

DRAFT PLAN OF DEVELOPMENT, OCTOBER 2014

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1. Purpose and Need for the Facility

a. what would be built

A cut-and fill earthen haul road with all-weather surface would be constructed. The proposed action would construct, maintain, and terminate an access/haul road across public and private land and between two private parcels. One private parcel contains an open pit mine, with a primary resource of Gypsum and Anhydrite and a secondary resource of high grade marble. The other private parcel allows access to Delphi Road in northeastern Smith Valley. A wire fence along the perimeter of the Right of Way (ROW) would also be built to BLM Antelope Type B standards. The fence would be posted with warning signs at 100 foot intervals.

b. what is use

This would be the primary access and haul route for a mine on a private parcel completely surrounded by public lands and with no existing improved access. The road would be an exclusive ROW for private mining traffic. The road in its entirety (the Project on and off public land) would cover a route generally heading east off of Delphi Road on private land, through a private parcel, thence across an approximately 400 foot long stretch of public land into another private parcel which is the location of the gypsum mine to the east of Delphi.

c. what is size

The road would consist of 400 feet of all-weather surfaced, two-direction road within a 200-foot wide right of way on BLM land. The road surface would be two 30-foot wide lanes, with additional berm and cut or fill adjacent disturbance, totaling approximately 90 feet wide, and disturbing approximately 0.79 acres of land. The remainder of the 200-foot right of way would provide maintenance access and a buffer from adjacent public uses. The total area of the ROW is 1.63 acres.

d. does the proposal involve new construction, reconstruction, or improvement of an existing road

The road would consist of new construction.

e. is the use temporary or permanent

The use would be temporary for the life of the mine.

f. is this ancillary to an existing right-of-way

No.

g. type and volume of traffic that is anticipated

Primary traffic would consist of non-highway mining haul trucks, with some use by other vehicles

[water trucks, heavy equipment, pickup trucks etc.] in direct support of mining and maintenance operations. Estimated volume is 100 trips per day.

h. Season of use

Year-round use.

i. Origination and destination of the road

See Appendices A-1 and A-2.

j. Alternative routes or locations, if proposed road is not within a designated corridor

There are no reasonable alternatives to the proposed road.

2. Right-of-way Location

a. legal description

See Appendix A-3. A portion of the SW ¼ of the SE ¼ of Section 27, T13N, R24E, MDB&M.

b. maps tied to section corners and drawings

See Appendix A-2.

c. road cross sections, and plans and profiles

3. Facility Design Factors (See Appendix A-3)

a. minimum and maximum engineering standards

1) construction standards of the road

See Appendix A-3. Where not otherwise specified, construction would conform to BLM Gold Book Standards. maximum grade and pitch of the road
See Appendix A-3.

2) requirements and location of drainage ditches, culverts, bridges, and low-water crossings

Bridges and low-water crossing are not required. A culvert would be required, constructed per specifications and details Appendix A-3. The culvert would be 16 inches in diameter, which is adequate to handle the run-off of a 100-year precipitation event. (See Appendix A-4 evaluation)

3) if the road would be surfaced, what surfacing material would be used

The road surface would consist of screened and compacted native colluvium obtained from the private land owned by Art Wilson Company. Surfacing materials would be mechanically compacted in accordance with specifications on Appendix A-3.

4) length and width of road

Total length of road on public land is 400 feet. Total travel width of road is 60 feet.

5) cut and fill diagrams

b. detailed engineering plans and specifications for major structures

A single culvert (within ROW) would be constructed with appropriate headwall and rock armoring. (See Appendix A-3).

c. temporary use areas needed

No temporary areas would needed.

4. Additional Components

a. existing components on and off public land

There are no associated components existing on either public or private lands.

b. possible future components on and off public land

There are no future components expected for the public land. The public land road would connect two private parcels, and would connect two segments of the same haul road on those private parcels. The dimensions of the private parcel haul road segments are an approximately 3,700 foot long stretch within Lyon County Assessor's Parcel 010-041-23 (westerly of the proposed ROW; accessing Delphi Road) and an approximately 2,000-foot long stretch within Lyon County Assessor's Parcel 010-041-21 (easterly of the proposed ROW; accessing the source of gypsum and anhydrite).

c. is there a need for sand and gravel supplies from public land

No. Private land for which access is intended includes aggregate sources.

d. location of equipment storage areas

Equipment would be stored on private land parcels. No equipment storage areas would be located on public lands.

5. Government Agencies Involved

a. are Corps of Engineers Section 404 permits needed

No.

b. are State or local permits, easements, or dedications needed

No.

