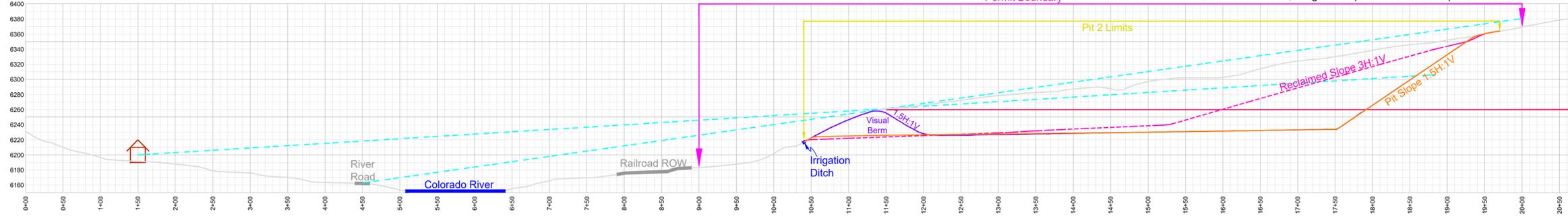
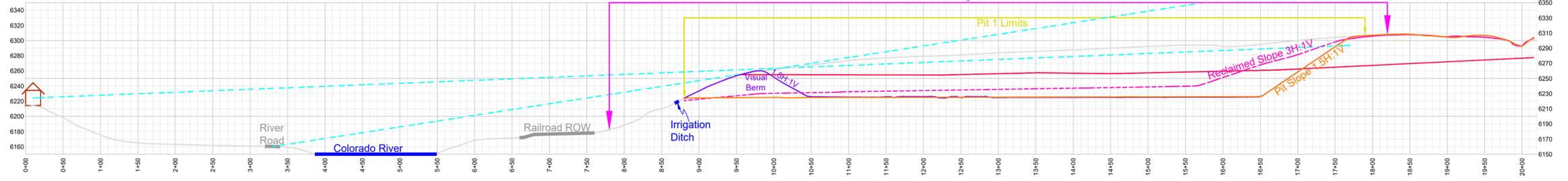


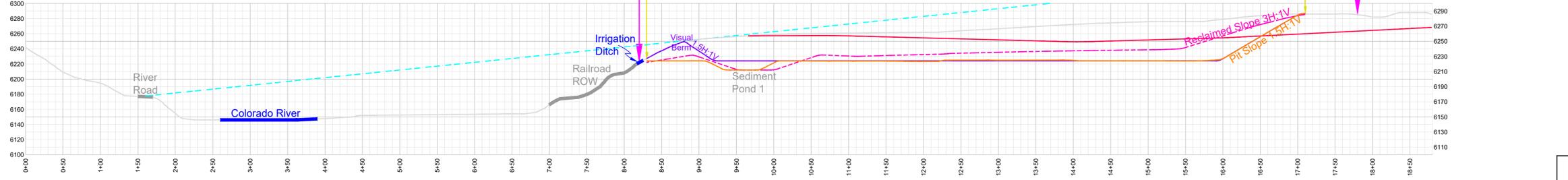
### Cross Section A-A'



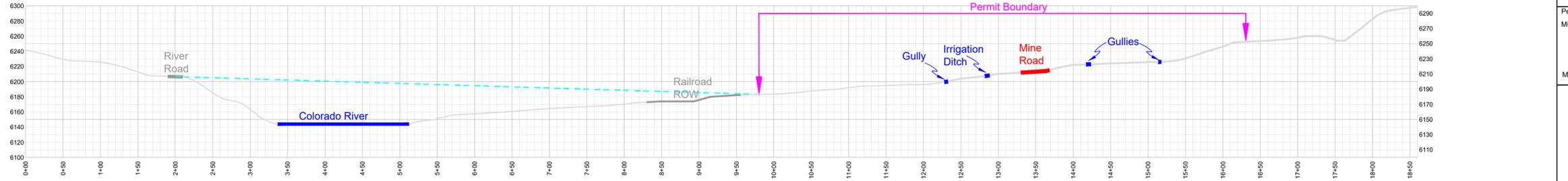
### Cross Section B-B'



