



STATE OF
COLORADO

Eschberger - DNR, Amy <amy.eschberger@state.co.us>

M1985-184 - Bivens Pit- TR-2: 2nd Submission and Comments to Adequacy Review

Tim Gerken <tgerken@telesto-inc.com>

Wed, Feb 24, 2021 at 11:05 AM

To: "amy.eschberger@state.co.us" <amy.eschberger@state.co.us>

Cc: A B <bivensrecycling@yahoo.com>

Amy Eschberger,

Attached is the updated Technical Revision No. 2 (TR-2) and the comments to your adequacy review for Bivens Pit, Permit No. M-1985-184.

Also attached is the Gravel Well Permit Application (Application Receipt: 10009775) sent to the DWR on February 22, 2021.

Please contact us with any questions regarding this submission.

Thank you for your time and review of this revision.

-Tim Gerken

Tim J. Gerken

Geologist

Telesto Solutions, Inc.

[750 14th St. SW](#)

[Loveland, CO 80537](#)

(970)-484-7704 – Office

(720)-438-5513 -- Cell



M-1985-184_BivensPit_TR-2_2ndSubmission.zip
20295K



February 16, 2021

Via Electronic Mail

Amy Eschberger
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, Colorado 80203
amy.eschberger@state.co.us

**Subject: Bivens Trucking and Excavating, Inc –
Bivens Pit, Permit No. M-1985184
Response to Adequacy Review on Technical Revision 2**

Dear Ms. Eschberger:

Telesto Solutions, Inc. (Telesto) submits this letter on behalf of Bivens Trucking and Excavating, Inc. (Bivens) to address comments and questions in Adequacy Review No. 1 (AR-01) dated January 8, 2021. We appreciate your time in this matter. This letter repeats the comment/question from the adequacy review in *italics* with a response immediately following. Responses and questions that led to a change in Technical Revision 2 (TR-02).

Item 1

The updated mining plan states the operator plans to continue mining the pit from Phase 1 (i.e., the existing pond) to the south and expanding the pond to its original mine plan surface area of 6.5 acres, described as the Final Phase. However, on the updated mining plan map presented on Figure 3, the operator proposes expanding the existing pond by 1.1 acres in the Final Phase, which would give a total final pond surface of 4.6 acres (3.5 acres existing + 1.1 acre expansion). Additionally, on the updated reclamation plan map presented on Figure 4, the legend indicates the final reclaimed water body will be 4.9 acres in size. Please explain and/or correct this discrepancy in the proposed final pond size. Does the operator propose a maximum final pond size of 6.5 acres, 4.9 acres, or 4.6 acres? Please make any necessary corrections to the appropriate text and/or figures.

Response 1

Currently, the existing total reclaimed pond is 3.6 acres and additional 0.3 acres recreational beach area. Bivens plans on continuing mining and expanding the pit to the south, described as the final phase. The final phase includes expanding the pit by 1.3 acres to the south as was the original mining plan submitted in the 1980s. At the end of mining, Bivens's plans on leaving a final pond water surface area of 4.8 acres as described in the

two alternative reclamation plans. Plan 1 includes 4.8 acres exposed water surface area with an island. Plan 2 includes an exposed water surface area of 4.8 acres with no island. Regardless of which reclamation plan is chosen, the total final pond surface is 4.8 acres.

Item 2

Page 3 of the water court approved augmentation plan provided in Attachment 3 for Case No: 90-CW-129 (W-7813-74) states the plan was approved for a 6.05 acre “area of water surface left by mining.” This indicates the augmentation plan would not cover a proposed final pond size of 6.5 acres. Therefore, please make any necessary corrections to the appropriate text and/or figures to ensure the proposed final surface area of exposed groundwater does not exceed the 6.05 acres approved by the augmentation plan

Response 2

The final phase pond size of 6.5 acres was an error. The reported final phase pond size is updated to the correct the size of 4.8 acres. Bivens will not exceed the approved augmentation plan for 6.05 acres area of surface water left by mining.

Item 3

Page 5 of the water court approved augmentation plan provided in Attachment 3 for Case No: 90-CW-129 (W-7813-74) states the applicant had applied for a well permit for the site which was pending with the Office of the State Engineer (at the time of augmentation approval). Please confirm that a well permit is in place with the Division of Water Resources for the existing amount of exposed groundwater at the site, and that the well permit will be amended, if required, to cover the proposed pond expansion.

Response 3

A previous owner of the property, Charles R. Nauta, applied for a well permit in 1990 (Attachment 4). The well permit application was filed with the DWR, but no well permit was ever finalized. Bivens is currently working with the DWR to obtain the appropriate gravel well permit.

