This information provided in this Exhibit is intended to satisfy the requirements outlined in Section 6.4.5 of the Colorado Mined Land Reclamation Board Construction Material Rules and Regulations: The proposed mining and reclamation plan focuses on minimizing the ecological impacts of mining, minimizing the length of time of impact, and maximizing long-term benefits.

<u>Phase 1</u> – mined in year one and reclaimed concurrently.

Phase 2 – mined in year two and reclaimed concurrently.

Phase 3 – mined in year three and four reclaimed concurrently.

Phase 4 – mined in year five and reclaimed concurrently.

(a) A description of the type(s) of reclamation the Operator proposes to achieve in the reclamation of the affected land, why each was chosen, the amount of acreage accorded to each, and a general discussion of methods of reclamation as related to the mechanics of earthmoving;

The mined area will be reclaimed to 2-feet below existing grade and tie into existing grade on the perimeter of the mine. The mine will include a 100-foot buffer around the perimeter of the excavation. The mine was excavated down at a 2 to1 horizontal to vertical slope on the east, west and south side, along with feathering grades back into existing on the north by Weld County Road 40. This excavation will be amended and planted with crops or dryland native grasses. Historic drainage patterns will be maintained. Refer to Exhibit F for the acreages and additional details.

Earthmoving

The soil amendment will be placed by a loader and generally graded with a blade. All grading will be done in a manner that controls erosion and siltation of the affected lands, to protect areas outside of the affected land from slides and other damage. In addition, all backfilling and grading will be completed as soon as feasible after the mining process. All disturbed areas will be regraded and smoothed to a finished grade that is suitable for revegetation of the final land use. See attached mining plan for historic and proposed grades.

As noted previously, the area will be reclaimed as mining commences. Finish grading, topsoil/soil amendment placement and seeding will occur once the resource is completely removed per phase. A typical cross-section of the excavation is included on the Reclamation Plan Map.

- (b) A comparison of the proposed post-mining land use to other land uses in the vicinity and to adopted state and local land use plans and programs. Once the site is reclaimed it can returned to being farmed.
- (c) A description of how the Reclamation Plan will be implemented to meet each applicable requirement of Section 3.1.

The Operator will carry reclamation to completion with reasonable diligence. Reclamation will be completed within one to two years from completion of mining, but not more than five years from the date the Operator informs the Board or Office that such phase has commenced.

Section 3.1.5 Reclamation Measures Material Handling: Grading will be performed to help control erosion and siltation of the affected lands through phased mining, implementing good operation techniques to handle material as little as possible, and vegetation of stockpiles remaining in place for more than one growing season. Although the use of erosion protection devices is not anticipated, if deemed necessary by the operator at the time of excavation, silt fence and haybale dams will be installed to prevent erosion. Backfilling and grading will be completed as soon as feasible after the mining process is complete.

Maximum slopes and slope combinations will be compatible with the configuration of surrounding conditions and selected land use. Mining will occur at a slope that is stable. The site will be reclaimed to grades 2-feet below pre-mining elevations.

The operator will backfill using fill material generated on-site, or imported inert fill generated outside the permit area. If any inert off-site material is used as backfill, a notarized letter will be submitted to the Division as required by Section 3.1.5(9) of the MLRB Construction Material Rules and Regulations.

It is not anticipated that mining will uncover any refuse or acid-forming or toxic producing materials, however if any such materials are encountered the operator will take precaution to handle the materials in a manner that will control unsightliness and protect the drainage system.

Drill or auger holes that are part of the mining operation shall be plugged with noncombustible material, which shall prevent harmful or polluting drainage. Any test pits, soil boring holes, or monitoring wells not located within the mine excavation limits will be plugged as soon as it can be confirmed that they are no longer needed for the operation.

Mined material to be disposed of within the affected area will be handled in such a manner so as to prevent any unauthorized release of pollutants to the surface drainage system. No unauthorized release of pollutants to groundwater shall occur from any materials mined, handled or disposed of within the permit area.

Section 3.1.6 Water-General Requirements: The Operator will comply with applicable Colorado water laws governing injury to existing water rights and with applicable state and federal water quality and dredge and fill laws and regulations.

The operator will develop and comply with a stormwater management plan and will use best management practices (BMPs) to ensure groundwater and surface water are protected to the greatest possible extent. BMPs include schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution in runoff from the site. **Section 3.1.7 Groundwater - Specific Requirements:** The Operator will comply with the applicable standards and conditions for classified and unclassified groundwater. Groundwater will not be exposed or dewatered.

Section 3.1.8 Wildlife: The mining and reclamation plans have been designed to account for the safety and protection of wildlife on the mine site. The Operator will use concurrent reclamation methods to minimize the impact on wildlife. The proposed reclamation plan may improve wildlife habitat. The proposed plantings will create improved cover, foraging, roosting, and nesting areas for wildlife. Control and/or removal of noxious and weedy species during the project and the replacement of desirable graminoid, forb, shrub and tree species during reclamation will result in enhancement of wildlife habitat on the project site.

Section 3.1.9 Topsoiling: Three inches of topsoil will be removed and segregated from other spoil. The topsoil will be blended with manure and used for reclamation. Topsoil stockpiles shall be stored in places and configurations to minimize erosion and located in areas where disturbance by ongoing mining operations will be minimized. Once stockpiled, topsoil shall be rehandled as little as possible. Stockpiles that will remain in place for more than one growing season will receive vegetative cover, as outlined on the Reclamation Plan Map, as soon as possible to minimize erosion.