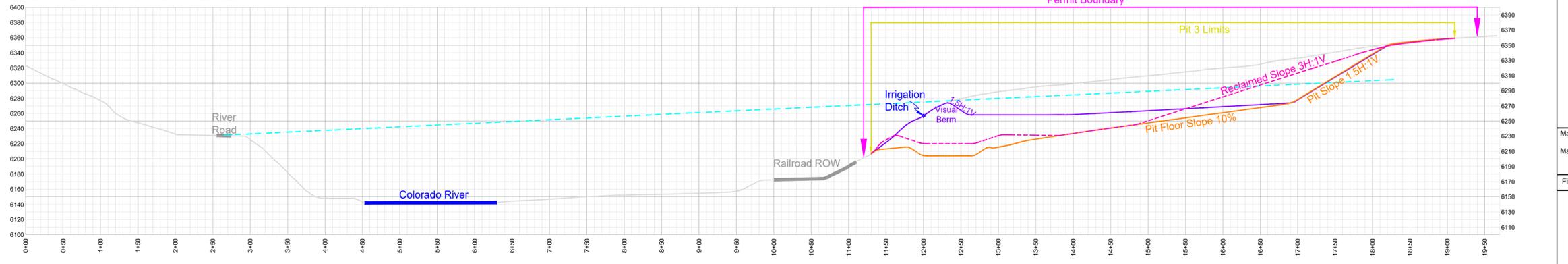
### Cross Section C-C'



### Cross Section D-D'



### Cross Section E-E'



### Elam Construction, Inc. Coyote Gravel Pit

#### Exhibit C Map 3A: Cross Sections

Permit Number:	Latitude:	Longitude:	Nearest Town:
Mine Center Location:	State: Colorado	County: Eagle	Dotsero
	Section: 32	Township: 4 South	Range: 86 West
	Major Watershed: Colorado River		



Map Scale: \_\_\_\_\_

#### Legend

- Original Groundline
- Approximate Top of Gravel
- Permit Boundary
- Pit Boundary
- Gravel Pit Phase 1 (with visual berm)
- Gravel Pit Phase 2 (without visual berm)
- View Sightline
- Reclaimed Pit

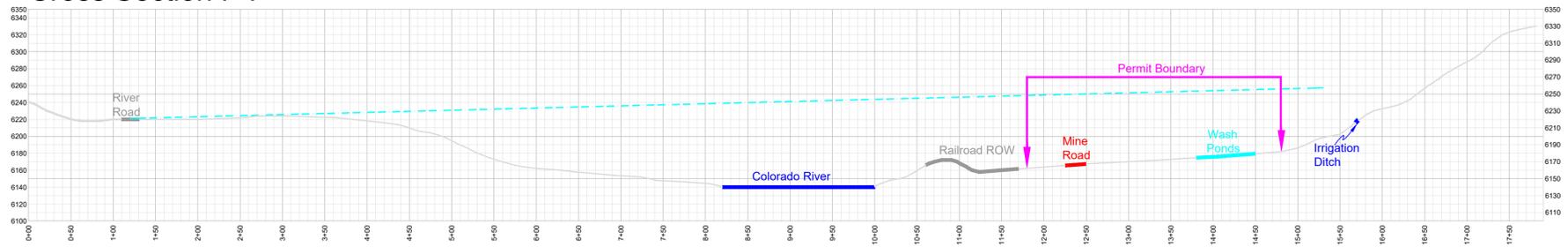
Map Georeferencing Information:	Datum: <input type="checkbox"/> NAD27 <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> WGS84 <input type="checkbox"/> None (Local)	Units: <input checked="" type="checkbox"/> Foot <input type="checkbox"/> Meter
Mapping Projection:	Slate Plane: <input type="checkbox"/> Single Zone <input type="checkbox"/> North Zone <input type="checkbox"/> South Zone <input checked="" type="checkbox"/> Central Zone	UTM: <input type="checkbox"/> Zone 12 <input checked="" type="checkbox"/> Zone 13 <input type="checkbox"/> Zone 14 <input type="checkbox"/> Other: _____
	Local System (Name): Colorado Central	

File Name: E:\Work\Dropbox\Karl Berger\Coyote Pit\AutoCAD\Coyote Pit 161128.dwg Date Plotted: 11/30/16

