#### Exhibit 4

## Detailed description of subject site and proposed use

## (a) Description of existing conditions:

- 1. **Soils:** According to the National Cooperative Soil Survey/Natural Resources Conservation Service, soil in the general area of the Extraction Site consists of Rogert gravelly loam. *See* Exhibit 4(b), NRCS Soil Resources Report.<sup>1</sup>
- 2. **Vegetation:** Site consists of rangeland and pastureland. Vegetation consists of shrub/scrub brush with native grass understory on ridges and sideslopes and improved grasses on upland pasture areas.
- 3. **Land Uses:** The subject property is zoned Agriculture and Forestry. A residence owned by the Applicant is situated on the subject property. Parts of the subject property are occasionally used for agricultural purposes. The Extraction Site was in use prior to the Applicant's purchase of the subject property. Historical satellite images accessed via Google Earth Pro indicate that the Extraction Site was initially developed as early as 2005.
- 4. Wildlife Habitat: Wildlife such as deer, moose, elk, mountain lions, marmots, pikas, bears, skunks, ermines, raccoons, coyotes, porcupines, beavers, foxes, rabbits, and various species of birds are present in Routt County. The Extraction Site is dryland hillside and is not productive wildlife habitat. Much of the Extraction Site is dryland sideslopes with limited productive wildlife habitat. The remainder is improved pasture also with limited wildlife habitat.
- 5. **Geologic Hazards:** Based on the Routt County GIS map, no geologic hazards are present at the Extraction Site or in the vicinity within 500 feet.
- (b) Description of mining operation (method of extraction; hours of operation (mining, processing, hauling); number of employees; phasing; maximum area to be disturbed; type of equipment and vehicles; expected volume of resource per year and life of mine; etc.)
  - 1. **Mining operation:** The Applicant will use track hoes and front-end loaders to excavate gravel material from the pit. The hours of operation for mining, processing, and hauling will be 8 hours per day, 5 days per week, and 50 weeks per year.
  - 2. **Number of employees:** The brother of the Applicant's will undertake mining operations at the Extraction Site.
  - 3. **Phasing:** The Applicant will remove material beginning at the southwest corner and west side of the site and moving in an east-northeasterly direction. Extracted materials may be

<sup>&</sup>lt;sup>1</sup> NRCS Web Soil Survey.

screened and mixed onsite. No crushing is expected to occur at this time. Products will be placed into semi-trailers and/or dump trucks for transportation off site. The Applicant anticipates that extraction will occur in one to two phases:

- a. **Phase 1 Mining:** Currently, a 50-foot highwall is located along the eastern boundary of the Extraction Site. Applicant will grade down the highwall to attain 3:1 side slopes around the perimeter of the Phase 1 Extraction Site, which will be maintained during mining operations. Using loaders, the Applicant will remove gravel material beginning at the southwest side of the site and moving in an easterly direction. *See* Exhibit 6(a) (Phase 1 Mining Map).
- b. **Phase 1 Reclamation:** Should the Applicant determine that the gravel material deposits do not continue substantially past the Phase 1 eastern boundary, Applicant will cease excavation activities and will reclaim the Phase 1 Extraction Site pursuant to the reclamation plan depicted in Exhibit 6(b) (Phase 1 Reclamation Map).
- c. **Phase 2 Mining:** Should the Applicant determine that the gravel material deposit continues substantially past the Phase 1 eastern boundary, Applicant will reclaim a portion of the Phase 1 excavation area. The Applicant will then continue excavation to the east and south of the Phase 1 eastern boundary. *See* Exhibit 6(c) (Phase 2 Mining Map).
- d. **Phase 2 Reclamation:** Upon completion of the Phase 2 mining activities, the Applicant will reclaim the entirety of the Extraction Site pursuant to the reclamation plan depicted in Exhibit 6(d) (Phase 2 Reclamation Map).
- 4. **Maximum area to be disturbed:** The maximum area to be disturbed will be ~9 acres or less.
- 5. **Type of equipment and vehicles:** The Applicant will use track hoes and front-end loaders to excavate materials and semi-trailers or dump trucks for transportation.
- 6. **Expected volume of resource per year and life of mine:** The Applicant anticipates that less than 70,000 tons will be excavated per year.

### (c) Description of haul route and anticipated traffic

The excavated materials will be hauled from the Excavation Site via County Road 129 to the north and south. The Applicant anticipates approximately 20 vehicles per day arriving at and leaving from the Extraction Site.

### (d) Waste disposal plan

Applicant does not anticipate that mining activities will generate substantive amounts of trash. Any trash produced by contractors and their employees will be collected in designated trash cans and disposed of with the Applicant's scheduled trash pickup. If necessary, a rented portable toilet will be present at the site.

(e) Weed control plan (during operations and reclamation).

