

Environment, Inc.

LARRY E. O'BRIAN
FOUNDER

STEVEN L. O'BRIAN
PRESIDENT

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

August 14, 2012

Ms. TC Wait
Division of Reclamation, Mining & Safety
Minerals Section
1313 Sherman St, # 215
Denver, CO 80203

Dear TC;

RE: Tamrock Gravel LLC. - Shot Rock Pit
Permit # M-2012-023 - Adequacy Review

On behalf of our client Tamrock Gravel LLC., I will respond to your July 27, 2012 adequacy review letter, as needed, in the order and number format presented in that document.

6.4.3 Exhibit C- Pre-Mining and Mining Plan Map(s) of Affected Lands

- Exhibit C shows two areas labeled as "old mine" locations. Please provide more detail on these two mines, such as approximate age, commodity, extent (including any underground workings), reclamation work, and previously disturbed areas relating to past mine activities.

We do not have much information on these old mines. I talked to an adjoining landowner and she said she remembers her husband and father saying the mine in the southwest corner dates to the 1930's and the material was used on WPA projects in the area. The material was dumped into a chute, that ran to the valley floor where the material was picked up and deliver to the projects. The talus below the mine is what remains of the chute and rock taken from the mine. The talus area will not be re-disturbed by the mining activities so will not be reclaimed. It has no underground working that we know of, and has not had any activity since the 1950's. Since operations ended before 1976 this is a pre law area so only the redisturbed areas have to be reclaimed. It appears that no reclamation was done as the stable working face is left vertical, the area has no growth medium and appears to be naturally reclaimed. Since mining will begin on the existing mine face and move to the east no reclamation will be needed on the areas outside the permit area.

We think this mine dates back 10 years or more but over the past few years unprocessed rock has been removed for use on the landowners property to armor ravine crossing or protect banks and roads from erosion. There are no underground workings as it is a shallow holed in the caprock. It may be backfilled with overburden when the first areas are stripped so it can be used

for stockpile area in the Plant Site. If that happens the fill material be removed later when this area is mined and reclaimed.

- Exhibit C-1: Please show the location of the topsoil stockpiles.

I forgot to add them to the map. Attached is a corrected copy showing the approximately location of growth medium piles around the active mine area. I also added a label for the raw material haul route (dashed brown line).

6.4.5 Exhibit E- Reclamation Plan

- The reclamation plan needs to include grading or backfilling all remaining slopes to a 3:1 or flatter grade. If benching will be used for final slopes, then an overall grade of 3:1 should be achieved. Both of the options discussed for reclamation include leaving a remaining rock face of 25 to 70 feet high. To be in compliance with Rule 3.5.1, the final grade should be compatible with the surrounding topography and shall be done in a manner to control erosion and consistent with the post-mining land use. In the Division's experience, a final slope grade of 3:1 or flatter is required.

Not to nitpick but I think you mean Rule 3.1.5. The maximum height we expect the highwall to be is 30 feet not 70 feet. The sloping rule (3.1.5(7)) only requires 3:1 slope in the area of a lake bank from 5 foot above to 10 feet below water, all other slopes can be 2:1. This means that in general any dryland slopes can be graded 2:1 or less unless they are around a lake. It also notes that the "*Maximum slopes and slope combination shall be compatible with the surrounding conditions and selected end use.*" The key words in this section is compatible with surrounding conditions. When I visited the site I observed that there were many slopes greater than 2:1 and some that were near vertical on the site and on surrounding lands. In the area where this caprock is exposed it shows as a rock face along the tops of ridges and canons where natural erosion had cut thru it. In the old mine on the SW corner there the face of the rock has been exposed and show little effects from weathering. This natural occurrence of the vertical rock faces should suggest that leaving the face as described will be compatible with surrounding conditions.

The cost to prepare a Geotechnical report on the rock mechanics and address the stability of the higher mined face forces us to bench the face at this time. Some time in the future when we have the rock exposed we may choose to prepare the necessary study showing that the vertical rock face will be stable. If that is done a Technical Revision will be filed asking for a slope change. In lieu of doing the study Tamrock Gravel LLC. Will commit to mining a bench into the working face so the overall slope is 2:1.