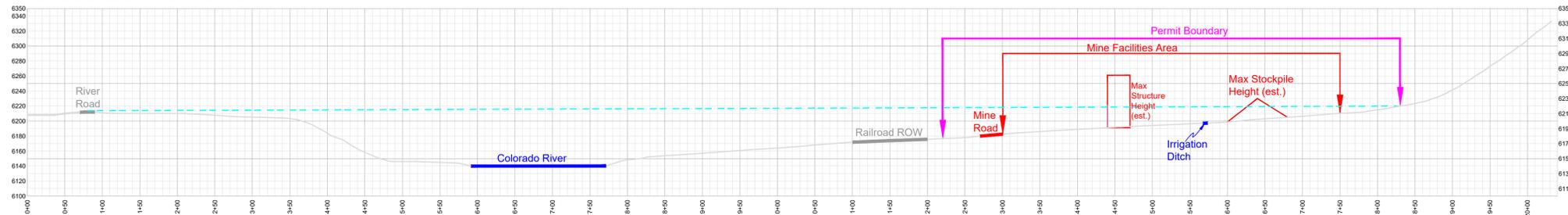
**Greg Lewicki And Associates**  
 11541 Warrington Court Parker, CO USA 80138 Phone (303)-346-5196 E-Mail - info@lewicki.biz

Note: The base of gravel is assumed to be 35 feet below top of gravel

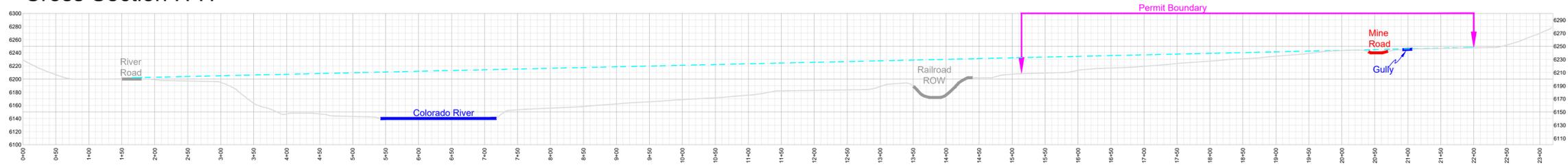
Cross Section F-F'



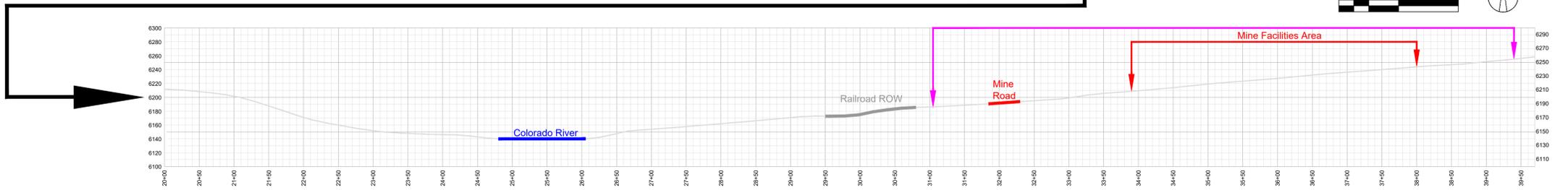
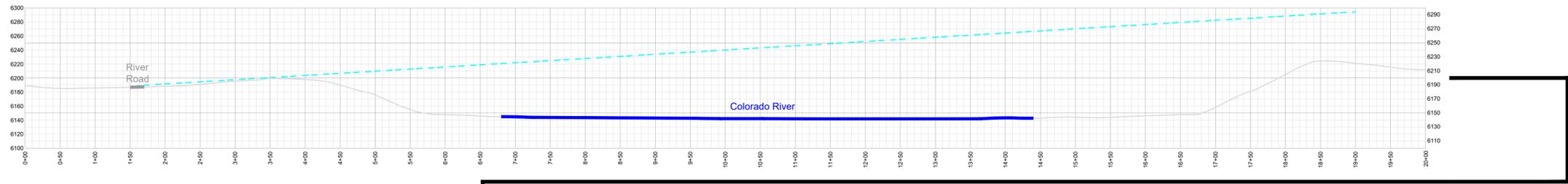
Cross Section G-G'



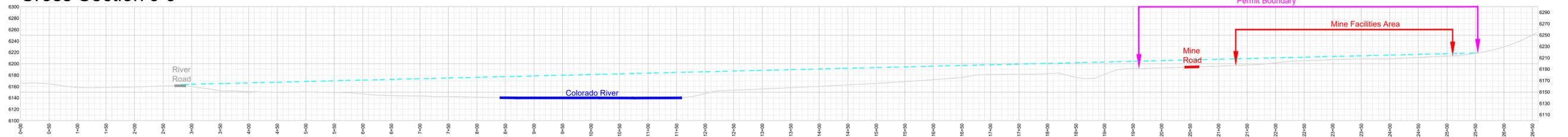
Cross Section H-H'



