WEST COVINA, CA 91791

PERRINO PIT M-2017-007 5/18/17

| DATE & TIME | STATUS OF ITEM | LOCATION |
|-----------------------------|-----------------------------------------|--------------------------|
| March 20, 2017, 8:36 am | Sorting Complete | WEST COVINA, CA 91791 |
| March 20, 2017, 6:18 am | Arrived at Unit | WEST COVINA, CA 91793 |
| March 19, 2017, 12:35 pm | Departed USPS Destination Facility | SANTA ANA, CA 92799 |
| March 19, 2017, 7:21 am | Arrived at USPS Destination Facility | SANTA ANA, CA 92799 |
| March 18, 2017. 7:00 pm | In Transit to Destination | |
| March 17, 2017, 7:58 pm | Departed USPS Facility | DENVER, CO 80266 |
| March 17, 2017, 7:00 pm | Arrived at USPS Origin Facility | DENVER, CO 80266 |





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PROOF OF PUBLICATION AFFIDAVIT

Huerfano World Journal 500 Main St. P. O. Box 346 Walsenburg, CO 81089

I, Brian Orr, of lawful age, being duly sworn upon oath, deposes and says that I am the Publisher of the Huerfano World Journal, which has a general circulation therein: that the same is a weekly publication that is a "legal newspaper" as that phrase is defined in CRS § 24-70-103 for the City of Walsenburg, for the County of Huerfano, in the State of Colorado; and has been published continuously and uninterruptedly in said County of Huerfano for a period of more than one year and for more than fifty-two consecutive weeks prior to the first publication of the annexed legal notice; that said newspaper has been admitted to the United States mail as a second-class matter under the provisions of the Act of March 3, 1879, or any amendment thereto and that said newspaper is duly qualified to publish legal notices and advertisements within the meaning of the laws of the State of Colorado, and more particularly Chapter 109, Colorado Revised Statues 1963 and amendments thereto; and that the <u>attachment</u> <u>hereto</u> contains a true and correct copy of what was actually published in said legal newspaper in consecutive issues on the following dates:

| ITEM PERMIT # M 2017-001 | | |
|-----------------------------------------------------|----------------------------------|--------------|
| Public Notre | 16 day of March | 2017 |
| 11 | 23 day of March | 2017 |
| 11 | 30 day of March | 2017 |
| 1 | Ob day of April | 2017 |
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| | Publication fee: \$ 176.4 Bri | On |
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Legal Notice

c/o Steve O'Brian Name/Organization: Environment Inc. Address: 7985 Vance Dr. Ste. # 205-A Arvada, CO 80003 (tele: 303-423-7297) Legal document name: Public Notice (permit # M-2017-007) Dates to run: March 16, 23, 30 & April 6, 2017 (4 insertions) TOTAL = \$176.40 Rate: 126 lines @.44¢ per line = \$ 55.44 / Rate: 126 lines @.32¢ per line = \$40.32 (X3 = \$120.96) (cost determined by number of columns times number of lines times number of insertions) 1 column 2 columns 3 columns 01 02 03 04 05 06 07 08 09 10 11 PUBLIC NOTICE PUBLISHED NOTICE OF APPLICATION FILING FOR A REGULAR (112) CONSTRUCTION MATERIALS RECLAMATION PERMIT The Colorado Crushing, Inc., 7707 3R Road, Beulah, CO 81023, has filed an conversion application for a Construction Materials Regular 112 Rectamation Permit with the Colorado Mined Land Rectamation Board under provisions with the Colorado Mined Land Rectamation Act for ex-traction of Construction materials. The proposed mine is known as the Permin Pit, (Permit # M-2017-007) and is located in or near the NE/k of Section 2, T-27-S, R-68-W of the 6th P.M., Huer and County, Colorado. 123145167892012232452672890112334556789011233455678901123345567890122324526772734756778901283 The date of commencement will be April 2017 and the proposed date of completion is December 2035. The proposed future use of the land a rangeland Additional information and a tentative decision date may be obtained at the Division of Reclanation, Mining & Safety, 1313 Sherman Street, Rm 215, Denver, Colorado 80203. (303) 866-3557, or at the office of the Huerfano County Clerk and Recorder. 401 Main St, Suite 204, Waisen-burg, Colorado 81089. Written comments to the application must be redeived at the office of the Mined Land Reclamation Division no later than 4 00 p.m. on the 26th day of April, 2017 Please note that comments related to noise, truck traffic, hours of operation, visual impacts, effects on property values and other social or eco-nomic concerns are issues not subject to this Office's jurisdiction. These subjects and similariones, are typically addressed by your local gov ernments, rather that the Division of Reclamation. Mining & Safety or the Mined Land Reclamation Board Colorado Crushing, Inc. Buelah, Colorado Publication Dates First: 3/16/17 Second: 3/23/17 Third: 3/30/17 Fourth 4/6/17 Published in World Journal

