STATE OF COLORADO

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

Two Rivers M1998-038 Second Adequacy Response

1 message

Jodi Schreiber <jodi@arycorp.com> Fri, Jun 7, 2024 at 6:59 AM
To: "Carter - DNR, Jocelyn" <jocelyn.carter@state.co.us>, John Paul Ary <jp@arycorp.com>

Jocelyn,

Please see the attached Second Adequacy Response.

Fremont would also like to ask for a two-week extension for you to review the response and Groundwater Monitoring Plan submitted.

Thank you,

ARY CORPORATION

Jodi Schreiber

839 Mackenzie Ave., Canon City, CO 81212
Office (719) 275-3264 | **Mobile** (719) 529-0916
jodi@arycorp.com

"Success is not final, failure is not fatal; it is the courage to continue that counts. "
–Winston Churchill

8 attachments

- **Groundwater Monitoring Plan Scope of Work.pdf** 293K
- **Exhibit D r2.pdf** 363K
- **Exhibit F r2.pdf** 326K
- **Legal r2.pdf** 1072K
- **Phase Map R7.pdf** 439K
- **DRMS Permit Narrative Updated Updated 6.6.2024.pdf** 39K
- **Exhibit C r2.pdf** 1516K
- **Second Adequacy Review Response 6.6.2024.pdf** 168K

ARY CORPORATION

June 6, 2024

Colorado Division of Reclamation, Mining and Safety
Attn: Jocelyn Carter
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Two Rivers Pit M1998-038 Amendment Application Second Adequacy Response

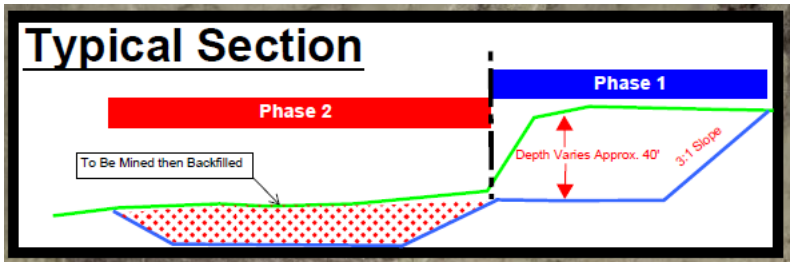
Jocelyn,

The maps enclosed and emailed on June 4th, 2024 should address Adequacy Items 1, 2, 4, 5, 6, 7, 8, 9, 10, 14, and 15.

3. Please remove this map, as it was attached in error. I apologize for the oversight.

11. The trench is located at the phases that will need dewatering. Phases 1, 3, 8, 9, and 10 will not need dewatering. The trench and settling pond have been added to the Existing Conditions Map as requested, however the Rule sited I believe pertains to existing conditions and not conditions during mining activities. However, to keep this process moving forward, we have added it to satisfy the request in this review. The wash ponds are not on this map, as they will move throughout the mining process and will be in the process area.

12. With up to 10 feet of overburden, and an approximate 30% waste across the entire site, there will be ample quantities to backfill. Additionally, the State has not taken into account that the upper level will not be backfilled by 33 feet, as water will not be encountered at this level. Backfill will only occur to achieve proper 3H:1V sloping. The upper levels will be mined and backfilled to a depth that will lower the elevation to be consistent with the lower level at the conclusion of mining. Fremont continues to stand by our original backfill quantity calculations.



ARY CORPORATION

A&S Construction Co.
Fremont Paving and Redi-Mix, Inc.
Ary Brothers Trucking, Inc.
All-Rite Paving & Redi-Mix, Inc.
Hard Rock Paving and Redi-Mix, Inc.

839 Mackenzie Ave.
Cañon City, CO 81212
719.275.3264

13. Please see the attached Groundwater Monitoring Plan. The home and outbuildings will be removed during mining and reclamation activities.

16. AGRA is the Arkansas Groundwater and Reservoir Association. Fremont regularly purchases water from entities such as this for these operations and to cover our SWSP requirements that is then approved by the Colorado Division of Water Resources. We would do the same in this instance and purchase water to cover our operations onsite. We anticipate a need of 10-15 acre feet per year.

17. Please see the attached updated Mining plan with updated depths.

Thank you,

Jodi Schreiber

Jodi Schreiber
jodi@arycorp.com
719-529-0916

6.4.4 Exhibit D

Mining Plan

The Two Rivers Pit is an existing site that encompasses 357.2 acres. Of this acreage, 336.9 acres will be mined/disturbed while 20.3 acres will remain unaffected. The target gravel source is located beneath limited topsoil and overburden. The primary commodities are sand and gravel. Incidental materials not used for construction material will be used to reconstruct the pit floor and lessen the pit slopes.

The site is made up of mostly Otero dry sandy loam, Cascajo very gravelly sandy loam, Gelberg-Haversid complex. The target gravel source is located beneath limited topsoil of 18 inches and overburden of an additional 2-10 feet. Topsoil and overburden will be saved for reclamation of the mine site. The stratum beneath the deposit is presumed to be blue shale. The primary commodities are sand and gravel. Incidental materials not used for construction material will be used to reconstruct the pit floor and lessen the pit slopes.

The life of the proposed operation is speculative due to ever changing economic conditions in the construction industry. If economic demands remain low and extraction is limited to 70,000 tons per year, approximately six acres per year would be mined. At this rate, the life of the mine would extend to over 50 years.

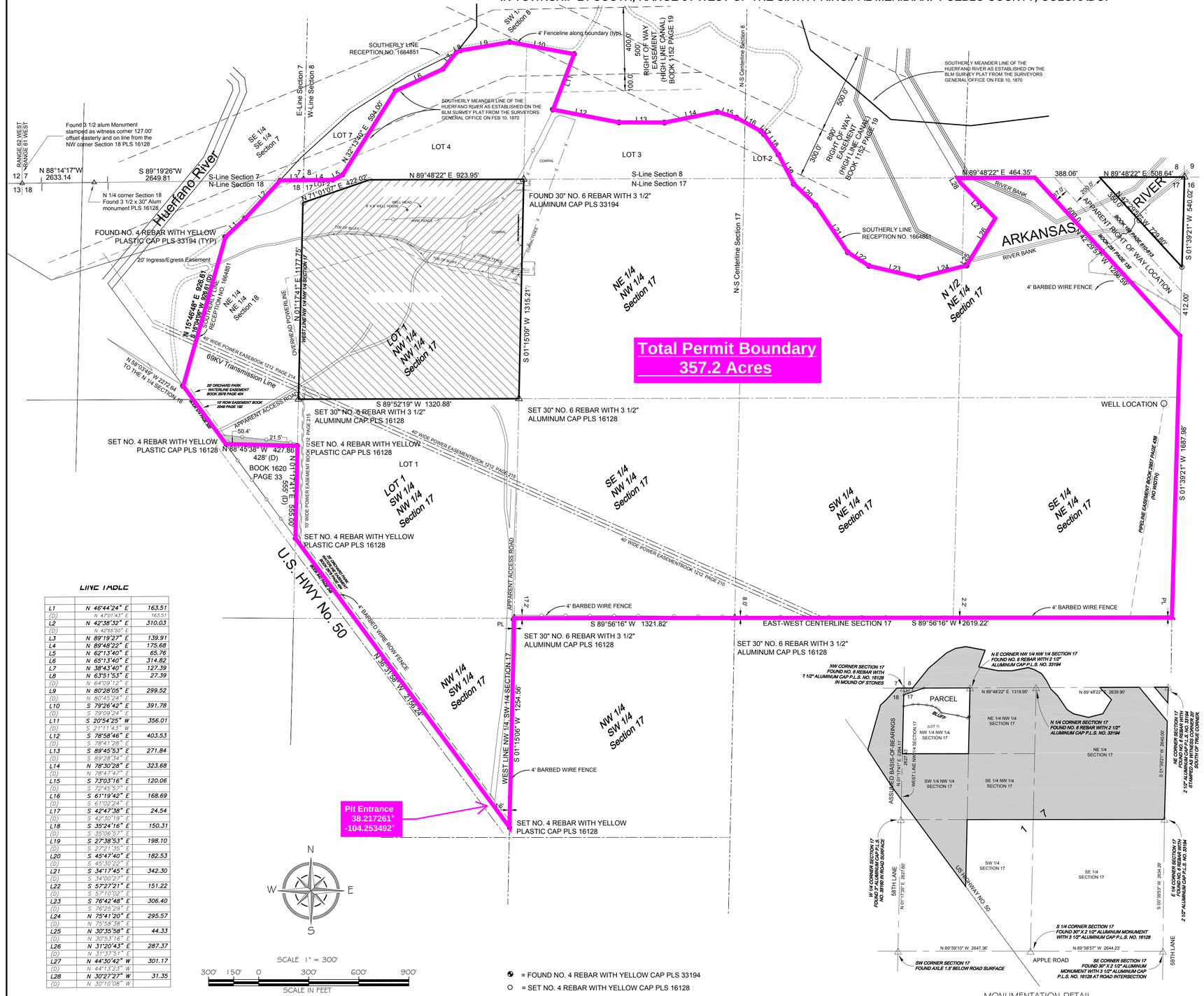
Mining had previously begun with the original operator of the site. Fremont intends to continue to mine out what will be referred to as Phase One, which is the original mine area, and then move into Phase Two. A dewatering pond will be located on the north side of Phase Seven and will be established early on in this new mine plan. It is anticipated that water will be intercepted during the mining of Phase Two. This water will be directed through a trench to the dewatering pond. Reclamation will occur concurrent to mining with any excess material from a phase being used as backfill in the previous phase. At no time will greater than 100 acres be open for active mining or reclamation. Once one phase has been backfilled and top soil has been applied, Fremont will then proceed to open a new phase of mining using that phase's waste material to create slopes of 3H:1V in the previous phase. This process will continue throughout the site following the phase numbering noted on the Phase Map.

