



**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY**  
**MINERALS PROGRAM INSPECTION REPORT**  
**PHONE: (303) 866-3567**

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

<b>MINE NAME:</b> Brann Pit	<b>MINE/PROSPECTING ID#:</b> M-1984-136	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Prowers
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> May 29, 2014	<b>INSP. TIME:</b> 13:25
<b>OPERATOR:</b> Prowers County	<b>OPERATOR REPRESENTATIVE:</b> Mark Dorenkamp	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$0.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> <i>Amy Eschberger</i>	<b>SIGNATURE DATE:</b> July 14, 2014

**GENERAL INSPECTION TOPICS**

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>NA</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(SB) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

## **OBSERVATIONS**

This was a normal monitoring inspection of the Brann Pit (File No. M-1984-136) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Mark Dorenkamp of Prowers County was present for the inspection. The site is located approximately 24 miles south and 7 miles west of Lamar, Colorado in Prowers County, on land owned by George W. Brann. The site is adjacent to Co Rd 16 (Photo 1), located approximately 0.8 miles north of Co Rd F.

At the time of inspection, it was clear and warm, and the ground was dry. A permit sign was posted along Co Rd 16 (Photo 2). The permit area was well defined by Co Rd 16 to the west and an agricultural fence to the east. The eastern portion of the site consists of a long west-facing highwall approximately 20-25 feet in height with near vertical slopes (Photos 3 and 4). One material stockpile is present at the south end of the permit area and appears to be stable (Photo 5). A pile of large rocks is present near the center of the permit area (Photo 6).

This is a 110c operation permitted for 9.9 acres to mine rock and gravel for County road maintenance. This operation involved removing a portion of a hill along Co Rd 16. An area of 0.5 acres located at the far northern end of the permit area was previously mined. Mining under the current operation started at the southernmost end of this previously disturbed area and progressed southward.

No mining equipment was present during the inspection. Mr. Dorenkamp indicated that no mining activities have occurred in several years. A Technical Revision was approved on November 22, 2010 that allowed for intermittent operation of the site. However, the letter received from the Operator on October 22, 2010 clearly requests temporary cessation. Under intermittent status, mining activity must occur at the site every year. If the site is in temporary cessation, which seems to be the case, then the initial 5-year period would end in November 2015. At that time, an additional 5 year period of temporary cessation may only be considered if the Operator can sufficiently explain why no mining activities or reclamation will occur at the site and demonstrate a continued commitment to conduct mining operations by the end of the period as required by Rule 1.13.5(3). Unless the Operator intends to request an additional 5-year period of temporary cessation, the Operator shall either initialize final reclamation or continue mining activities at the site within the next year. The discrepancy in Division records considering the TR that was approved on November 22, 2010 has now been corrected to reflect that it was a request for temporary cessation, not intermittent status.

According to the approved reclamation plan and map (see enclosed), reclamation of this site would include moving the current Co Rd 16 to the pit area, thus straightening out a curve in the road. The pit would be leveled off to match the existing road grade and be made the new Co Rd 16. The old road would remain per the landowner's request to use for ranch access. During the inspection, Mr. Dorenkamp indicated that straightening out the road is no longer part of the reclamation plan for the site. If this is the case, then the Operator will need to submit a Technical Revision that includes an updated reclamation plan and reclamation plan map.

Native grasses and forbs have volunteered throughout the site (Photo 7). Less vegetative cover is present in the northern half of the site (Photo 8) where some minor erosion damage was observed. A gully appears to be forming in this portion of the permit area near the road (Photo 9). This gully seems to have been filled in naturally with tumbleweeds, but action by the Operator may be required to help stabilize this area from further erosion damage. Rule 3.1.6(3) states that the Operator shall effectively control erosion of all surface areas of the affected land. The Division strongly encourages the Operator to monitor erosion in the permit area and to work to prevent and repair erosion damage in a diligent manner so that it does not become a problem at this site.