PUBLIC NOTICE PUBLISHED NOTICE OF APPLICATION FILING FOR A REGULAR (112) CONSTRUCTION MATERIALS RECLAMATION PERMIT

The Colorado Crushing, Inc., 7707 3R Road, Beulah, CO 81023, has filed an conversion application for a Construction Metarials Regular 112 Reclamation Permit with the Colorado Mined Land Reclamation Board under provisions with the Colorado Mined Land Reclamation Act for extraction of Construction materials. The proposed mine is known as the Permito Pit, (Permit # M-2017-007) and is located in or near the NE¼ of Section 2, T-27-S, R-68-W of the 6th P.M., Huertano County, Colorado.

The date of commencement will be April 2017 and the proposed date of completion is December 2035. The proposed future use of the land is rangeland.

Additional information and a tentative decision date may be obtained at the Division of Reclamation, Mining & Safety, 1313 Sherman Street, Rm 215, Denver, Colorado 80203, (303) 866-3567, or at the office of the Huerfano County Clerk and Recorder, 401 Main St, Suite 204, Walsenburg, Colorado 81089.

Written comments to the application must be received at the office of the Mined Land Reclamation Division no later than 4:00 p.m. on the 26th day of April, 2017.

Please note that comments related to noise, truck traffic, hours of operation, visual impacts, effects on property values and other social or economic concerns are issues not subject to this Office's jurisdiction. These subjects and similar ones, are typically addressed by your local governments, rather that the Division of Reclamation, Mining & Safety or the Mined Land Reclamation Board.

1.3

Colorado Crushing, Inc. Buelah, Colorado

Publication Dates: First: 3/16/17 Second: 3/23/17 Third: 3/30/17 Fourth: 4/6/17 Published in World Journal

GEOTECHNICAL STABILITY EXHIBIT

This information is presented to address the plan to mine within 200 feet of the structures listed in Exhibit S. The mine depth closest to any structure where no waiver agreement has been obtained is 50 feet. This is a dry mining operation and mined dry. The closest structure for which there is no damage agreement is the fence line in the southeast corner. Ownership is shared by the lessees and the neighboring landowners. In this area, the setback from the permit/affected lands lines to the dig line will be 25 feet and the fence at its closest point is 3 feet from the property line.

The following information is presented using these distances to determine the safety factors that show there would be no potential impacts to structures within 83 feet of the near vertical mine face during mining. When partially reclaimed and when the final slopes are done then a 25-foot setback is safe. See attached sketch plats.

As mining approaches the perimeter of the mine a 25 foot mining setback will be staked from the property line to establish the mining limit (Section A - Proposed Plan). When the mine face gets to within 85 feet (Section B Temporary Setback - SF=1.5) if the mine perimeter reject material will begin to be collected so as mining take place into this 60-foot area material will be ready to begin backfilling as soon as possible. The mine face will progress to the 25-foot setback line and expand along it as backfilling begins by placing fill material against the mined face to create a temporary 2:1 slope. This will prevent the slope from failing until the final grading is completed. We expect the near vertical mining face along the mine perimeter will be about then 100 feet long before backfill will begin. Backfilling will be done by using a conveyor to deposit reject material at the base of the cut face and loaders or a dozer to finalize the temporary slope. There would then be 500 feet of temporary sloping done until there is enough room so the final grading can be done. The limited length of the face, the lack of water pressure and the backfilling plan assure the ½:1 face will remain stable until backfill material can be placed against it.

In the past, Mr. Alan Sorenson reviewed Slope Stability Report prepared for the mine in Colorado and He suggested that an appropriate friction angle of 35 degrees should be used, when non-site-specific information was available of a gravel deposit. So for this analysis the 35° angle or the natural angle of repose is used to calculate the safety factor. The suggested number falls into the parameters listed in Rock Slopes: Design, Excavation and Stabilization, Publication No. FHWA-TS-89-045, Table 1 - Typical Soil and Rock Properties for Sand and Gravel, uniform grain size.

The material in the mine wall will be in-place sand and gravel and assumed to be cohesionless and having an assumed natural friction angle (Φ) of 35° (\approx 1.43:1). This is consistent with observations made along the north side of the permit area where a natural slopes falls into the Huerfano River bottom. Along this natural slope I measured the slope to be between 28.5 degrees and 37.2 degrees.