6. Construction of facilities

a. construction (brief description)

1) major facilities (including vehicles and number of tons and loads)

Access road earthwork would consist of approximately 2,700 cubic yards of cut, and 3,800 cubic yards of fill, net 1,100 cubic yards imported from the easterly adjacent private parcel. At 1.5 tons per cubic yard, the import would be about 50 CAT 735B 36-ton haul truckloads of colluvium, including at least 3 truckloads of select all-weather gravel surfacing material.

2) ancillary facilities (including vehicles and number of tons and loads)

None.

3) methods of construction and types of equipment to be used on the road right-of-way

One grader [Champion 740A or equivalent] would be utilized to construct the grade and cross slope for road improvements. One 4,000 gallon water truck would be utilized to control dust during construction. One loader [Cat 966 or equivalent] and one dozer [Cat D-7 or equivalent] may supplement this equipment. Articulated haul trucks [Cat 735B] would be used to import material. A Caterpillar CS563 Vibratory Roller or equivalent would be used to compact fill as required. The work force is anticipated to consist of

three to four MSHA-trained and task-trained personnel. Vehicles would include the heavy equipment described in part A, and associated fuel/service trucks and pickup trucks.

b. flagging or staking of the right-of-way

The proposed road would be staked and flagged along the centerline and along the outer boundaries of permitted Disturbance, and with conventional slope staking at no less than 2.0-ft tolerance. The limits of ROW would be denoted by a barbed-wire fence as described above.

c. clearing and grading

Clearing and grading would be conducted within the proposed right of way and would be restricted to that which is absolutely necessary for the construction of the proposed road and berms.

d. facility construction data

1) description of construction process

Commence work from single-lane equipment access within private land. Construct safe 90-degree intersection, including signage, at Delphi Road. Heavy equipment clearing and grubbing within proposed disturbance limits. Perform cut from weak rock or colluvium ridge within public right of way, to fill the shallow valley within right of way on public lands. Import material, segregating a) general fill (moisture conditioned and compacted), slope armoring (small rip-rap ~D50=4"), and gravel all-weather surfacing within right of way proposed disturbance limits.

e. access to and along right-of-way during construction

The Project would be closed to non-construction traffic during construction. The private parcels have been perimeter-fenced, gated, and posted.

f. contingency planning

1) holder

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g. safety requirements

MSHA safety requirements would be upheld during construction. All relevant OSHA regulations would be complied with. No unauthorized personnel would be allowed on site. Appropriate PPE and mandatory seatbelt use would be enforced at all times. A speed limit of 17.1 mph would be imposed (irregular speed limits are the standard of modern mine practice to maximize personnel awareness).

industrial wastes and toxic substances

No industrial wastes are expected to be generated. Toxic substances would be limited to fuels, fluids, and materials required by vehicles and equipment. All precautions would be taken to adhere to relevant Federal, State, and Local regulations. Reportable releases would be immediately reported to the Nevada Division of Environmental Protection [NDEP] and the BLM. All releases would be remediated per NDEP and other applicable regulations.

j. seasonal restrictions on various activities

No construction would occur during migratory bird nesting season unless BLM-approved surveys are conducted immediately prior to any ground-disturbing activities. No construction activity would occur when NOAA Weather Service or local observation predicts probability of precipitation in excess of 0.25 inches in a 24 hour period.

7. Resource Values and Environmental Concerns

a. address at level commensurate with anticipated impacts

1) location with regard to existing corridors

Existing BLM corridors and powerline roads would not be impacted by this Project. See Appendix A-2, which shows avoidance of existing power pole by properly routing the proposed haul road.

b. anticipated conflicts with resources or public health and safety

1) air, noise, geologic hazards, mineral and energy resources, paleontological resources, soils, water, vegetation, wildlife, threatened and endangered species, cultural resources, visual resources, BLM projects, recreation activities, wilderness, etc.

The haul road location does not exacerbate known geological hazards or negatively impact known mineral and energy resources. Conflicts with paleontological resources would be avoided due to road location based on archaeological surveys. Impacts to soils, water, vegetation, and wildlife would be minimized by limiting activities to the approved right of way and avoiding construction during migratory bird nesting season. No threatened and endangered species are known or expected at the site. Impacts to

visual resources are minimal and consistent with the surrounding landscape. BLM projects are not present in the Project vicinity. Due to mining activities on the private land parcel recreational usage would be suspended. Dust Control: Air quality would be controlled by maintaining low road speeds (Posted and enforced 20 MPH) and regular water spraying or other dust stabilization. No resident neighbors regularly occupy the private parcels adjacent to the mine; therefore any noise increase due to mine traffic is not expected to become an issue.