According to the approved reclamation plan, the highwall will be sloped at a minimum of 2H:1V. To achieve this, the Operator may need to consult with the landowner about moving the eastern fence to allow for more room to maneuver equipment. Because the fence is not part of the permit area, this does not need to be included in the updated reclamation plan. However, the Operator shall be careful to not disturb area outside of the permit boundary.

Overall, the site appears to be stable.

## **PHOTOGRAPHS**



**Photo 1.** View looking south from central portion of site, showing Co Rd 16 located just west of the site.



**Photo 2.** View of permit sign posted along Co Rd 16.



**Photo 3.** View of west-facing highwall located along eastern side of permit area.





**Photo 4.** View of west-facing highwall located along eastern side of permit area (taken from further north than Photo 3).



**Photo 5.** View of material stockpile located at far southern end of site.



**Photo 6.** View of pile of large rocks located in central portion of site.





**Photo 7.** View looking north from central portion of site, showing native grasses and forbs that have volunteered in the permit area.



**Photo 8.** View looking north from northern portion of site, showing less vegetative cover in this area.



**Photo 9.** View of gully located in northern portion of site, near the road.

**Inspection Contact Address**

Mark Dorenkamp  
Prowers County  
109 E. Sherman St.  
Lamar, CO 81052

Enclosure:    Approved reclamation plan and reclamation plan map

CC:            Tom Kaldenbach, DRMS

## EXHIBIT E

### RECLAMATION PLAN

The Brann Pit has been disturbed from previous mining operations. The total disturbance is around 1/2 acre. Future operations will disturb 9.4 acres. The access road is County Road 16. All topsoil stockpiles will be protected from erosion by a seeding of native grasses.

After mining, the pit area will be levelled to the level of the existing county road grade and be made the new County Road 16. Topsoil will be placed over the site as mining is completed. There will be no haul road to reclaim. Topsoil will be placed over the area adjacent the new road to a depth of 20 inches. Topsoil being replaced in the mined area will be 15 to 20 inches deep. The reason for reduction of topsoil depth from the 24 inches that is available is a result of reclaiming the 1/2 acre previously disturbed. The topsoil was not saved on the site mined in the past.

Per landowner request, the old County Road 16 will not be reclaimed. It will be used as a range access road.