Using this information from the sections the safety factors for each slope was calculated using the 35° as the base. The safety factors are shown in the following table using the formula $FS = Tan\Phi \div Tan\theta$, where θ is the slope angle from the toe of the slope to the closest structure (permit line). I have also calculated the factor of Safety for the 2:1 and the 3:1 slopes.

| SLOPE EVALUATED | CALCULATED SLOPE ANGLE O | Factor of Safety for Natural slope angle Φ =35° |
|--------------------------------------------|--------------------------------|------------------------------------------------------|
| PROPOSED MINING SLOPE (½:1) | 63.5° | 0.35 |
| SLOPE FROM TOE TO CLOSEST STRUCTURE | 45° ⁽¹⁾ | 0.70 |
| TEMPORARY SETBACK 59 ' FOR SETBACK LINE | 25.0° | 1.50 |
| Temporary Slope 2h to 1V slope | 21.8° | 1.75 |
| FINAL SLOPE 3H TO 1V SLOPE | 15.9° | 2.46 |

 45° angle is calculated from 50 feet slope height and 50 feet horizontal from the toe of mine face to the permit line

As shown above, the safety factor for the closest structure is 0.70 when the mining face is mined near vertical. So by reason as mining moves away from the mine face the greater the safety factor would be. Instead of risking a failure and for safety reasons, Colorado Crushing, Inc. has chosen to use the method of slope stabilization described above and in the reclamation plan.

Cross section Key.

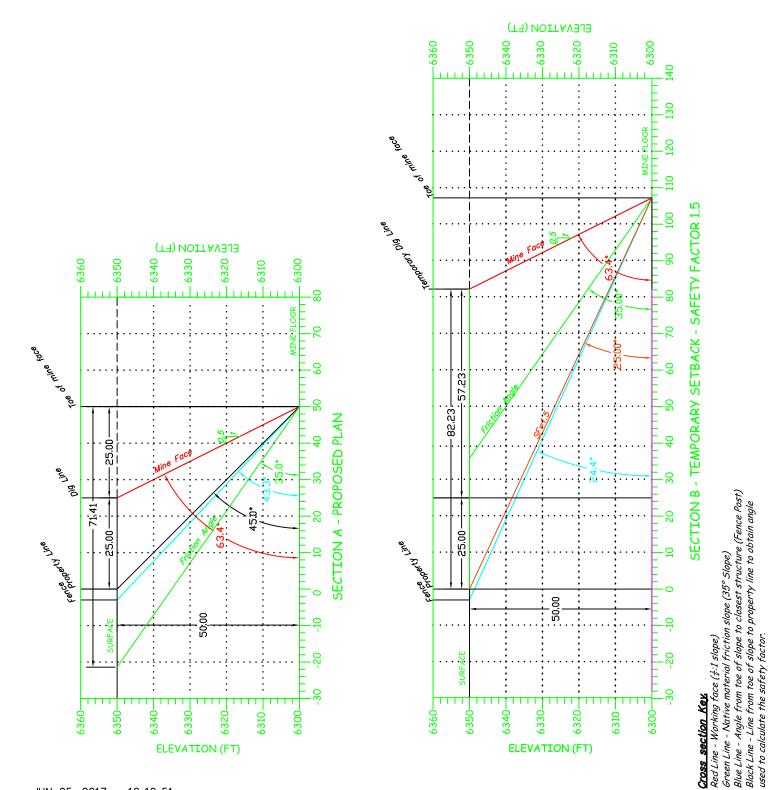
Red Line - Working face $(\frac{1}{2}:1 \text{ slope})$

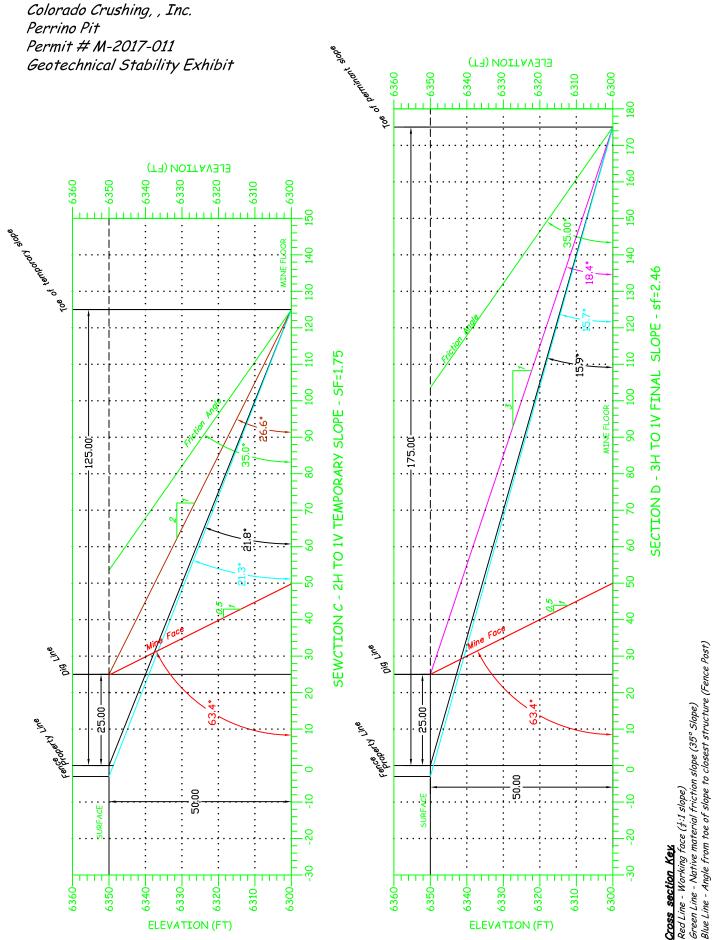
Green Line - Native material friction slope (35° Slope)