6.4.6 Exhibit F- Reclamation Plan Map

- Please revise the reclamation plan maps and cross sections to reflect the comments in 6.4.5 above pertaining to final slope grades. All final slope grades for mined areas should be 3:1 or flatter.

I have revised the cross section on Figure F-1 to show two probable scenarios. In A-A' the reclaimed face height is 30 feet high, the first bench will be 15 feet below the top and will be 30 feet wide, the second bench height will be 15 feet high. In B-B' the reclaimed face height is 20 feet high, the first bench will be 10 feet below the top and will be 20 feet wide, the second bench height will be 10 feet high. The Reclamation Plan Maps have been revised showing a benched rock face.

6.4.19 Exhibit S- Permanent Man-made Structures

- The application indicates that an agreement with Pioneer for the gasline on east side is in progress. Please forward an official agreement to DRMS for this and all other roads, fences, utilities and structures within 200 feet of the proposed permit boundary.

Attached is a copy of the Structure Agreement between Tamrock Gravel LLC. and Pioneer Natural Resources USA, Inc. for the gasline. The agreement for the fences and road, the only other structures within 200 feet was included in Exhibit S at the time of submittal.

6.5 Geotechnical Stability Exhibit

- Not required if reclaimed slopes will be graded to a 3:1 or flatter final grade. If steeper slopes or benching will be used, then a stability analysis will be required

We may choose to exercise this option once there is income coming in and more rock is exposed.

LIST OF ATTACHMENTS TO THIS RESPONSE:

Exhibit C1 - Mining Plan Map (revised)
Map Exhibit F - Option A (revised)
Pioneer Structure agreement

Figure F-1 Cross Sections (revised)
Map Exhibit F - Option B (revised)

I hope these responses have addressed the adequacy questions you had. I will place a copy of this packet with the Las Animas County Clerks' office as required. If you have any questions please call me.

Sincerely,
Environment, Inc.



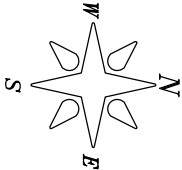
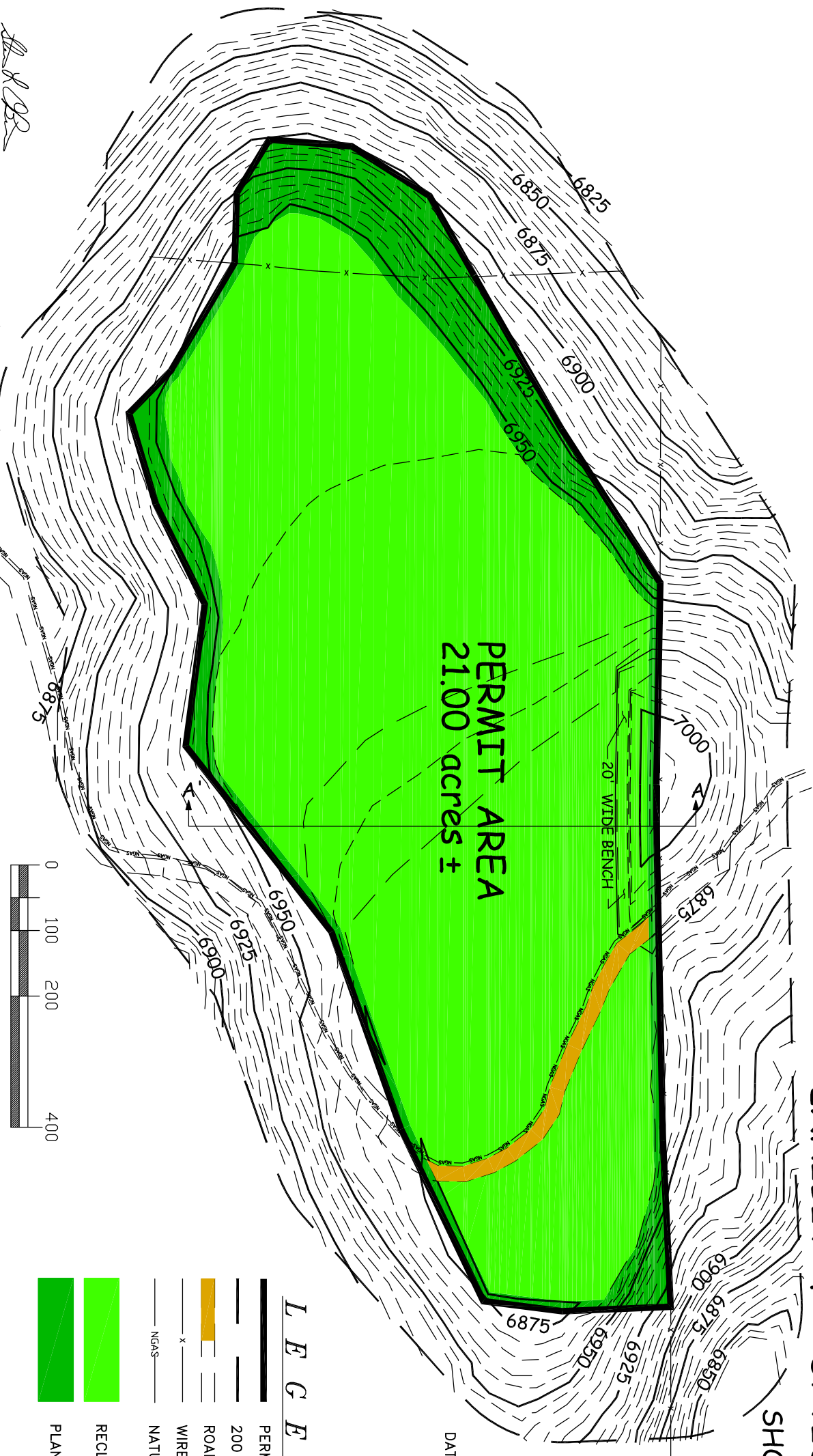
Stevan L. O'Brian
President