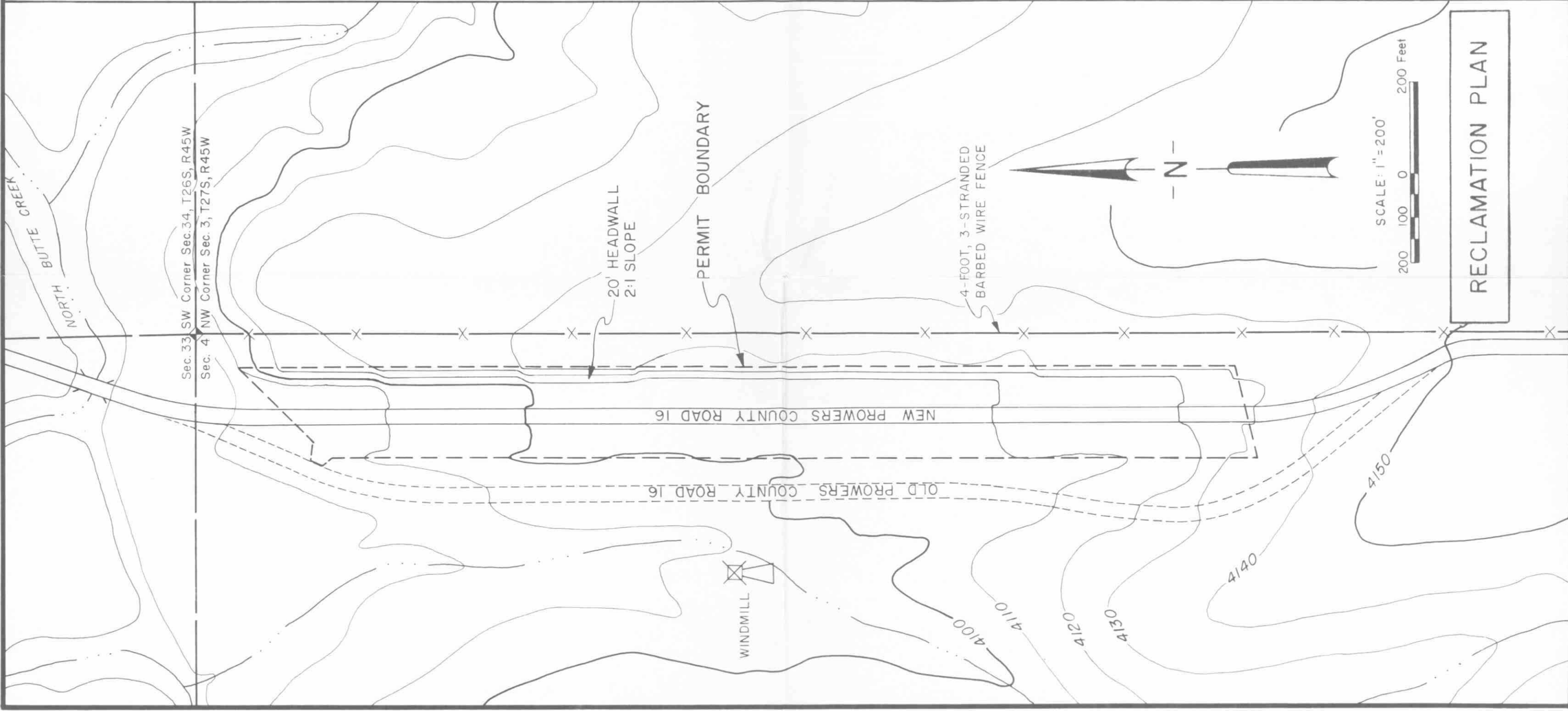
The following seed mix will be used in reclamation.

	*Rate - lbs. PLS/ <u>acre</u>	Seeds/ <u>ft.<sup>2</sup></u>	Percent of <u>mix/ft.<sup>2</sup></u>
Buffalograss	6.7	7	14.5
Blue grama grass	0.7	12	25
Alkali sacaton	0.2	9	18.5
Little bluestem	1.2	6	12.5
Sandberg bluegrass	0.4	8	17
Cicer milkvetch	<u>1.8</u>	<u>6</u>	<u>12.5</u>
	11.0	48	100.0