Blue Line - Angle from toe of slope to closest structure (fence post)

Black Line - Line from toe of slope to property line to obtain angle used to calculate the safety factor.

Colorado Crushing, , Inc. Perrino Pit Permit # M-2017-011 Geotechnical Stability Exhibit





JUN 05, 2017 - 10:20:48

Green Line - Native material friction slope (35° Slope) Blue Line - Angle from toe of slope to closest structure (Fence Post) Black Line - Line from toe of slope to property line to obtain angle used to calculate the safety factor.

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the SE¼NE¼, and parts of the NE¼NE¼, <u>and</u> SW¼NE¼ and NW¼NE¼, Section 2, Township 27 South, Range 68 West, of the Sixth Principal Meridian, Huerfano County, Colorado.

Containing <u>96.3481.40</u> acres more or less.

Entrance location: 37 43'4744'01.566".17" N, 104 58'2.83"57'30.126" W

LOCATION

This is an open pit mine located approximately 11.6 miles northwest of Walsenburg, Colorado on and 1.0 mile west of County Road 615614. From I-25 north of Walsenburg, Exit I-25 at Exit 56 - Red Rock Road, west 2.5 miles to SHWY 69. Then northwest on SHWY 69 for 7.955.00 miles to CR 614.1 (intersection coordinates 37d4243'15.2516.28", 104d5558'38.4036.41"). Then northeast 02.6 miles on CR 614.1 to a private road that CR 615 running eastwest above the Huerfano River, then east about 1.0.5 mile to the mine entrancecattle quard & gate. The entrance to the mine is at 37d43'47.1744'01.566"", 104d5758'30.1262.83". Mining access will be via this existing private road that is a owned by Edward Pinothe landowner to access his property from CR 614.1. It is currently 20 feet wide and the location is shown on the map exhibits supplied with this application. The used of the northeast entrance for the mining operations is via a use agreement between Colorado Crushing, Inc and Mr. & Mrs Pino. The prive roads on the mine site will be used also. Periodic grading will be necessary to keep the road in its present condition. It will remain after mining is complete for landowner access. Please refer to EXHIBIT B - VICINITY MAP for the property configuration and the relationships to surrounding geological features.

CURRENT CONDITIONS

Map Exhibit C shows the outline of the Affected Lands; the touching landowners; the 200 foot ownership; structures; current topography, and hydrologic features of the property. Surrounding property uses include rangeland on all sides. The land along the south side is used by the property owners as undeveloped open lands and to the north across the Huerfano River the property owners have irrigated grasslands. The Perrino's have a ranch yard and house on the northwest side of the permit area and own a school house on the access road east of the house area. At this time both structures will remain so we plan to establish a mining setback of 200 feet from the main structures in those areas.

Along the north side of the terrace is a near vertical face that exists along the transition area from the rangeland down to the river bottom. The area north of that is river bottom land. This face appears to have been created by past flood events on the Huerfano River. It is marked by erosion channels where water has run off the rangeland into the river bottom. No disturbance will take place north of the permit line in the river bottom or on the existing slope into the river.

The site is currently used as rangeland and consists of a gravel terrace paralleling the southern side of the Huerfano River valley. The usable material on this site ranges from 5 to 50+ feet deep.

MINING PLAN •••••••

The site is currently used as rangeland and consists of a gravel terrace paralleling the southern side of the Huerfano River valley. The usable materials on this site ranges from 5 to 50+ feet deep. The soil covering the gravel averages 0 to 5 inches deep with a layer of overburden ranging from 0 inches to 9 feet deep.

The permit boundary starts in the southwest corner at a point east of the north/south fence north of the gate. The fence lines on the west, south and east sides do not lie on the ownership lines, so they will be located and then a shallow ditch will be placed <u>around the mine area on the inside edge of the lines</u> to delineate the permit boundary to the top of the <u>bluff on the north</u>. The north line for the affected/permit line is the southern ROW line for the San Isabel Electric Association powerline. The powerline ROW is 25 feet each side of the power poles. The north line will be the center of the Huerfano River.