8. Stabilization and Rehabilitation

a. soil replacement and stabilization

Any soils in excess of construction needs would be stockpiled for future reclamation use on adjacent private land and would be seeded with an appropriate native interim reclamation mix to stabilize and reduce the likelihood of weed invasion.

b. disposal of vegetation removed during construction (i.e., trees, shrubs, etc.)

No trees occur within the Project Area. The upland salt desert shrub community is low in cover and biomass. Vegetation removed during construction shall be piled in unvegetated areas on private land in a manner to provide wildlife habitat.

c. seeding specifications and reclamation

d. Cut and fill slopes, berms, and other areas of disturbance would be seeded with a BLM-approved native seed mix during the first fall season following construction. Seed method would involve scarification, broadcast seeding at a rate of 20 seeds per square foot, and dragging/harrowing. No fertilizer would be used.

None.

e. limiting access to right-of-way

The private lands adjacent to the Proposed Project are fenced, gated, and signed. Public access to the haul road would be prohibited. Several other roads exist in the area so access to public lands other than the Project Area would not be impeded.

1. Operation and Maintenance

a. minimum maintenance and maintenance schedule

Routine maintenance would consist of grading, watering or other dust control, and maintenance of drainage and berms.

b. placement of control, warning, and directional traffic signs

There would be no public access to the haul road, thus no signage is required for the low traffic volumes and low road speed (17.1 MPH).

c. maintenance of special needs such as snow removal, seasonal closure, and controlled access

Snow removal would be conducted as needed using site located grader, loader or bulldozer equipment as appropriate. No seasonal closures are anticipated. Access is controlled by fencing, gates, and signage.

d. safety

MSHA safety requirements would be upheld during operation. No unauthorized personnel

would be allowed on site. Appropriate PPE and mandatory seatbelt use would be enforced at all times. A speed limit of 17.1 mph would be imposed.

e. industrial wastes and toxic substances

No industrial wastes are expected to be generated. Toxic substances would be limited to fuels, fluids, and materials required by vehicles and equipment. All precautions would be taken to adhere to relevant federal, State, and local regulations. Reportable releases would be immediately reported to the Nevada Division of Environmental Protection [NDEP] and the BLM. All releases would be remediated per NDEP and other applicable regulations.

f. inspection and maintenance schedules

The BLM would be given a minimum of two weeks advance notice prior to construction or reclamation activities to allow for inspection as appropriate. Art Wilson Company would initiate daily inspection of the Project during the normal course of business with special attention following major storm events.

g. work schedules

Construction and transportation would occur during daylight hours.

h. fire control

Although the sparse upland salt desert shrub community is not normally susceptible to fire, all precautions would be taken to minimize the risk of wildfire. The on-site water truck would be equipped for fire suppression. All vehicles would carry appropriate fire extinguishers. All personnel would be briefed on the prevention and suppression of wildfire. Development of the proposed mining operations includes compliance with Lyon County Fire Department requirements.

i. inspections

BLM, MSHA, and other regulatory agencies may inspect the Project as necessary. Inspection by mine personnel and, as required, engineering consultant as well as normal usability monitoring by truck drivers would be conducted on an ongoing basis. BLM would be given a minimum of two week's notice prior to any ground-disturbing activities.

j. contingency planning

User has retained Robison Engineering to respond to design or maintenance needs for safe and stable road use. Section 6.g above includes points of contacts for contingency planning.

2. Termination and Restoration

a. determine if the road would be totally obliterated

At the conclusion of active gypsum/anhydrite/marble mining, the road would remain in place to serve extended mining operations and other future land uses.

b. what structures would be left in place or removed

Culvert[s] and drainage features would remain in place.

c. stabilization and re-vegetation of disturbed area

New disturbance outside of road prism is not anticipated. If disturbance does occur, area

would be re-vegetated with native plant species; seed mix would be submitted to, or requested from BLM prior to seeding. At the conclusion of active mining, the culvert and fence would be removed and the road, ditches, berms, and other features would be re-contoured to the approximate pre-construction contours, avoiding any new disturbance. The Project would then be scarified [if not to be immediately seeded], and broadcast seeded with a BLM-approved mix of native shrub, forb, and grass species naturally occurring in the Project Area, followed by dragging/harrowing. The BLM would be provided a minimum of 30 days' notice prior to initiation of reclamation activities.