Cross Section I-I'



Cross Section J-J'



Elam Construction, Inc.  
Coyote Gravel Pit

Exhibit C Map 3B: Cross Sections

Permit Number: \_\_\_\_\_  
 Mine Center Location: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Nearest Town: Dotsero \_\_\_\_\_  
 State: Colorado \_\_\_\_\_ County: Eagle \_\_\_\_\_ Section: 32 \_\_\_\_\_ Township: 4 South \_\_\_\_\_ Range: 86 West \_\_\_\_\_  
 Major Watershed: Colorado River \_\_\_\_\_



Map Scale: \_\_\_\_\_

Legend

- Original Groundline
- Permit Boundary
- Pit Boundary
- View Sightline

Map Georeferencing Information: Datum:  NAD27  NAD83  WGS84  None (Local) Units:  Foot  Meter  
 Mapping Projection: State Plane:  Single Zone  North Zone  South Zone  Central Zone  
 UTM:  Zone 12  Zone 13  Zone 14  Other: \_\_\_\_\_  
 Local System (Name): Colorado Central  
 File Name: E:\Work\Dropbox\Karl Berger\Coyote Pit\AutoCAD\Coyote Pit 161128.dwg Date Plotted: 11/30/16

**Greg Lewicki And Associates**  
 11541 Warrington Court Phone (303)-346-5196  
 Parker, CO USA 80138 E-Mail - info@lewicki.biz



Permit Number: \_\_\_\_\_  
 Mine Center Location: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
 State: Colorado County: Eagle Nearest Town: Dotsero  
 Section: 32 Township: 4 South Range: 86 West  
 Major Watershed: Colorado River

Map Scale: 1" = 200'