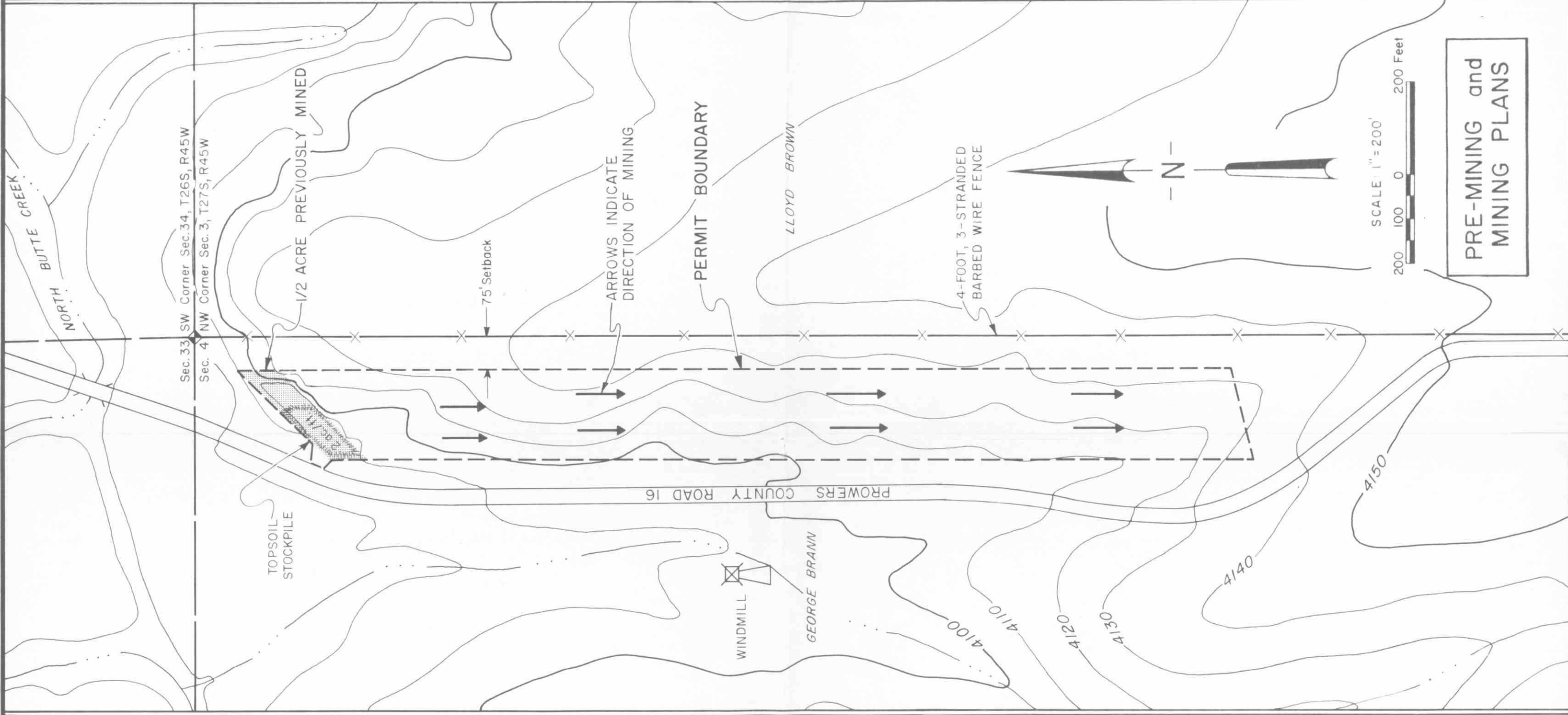
\*Drilled, if broadcast double the amount

The seeding amounts listed are generally on the high end due to no irrigation being used in reclamation. Seeding time will be early winter when the soil is dry and cold and the seeds will remain dormant until they are able to take advantage of spring moisture. Mulching with weed-free straw, manure, or grass hay will be used to protect the soil surface following seeding. A soil analysis will be done by Prowers County at the time of topsoil placement. A composite sample will be analyzed for amendment recommendation.