Mining will occur to a depth of approximately 45 feet. Groundwater is expected to be encountered during excavation and mining. Water will be pumped from the facility with surface water onsite not exceeding 1 acre. This water will be pumped from the mine area through a ditch to the dewatering pond. The water will then flow to the Arkansas River, where it will be discharged at a rate equal to that of the pump. At this time, the rate of that release is unknown. If, after the discharged water tests show that the water needs to be pumped into a settling pond prior to being released into the Arkansas due to the Division of Water Resource requirements, a settling pond will be built in which the water from the mine site will be stored

Two River Pit
Exhibit A - Legal Map

ALTA/ACSM LAND TITLE SURVEY

A PARCEL OF LAND LOCATED WITHIN A PORTION OF THE S 1/2 OF SECTION 8, THE EAST 1/2 OF THE NE 1/4 OF SECTION 18 AND A PORTION OF SECTION 17 ALL IN TOWNSHIP 21 SOUTH, RANGE 61 WEST OF THE SIXTH PRINCIPAL MERIDIAN. PUEBLO COUNTY, COLORADO.



LINE TABLE

L1	N 46°44'24" E	163.51
(D)	N 47°01'43" E	163.51
L2	N 42°38'32" E	310.03
(D)	N 42°55'50" E	
L3	N 89°19'27" E	139.91
L4	N 89°48'22" E	175.68
L5	N 62°13'40" E	65.76
L6	N 65°13'40" E	314.82
L7	N 38°43'40" E	127.39
L8	N 63°51'53" E	27.39
(D)	N 64°09'12" E	
L9	N 80°28'05" E	299.52
(D)	N 80°45'24" E	
L10	S 79°26'42" E	391.78
(D)	S 79°09'34" E	
L11	S 20°54'25" W	356.01
(D)	S 21°11'43" W	
L12	S 78°58'46" E	403.53
(D)	S 78°41'28" E	
L13	S 89°45'53" E	271.84
(D)	S 89°28'34" E	
L14	N 78°30'28" E	323.68
(D)	N 78°47'47" E	
L15	S 73°03'16" E	120.06
(D)	S 72°45'57" E	
L16	S 61°19'42" E	168.69
(D)	S 61°02'34" E	
L17	S 42°47'38" E	24.54
(D)	S 42°30'19" E	
L18	S 35°24'16" E	150.31
(D)	S 35°06'57" E	
L19	S 27°38'53" E	198.10
(D)	S 27°21'35" E	
L20	S 45°47'40" E	182.53
(D)	S 45°30'22" E	
L21	S 34°17'45" E	342.30
(D)	S 34°00'27" E	
L22	S 57°27'21" E	151.22
(D)	S 57°10'02" E	
L23	S 76°42'48" E	306.40
(D)	S 76°25'29" E	
L24	N 75°41'20" E	295.57
(D)	N 75°58'38" E	
L25	N 30°35'58" E	44.33
(D)	N 30°53'16" E	
L26	N 31°20'43" E	287.37
(D)	N 31°37'51" E	
L27	N 44°30'42" W	301.17
(D)	N 44°13'33" W	
L28	N 30°27'27" W	31.35
(D)	N 30°10'08" W	

● = FOUND NO. 4 REBAR WITH YELLOW CAP PLS 33194

O = SET NO. 4 REBAR WITH YELLOW CAP PLS 16128

(D) = DEED TO DOS RIOS AS RECORDED UNDER RECEPTION NO. 1664851

LEGAL DESCRIPTION

The SE 1/4 NE 1/4 Section 17: Township 21 South Range 61 West of the 6th P.M.

Lot 2 in the NW 1/4 NW 1/4 Section 17, Township 21 South, Range 61 West of the 6th P.M.;
A portion of Lot 1 of the NE 1/4 of Section 18, Township 21 South, Range 61 West of the 6th P.M., described as follows:
Beginning at a point where the Northeasterly line of new Highway No. 50 intersects the East line of the NE 1/4 of said Section; thence North along said Section line a distance of 855 feet to a point; thence West at right angles, a distance of 659 feet to a point in said Northeasterly line of said new Highway No. 50; thence southeasterly along the Northerly line of said new Highway No. 50 to the Point of Beginning;

EXCEPTING THEREFROM a tract of land approximately 2 acres described in a deed from Richard A. Harpman and Emily Harpman to Clarence A. Engelbrect and Linda Engelbrect recorded August 14, 1967 in Book 1620 at Page 33;

All that part of Lot 1 of the NE 1/4 of the NE 1/4 of Section 18, Township 21 South, Range 61 West of the 6th P.M., lying south of the centerline of the Huerfano River and East of the County Road, known as the Santa Fe Trail (U.S. Highway No. 50);
Lots 2 and 3, South of the Arkansas River, EXCEPT part conveyed to Mary Lee Russell in Book 206 at Page 534; and Lot 4 South of the Arkansas River in section 8, Township 21 South, Range 61 West of the 6th P.M.,

The N 1/2 of the NE 1/4 and the NE 1/4 of the NW 1/4 all in Section 17, Township 21 South, Range 61 West of the 6th P.M.;
SW 1/4 of the NW 1/4; and the NW 1/4 of the of the SW 1/4 lying Northeast of Highway 50, all in Section 17, Township 21 South, Range 61 West of the 6th P.M.; and
SE 1/4 of the NW 1/4 and the SW 1/4 of the NE 1/4 of Section 17, Township 21 South, Range 61 West of the 6th P.M.

EXCEPTING THEREFROM: any portion thereof as conveyed in Deed recorded December 4, 1968 in Book 1645 at Page 186; Deed recorded February 16, 1996 in Book 2867 at Page 515; and in Deed to Dos Rios Ranch, LLC, A Colorado Limited Liability Company, recorded March 8, 2006 at Reception No. 1664851;
AND FURTHER EXCEPTING THEREFROM: any portion thereof lying within the right of way for the Highline Ditch in said Section 17; and
FURTHER EXCEPTING those portions deeded to the Department of Highways in Book 1648 at Page 987; to Pueblo County for Public Highway in Book 116 at Page 75; Book 642 at Page 246; Book 574 at Page 320; Book 877 at Page 272; Book 168 at Page 610 and Book 281 at Page 135.
AND FURTHER EXCEPTING any portion lying within that parcel contained in Amended Decree in Quiet Title recorded January 9, 2015 at Reception No, 1993941.

SURVEYORS CERTIFICATION

I, ROCKY L. MANGINI, a Professional Land Surveyor in the State of Colorado hereby certify to Fidelity National Title Company that a survey of the land described above was done by me or under my direct responsible charge in August 2015 and complies with the minimum standards for Land Surveys and Plats as set forth in Section 38-51-106 et, seq. C.R.S. 1994 (as amended).

I also certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 3, 4, 6(b),7(a)(1), 8, 11(a) and 18 of Table A thereof. The field work was completed in August 2015.