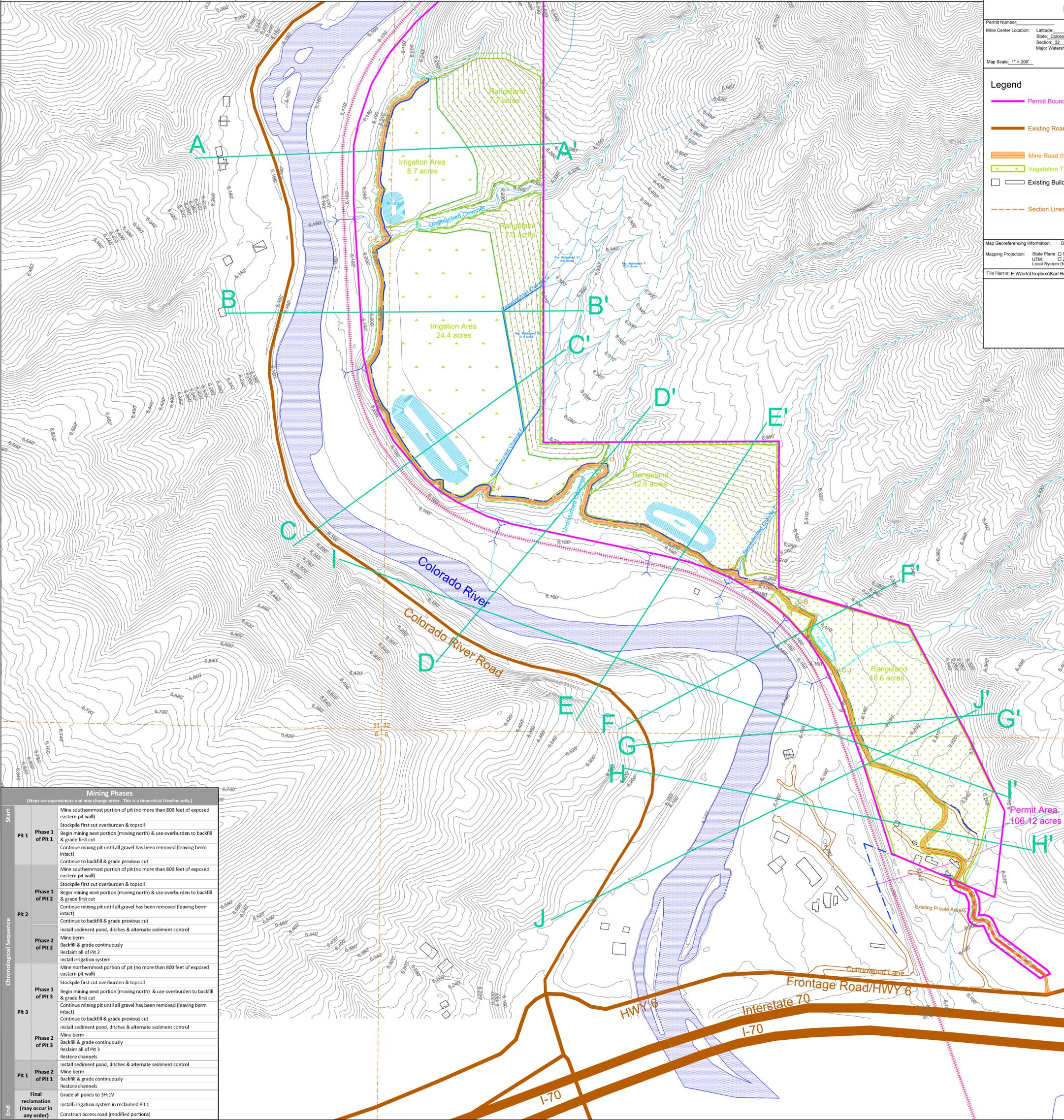
**Legend**

- Permit Boundary
- Existing Roads
- Mine Road (to remain permanent)
- Vegetation Type/Boundaries
- Existing Buildings
- Section Lines
- Watershed
- Water/Drainages
- Colorado River
- Reclaimed Topography

Map Referencing Information: Datum:  NAD27  NAD83  WGS84  None (Local) Units:  Foot  Meter  
 Mapping Projection: State Plane:  Single Zone  North Zone  South Zone  Central Zone  
 UTM:  Zone 12  Zone 13  Zone 14  Other: \_\_\_\_\_  
 Local System (Name): Colorado Central

File Name: E:\Work\Dropbox\Karl Berger\Coyote Pit\AutoCAD\Coyote Pit\_161128.dwg Date Plotted: 11/30/16

**Greg Lewicki And Associates**  
 11541 Warrington Court  
 Parker, CO USA 80138 Phone (303)-346-5196  
 E-Mail - info@lewicki.biz



	Area Acres	Total Gravel Tons
Pit 1	31.41	1,774,758
Pit 2	14.39	844,355
Pit 3	12.65	488,418
<b>Total</b>	<b>58.45</b>	<b>3,107,530</b>

Gravel Production Phase 1		
	Cubic Yards	Tons
Pit 1	757,811	1,136,705
Pit 2	396,866	595,293
Pit 3	305,494	458,236
<b>Total</b>	<b>1,460,171</b>	<b>2,190,234</b>

Overburden Phase 1 +8% Swell		
	Cubic Yards	Cubic Yards
Pit 1	788,443	851,519
Pit 2	626,484	676,603
Pit 3	56,507	61,028
<b>Total</b>	<b>1,471,435</b>	<b>1,589,150</b>

Gravel Production Phase 2		
	Cubic Yards	Tons
Pit 1	425,373	638,053
Pit 2	166,043	249,062
Pit 3	20,121	30,181
<b>Total</b>	<b>611,537</b>	<b>917,296</b>

Overburden Phase 2 +8% Swell		
	Cubic Yards	Cubic Yards
Pit 1	158,839	171,547
Pit 2	321,358	347,066
Pit 3	19,269	20,811
<b>Total</b>	<b>499,467</b>	<b>539,424</b>

Reclamation Backfill Excess Overburden		
	Cubic Yards	Cubic Yards
Pit 1	470,656	552,409
Pit 2	466,027	557,642
Pit 3	98,592	-16,753
<b>Total</b>	<b>1,035,275</b>	<b>1,093,299</b>