The existing on site road is gravel with graded runoff ditches on each side. It is 20 feet wide with a slight crown to allow for drainage. The haul road that exits on the site in the northeast corer is road will be maintained for use as a haul route and access for the property owners along it. Any runoff from the road will be retained on site and allowed to soak into the ground or evaporate. The road will be maintained for the life of the mine and a scale and scale house will be placed on the road near the access point. A Road Use Agreement with Mr. & Mrs. Pino requires that the road be improved, maintained during mining and remain when its need ends.

SOILS AND OVERBURDEN

The SOILS MAP in EXHIBIT I shows the soil types as delineated by the National Resource Conservation Service (NRCS) obtained from the internet WSS web site. The information contained in EXHIBIT I/J will provide background levels for the site as reclamation begins on the entire area.

There are 5 types of soils found on the site. These soils are typical throughout the Huerfano River valley. They have no unusual qualities and three of the soils will not be disturbed by mining.

The <u>singlethree</u> undisturbed soils <u>isare</u> designated as map units: 22-Glenberg sandy loam, 0 to 2% slopes, 24 Haverson clay loam, 0 to 3% slopes, and EL Ellicott Las Animas complex, 0 to 2% slopes. The other two, 77-Schamber-Midway complex, 3 to 25% slope and 92-Willowman, Complex 0 to 2% slopes cover the area to be mined. See the soils map in the NRCS report for how the soils are distributed on the permit area. More detail information including, the soils description and engineering qualities, can be found starting on page 25 in this application.

Based on the soils report and on site observations there are sufficient quantities of soil available to reclaim the disturbed lands to their present condition. The soils in this area when salvaged and replaced should be capable of growing vegetation consistent with what is The average depth of topsoil on the site according to the NRCS there now. report is 0 to 5 inches deep. Using 3.0 inches as the average we calculate there should be a minimum of $8,070 \text{ YD}^3$ of growth medium available for resoiling the disturbed area. In addition, there is from 0 inches to 9 feet of overburden on most of the site. Much of this overburden will be retained and used to rebuild slopes. If needed, it could be transformed into growth medium to supplement topsoil needs. Be assured that enough growth medium will be retained on the site to assure reclamation and revegetation is successful. The topsoil and overburden stockpiles will be located around the excavation (their approximate locations are shown on the MINING PLAN MAP) to reduce the haul distances when reclamation starts. If the soil and overburden stockpiles remain undisturbed for more than one year a cover crop of Western Wheatgrass at a rate of 2 pounds-pls/100 sq-ft will be planted on them.

MINING PLAN

Of the 96.3481.40 acres ± in the permit area a maximum of 90.2676.66acres \pm will be disturbed by the mining operation. Presented in this mining plan are detail plans for developing the mine under -2 different options. The first will be to create slopes around the site as shown on the Exhibit F-1 - Reclamation Plan Map. This option leaves the Perrino House Area and the School House Area as undisturbed islands in the mining area with 3h to 1v slopea on the 3 mined sides of the islands. and daylights out the slope along the north side. Option 2 would remove the Perrino House Area and the School House Area, and leaves a 3h to 1 v slope along the daylight the mine floor out the north side of the permit as shown on the EXHIBIT F-2 - RECLAMATION PLAN MAP. The existing slope along the north line will not be disturbed. A 25 foot setback will be maintained along the powerline in addition to the 25 feet side ROW so mining will not take place within 50 feet for the power poles. San Isabel Electric will be contacted prior to mining under the powerlines to work out the relocation of the powerline.

The method of mining discussed below will fit each option unless other wiseotherwise stated. Please use the RECLAMATION PLAN MAPS during review of the following text for the areas discussed. They show how the site would look, depending on what option is used.

Mining will begin in the southeast corner of the site and will continue, as shown on the Mining Plan Map, to the west and north. The

that time mining will progress to the west. As mining progresses thru the site the processing plant will be set near the open face to reduce the haul distance from the mine face.

This pit will be operated year-around by Colorado Crushing, Inc., weather permitting. There may be periods when the demands for material are slow and no mining will take place at which time the mine will become an *Intermediate Operation*. Stockpiles of material will be maintained on the site and as the need arises, it will be hauled to our project sites or sold to the public.

This will be a single stage operation, but the amount of disturbance will be limited to 20.0 acres or less at any-one-time. This will allow us to use approximately 15.0 acres as a processing plant/stockpile area and approximately 5.0 acres for the active mining area. As mining progresses around the property the bank slopes will be mined or shaped to the required grades where they are in their final location. This will reduce the amount of work that has to be done to reclaim the site. Reclamation will begin once we have enough room for the stockpiled material and the newly mined section, to be reclaimed so it will not have to be disturbed again.