COLORADO REGISTERED ROCKY LEE MANGINI 16128 PROFESSIONAL LAND SURVEYOR

8/26/2015
DATE

ROCKY L. MANGINI
PROFESSIONAL LAND SURVEYOR NO. 16128

NOTES:

1.) A search for recorded rights of way and easements by Fidelity National Title Insurance Company, Commitment No. 598-F0516818-320-BY3, Amendment No. 3, having an effective date of June 12, 2015 at 7:00 a.m.

2.) Bearings based on west line of the NW 1/4 of Section 17, Township 21 South, Range 61 West of the Sixth Principal Meridian, monumented at the W 1/4 Corner with a 3" aluminum cap P.L.S. No. 38160 in road surface and monumented at the NW corner with a No. 6 rebar (30" long) with 2 1/2" aluminum cap P.L.S. No. 16128 in mound of stones, assumed to bear N 01°17'41"W.

3.) All distances shown hereon are in U.S. Survey Feet.

4.) At the time of this survey there was no observed evidence that the site was used as a solid waste dump, sump or sanitary landfill.

5.) This survey meets the maximum allowable Relative Positional Precision for and ALTA/ACSM Land Title Survey of (0.07 feet) plus 50 parts per million.

PROPERTY MAY BE SUBJECT TO:
(Note: Numbered items correspond to the numbered items within the title work prepared Fidelity National Title Company)

8. Reservations, if any, as set forth in the following Patents, posted in the Bureau of Land Management -
General Office Land Records:
Patent No. 59, issued June 18, 1890 to Worsnop Clough;
Patent No. 58, issued June 18, 1890 to Worsnop Clough;
Patent No. 60, issued June 18, 1890 to Worsnop Clough;
Patent No. 5792, issued May 23, 1906 to John C. Collins;
Patent No. 6605, issued November 3, 1891 to Samuel Cottom;
Patent No. 63956, issued June 1, 1868 to Henry Dircks, George Gilbert, and George Woodward;
Patent No. 105759, issued December 10, 1867 to Ruth Miller and George F. Norris;
Patent No. 572, issued August 5, 1869 to George F. Norris;
Patent No. 6561, issued November 3, 1891 to William T. Junior Baker; and
Patent No. 9063, issued April 5, 1905 to Edwin B. Haver.

9. All rights to any and all minerals, ore and metals of any kind and character, and all coal, asphaltum, oil, and other like substances in or under the land, the rights of ingress and egress for the purpose of mining, together with enough of the surface of the same as may be necessary for the proper and convenient working of such minerals and substances, as reserved by the State of Colorado, as evidenced in Deed recorded March 24, 1937, in Book 835 at Page 226.
10. An easement for irrigation channels, ditches and waterways, and incidental purposes granted to The Highline Canal Company, by the instrument recorded April 13, 1951 in Book 1152 at Page 19. (As shown on this survey)
11. An easement for electrical lines and incidental purposes granted to Southern Colorado Power Company, by the instrument recorded June 15, 1953 in Book 1212 at Page 210. (As shown on this survey)
12. An easement for electrical lines and incidental purposes granted to Southern Colorado Power Company, by the instrument recorded June 15, 1953 in Book 1212 at Page 215. (As shown on this survey)
13. An easement for pipes and/or ditches for irrigation and incidental purposes granted to Elden E. Rogers, by the instrument recorded October 3, 1955 in Book 1280 at Page 167. (Blanket Easement)
14. An easement for communication and other facilities and incidental purposes granted to The Mountain States Telephone and Telegraph Company, by the instrument recorded October 2, 1980 in Book 2046 at Page 192. (Blanket Easement)
15. An undivided one-half (1/2) interest in all oil, gas and other minerals as reserved by Dinsmore C. Wayt and Irene Wayt, in Deed recorded May 27, 1983 in Book 2158 at Page 92, and any and all assignments thereof or interests therein.
16. Gravel rights, as more particularly set forth therein, as reserved by Ann Carruth as Personal Representative of the Estate of Odie W. Carruth aka O. W. Carruth, in Deed recorded October 27, 1993 in Book 2689 at Page 242, and any and all assignments thereof or interests therein.
17. An undivided one-half (1/2) interest in all gravel, conveyed to Ann Carruth, by Deed recorded October 27, 1993 in Book 2689 at Page 245, and any and all assignments thereof or interests therein.
18. Gravel rights, as more particularly set forth therein, conveyed to Ann Carruth by Deed, recorded October 27, 1993 in Book 2689 at Page 246, and any and all assignments thereof or interests therein.
19. An easement for pipeline, and incidental purposes granted to Scott E. Cotton and Ann C. Cotton, by the instrument recorded December 27, 1996 in Book 2957 at Page 439. (Blanket Easement)
20. An easement for sub-surface water main(s) and incidental purposes granted to the Orchard Park Water Association, by the instrument recorded March 17, 1997 in Book 2978 at Page 404.
21. An easement for sub-surface water main(s) and incidental purposes granted to the Orchard Park Water Association, by the instrument recorded March 17, 1997 in Book 2978 at Page 407.
Right of First Refusal recorded March 9, 2006 at Reception No. 1665193.
22. Terms, agreements, provisions, conditions and obligations of a Memorandum of Lease Agreement, executed by Kirkland Construction, LLLP, as Lessee(s), for an additional term of fourteen (14) years, recorded June 29, 2007 at Reception No. 1732252.
23. Deed of Conservation Easement recorded December 26, 2007 at Reception No. 1752850 and Amendment recorded September 26, 2008 at Reception No. 1783071.
24. Deed of Conservation Easement recorded December 26, 2007 at Reception No. 1752851 and Amendment recorded September 26, 2008 at Reception No. 1783068.
25. Deed of Conservation Easement recorded December 28, 2007 at Reception No. 1753089.
33. Notice regarding mineral rights recorded March 18, 2014 at Reception No. 1970020.
34. Any limitations on access to and from U. S. Highway 50, from subject property, resulting from the fact that the Colorado Department of Transportation has the authority to establish points of access from said Highway.
35. Any increase or decrease in the area of the land and any adverse claim to any portion of the land which has been created by or caused by accretion or reliction, whether natural or artificial; and the effect of the gain or loss of area by accretion or reliction upon the marketability of the title of the land.
36. Any rights, interest or easements in favor of the United States, the State of Colorado or the Public, which exists or are claimed to exist in and over the present and past bed, banks or waters of the Arkansas River.
37. Deed of Trust from Carl R. Pantaleo, to the Public Trustee of Pueblo County for the benefit of The First National Bank of Las Animas, to secure an indebtedness in the principal sum of $95,675.93, and any other amounts and/or obligations secured thereby, dated April 10, 2000, and recorded April 13, 2000 at Reception No. 1328752.

NOTE: No Full Release of said Deed of Trust appears of record. The Partial Release recorded April 20, 2006 at Reception No. 1671609 purports to release that portion thereof conveyed to Dos Rios Ranch, LLC, in Deed recorded March 8, 2006 at Reception No. 1664851.

NOTICE:
According to C.R.S. 13-80-105, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certificate shown hereon.