Mining Phases	
(Steps are approximate and may change order. This is a theoretical timeline only.)	
Start	
Pit 1	<b>Phase 1 of Pit 1</b> Mine southernmost portion of pit (no more than 800 feet of exposed eastern pit wall) Stockpile first cut overburden & topsoil Begin mining next portion (moving north) & use overburden to backfill & grade first cut Continue mining pit until all gravel has been removed (leaving berm intact) Continue to backfill & grade previous cut
	<b>Phase 1 of Pit 2</b> Mine southernmost portion of pit (no more than 800 feet of exposed eastern pit wall) Stockpile first cut overburden & topsoil Begin mining next portion (moving north) & use overburden to backfill & grade first cut Continue mining pit until all gravel has been removed (leaving berm intact) Continue to backfill & grade previous cut Install sediment pond, ditches & alternate sediment control
	<b>Phase 2 of Pit 2</b> Mine berm Backfill & grade continuously Reclaim all of Pit 2 Install irrigation system
Pit 3	<b>Phase 1 of Pit 3</b> Mine northernmost portion of pit (no more than 800 feet of exposed eastern pit wall) Stockpile first cut overburden & topsoil Begin mining next portion (moving north) & use overburden to backfill & grade first cut Continue mining pit until all gravel has been removed (leaving berm intact) Continue to backfill & grade previous cut Install sediment pond, ditches & alternate sediment control
	<b>Phase 2 of Pit 3</b> Mine berm Backfill & grade continuously Reclaim all of Pit 3 Restore channels
	<b>Phase 2 of Pit 1</b> Mine berm Backfill & grade continuously Restore channels
<b>Final reclamation (may occur in any order)</b>	Grade all ponds to 3H:1V Install irrigation system in reclaimed Pit 1 Construct access road (modified portions)



## Greg Lewicki And Associates, PLLC

11541 Warrington Court  
Parker, CO USA 80138

Phone: (303) 346-5196  
E-Mail: info@lewicki.biz

Fax (303)-346-6934

November 29, 2016

Travis Marshall

Colorado Division of Reclamation, Mining, and Safety

1313 Sherman St, Rm 215

Denver, CO 80123

RE: Coyote Pit, M-2016-046, 112 Construction Materials Reclamation Permit Application, Adequacy Response.

The following information is in response to the comments and questions from the Division's November 28th adequacy review letter. Each item is addressed in line, with a list of revised permit components at the end.

- 1) *Per Rule 6.4.3(e), please submit a map that clearly identifies the type of present vegetation covering the proposed operation. Exhibit C Map C-1 Pre Mine Map does not specify the pre-operation vegetation.*

Information on the pre mine vegetation has been added to Map C-1. A revised version of this map is attached.

- 2) *Please provide maps that have accurate map legends. The maps submitted have various errors within the legend.*

The maps have all been checked for map accuracy. Revised versions are attached.

- 3) *Map C-2A shows the proposed access road not extending all the way to the frontage road. Please provide a revised map that shows the access road in its complete proposed configuration.*

See revised Map C-2A.

- 4) *Page D-11 topsoil will be stockpiled and seeded. Please specify the configuration and location of the topsoil stockpiles. Also, please provide mine plan maps that clearly display where the topsoil stockpiles will be located.*

Map C-2A now shows potential topsoil stockpile locations. Which areas are used, and the precise size of the piles to be used will vary depending on where mining activity is at.

- 5) *Page D-13 10 (g) states that the Coyote Pit will be reclaimed to rangeland and Table E-6 states that the post mining land uses will be irrigation fields, rangeland and commercial / industrial. On*

*page 4 of the DRMS application form has both boxes for rangeland and residential checked. Please clarify what the actual post mine land use will be.*

Only rangeland and irrigated fields will be left in the reclamation plan. Table E-6 has been corrected. Page 4 of the DRMS application has also been corrected.

*6) Exhibit H, on October 27, 2016 DRMS received a comment letter from Colorado Parks and Wildlife identifying potential wildlife concerns. In order to best minimize potential impact to wildlife please commit to the best management practices specified by Colorado Parks and Wildlife.*

The applicant will put into place the best management practices as described in the CPW letter. It should be noted that the primary berm between the mining activity and the Colorado River will not require seeding since it will be native material left in place as opposed to be constructed.

Attached to this adequacy response are the following revised items:

<b>Text</b>	<b>Map</b>
<b>Exhibit E, pg. E-1</b>	Map C-1
<b>Application Form pg. 4</b>	Map C-2A
	Map C-2B
	Map C-3A
	Map C-3B
	Map F

Please contact me at (303) 960-5613 or [benl@lewicki.biz](mailto:benl@lewicki.biz) with any further questions or comments.

Sincerely,



Ben Langenfeld, P.E.