Section 3.1.10 Revegetation: In those areas where revegetation is part of the reclamation plan, the land shall be revegetated in a manner that establishes a diverse, effective, and long-lasting vegetative cover. The proposed seed-mix or plantings for reclamation are outlined on the Reclamation Plan included in Exhibit F of this application. The quarter section of land has a sprinkler and irrigation water and this infrastructure will remain and be utilized for irrigation purposes.

Section 3.1.11 Buildings and Structures: Please refer to the enclosed Reclamation Plan included in Exhibit F.

Section 3.1.12 Signs and Markers: The Operator will post appropriate signage at the entrance to the mine site. The permit area will be marked by existing fencing, or proximity to existing County roads.

(d) Plans for topsoil segregation, preservation and replacement; for stabilization, compaction and grading of spoil; and for revegetation.

Topsoil will be removed and segregated from other spoils. Topsoil not needed for reclamation may be sold or removed from the site. For reclamation, topsoil will be replaced by a scraper and generally graded with a blade. Grading shall be done in a manner that controls erosion and siltation of the affected land and protects areas outside the affected land from damage. In addition, backfilling and grading shall be completed as soon as feasible after the mining process.

Final grading will create a final topography that is appropriate for ultimate land use. For example, grades on the site will maintain historic drainage. Topsoil will be uniformly placed and spread on areas disturbed by the mining. The minimum thickness shall be 3

inches above the surrounding excavated grade, consistent with existing topsoil depths onsite. The topsoil shall be keyed to the underlying and surrounding material by the use of harrows, rollers or other equipment suitable for the purpose. The owner is as active farmer in the area and has the ability to maintain and ensure the reclaimed land will be suitable for the proposed use.

The Operator plans to plant crops for use in their feed lot operation. In the event crops are not use, areas where perennial seed revegetation is part of the reclamation plan, the Operator will revegetate the land in such a manner so as to establish a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation or fertilizer and is at least equal in extent of cover to the natural vegetation of the surrounding area. Seed will be drilled and mulched. The Operator owns a sufficient amount of irrigation water to establish an effective ground cover. In the event a dryland crop is utilized the Operator will more than likely continue to irrigate the ground allowing for more production for use in feedlot operations. The Operator currently uses this method on their other Weld County farms.

The revegetation seeding and plant list on the Reclamation Plan Map contains the preferred species of grasses, shrubs and trees to be planted.

Seeding will take place once final grading and replacement of topsoil have been completed. Timing of seeding will be consistent with standard horticultural practice for dryland applications - generally between late September and the middle of April to ensure there is adequate moisture for germination.

- (e) A plan or schedule indicating how and when reclamation will be implemented. Include:
 - *i.* An estimate of the periods of time which will be required for the various stages or phases of reclamation.

Please refer to the Timetable for Mining and Reclamation in Section (e) of Exhibit D.

ii. A description of the size and location of each area to be reclaimed during each phase.

Please refer to the Reclamation Plan Map (Exhibit F).

iii. Outlining the sequence in which each stage or phase of reclamation will be carried out.

Please refer to the Timetable for Mining and Reclamation in Section (e) of Exhibit D.

- (f) A description of:
 - *i. Final grading maximum anticipated slope gradient or expected ranges thereof;* The slopes will range from 0.5% to 2% and match historic grade.
 - *ii.* Seeding types, mixtures, quantities and time of application;

Please refer to the Reclamation Plan Map for the list of plant materials and seeds to be utilized and the tables below. The operator will seed during the appropriate season to ensure adequate moisture for germination and implement weed controls to allow the grasses/crops to successfully establish.

<u>Primary Seed Mix:</u> Alfalfa – Seeding Rate – 20 pounds per acre

Alternate Seed Mix:

COMMON NAME	SCIENTIFIC NAME	LBS
(VARIETY)		PER/ACRE
SAND BLUESTEM	(CHAMP, CHET)	1
SAND LOVEGRASS	(BEND, NATIVE, NE27)	2.5
INDIAN RICEGRASS	(NEZPAR, RIMROCK)	3
PRAIRIE SANDREED	(GOSHEN)	0.75
GREEN NEEDLEGRASS	(LODORM)	1.5
LITTLE BLUESTEM	(BLAZE, CIMARRON, CAMPER)	0.75
YELLOW INDIANGRASS	(CHEYENNE, HOLT, SCOUT)	0.5
SWITCHGRASS	(BLACKWELL, NEBRASKA 28)	1.5
SAND DROPSEED		0.5
	TOTAL LBS PER ACRE:	12.00

iii. Fertilization –types, mixtures, quantities, and time of application; The type and application rate of fertilizer shall be determined based on a soil test at the time of final reclamation.

- *iv. Revegetation types of trees, shrubs, etc.; and* Please refer to the letter discussing the proposed reclamation in more depth.
- v. Topsoiling specify anticipated minimum depth or range of depths for those areas where topsoil will be replaced.

Topsoil will be uniformly placed and spread on all areas disturbed by the mining. The minimum thickness shall be 3 inches above the surrounding excavated grade including soil amendments and manure application.

Manure application at 5 tons per acre. Using a conversion of 1.5 tons per cubic yard the total application is 500 tons or approximately 333 cubic yards cross the site. Manure to be hauled in from adjacent feedlot to the west of the Site.

WEED MANAGEMENT PLAN

The area to be mined has historically been managed via mechanical methods such as mowing or tillage and herbicide is not typically used on the farm. Hunt Farms has been successful in keeping noxious weeds controlled with the main problematic weed being "pigweed".

Hunt Farms has a full-time weed manager on staff as they currently irrigate hundreds of acres for

their associated operations. Hunt Farms has all the necessary equipment in house to perform weed management.



