EXHIBIT D – MINING PLAN

This information provided in this Exhibit is intended to satisfy the requirements outlined in Section 6.4.4 of the Colorado Mined Land Reclamation Board Construction Material Rules and Regulations:

(a) Description of the method(s) of mining to be employed in each stage of the operation as related to any surface disturbance on affected lands;

The proposed permit area includes a significant deposit of sand and gravel located in the alluvium of the Arkansas River in Pueblo County. The site is on the east side of Baxter Road, approximately ¾ of a mile south of U.S. Highway 50. It encompasses 543.5 acres +/- and will consist of one unlined cell and two slurry wall lined cells. The unlined cell, referred to herein as Phase 1, will serve as a siltation pond receiving wash water from the site wash plant. Phase 1 is subdivided into 1a and 1b, primary and secondary silt ponds. Initially, only the primary (1a) silt ponds will be constructed. If the primary silt pond (1a) fills with silt, it may be necessary to open the secondary silt pond (1b). The lined cells, referred to herein as Phases 2 and 3, will be encompassed by slurry walls keyed 4-feet into the bedrock. The slurry walls will be constructed prior to exposing groundwater. The freshwater source for the wash plant will be Thunderbird Lake.

Site Preparation:

Initial disturbance of the property will include: stripping overburden to establish the plant footprint. Concurrently with establishing the plant, the Phase 1a Siltation Pond will be stripped of overburden and mining will commence in these areas once the plant has been established.

After the initial preparation of the Plant, and Phase 1a Siltation Pond, customer roads will be established from the entrance to the plant areas. A parking area for employees will be constructed near the entrance road. All roads and parking areas will be graveled.

Mining:

Conventional heavy-duty equipment will be used to strip the topsoil and overburden material from a given phase. Stripped material will be placed in stockpiles either to visually screen the plant or in areas of the site that are not within the floodway. Separate stockpiles of topsoil and overburden will be maintained. Site material balances indicate there will be an excess of top soil and overburden required to reclaim the site. The operator will maintain 1.3 times the material required for reclamation. Excess material above this threshold may be sold or hauled off-site during the life of the mine. There will be no mining below the groundwater table until an approved Substitute Water Supply Plan (SWSP) has been obtained and/or slurry wall lining is complete.

The slurry wall lined phases (Phases 2 and 3) will be dewatered and dry-mined using scrapers, bulldozers, front-end loaders, excavators, or similar equipment. Siltation Ponds (Phases 1a and 1b) will be unlined and wet mined with excavators with no dewatering.

Mining at the site will progress in three (3) major stages. A map depicting the phases can be found in Exhibit C-2.

Phases 1a and 1b- Phase 1a is the site development phase during which the operator will establish the Aggregate Plant within the Phase 3 area, the Phase 1a Siltation Pond, develop Thunderbird Lake as the Freshwater Pond and place a culvert or bridge over the Excelsior

Ditch allowing access to stockpile areas on the northwest part of the site. Phase 1a is anticipated to last approximately 1 year, but will vary depending on market demands for aggregate. The secondary siltation pond (Phase 1b) will be established at a later date if the Phase 1a silt pond is filled to capacity.

Topsoil mined from phase 1a, and 1b (if necessary) will be segregated from overburden and utilized to establish visual screening- berms along Baxter Road (where not encumbered by the floodway) and on the north part of the site near the neighboring properties. Overburden may be used to complete construction of the visual berms if there is not enough topsoil available. After the berms have been established, any remaining top soil and/or overburden may be stockpiled in segregated piles north of or on the northern parts of phases 2 and/or 3. As discussed above, excess overburden may also be sold for use offsite. If the overburden is uneconomical to sell, it may be used in slope reclamation or backfill for phases 2 and 3.