Greg Lewicki & Associates

# EXHIBIT E

# RECLAMATION PLAN

## 1. General Reclamation Plan

The total area of the permit is 106.12 acres. Much of the undisturbed areas are perimeter areas of the pit and the access road. The access road is to be left in place for access to the reclaimed irrigated fields. The reclaimed land use is shown below in Table E-6.

**Table E-6: Post Mining Land Uses**

Post Mining Land Use Acreages	
Irrigation Fields	31.0
Rangeland	45.8
Road	14.1
Undisturbed	15.2
<b>Total</b>	<b>106.1</b>

Reclamation will be conducted as new areas are disturbed throughout the year. This will most likely occur in small increments a few times per year, with topsoil and overburden being placed in the previously excavated areas of the pit. See Map F for details. Once the pit mines out the initial 7-10 acres, the pit will strip topsoil on 2-5 acres per year and will place this topsoil directly on regraded mined out areas in back of the pit. In this way, reclamation will be concurrent and the maximum pit exposed area at any one time will be limited. This will also help reduce the exposed land area, which will reduce the reclamation bond and impacts to wildlife. The pit floor will be graded to drain towards the river. The pit excavation itself will prevent on-site stormwater from leaving the site until vegetation is sufficient to control erosion.

Topsoil will be salvaged from all mining areas. The expected topsoil thickness is 4 to 6 inches. The mining will be done contemporaneously with the reclamation. The maximum length of pit wall (eastern pit wall facing the river) will be 800 feet. Initially, topsoil will be stripped from an area of approximately 8 acres in the southern portion of Pit 1. Topsoil will be stockpiled adjacent to the stripped area. The operation will mine for 6 to 9 months per year and produce gravel stockpiles to last the remainder of the year. Overburden will also be stripped from the same area as the topsoil. This overburden will also be stockpiled for later reclamation. Mining of the raw gravel will then start and progress north. Further overburden removed in this process will be used to backfill the eastern

12. **Primary future (Post-mining) land use (check one):**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Cropland(CR)                  | <input type="checkbox"/> Pastureland(PL) | <input type="checkbox"/> General Agriculture(GA)   |
| <input checked="" type="checkbox"/> Rangeland(RL)      | <input type="checkbox"/> Forestry(FR)    | <input type="checkbox"/> Wildlife Habitat(WL)      |
| <input type="checkbox"/> Residential(RS)               | <input type="checkbox"/> Recreation(RC)  | <input type="checkbox"/> Industrial/Commercial(IC) |
| <input type="checkbox"/> Developed Water Resources(WR) |  | <input type="checkbox"/> Solid Waste Disposal(WD)  |

13. **Primary present land use (check one):**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Cropland(CR)                  | <input type="checkbox"/> Pastureland(PL) | <input type="checkbox"/> General Agriculture(GA)   |
| <input checked="" type="checkbox"/> Rangeland(RL)      | <input type="checkbox"/> Forestry(FR)    | <input type="checkbox"/> Wildlife Habitat(WL)      |
| <input type="checkbox"/> Residential(RS)               | <input type="checkbox"/> Recreation(RC)  | <input type="checkbox"/> Industrial/Commercial(IC) |
| <input type="checkbox"/> Developed Water Resources(WR) |  |  |

14. **Method of Mining:** Briefly explain mining method (e.g. truck/shovel): \_\_\_\_\_  
Dozer, loader, and haul truck

15. **On Site Processing:**  Crushing/Screening

13.1 Briefly explain mining method (e.g. truck/shovel): \_\_\_\_\_  
Dozer, loader, and haul truck

List any designated chemicals or acid-producing materials to be used or stored within permit area: \_\_\_\_\_  
None

16. **Description of Amendment or Conversion:**

If you are amending or converting an existing operation, provide a brief narrative describing the proposed change(s).

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# COLORADO

## Parks and Wildlife

Department of Natural Resources

Glenwood Springs Area Office  
0088 Wildlife Way  
Glenwood Springs, CO 81601

10/26/2016

Travis Marshall  
Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, CO 80203

**RE: Coyote Gravel Pit (DRMS File No. M-2016-046)**

Dear Mr. Marshall,

Thank you for the opportunity to review the proposed gravel mining operation referred to as the Coyote Gravel Pit in Eagle County, Colorado. Colorado Parks and Wildlife (CPW) has a statutory responsibility to manage all wildlife species in Colorado; this responsibility is embraced and fulfilled through CPW's mission to protect, preserve, enhance, and manage the wildlife of Colorado for the use, benefit, and enjoyment of the people of the State and its visitors. CPW encourages the Division of Reclamation, Mining and Safety and the applicant to afford the highest protections for Colorado's wildlife species and their habitats.