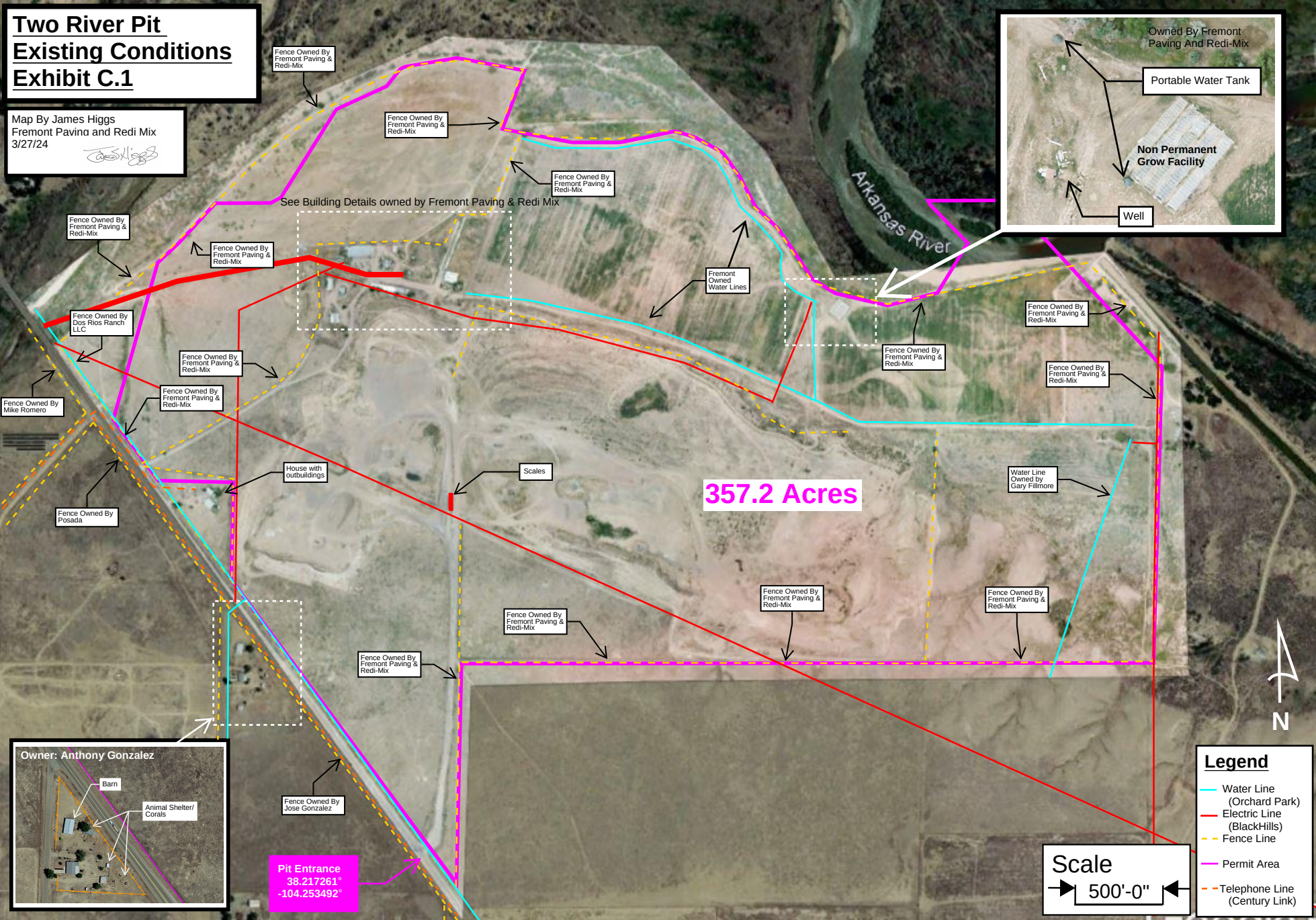
Mangini & Associates, Inc
Professional Engineers and Professional Land Surveyors
P.O. Box 8505 – Pueblo, CO
(719) 544–0865 Fax (719) 676–2853

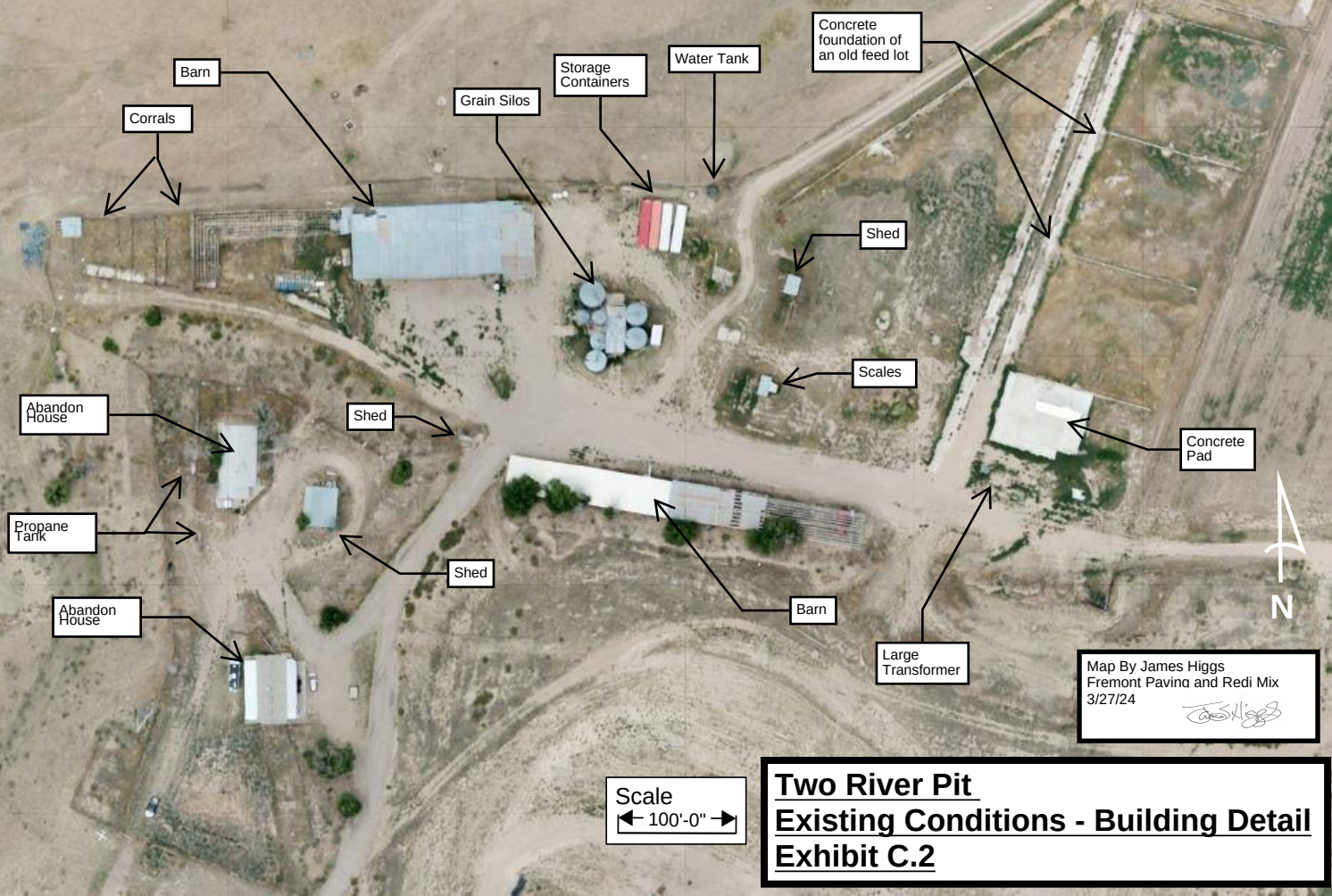
OWNER/TITLE: RANDY SHIPP / HARVEY KRAMER			
JOB DESCRIPTION: ALTA / ACSM SURVEY @ 57935 E U.S. HWY 50			
DETAILED BY: MAC			DATE: 08/21/2015
JOB NUMBER: 2015–161			SCALE: 1" = 300'
FILE NAME: 2015–161			SHEET NO.
REF JOB NO.:			1 OF 1