cc Tamrock Gravel LLC.
Las Animas County Clerk
file

enclosures

TAMROCK GRAVEL COMPANY
RECLAMATION PLAN MAP
EXHIBIT F - OPTION A

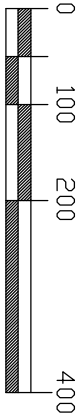
SHOT ROCK PIT



DATE: AUG 10, 2012 - 13:12:15

LEGEND

- PERMIT LINE/AFFECTED LANDS
- 200 FOOT LINE
- ROADS
- WIRE FENCE
- NATURAL GAS LINE
- RECLAIMED
- PLANT SITE



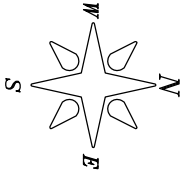
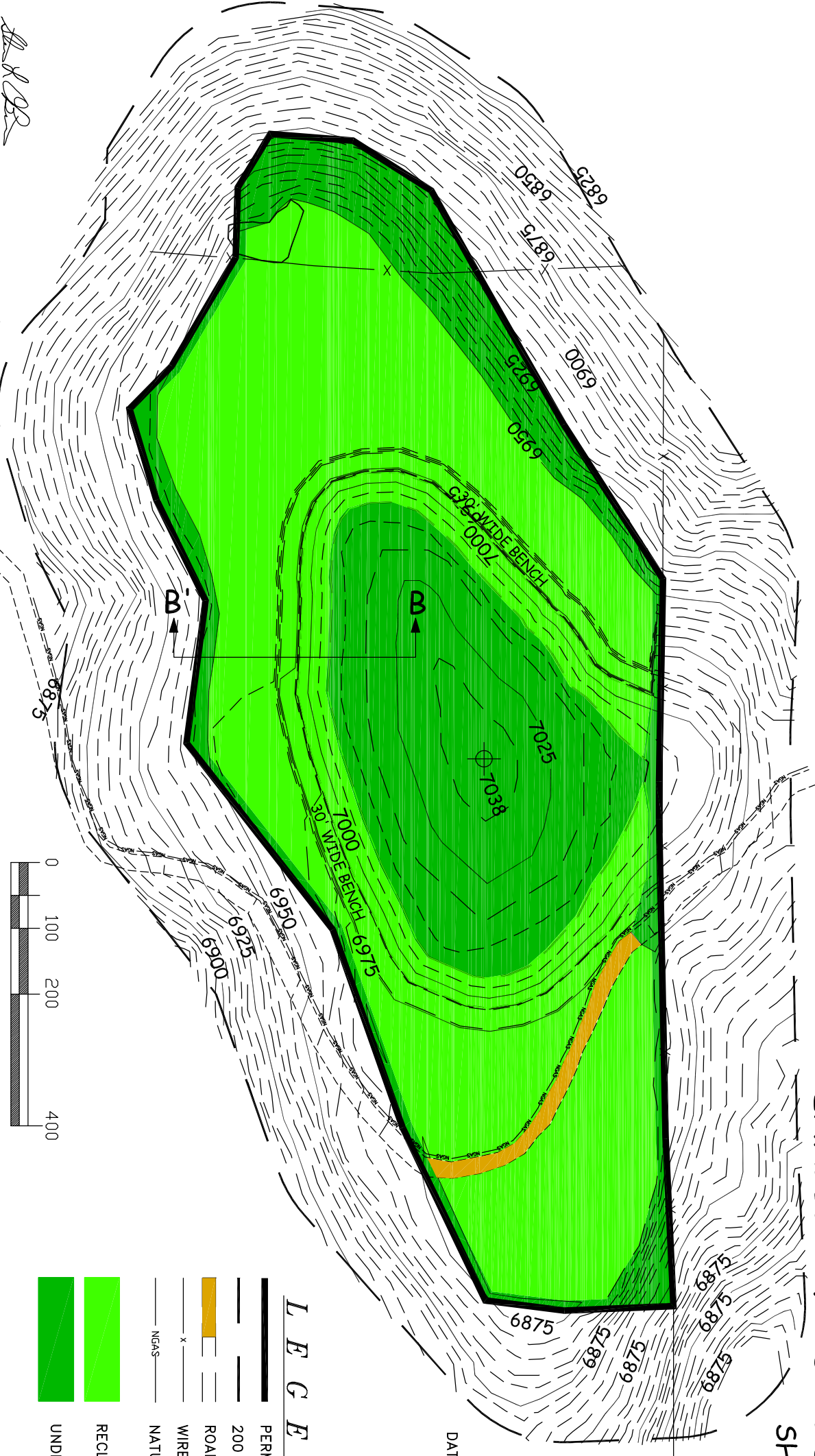
SCALE 1"=200'
CONTOUR INTERVAL: 5 FEET

PREPARED BY: *ENVIRONMENT, INC.*
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423-7297

PART OF THE NE/4SE/4 & NW/4SE/4, SECTION 3,
TOWNSHIP 33 SOUTH, RANGE 65 WEST, 6TH P.M.,
LAS ANIMAS COUNTY, COLORADO

TAMROCK GRAVEL COMPANY
RECLAMATION PLAN MAP
EXHIBIT F - OPTION B

SHOT ROCK PIT



DATE: AUG 10, 2012 - 13:17:15

LEGEND

- PERMIT LINE/AFFECTED LANDS
- 200 FOOT LINE
- ROADS
- WIRE FENCE
- NATURAL GAS LINE
- RECLAIMED
- UNDISTURBED



SCALE 1"=200'
CONTOUR INTERVAL: 5 FEET

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PART OF THE NE/4SE/4 & NW/4SE/4, SECTION 3,
TOWNSHIP 33 SOUTH, RANGE 65 WEST, 6TH P.M.,
LAS ANIMAS COUNTY, COLORADO