Phase 2- Prior to mining of Phase 2, a survey will be performed to establish the top of the river bank immediately south of the Phase 2 area. Phase 2 will consist of mining out of the eastern cell located immediately east of the electric transmission lines. This cell will be slurry wall lined prior to mining below the water table and will be dry mined. Mining of the Phase 2 cell is anticipated to be completed in approximately eleven (11) years. The phase 2 mining will generally progress from east to west but the specific mining locations within the pit may vary depending on the variability of the deposit. Actual timing of mining will vary with aggregate market demands. Mining may encroach to 200 feet of the top of river bank in the non-flood period between September 30 and April 1. These encroachment areas will be backfilled with overburden to a distance 400 feet from the top of river bank before the subsequent April 1 date.

Topsoil and overburden from this stage will be segregated and stockpiled north of or on the northern portion of Phases 2 and/or 3 where not encumbered by the Floodway or may be placed in the slope for concurrent reclamation as the mine highwalls at the mine limits are exposed.

Phase 3 – Prior to mining of Phase 3, a survey will be performed to establish the top of the river bank immediately south of the Phase 3 area. Phase 3 will consist of mining out of the western cell located immediately west of the electric transmission lines. This cell will be slurry wall lined prior to mining below the water table and will be dry mined. Mining will be completed in an estimated four (4) years and the mining will generally progress from south to north, but the actual mining location within the cell may vary depending on the variability of the deposit. Actual timing of mining will vary with aggregate market demands. Mining may encroach to 200 feet of the top of river bank in the non-flood period between September 30 and April 1. These encroachment areas will be backfilled to a distance 400 feet from the top of river bank before the subsequent April 1 date.

Topsoil and overburden from this stage will be segregated and stockpiled north of or on the northern portion of Phases 2 and/or 3 where not encumbered by the Floodway or may be placed in the slope for concurrent reclamation as the mine highwalls at the mine limits are exposed.

Processing:

All material mined under this proposed application will be transported by conveyor or haul truck to the processing area. The processing area will be located on the north side of the Phase 3 mine-area.

Water for use in the processing wash plant will be pumped from Thunderbird Lake via pipeline. After use in the wash plant, the used water will be piped to the siltation ponds where solids will settle. The clarified water will then return to Thunderbird Lake via ditch or pipeline for reuse.

Modular buildings with footings will be used as the shop near the processing area and the scale house near the scale. In addition, the conveyor will be locally founded on footings. Dimensions of these footings are presented in Exhibit L – Reclamation Costs.

Import Material:

The operator may import material from and export material to other sites. The applicant is aware that in accordance with Rule 3.1.5(9) of the Construction Material Rules and Regulations, if any offsite material is used as backfill, a Technical Revision (TR) with all information required by Rule 3.1.5(9) will be submitted to the DRMS. This TR will include revised mining and reclamation plans and maps as well as a revised bond estimate, as appropriate.

(b) Earthmoving;

Topsoil and overburden will be stripped with conventional heavy earthmoving equipment and will be used concurrently to reclaim finished slopes, to backfill areas mined between 200-400 feet of the Arkansas River, or it will be stockpiled in segregated piles at the edge of the active mine phase where not encumbered by the Floodway. The equipment used to excavate onsite materials may include, but is not limited to scrapers, excavators, front-end loaders, and/or bulldozers. Conveyor belts or haul trucks will be utilized to transport the raw material from the active mine phase to the processing area. All phases will be mined at a 0.5 horizontal:1vertical (0.5h:1v) slope or flatter. The maximum length of highwall open at any one time is anticipated to be approximately 2,000 feet.

(c) All water diversions and impoundments; and

The perimeter of the mined areas will be dewatered by digging dewatering trenches extending deeper than the mining interval eventually reaching into the bedrock at the bottom of the mine. The water will be pumped into a settling pond and discharged in accordance with a CDPHE discharge permit. Wash water for the processing area will be recycled through a series of siltation ponds within the processing area. The water required to operate the facility will be supplied under the provisions of a substitute water supply plan (SWSP).

(d) The size of area(s) to be worked at any one time.

The mine phases will be mined in stages that range from approximately 2 to 131 acres. The Operator may mine multiple stages concurrently in order to obtain a range of material for production. In addition to mining, the Operator, will begin reclaiming slopes as mining is finished in each stage. Since multiple stages will be being worked at any one time, the approximate combined size of the areas being worked at any one time may range from 25 acres to 131 acres and will depend on market conditions.