#	DATE	REVISIONS (COMMENTS)	CHECKED BY:

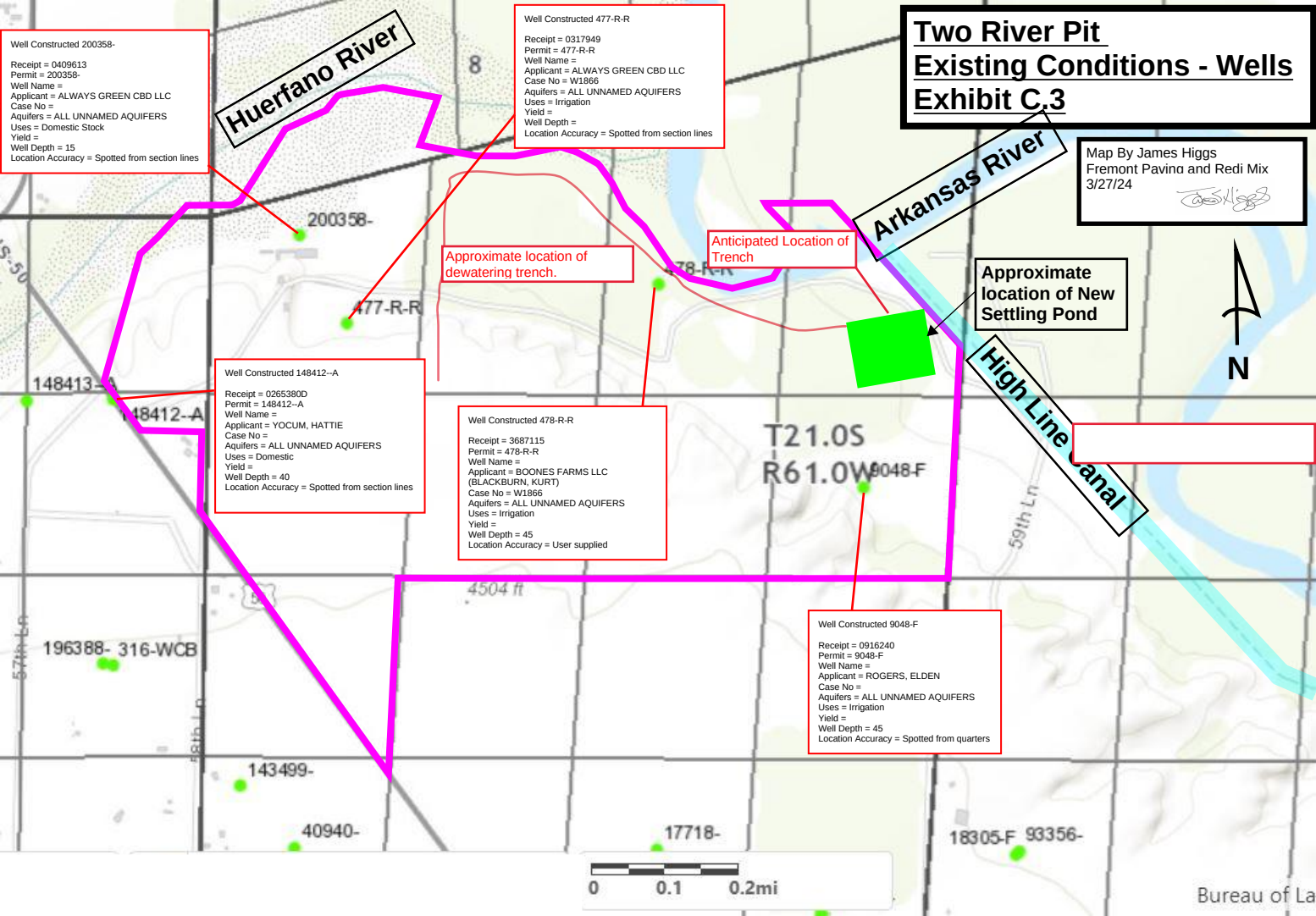
Two River Pit Existing Conditions Exhibit C.1

Map By James Higgs
Fremont Paving and Redi Mix
3/27/24





Two River Pit
Existing Conditions - Building Detail
Exhibit C.2


Two River Pit
Existing Conditions - Wells
Exhibit C.3
Map By James Higgs
Fremont Paving and Redi Mix
3/27/24
Huerfano River
Arkansas River
High Line Canal
N
Well Constructed 200358-
Receipt = 0409613
Permit = 200358-
Well Name =
Applicant = ALWAYS GREEN CBD LLC
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Domestic Stock
Yield =
Well Depth = 15
Location Accuracy = Spotted from section lines
Well Constructed 477-R-R
Receipt = 0317949
Permit = 477-R-R
Well Name =
Applicant = ALWAYS GREEN CBD LLC
Case No = W1866
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth =
Location Accuracy = Spotted from section lines
Approximate location of dewatering trench.
Anticipated Location of Trench
Approximate location of New Settling Pond
Well Constructed 148412--A
Receipt = 0265380D
Permit = 148412--A
Well Name =
Applicant = YOCUM, HATTIE
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Domestic
Yield =
Well Depth = 40
Location Accuracy = Spotted from section lines
Well Constructed 478-R-R
Receipt = 3687115
Permit = 478-R-R
Well Name =
Applicant = BOONES FARMS LLC (BLACKBURN, KURT)
Case No = W1866
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth = 45
Location Accuracy = User supplied
Well Constructed 9048-F
Receipt = 0916240
Permit = 9048-F
Well Name =
Applicant = ROGERS, ELDEN
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth = 45
Location Accuracy = Spotted from quarters
T21.0S
R61.0W
4504 ft
200358-
477-R-R
148413-
148412--A
196388-
316-WCB
143499-
40940-
17718-
18305-F
93356-
9048-F
59th Ln
57th Ln
0
0.1
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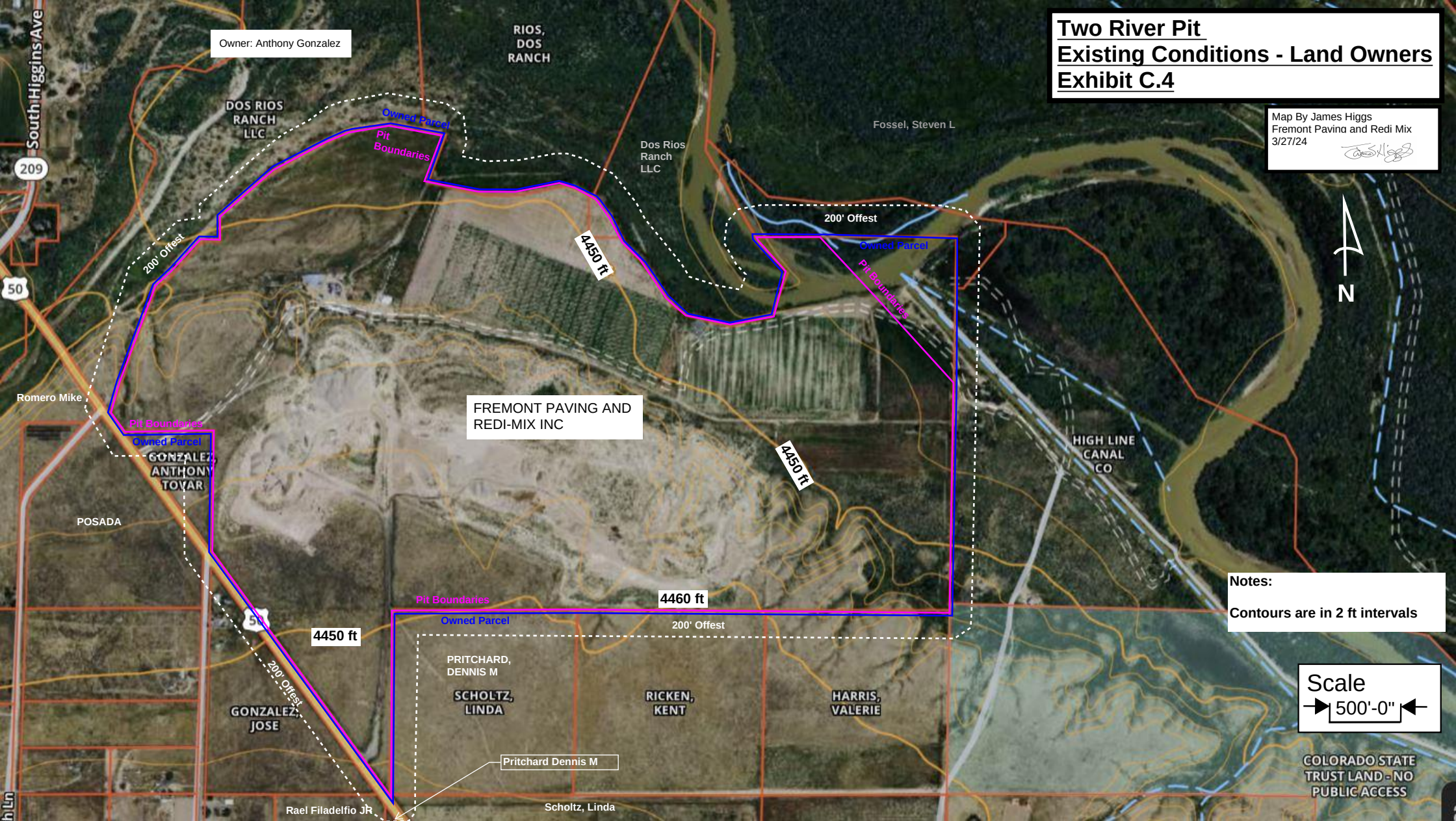
Bureau of La