OWNERSHIP WITHIN 200 FEET
OF AFFECTED LANDS

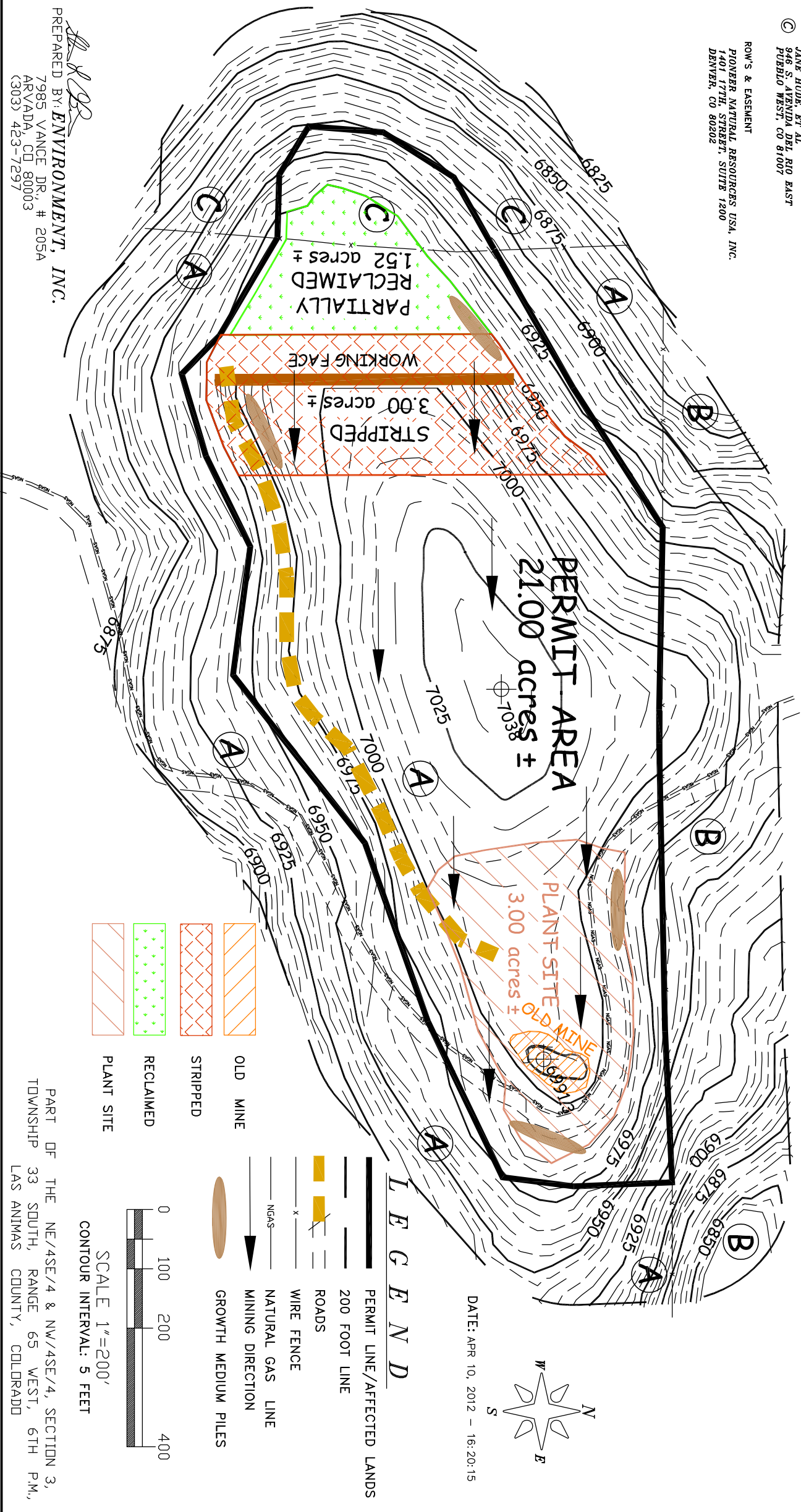
- ① BRIAN TAMBURELLI
404 WALNUT
TRINIDAD, CO 81082
- ② PATRICIA ANN TAMBURELLI
P.O. BOX 73
BOY CARBO, CO 81024
- ③ JANE HUDE, ET AL
946 S. AVENIDA DEL RIO EAST
PUEBLO WEST, CO 81007