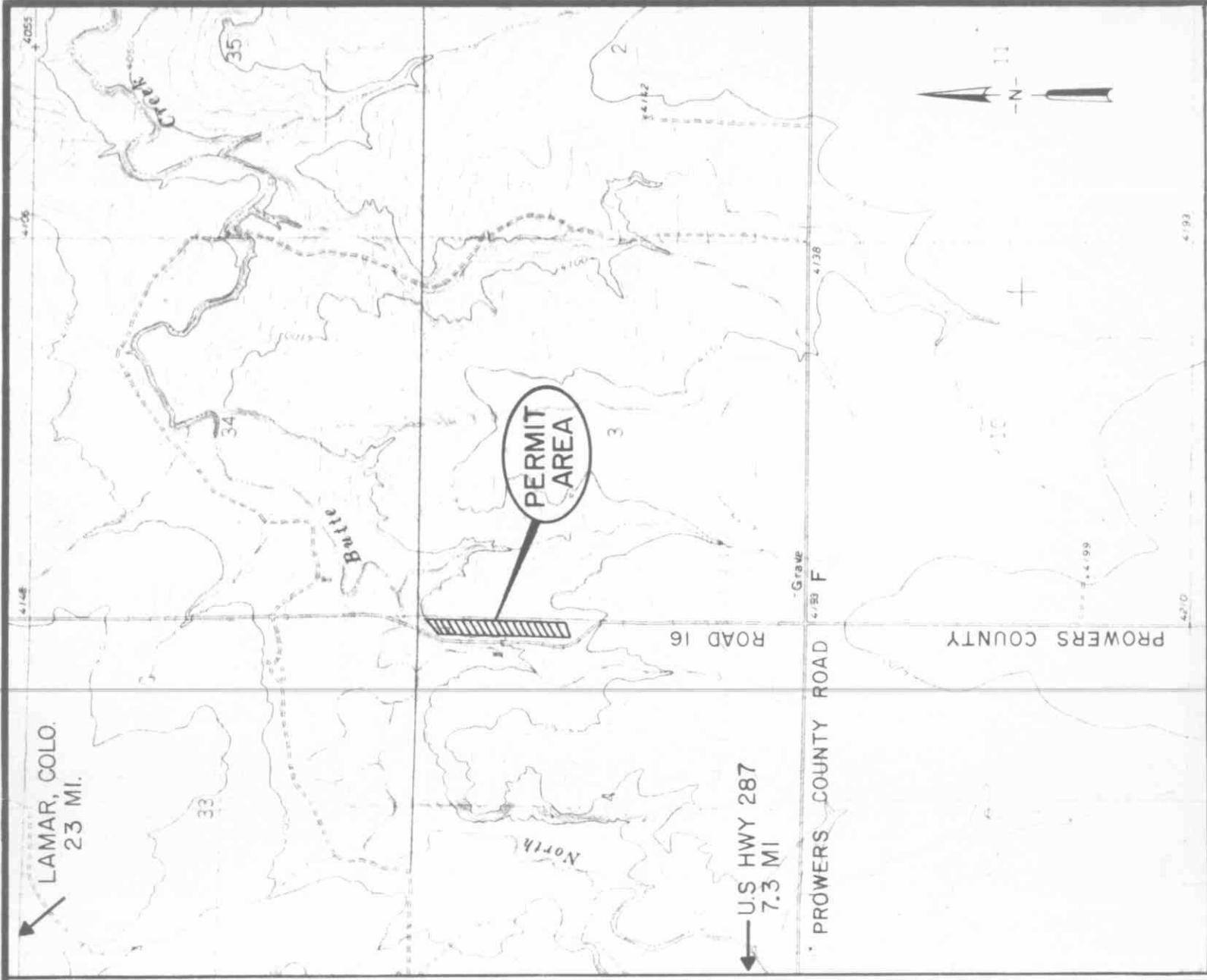




RECLAMATION PLAN



PRE-MINING and MINING PLANS



VICINITY MAP

RECEIVED  
AUG 03 1984  
MINED LAND RECLAMATION DIVISION  
Colo. Dept. of Natural Resources

LEGAL DESCRIPTION  
E 1/2 NE 1/4, Sec. 4, T27S, R45W, of the 6th P.M., Prowers County, Colorado.

CONTOUR INTERVAL = 10'

Permit Number: *M1984-136*  
Class: ☒ Permit  
Section/Exhibit:   
Class: ☐ Revision  
Type/Seq:   
Class: ☐ Report ☐ Hydro ☐ General  
Doc Type:   
☐ Application (Coal only) ☐ Bond ☐ Enforcement ☐ Inspection

<b>Prowers County</b>	
<b>Brann Pit</b>	
<b>Pre-Mining, Mining &amp; Reclamation Plans</b>	
RINDAHL & ASSOCIATES 2305 S. Syracuse Way Denver, Colorado 80231 303/696-6846	DATE: 3-7-84 JOB NO: 83-1206 DRAWN BY: RJA CHECKED BY: GFR AS SHOWN: AS SHEETS: 1 OF 1