Review of MAP EXHIBIT C-1 shows how we expect the site to look when mining is approximately 38% done. Note, the floor of the excavation is flat and the exterior slopes into the mined area are graded 3:1 where reclaimed, 2:1 when temporary grading is done and near vertical where mining is taking place. There is adequate overburden <u>and reject material</u> that can be used to backfill the exterior slopes if needed, even if Option 1 reclamation is followed.

We have developed two Options for the reclamation plans for this mine so in the future we will only need to file a Technical Revision to implement the changes for Option 2 if needed.

Mining equipment may include but is not limited to, front-end loaders, scrapers, bulldozers, dump trucks and a water truck. Processing equipment may include but is not limited to conveyors, crushers and screen plants. A scale and scale house as well as a shop and maintenance building may also be built at the mine during its life. No blasting will take place at this mine.

As much as possible, the surface drainage will be maintained in the same direction as it now exists. The proposed sloping plan for the excavated area should eliminate any concerns of erosion occurring on the site.

On a typical operation of this type we may use up to 3 ac-ft of water per year. Most of the water used for dust control will be used on haul roads. Please refer to **EXHIBIT G-WATER** for the discussion of how water will be used at the site and the source of said water.

There are no ditches crossing the site and no surface or subsurface water will be impacted by the mining operation. All interior pit slopes will be maintained with a pit-ward attitude so that historic drainage patterns can be maintained. This same slope management plan will prevent any offsite slides or other disruptions. Isolation berms or ditches will be constructed around the active mining area to prevent off site stormwater from contacting the disturbed area. All stormwater contacting the disturbed area will be retained on site and allowed to evaporate or soak into the underlying gravel. No U.S. Army Corps of Engineers 404 permit is necessary, as there are no water bodies on the site nor are there any wetland areas that will be disturbed by mining or reclamation.

MINING TIMETABLE

This estimated mining timetable is based on an average year and Colorado Crushing, Inc. expects a specific year to vary widely from the average. If there are changes in the mining timetable we will discuss the reasons for the change in the annual report that follows the change and modify it at that time.

| | | ACRES ± | | | |
|--------|--------------------|---------------------------|---------------------------|----------------------------------|---------------------------|
| OPTION | ESTIMATED YEARS | TOTAL AREA | TOTAL MINED | MINED 100% | MINED SLOPES |
| #1 | 28-38 | 96.34 81.40 | 83.71 73.54 | 55.97 <u>47.52</u> | 27.74 26.02 |
| #2 | 29-39 | 96.34 81.40 | 90.26 76.66 | 70.67 26.02 | 19.59 22.69 |

ESTIMATED MINING TIMETABLE

EXHIBIT D (CONT)

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EXHIBIT E

RECLAMATION PLAN AND TIMETABLE

MINING PLAN

RECLAMATION PLAN

The proposed future use of this site is to return it to it's existing use of rangeland. Mining will create a depression in the terrace deposit that leaves <u>an a amphitheater hole</u> in the Terrace <u>deposit by day lighting</u> out the north side, and creating a flat <u>bench floor in the excavated</u> <u>arearunning east west</u> approximately 3 feet above the <u>bank of the</u> Huerfano River. This makes the reclamation plan very simple in that the mined area will have to be shaped, resoiled and then revegetated with grass seed once mining is complete. Review of various options shown on the RECLAMATION PLAN MAPS in this application packet depicts how we believe the site will look once mining is complete.

As noted in the MINING PLAN we are proposing two options for reclaiming the site. The method used to reclaim each option are the same, the difference in being the amount of sloping needed and a revegetated area increase. In Option 1, the Perrino House Area and School House Area setback area will remain undisturbed and 3h to 1 v slope will extend to the floor of the mine to allow access to them as shown on MAP EXHIBIT F-1. In Option 2, the Perrino House Area and School House Area will be removed and those areas will be mined as shown on MAP EXHIBIT F-2. The amount of sloping, resoiling and revegetation will be different between the two options as shown in the Reclamation Timetable. Basically, in Option 2 the floor area will increase by approximately $\frac{8.26.45}{8.26.45}$ acres.

As mining progresses the slopes along working face of the mining area will be temporally graded 2:1 to stabilize them until it is time for resumption of mining or they are final graded for final reclamation. By creating the temporary slopes as mining progresses, we are reducing the amount of work necessary to reclaim the site if mining stopped prematurely.