STRUCTURES WITHIN 200 FEET
OF AFFECTED LANDS

- BRIAN TAMBURELLI
2 - 3 STRAND WIRE FENCES, ACCESS ROAD
- PIONEER NATURAL RESOURCES USA, INC.
6" - NATURAL GAS COLLECTOR LINE

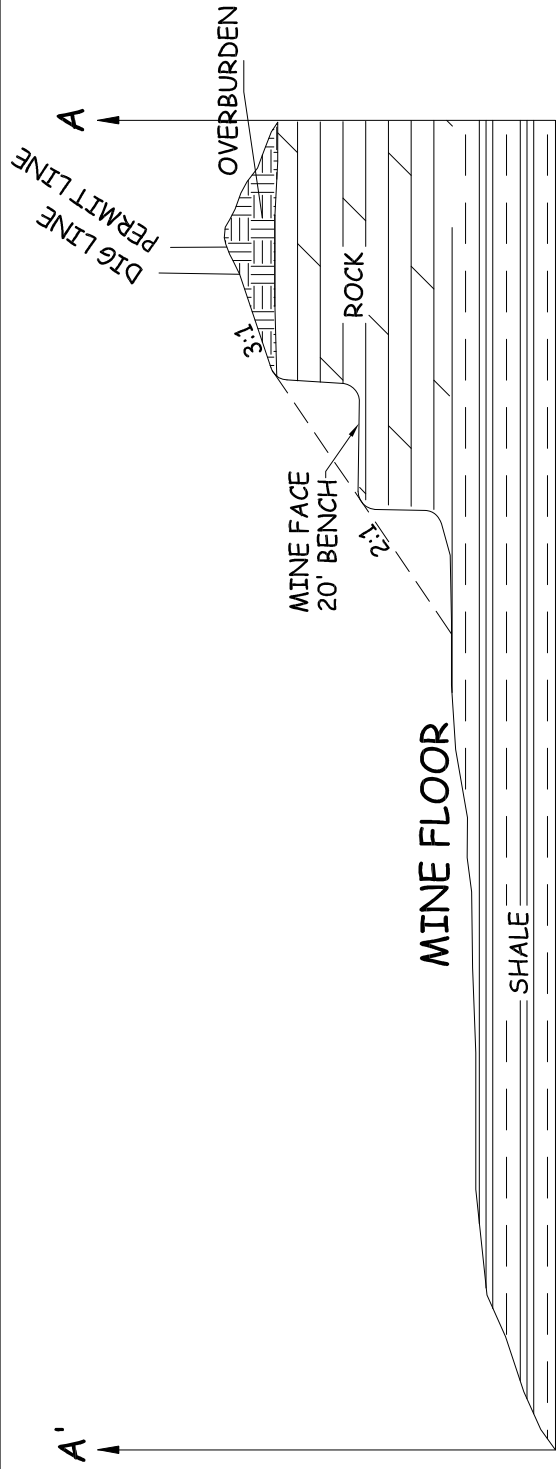
ROW'S & EASEMENT
PIONEER NATURAL RESOURCES USA, INC.
1401 17TH, STREET, SUITE 1200
DENVER, CO 80202