CPW understands that the proposal is to mine aggregate materials from this site over the course of the next 12 years. Final reclamation will be implemented to support a rangeland post-mining land use to be used by the property owner. The mining and reclamation activities will occur during two separate phases of development. Upon final reclamation, CPW would be happy to offer suggestions for native seed mixtures and reclamation techniques to benefit wildlife.

After reviewing the application materials CPW has identified potential wildlife concerns and developed the following best management practices to avoid and minimize wildlife impacts to the greatest extent possible.

### Aquatic Habitats

The primary concern to aquatic habitats and fish species is potential sediment contributions through erosion and stormwater runoff events. In places, the proposed pits appear to be within 300 feet from the Colorado River which contains important habitat for trout and native fish species including bluehead suckers, flannelmouth suckers, roundtail chub, mottled sculpin, and speckled dace. CPW recommends strict stormwater control and sediment containment measures/BMPs to minimize sediment transport into the Colorado River. Immediate seeding of the berm between the pit and the river should be utilized to reduce erosion. Until vegetation is established,



CPW recommends using straw wattles, silt fencing, or other appropriate measures to reduce erosion and sediment transport.

Additionally, CPW supports secondary containment measures for all fuel and hazardous materials storage facilities, as outlined in the application. If water is drawn from the Colorado River to fill water trucks or for other operational uses, CPW recommends that all hoses be screened with a foot valve and also be disinfected prior to their use.

### Terrestrial Wildlife & Habitats

While the most important winter range habitat for mule deer and elk in this area occurs on the west side of the river, there are animals that utilize the upper sagebrush benches on the east side as well. Bighorn sheep also utilize this area year-round with frequent sightings on the BLM land above the property. CPW supports the following practices that were identified in the application to minimize impacts to terrestrial wildlife species and their habitats:

1. No night-time mining operations will occur besides occasional equipment maintenance and light vehicle traffic.
2. Any necessary fencing will be in accordance with CPW's Fencing with Wildlife in Mind document, which can be found at:  
<https://cpw.state.co.us/Documents/LandWater/PrivateLandPrograms/FencingWithWildlifeInMind.pdf>
3. Dust suppression measures will be utilized when necessary to minimize fugitive dust. Minimizing dust coatings on adjacent vegetation will be important to reduce indirect impacts to wildlife habitat.
4. Implementation of the weed monitoring and control plan will be imperative to minimize noxious weed infestations both during and after mining operations.
5. Apply reduced speed limits to haul roads to reduce animal-vehicle collisions.

CPW also encourages the applicant to utilize the summer and fall months to the maximum extent possible to achieve their desired yearly production levels. Minimizing activity during the winter months will lessen disturbances to big-game species and bald eagles which frequent this area during the winter.

The northern portion of the proposed property is within a CPW mapped peregrine falcon nesting area. The nearest known peregrine nests are approximately 2 miles north of the property; however, if new nest sites are located closer to the property, CPW suggests that the applicant adhere to seasonal timing restrictions for peregrine falcon nesting. Recommended restrictions for peregrine falcons are as follows:

*No surface occupancy (beyond that which historically occurred in the area) within ½ mile radius of active nests. Seasonal restriction to human encroachment within ½ mile of the nest cliff(s) from March 15 to July 31. Due to propensity to relocate nest*

*sites, sometimes up to ½ mile along cliff faces, it is more appropriate to designate 'Nesting Areas' that encompass the cliff system and a ½ mile buffer around the cliff complex.*

Colorado Parks and Wildlife appreciates the opportunity to review and submit comments for this project. If there are any questions or needs for additional information don't hesitate to contact Land Use Specialist, Taylor Elm, at (970) 947-2971 or District Wildlife Manager, Brian Wodrich at (970) 948-9166.

Sincerely,

A handwritten signature in black ink, appearing to read "Perry Will", with a long horizontal flourish extending to the right.

Perry Will, Area Wildlife Manager

Cc. Brian Wodrich, District Wildlife Manager  
Taylor Elm, Land Use Specialist  
File