Two River Pit
Existing Conditions - Land Owners
Exhibit C.4
Map By James Higgs
Fremont Paving and Redi Mix
3/27/24
Owner: Anthony Gonzalez
RIOS, DOS RANCH
DOS RIOS RANCH LLC
Owned Parcel
Pit Boundaries
200' Offest
4450 ft
Dos Rios Ranch LLC
Fossel, Steven L
200' Offest
Owned Parcel
Pit Boundaries
N
South Higgins Ave
209
50
Romero Mike
Pit Boundaries
Owned Parcel
GONZALEZ, ANTHONY TOVAR
POSADA
FREMONT PAVING AND REDI-MIX INC
4450 ft
HIGH LINE CANAL CO
Pit Boundaries
Owned Parcel
4460 ft
200' Offest
4450 ft
50
200' Offest
GONZALEZ, JOSE
PRITCHARD, DENNIS M
SCHOLTZ, LINDA
RICKEN, KENT
HARRIS, VALERIE
Pritchard Dennis M
Rael Filadelfio JR
Scholtz, Linda
COLORADO STATE TRUST LAND - NO PUBLIC ACCESS
Notes:
Contours are in 2 ft intervals
Scale
500'-0"

Two Rivers Pit - Phase Map 6/6/24

Map By James Higgs
Fremont Paving and Redi Mix

Unaffected

Phase 2
34 acres

Typical Section

Approximate Dewatering Ditch/Pipe Line

Phase 4
30 acres

Phase 5
30 acres

Phase 3
30 acres

Phase 1
(Current Mining Operation)
63.3 acres

Phase 6
30 acres

Unaffected

Phase 7
30 acres

Phase 8
30 acres

Phase 9
34 acres

Phase 9
34 acres

Phase 10
25.6 acres

357.2 Acres

Unaffected

Acres	
Mined	336.9
Unaffected	20.3
Total Permit Acres	357.2

Note:
1) Mine Phase 1 & 2
a) Continue mine phase 1
b) Begin phase 2 by strip/stockpile overburden and topsoil.
c) Establish dewatering pond located north of phase 7.
d) Begin mining below existing ground in phase 2.(start of dewatering)
e) Use excess stripping, topsoil and waste material from phase 2 to backfill mined area of phase 2
f) As soon as feasible, start backfilling phase 2 with excess material from phase 1.
g) Begin reclamation process in phase 1 as mining progresses.
h) After enough acreage is mined and reclaimed in phase 1, begin stripping phase 3.Using this material to finish backfilling phase 2. (never to exceed 100 acres open at any given time)
i) Close out majority of phase 1 (except roads and processing area)
j) Reclaim phase 2 as backfill is progressing.
g) Move mining to Phase 3 & 4

2) Phase 3 & 4 Mining
a) Mine phase 3 area that has already been stripped by the phase 2 process.
b) Begin phase 4 strip/stockpile overburden and topsoil.
c) As the mining of phase 2 moves east begin mining phase 4 and continue east.
d) Finish stripping phase 3 & 4, using excess overburden/topsoil in phase 2
e) Close out phase 2 as operations are complete
f) Begin reclamation of phase 3 as mining progresses
g) Begin reclamation of phase 4 as mining progresses

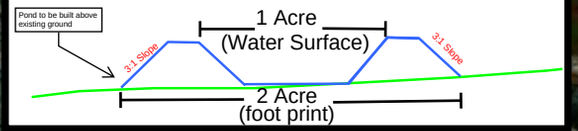
3) Repeat process until mining is complete
(Staying in numerical order in the phases)

Notes:
1) While mining there will be less than 1,000 ft at all times.
2) Phase time table will only driven by what the market bares. This is an estimated 5-10 years per phase.
3) Size and location of the dewatering ditch may change do to field conditions and changing needs of the gravel pit.

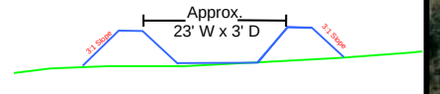
Scale
500'

N

Typical Settling Pond Section



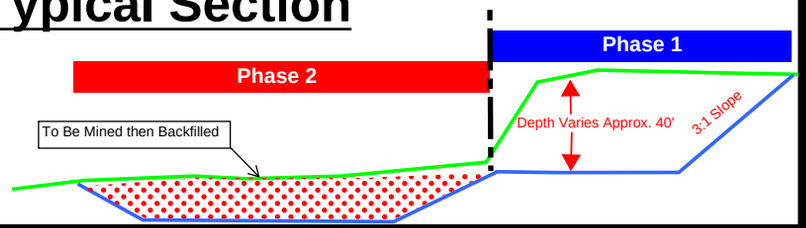
Typical Ditch Section

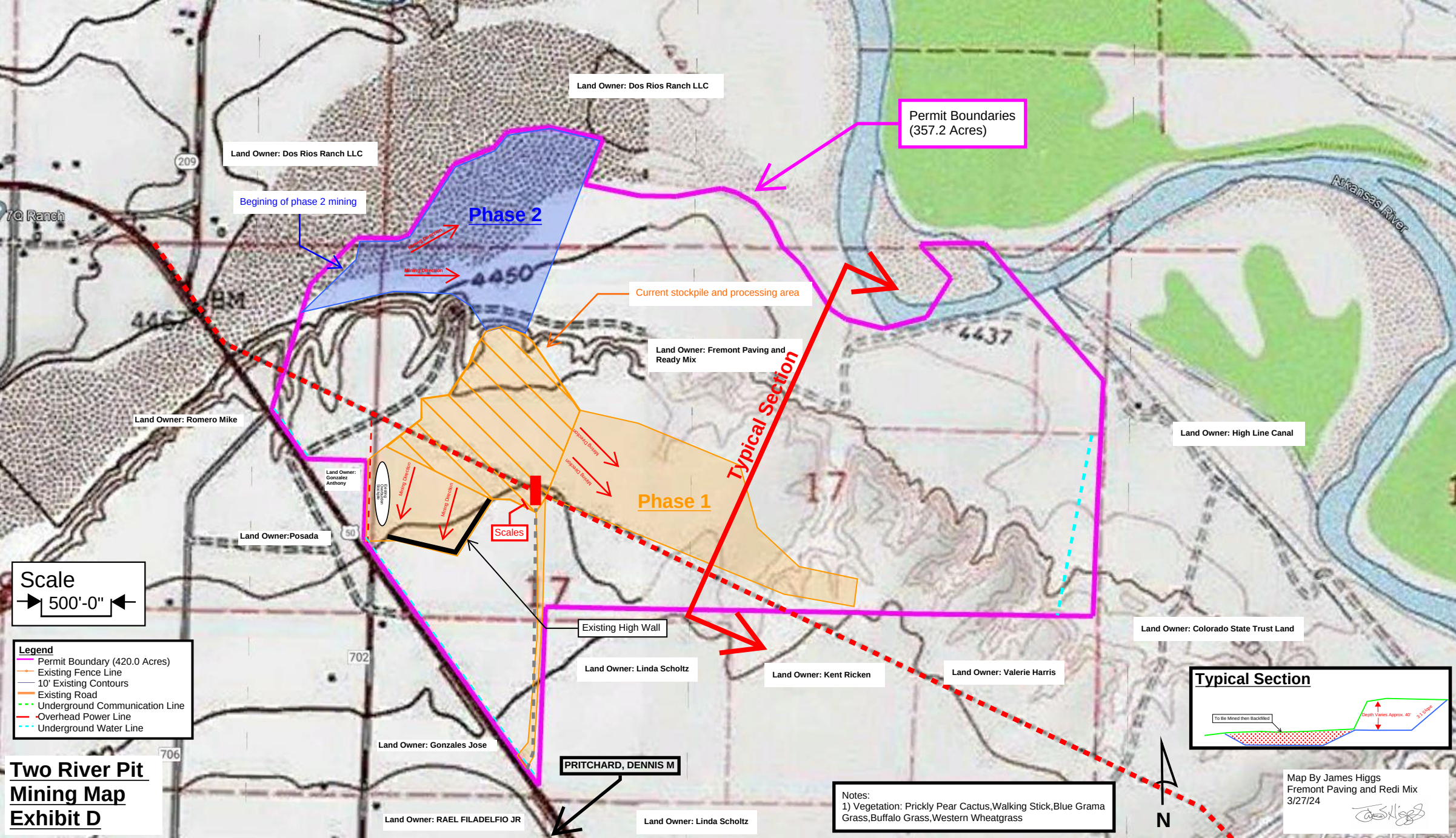


Outlet pipe shall be 24" or equivalent to a 24" pipe

Settling Pond
(see detail)