TAMROCK GRAVEL COMPANY MINING PLAN MAP - EXHIBIT C-1 SHOT ROCK PIT

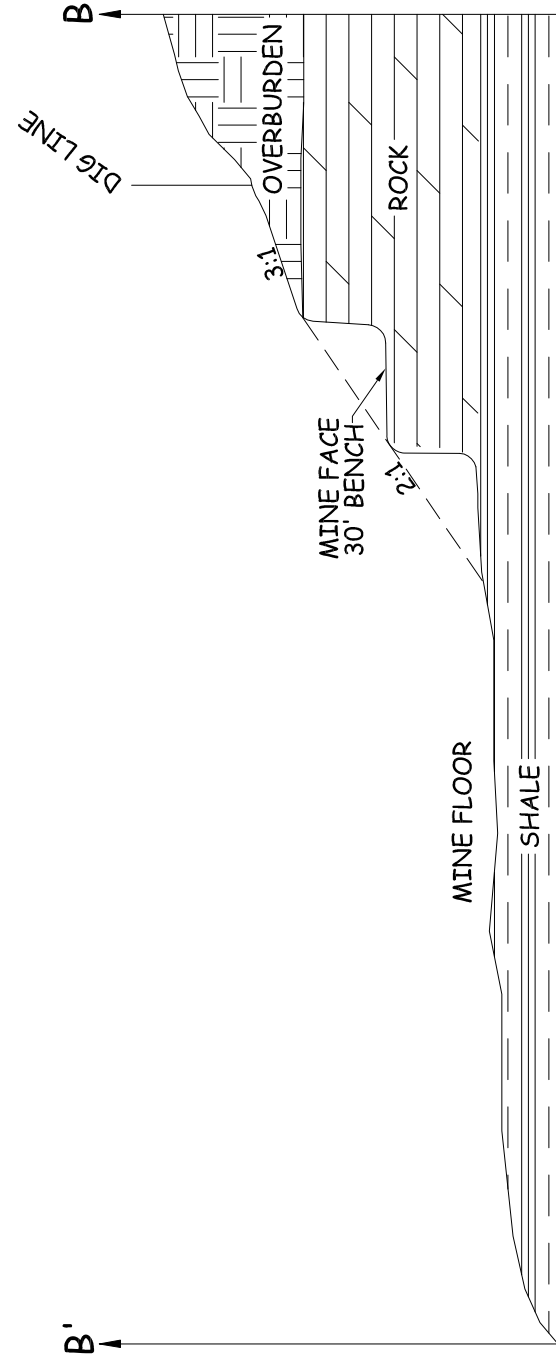


PREPARED BY: *ENVIRONMENT, INC.*
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PART OF THE NE/4SE/4 & NW/4SE/4, SECTION 3,
TOWNSHIP 33 SOUTH, RANGE 65 WEST, 6TH P.M.,
LAS ANIMAS COUNTY, COLORADO



OPTION A



OPTION B

FIGURE F-1
CROSS SECTIONS
AUG 10, 2012 - 12:55:17



May 9, 2012

Pioneer Natural Resources USA, Inc.
1401 17th St, Suite 1200
Denver, CO 80202

**RE: Damage Reimbursement Agreement
Tamrock Gravel LLC. - Shot Rock Pit**

Dear Pioneer Natural Resources USA, Inc.:

Tamrock Gravel LLC., is making an application for a Colorado Mined Land Reclamation (MLR) permit to extract construction materials from a tract of land located in parts of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$ Parts of Section 3, T-33-S, R-65-W, 6th Prime Meridian, Las Animas County, Colorado.

State MLR law requires the permit applicant to agree to reimburse the owner of any permanent man-made structure(s) within 200 feet of the mining area for damage done to the structure(s) as a result of the permitted operation. We believe Pioneer Natural Resources USA, Inc. own the structure(s) listed below. Tamrock Gravel LLC. agrees to reimburse Pioneer Natural Resources USA, Inc. for any damage done to the structure(s) listed below as a result of the proposed mining operation. Your acknowledging signature and a notary seal in the spaces provided below should satisfy the MLR law reimbursement requirement.

Please return this agreement within 30 days of receiving it if at all possible. Enclosed is a stamped addressed envelope so you can return the executed agreement to us. We have also enclosed a second copy of this letter that you should keep for your files. Thank you for your cooperation.

Sincerely,

Brent Tamburelli
Manager

cc: Division of Reclamation, Mining & Safety
file

Structure list:
6" Natural gas collection line

ACKNOWLEDGED BY:
Pioneer Natural Resources USA, Inc.

Title Attorney-in-fact

STATE OF CO)
) ss.
COUNTY OF Denver)

The forgoing was acknowledged, subscribed
and sworn to before me, a Notary Public,
this 24 day of May, 2012.

By Gari Ann Waite

Gari Ann Waite
Notary Public

My commission expires: 2-13-13

TAMROCK GRAVEL
137 E. PLUM ST. - TRINIDAD, CO 81082
PHONE 719-846-3034 - FAX: 719-846-7842