- 1. **During operations:** Weed control shall be employed for all prohibited noxious weeds. The Applicant will consult with the Routt County Weed Program Supervisor regarding weed control recommendations as necessary. If needed during reclamation, Applicant will use straw mulch during reclamation to ensure weed control. Applicant will employ the disc crimping method. Mulch shall be applied at a rate of 2 tons per acre. Applicant will spray and control noxious weeds throughout the year during operations in accordance with all treatment recommendation. Applicant will also contact the Routt County Weed Program Supervisor as necessary regarding a weed-growth inspection at the site. Applicant will then perform follow-up treatment and continue to monitor the site in accordance with the Routt County Weed Program Supervisor's recommendations.
- 2. **During reclamation:** Applicant has consulted with Tony Waldron, former supervisor of the DRMS Minerals Program, regarding recommendations and specifications for reseeding disturbed ground. The site will be seeded with a native seed mix upon completion of the permitted mining activities. The seedbed will be prepared to eliminate compacted conditions by discing or shallow ripping followed by harrowing to level and firm up seed bed. Seeding will occur utilizing a grass seed drill or by broadcasting. If broadcasting is utilized, the seed rate will be doubled and the seed will be incorporated by harrowing following seed application. Weed control shall be employed for all prohibited noxious weeds and whenever invasion of a reclaimed area by other weed species seriously threatens the continued development of desired vegetation.

## (f) Dust control plan.

As necessary, Applicant will purchase water for dust suppression and other nonsubstantive industrial uses on the site. Applicant estimates that it may use approximately 2,000 gallons of water per operating day for these purposes.

### (g) Emergency response and wildland fire plan.

With regard to emergency responses, the Applicant will contact 9-1-1 as necessary in the event of an emergency. With regard to the Applicant's wildland fire plan, the Applicant will utilize the water truck and will employ available extraction equipment as necessary. Fire danger on site will be minimized since vegetation will be stripped in advance of mining.

# (h) Reclamation plan (final land use; timing; topsoil/overburden salvage, redistribution, and/or disposal; and NRCS and/or DRMS seeding and revegetation recommendations).

- 1. Final land use: Upon completion of mining, the applicant intends to reclaim the mined area to grazing land/agricultural with native vegetation.
- 2. Topsoil/overburden salvage: Topsoil and/or overburden will be removed and stockpiled in advance of mining and in accordance with the approved DRMS Reclamation Plan and also replaced in accordance with that plan. Topsoil and/or overburden stockpiles will be reseeded as needed with the mixture of native grasses identified in the table below to conform with the condition of the site prior to the operation. Seeding will occur during the first favorable season following topsoil replacement.
  Native Grasses seed mixture:

		PLS Lbs
Kind	% Mix	/ A
Mountain Bromegrass	20.00	8.00
Streambank Wheatgrass	20.00	4.40
Slender Wheatgrass	20.00	4.40
Blue Wildrye	15.00	3.0
Big Bluegrass	5.00	0.2
Rocky Mountain Fescue	5.00	0.32
Sandberg Bluegrass	5.00	0.2
Prairie Junegrass	5.00	0.12
Tufted Hairgrass	5.00	0.2
Totals	100.00	20.84

3. Redistribution and/or disposal: The only commodities to be extracted at this site will be sand, gravel, and borrow material. These materials will be used for construction purposes. During reclamation, and as required by 2 CCR 407-4 Rule 3.1.5(1), Applicant will grade the site to conform with the natural gradient and contours of the slope and the surrounding area in order to ensure that the site complies with the intended post-reclamation use as rangeland. Applicant will mine and grade the site so as to leave the graded area at no more than a 3H:1V on the sideslopes and 1-2% slope on pit bottom.

### (i) Air and water pollution control measures.

- 1. Air pollution: See Section (f) above for dust suppression efforts during the life of the mine.
- 2. Water pollution: The topography of the area separates the Extraction Site from any nearby water resources. No water resources in the area of the Extraction Site will be impacted. Mining and post-mining slopes will be maintained at a drainage gradient which will direct water into the disturbed area. All disturbed area drainage will report to the sediment pond in the SW corner of the pit where it will be allowed to infiltrate into the ground within 72 hours of any storm event.

## (j) Water use and water rights.

See Section (f) above for water use during operations during the life of the mine. The topography of the area separates the Extraction Site from any nearby water resources. Existing water rights will not be affected by the proposed gravel pit.

## (k) Visual impacts and proposed mitigation measures.

The Extraction Site is not visible from County Road 129 or any nearby residences. Therefore, no mitigation measures will be necessary.

## (I) Noise mitigation measures.

The nearest residences are approximately 1514 (separated from the Extraction Site by topography and County Road 129), 1541 (separated from the Extraction Site by topography), and 1632 feet (separated from the Extraction Site by topography) from the Extraction Site. The Applicant does not anticipate that noise mitigation measures will be necessary.

## (m) Conservation mitigation plan, if required.

The Applicant does not anticipate that a conservation mitigation plan will be necessary.