Typical Section

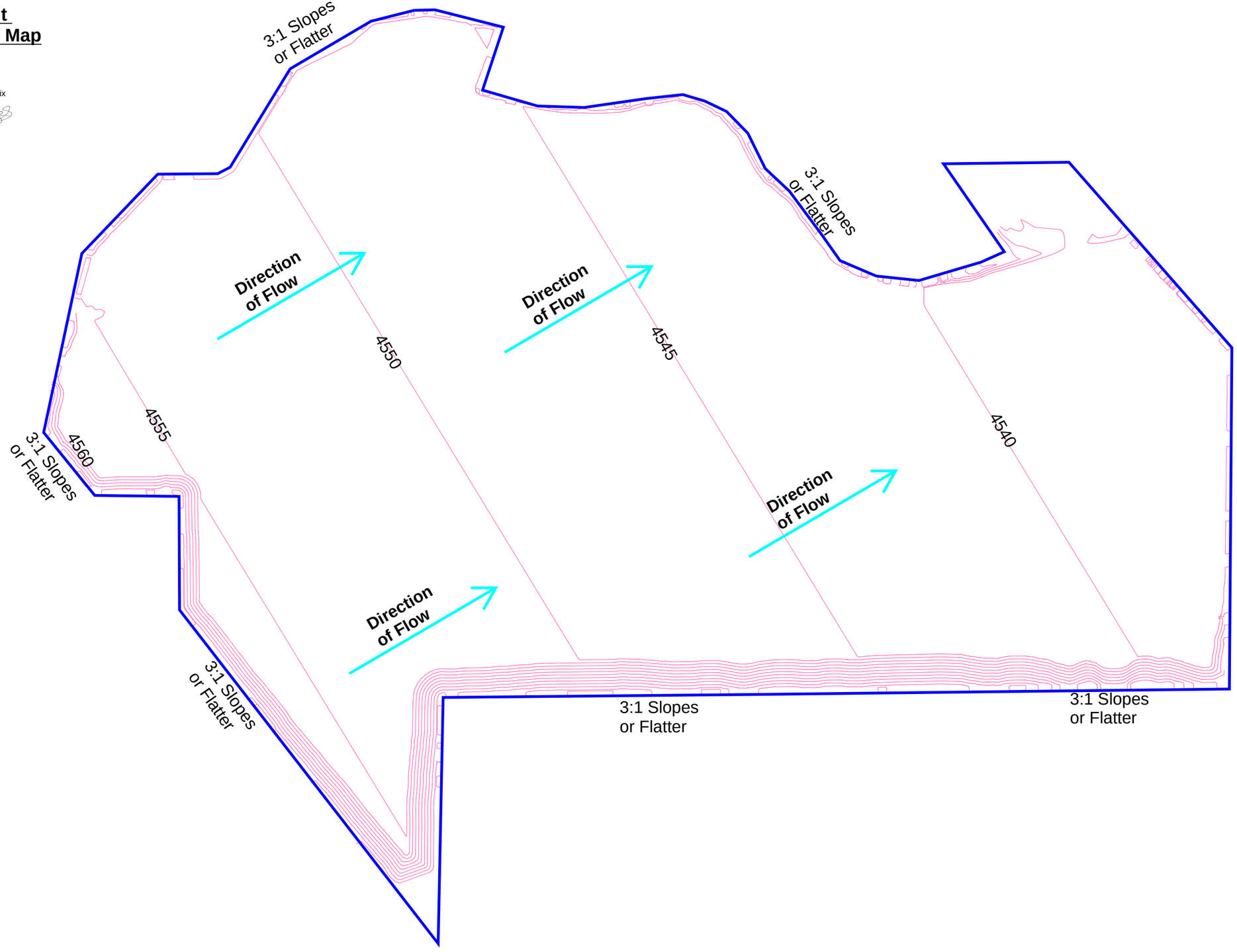




Two River Pit Mining Map Exhibit D

Two River Pit Reclamation Map Exhibit F

Map By James Higgs
Fremont Paving and Redi Mix
3/27/24



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June 6, 2024

Jodi Schreiber
Ary Corporation
839 Mackenzie Avenue
Canon City, CO 81212

Subject: **Scope of Work for Ary Corporation Two Rivers Pit DRMS Permit Groundwater Monitoring Plan Analysis; Pueblo, Colorado; Schnabel Project No. 21C26002.000**

Dear Ms. Schreiber:

SCHNABEL ENGINEERING, LLC is pleased to provide this scope of work to support development of a groundwater monitoring plan for Fremont Paving & Redi-Mix, Inc. (Fremont) at the Two Rivers Pit located near Boone, Colorado. The groundwater monitoring plan is in support of the amended application to Colorado Division of Reclamation and Mining Safety (DRMS) for permit M1998038 allowing ongoing mining of construction materials at the site.

This document describes establishing a pre-mining baseline for groundwater quality and quantity that can be presented in a groundwater monitoring plan. A groundwater monitoring plan presents results and recommends monitoring such that if/when mining encounters groundwater, water quality and quantity are not adversely affected by mining operations. Described herein is the proposed methodology to establish a groundwater monitoring plan, including the implementation of monitoring wells to collect water quality information and the efforts needed to establish a pre-mining baseline dataset. The end deliverable of establishing the baseline analyses presented here would be a technical memorandum describing the findings and proposing a groundwater monitoring plan for the Two Rivers Pit site to allow for continued operation of the site.

INTRODUCTION

The Groundwater Monitoring: Sampling and Analysis Plan Guidance, Construction Materials and Hard Rock Sites, published in September 2023, by DRMS (“The DRMS Guidance”) provides the necessary documentation to support a standard groundwater sampling plan for a site that could impact water quality or quantity during mining. Because future phases of mining at the Two Rivers Pit will require dewatering, a groundwater monitoring plan is required by DRMS to ensure compliance. This document presents a detailed description of the proposed methodology, development, and implementation of a groundwater monitoring plan at Fremont’s Two Rivers Pit.

BACKGROUND INFORMATION

The Two Rivers Pit is positioned near the intersection of Highway 50 and Highway 209 between the Huerfano River and the Arkansas River in parts of Sections 8, 17, and 18 of Township 21 South, Range

61 West of the 6th P. M. in Pueblo County, Colorado. The site has two main sections: a northern section located directly in the Arkansas River floodplain and a higher southern section positioned on a terrace above the floodplain. Mining operations to date have exclusively been in the southern portion of the site and have not encountered groundwater. In future mining phases where the northern part of the site is mined, groundwater in the alluvial aquifer will be encountered. Mining operations in the northern area will therefore require dewatering.

Historically, the site operated under Colorado Department of Public Health and Environment (CDPHE) Certification Number COG501830 authorizing Kirkland Construction, LLLP, to perform mining operations. The certification specified the discharge outfall as stormwater runoff from the site and the receiving stream to be the Huerfano River. This permit expired on December 31, 2021.

The site construction permit, M1998038, is currently undergoing an amendment process with DRMS. As part of this amendment, DRMS is requiring a groundwater monitoring plan be supplied with the amended application. The most recent correspondence on the permit from DRMS extended the deadline for re-submitting the permit application to June 8, 2024, to allow time to propose a groundwater monitoring plan.

SCOPE OF WORK:

Task 1 - Data Review

The initial step to developing a groundwater monitoring plan is establishing pre-mining groundwater conditions. To establish the baseline groundwater characterizations, relevant public and private sector data will be combined with field data. External information may come from the public domain literature and other private sources that do not require a Notice of Intent (Rule 5). One source of private sector data may be land acquisitions that included environmental site assessments.

Site Conditions

Permit information, publicly available data, and additional sources of data will be reviewed to establish site characteristics. The review will allow for establishing a general site narrative and descriptions of historical uses, existing structures, current land use characteristics, description of the topography, and any additional relevant physical features; a geologic description, including lithology and stratigraphy, composition, thickness, extent of each formation, and major structural features; a hydrogeologic description, stating all aquifers underlying the site along with aquifer parameters including hydraulic conductivity, isotropy, unconfined, recharge zones, groundwater flow direction, and identification of aquitards and confining layers. The review will document how site characteristics details are obtained.

Existing Site Wells

Locations, characteristics, drilling logs, correspondence, and uses for wells within the permit boundary will be evaluated. Wells immediately surrounding the site that could be impacted if groundwater quality or quantity is altered will be identified.