Since the slopes around the perimeter of the mined area will <u>be</u> steeper <u>thenthan</u> their final slopes, only minor amounts of backfill slope work will be necessary as mining ends. Five Hundred feet of the working face will be left nearly vertical and will need to be cut/fill sloped if mining ended early. The excess overburden <u>and reject materails</u> being stockpiled will insure that adequate material is on site, to complete the sloping plan. This sloping plan will also insure, that if mining ceases before the resource is exhausted, only a minor amount of work would have to be done to finish reclamation on the disturbed area. The placement of the soil stockpiles around the perimeter of the mined area or direct placement on the final slopes as stripping takes place helps reduce the cost to reclaim the site if mining ended midway thru the site. It also means that

EXHIBIT E (CONT)

the topsoil, only has to be handled once and reclamation will run concurrent with mining.

There are sufficient amounts of topsoil on the site so the mined area can be resoiled to a maximum average depth of three (3) inches. Additional growth medium (processing fines) will be salvaged during processing to supplement the topsoil if needed. All topsoil encountered will be saved from the stripping process and the operator <u>will not</u> haul additional soils onto the site for revegetation. Existing soils in place have been capable of producing a sparse cover of grasses suitable for grazing purposes when not abused. The vegetation information was obtained from site visits and data provided in the vegetation information obtained from the NRCS soil survey web page. A copy if that report is in **EXHIBIT'S I and J** and describes the current cover in the terms of yearly production and will serve as background information as reclamation progresses. Our site specific investigations suggest the range quality is on the average side.

As outlined in the MINING PLAN, up to $\frac{90.2676.66}{2000}$ acres ± of the permitted area will be disturbed as a result of mining. Since there are no stages in the permit, reclamation will run concurrent with mining. The plan calls for having no more than 20.0 acres \pm disturbed at any-one-time. As mining progresses across the property some parts of the property will remain undisturbed while other areas will be either stripped, mined, partially reclaimed or totally reclaimed. The MINING PLAN MAP - EXHIBIT C-1 shows how the pit will look when approximately 38% is stripped, mined and partially reclaimed. The RECLAMATION PLAN MAPS - EXHIBIT F-1, & F-2 show how the area will look when reclamation is complete depending on what option is The area will be returned to at least it's present vegetative used. condition when reclamation is complete.

Careful analysis of the growth medium and salvaged soil will permit the operator to carry out a soil additive program and to monitor the prescribed seeding plan and to determine if the plan requires revision. Under normal weather conditions, an adequate moisture reserve will be present for establishment of the proposed seed mixture. No irrigation is planned for this site because we will be attempting to create a diverse dryland site that is non-water dependent. No revegetation will take place on access roads.

REVEGETATION PROGRAM

The revegetation program to be implemented by the Colorado Crushing, Inc. is detailed below. The topsoiling plan presented above and this revegetation program is devised after careful review of the existing soil conditions and present vegetation, both on the site and in the NRCS report. "Revegetation will be carried out in such a way so as to establish a

IRRIGATION

No irrigation is planned for the revegetated area in the pit. It makes the vegetation dependent on water and does not promote a vegetation cover that is diverse and capable of self regeneration.

RECLAMATION PERFORMANCE STANDARDS

The operator intends to mine the property in compliance with the Reclamation Performance Standards of Rule 3. Grading will be done to create a final topography that is compatible with the intended final land use. Most slope areas will be created by backfilling to the final slope rate. These slopes will be 3:1 and we will attempt to retain the present drainage pattern across the property. A sign that conforms to the requirements in Rule 3.1.12 (1996) is in place at the entrance to this facility.

The material used to create the slopes will be native overburden <u>or</u> <u>reject</u> material found on the site at this time. It will consist of sand, gravel, overburden and topsoil. The pit will be reclaimed so that a suitable grade for drainage exists that matches the premining pattern. All surface runoff from reclaimed areas will be directed into the <u>existing</u> <u>drainages around the sitemine area</u>.

All grading will be done in a manner to control erosion and to protect areas outside the affected lands from slides or other damage. All backfilling and grading will be completed as soon as feasible after mining is completed in any given area. All refuse will be hauled away or disposed of in a manner that will control unsightliness and protect the drainage system from pollution. There are no acid-forming or toxic materials involved in this operation. If petroleum products are stored at the site, it will be done as prescribed by applicable laws. Any storage tanks will be surrounded by a berm or be in self- contained facilities adequate to retain any fluid spilled should a tank rupture. In addition, there is adequate absorbent materials on site to contain any spills that would occur outside the containment structure. There are no drill or auger holes on the land. Maximum slopes will be within the limits set forth in the Rules and Regulations of the Board and will be capable of being traversed by machinery.