(e) An approximate timetable to describe the mining operation. The timetable is for the purpose of establishing the relationship between mining and reclamation during the different phases of a mining operation.

The Operator anticipates that mining will commence as soon as all permits are in place. The Operator anticipates extracting approximately 500,000 tons of aggregate per year however, production rate may vary based on market demands.

Estimated Timetable for Mining and Reclamation[1]

Phase 1: Mining will begin with the silt storage area 1a in the first year as described above. Stripping of the plant area will also occur. Mining may take up to a year. This area will take approximately a year to reclaim and reclamation of the phase 1 area will happen at the end of the mine's life.

Phase 2: This phase will take approximately 11 years to mine and 2 years to reclaim.

Phase 3: This phase will take approximately 4 years to mine and 1 year to reclaim.

Final reclamation will occur after mining is complete in a given Phase. When possible, concurrent reclamation practices will be used to minimize site disturbance and to limit material handling to the extent deemed practical by the operator. Please refer to the Mining Plan Map in Exhibit C for the location of mine phases and areas where processing and other onsite activities will occur. The table below summarizes the approximate timing in the mining areas and will vary depending on the nature of the deposit and market demands.

YEAR	MINING	RECLAMATION
1	Phase 1	--
2	Phase 2	--
3	Phase 2	Phase 2 concurrent
4	Phase 2	Phase 2 concurrent
5	Phase 2	Phase 2 concurrent
6	Phase 2	Phase 2 concurrent
7	Phase 2	Phase 2 concurrent
8	Phase 2	Phase 2 concurrent
9	Phase 2	Phase 2 concurrent
10	Phase 2	Phase 2 concurrent
11	Phase 2	Phase 2 concurrent
12	Phase 2	Phase 2 concurrent
13	Phase 3	Phase 2
14	Phase 3	Phase 2/Phase 3 Concurrent
15	Phase 3	Phase 3 Concurrent
16	Phase 3	Phase 3 Concurrent
17	--	Phase 3
18	--	Phase 1

[1] As discussed above, the ultimate timing will depend on market demand. The estimated times presented herein assumed mining occurs uninterrupted at a consistent pace.

(f) Use Mining Plan Map in conjunction with narrative to present:

(i.) Nature, depth and thickness of the deposit and thickness and type of overburden to be removed

Exploratory borings drilled at the site primarily in the Phase 2 and Phase 3 mine areas are presented in Exhibit I. The logs indicate the maximum depth of mining will be approximately 29-feet. Review of the logs indicates the borings encountered approximately two (2) to twenty-two (22) (averaging nine (9)) feet of overburden. The overburden described in the boring logs grades from clayey silt to silty sand. The overburden overlies approximately five (5) to twenty-seven (27) averaging nineteen (19) feet of sand and gravel overlying shale bedrock. The overburden is thickest on the southwest part of the site in an area that will not be mined. The bedrock depths encountered in the borings ranged from twenty-six (26) to twenty-nine 29) below the ground surface.

(ii.) Nature of the stratum immediately beneath the material to be mined in sedimentary deposits

The Site is located approximately 35 miles east of the eastern flank of the Rocky Mountain Front Range. Younger sedimentary strata dip eastward off the Pre-Cambrian igneous and metamorphic rocks that form the core of the Front Range.

Bedrock does not crop out at the site, however regional geologic mapping of the area (Tweto, 1979) indicates the near surface bedrock beneath the site is most likely the Lower Member of the Pierre Shale. Tweto (1979) describes the Lower Member as organic rich shale with numerous bentonite beds.

(g) Identify the primary and secondary commodities to be mined/extracted and describe the intended use.

The primary commodities are sand and gravel; intended for construction materials. Secondary commodities may include overburden sold as fill and gold. Gold will be recovered in mats within the wash plant. No chemicals will be used.

(h) Name and describe the intended use of all expected incidental products to be mined/extracted by the proposed operation.

There are no expected incidental products to be mined.

(i) Specify if explosives will be used in conjunction with the mining (or reclamation)

No explosive material will be used on-site.