Proposed Mining Operations

The proposed mining operations, including the mining plan, reclamation plan, water information, and all other appendices as presented in the most up-to-date version of the Two Rivers Pit M1998038

Application, will be reviewed to inform recommendations on potential impacts to groundwater due to mining operations.

Task 2 - Groundwater Characterization

Characterizing groundwater prior to mining requires measuring current water quality and water levels. Baseline data for groundwater quality and quantity prior to proposed mining operations must be comparable to groundwater quality and quantity during future mining operations to demonstrate any impacts, or lack thereof, to groundwater due to mining. Establishing baseline groundwater conditions will include sampling from a minimum of three locations, with at least one site located upgradient and one site located downgradient of the proposed mining. Sampling locations will be within the DRMS permit area. Samples will be taken at quarterly intervals to collect five quarters worth of data to understand seasonal variability.

Monitoring Wells

As described above, to establish baseline groundwater conditions, at least three locations will be selected for monitoring wells representing sampling locations both upgradient and downgradient of proposed mining operations.

Existing wells within the permit boundaries will be evaluated to determine their appropriateness for serving as monitoring wells. Existing wells will be considered to be appropriate for monitoring well purposes if the location, top of casing, total depth, screened intervals, and date of establishment are known and considered sufficient to accurately represent groundwater quality and groundwater water levels.

Monitoring wells will be drilled if existing wells are not sufficient to meet the required number of monitoring well sites. New wells will be permitted through the Division of Water Resources in the State Engineer's Office. Construction of any drilled monitoring wells will follow the standards outlined in *Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction (2 CCR 402-2)*. Placement and construction specifics will be approved by qualified professionals. A licensed contractor will install all wells. The screened intervals on wells will be sufficient to capture sampling from all aquifers identified as potentially being impacted by mining operations.

Task 3 - Groundwater Levels

Groundwater levels will be collected from each monitoring well during each sampling event. To measure water depth, a depth gauge will be used from the top of the casing to the point where water is encountered in each well during each sampling event. Measured water levels will contribute to quantifying the site hydrogeology to establish pre-mining conditions.

Task 4 - Groundwater Quality

Table 1 shows the proposed list of water quality parameters to be tested during each sampling event to establish baseline water quality. The analytes proposed in the table include all variables presented in *Appendix A*, *Full parameter list for Construction Materials Sites from Regulation 41, Tables 1-4* in *Groundwater Monitoring: Sampling and Analysis Plan Guidance Construction Materials and Hard Rock Sites, September 2023.* Analytes are classified as either being field measurements or laboratory

measurements. To establish baseline groundwater quality, water quality samples will be collected quarterly from the monitoring wells for five quarters, or a total of five times. Water quality samples will be collected from each monitoring well and delivered to a laboratory for testing.

Table 1 ***Proposed Parameters Tested for during Baseline Monitoring***

Variable	Table Value Standard (mg/L, unless other units given)	Reg. 41 Table Reference (1-4)	Type of Testing
Temperature			Field
pH			
Conductivity			
Dissolved Oxygen			
pH Field (pH unit)	6.50 - 8.50	2 and 3	Laboratory
Aluminum - Dissolved	5	3	
Antimony - Dissolved	0.006	1	
Arsenic - Dissolved	0.01	1	
Barium - Dissolved	2	1	
Beryllium - Dissolved	0.004	1	
Boron - Dissolved	0.75	3	
Cadmium - Dissolved	0.005	1	
Chloride - Dissolved	250	2	
Chromium - Dissolved	0.1	1 and 3	
Cobalt - Dissolved	0.05	3	
Copper - Dissolved	0.2	3	
Fluoride - Dissolved	2	3	
Iron - Dissolved	0.3	2	
Lead - Dissolved	0.05	1	
Lithium - Dissolved	2.5	3	
Manganese - Dissolved	0.05	2	
Mercury - Dissolved	0.002	1	
Molybdenum - Dissolved	0.21	1	
Nickel - Dissolved	0.1	1	
Nitrate (NO3)	10	1	
Nitrite (NO2)	1	1	
Nitrite + Nitrate as Nitrogen	10	1	
Selenium - Dissolved	0.02	3	
Silver - Dissolved	0.05	1	
Sulfate - Dissolved	250	2	
TDS	400 mg/L, or 1.25X	4	
Thallium - Dissolved	0.002	1	
Uranium - Dissolved	0.0168 to 0.03	1	
Vanadium - Dissolved	0.1	3	
Zinc - Dissolved	2	3	

Task 5 - Sampling Methods

To establish the baseline groundwater quantity and quality, groundwater depths will be measured and samples will be collected from each monitoring well and delivered to an analytical lab for testing. Specific water sample collection methods provided by the laboratory will be followed, in addition to the baseline sampling recommendations provided below:

- Samples will be collected from all monitoring wells during each quarterly site visit.
- Samples from the wells located above gradient will be collected before the below gradient wells are sampled.
- Prior to collecting water samples, the depth of the water will be measured.
- Wells will be purged (one casing volume) a minimum of three times before water samples are collected. Between each purging, temperature, pH, conductivity, and dissolved oxygen will be measured.
- If between the second and third purging, the measured parameters vary more than 10%, subsequent purges will be performed (up to six times total) until measured parameters are within 10% of the previous values.
- All testing equipment will be removed from the site between each sampling event.
- Sample collection and storage will follow the requirements provided by the lab testing the samples.
- Samples will be delivered to the testing laboratory within the lab-provided recommended time following sample collection.
- Each sampling event will include documentation describing the field work.

Task 6 - Report Development

Based on the results of the Data Review and the Groundwater Characterization tasks described in Task 1 and Task 2, respectively, a groundwater monitoring plan will be prepared to present the baseline groundwater conditions and predicted impacts of mining to the hydrologic balance. This will be accomplished by quantifying the baseline water quality and quantity conditions and simulating proposed mining operations to evaluate potential impacts to water quality and quantity.

Baseline Conditions

In the groundwater monitoring plan, baseline groundwater levels will be presented. Water levels as measured from the monitoring wells in Task 2 will be provided in tabular and graphical format in addition to providing a narrative about the data collection process.

The groundwater monitoring plan will include a table of baseline groundwater quality conditions and measured groundwater levels from each sampling event, in addition to a summary of the site visits.

Future Operations

Results will be compiled to allow an analysis of an estimated duration of time that groundwater quantity and quality will be impacted during mining operations. Such an analysis can also inform the impacts of mining operations on water quality including anticipated spatial and temporal extents.

Monitoring

The report will compile the results from the baseline analyses and the simulated impacts and present a monitoring plan for future mining operations. This includes descriptions of sampling methods, intervals, and a list of parameters that will be measured and collected during mining.

The plan will also propose a sampling method to ensure consistency throughout the duration of site operations. For testing during ongoing mining operations, water quality testing methodologies will reflect both “as presented" methods and methodologies provided by labs used for testing.

The timing and duration of sampling during active mining of the site, in addition to descriptions of proposed mining operations and how groundwater will be impacted (such as descriptions of the dewatering methodology), will be specified. Finally, the proposed methodology will discuss the regularity with which the data will be provided to DRMS and what data will be provided, such as comparing predicted and actual changes to water quality and quantity.

DRMS has the authority to enforce Water Quality Control Commission (WQCC) water quality standards. All parameters that will be tested for during ongoing site operations will be presented in a table in the groundwater monitoring report.

Groundwater Points of Compliance

During future operations, samples will be collected from points of compliance. Points of compliance are defined as the locations where groundwater classification and quality will be evaluated by the WQCC throughout the duration of the groundwater monitoring plan, with DRMS having the authority to approve the proposed compliance points. Points of compliance are located outside of the area being mined and should be hydraulically down-gradient from future mining extents.

The establishment of baseline groundwater conditions from the Groundwater Characterization task (Task 2) will inform the appropriate placement of points of compliance and will be presented in the report.

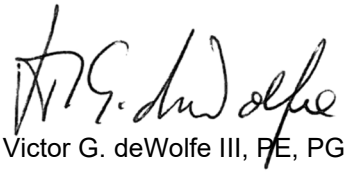
CONCLUSION

Schnabel is available immediately to support Ary Corporation with the Scope of Work described herein. We appreciate the opportunity to be of service for this project. Please call with any questions or comments you may have.

Sincerely,

SCHNABEL ENGINEERING, LLC

Nathan D. Phelps, PE
Associate Engineer



Victor G. deWolfe III, PE, PG
Senior Associate

NDP:VDW:em

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