The operator does not expect prevailing hydrologic conditions to be disturbed. Colorado Crushing, Inc. will comply with applicable Colorado water laws and regulations (as the operator understands them) governing injury to existing water rights to minimize any disturbance which might occur to the prevailing hydrologic balance of the affected land and surrounding area and to the quality and quantity of water in surface and ground-water systems both during and after the mining operation and during A portion of the floor area will be complete, but the area under the plant site/stockpile area will still need work and grading of the final face area will be that last area to be reclaimed. Within one year after mining ends and the stockpiles have been removed, all resoiling and revegetation will be complete. The area will then be monitored for success of revegetation until it is released by the Board. The operator estimates that, this will happen 3 to 5 years after mining is completed.

If revegetation problems occur before release, an analysis of the site will be made and the area will be revegetated again as necessary. The seed mixture and rates may be revised as needed to complete reclamation, if a modification is required, the Division will be notified prior to making the change. This gives us the most flexibility to complete reclamation successfully.

| ••••••• Acres ± ••••••• | | | | | |
|-------------------------|-------|------------------|------------------------|------|-----------------------|
| Option | Years | Total | Revegetation | Road | Undisturbed |
| | | Area | | | |
| #1 | 3-5 | 96.34 | 82.11 | 1.80 | 12.34 3.20 |
| # - | 5 5 | <u>81.40</u> | 76.25 | 1.00 | 12.94 <u>5.20</u> |
| #2 | 3-5 | 96.34 | 88.88 80.02 | 1.38 | 6.08 0.00 |
| ΠΔ | | <u>81.40</u> | 00.00 <u>00.02</u> | 1.50 | 0.000 |
| | | | | | |

SOILS

SOILS INFORMATION

The following information was obtained from site observations and the basic soils and vegetation information found thru the USDA's National Soils information page and the Soil Survey of Huerfano County. The following soils information downloaded from the site is made part of this application. Soil units are shown on the USDA map, reproduced on page 28 following this text. The photo map shows the surrounding vegetation features and soil types. This site lies along a east/west trending terrace deposit of gravel south of the Huerfano River. There are 5 soils types found on the mine site, of these 5 only 2 will be disturbed by mining. Underling the soils is a layer of overburden varying from 4 to 60 inches deep and a layer of gravelly sand that is 12 to 50 plus feet thick. The 22 Glenberg sandy loam, 24 Haverson clay loam and EL-Ellicott Las Animas complex soils cover approximately 13.19 acres and are in the river bottom that will not be mined.

The **77**-Schamber-Midway complex, 3 to 25% slopes soil series covers approximately 10.4 acres or 10.6% of the mine area. The general soils description indicates that this soil is deep, and excessively drained. The upper most horizon is 0 to 5 inches of deep brown gravelly loamy sand. Underlaying this top most horizon is an additional 0 to 9+ feet or overburden and 40 to 50 foot thick layer of very gravely sand. We believe this material is the same type that underlies the Willowman soils. The northern end of this soil runs along the transition area between the range level and the river bottom. Much of the area has no soil since it is the open face along the river.

The 92-Willowman gravelly sandy loam, 3 to 8% slopes soil series covers approximately 72.6 acres or 75% of the mine area. The general soils description indicates that this soil is deep, somewhat well drained soil on terraces. The upper most horizon, is a 0 to 5 inches deep, brown gravelly fine sandy loam and is a slightly sticky, slightly plastic and mildly alkali soil that is usable as topsoil. UnderlayingUnderlying this top-most horizon is an additional 3 to 5 feet thick layer of gravelly sandy loam overburden material inter bedded with calcareous layers. This overburden layer will be salvaged for use as backfill material on the mine's perimeter. EXHIBIT J VEGETATION INFORMATION (cont)

grasses and 0 to 5 percent cactus and sage brush. This area has a good grass cover because the site has not been grazed for guite some time.

The species of vegetation found on the site are Blue grama, Green needlegrass, Western Wheatgrass, Needleandthread, Little blue stem, and Sideoats grama. These grass species makeup 85% to 90%, by weight, of the vegetation found on the site.

<u>Slope Face Areas</u> This area is the exposed face along the transitions from the upper bench to the river bottom. This face shows extensive erosion that is due to flooding and bank cutting from past flood events on the Huerfano River. Weeds, grasses, and brush species cover this face. — This area has no topsoil on it and the vegetation has more cactus and sage brush then the surrounding rangeland. Average annual production is approximately 300 pounds or less per acre. The plant community is 10 to 40 percent grasses and 20 to 90 percent weeds, cactus and brush. Western Wheatgrass, Sand dropseed, Indian rice grass, Sideoats grama, general weeds and various species of cactus and brush. Ground cover is sparse in this area in comparison with the undisturbed areas on the south end of the site.

<u>**River Bottom**</u> This area is on the northern end of the permit area and covers from the base of the slope to the property line along the Huerfano River. None of this area will be disturbed by mining. The area is covered by river area, Cottonwood trees, grasses and brush.