Item 4

In expanding the pond to the south as proposed, would the operator first need to dewater the area? If so, where does the operator intend to discharge this water? If dewatering activities are proposed, please commit to obtaining the necessary discharge permit from the Colorado Department of Public Health and Environment, Water Quality Control Division prior to initiating these activities.

Response 4

The operator may choose to mine the final phase “wet.” If the operator chooses to dewater the pit, then the operator would likely discharge the water into the existing pond (berm in between and then mine out berm at last). Regardless, operator commits to obtaining all required water quality permits prior to the start of mining.

Item 5

The updated reclamation plan proposes two separate scenarios for final reclamation. One plan includes leaving a 4.6 acre pond (per the text; 4.9 acre pond per Figure 4) with a 0.4 acre recreational area, a 1.3 acre parking area (to receive 6 inches of road base), 1.3 acres of roads (to receive 6 inches of road base), and an area of 2.7 acres to be retopsoiled at 12 inches depth and revegetated. The other plan includes all the same features except that a water feature of unspecified size may be excavated between the recreational area and the proposed parking area and this material will be used to backfill an unspecified portion of the expanded pond.

The operator is allowed to propose more than one potential reclamation plan for the site. However, the Division must calculate the required financial warranty for the most costly plan proposed in the event the permit was revoked and the State had to complete reclamation of the site. In this case, as long as the proposed final pond size does not exceed what is approved in the augmentation plan, the plan to excavate a water feature and backfill a portion of the pond would be the most costly plan of the two proposed. Therefore, unless the operator chooses instead to commit to the first reclamation plan without the water feature, the Division requires the following details in order to calculate the required financial warranty:

- a) Please provide the anticipated size (in acres) and depth of the proposed water feature.*
- b) Please provide the approximate volume of material expected to be excavated from the water feature area.*
- c) Will construction of the water feature and/or backfilling the southern portion of the pond require dewatering? If so, please provide additional details on this activity, including the estimated total costs*
- d) Please specify the anticipated equipment to be used to excavate the water feature and to haul the material to the southern end of the pond for backfill.*

e) Please provide an approximate length of slope (in feet) around the edge of the water feature which will require grading. Will these slopes be graded to 3H:1V or flatter?

f) Please provide an approximate area around the water feature including its slopes, which will require retopsoiling and revegetation (if this area exceeds the proposed 2.7 acres to retopsoil and revegetate).

g) Please specify the anticipated equipment to be used to backfill the southern

h) Please provide the anticipated size (in acres) of the southern portion of the pond to be backfilled. Will this area be retopsoiled and revegetated for reclamation?

i) Please clarify whether the proposed 2.7 acres requiring retopsoiling and revegetation for reclamation includes the proposed water feature area and the proposed backfilled portion of the pond. Will construction of the water feature reduce the proposed 1.3 acre parking area? If so, please specify the anticipated size of the parking area if the water feature is constructed.

Response 5

We have clarified that the “water feature” is not part of reclamation, but rather there are two options to end mining (one with an island and one without). We have provided the data requested to calculate the bond under both closure scenarios in the updated technical revision. Based on the amount of reclamation completed to date, we believe the existing bond should cover either scenario. We have not calculated the required bond as the Division typically does this internally, but we can if so requested.

Item 6

The updated reclamation plan states that areas to be revegetated will be seeded with the approved reclamation grass seed mix (switchgrass, slender wheatgrass, tall wheatgrass, alkali sacaton, and yellow sweet clover). Please be advised, yellow sweet clover is now considered to be an invasive species as it readily invades open areas and may compete for resources with native species. Please remove yellow sweet clover from the proposed seed mixture, or replace it with a species that is more compatible with native species. The approved seed mixture is enclosed for reference.

Response 6

Yellow sweet clover has been removed from proposed seed mixture used for reclamation and the technical revision updated accordingly.

Item 7

The updated reclamation plan states the truck scale and scale house will be removed at the end of operations. Please provide the approximate dimensions of the permanent features requiring demolition for removal (e.g., concrete pads). Additionally, please specify the estimated costs for demolishing and removing any permanent features, including costs for disposal. Will any demolished features be disposed of on site or off-site? For materials disposed of on site, please specify the approximate location of disposal. For materials disposed of off-site, please provide an estimated distance to the disposal location.

Response 7

The truck scale and scale house will be removed during final reclamation. Approximately 16 yards of concrete will be removed from the concrete pad beneath the structures. The concrete will be recycled, and mixed in with other fill material onsite to be used as fill material for shore stabilization around the pond.

Item 8

On Figure 1 – Site Layout, the legend shows the permitted disturbance area to be 11.1 acres. Please be advised, the allowed disturbance cannot exceed the approved permit area, which is 11 acres in this case. Please adjust this acreage amount accordingly.

Response 8

The disturbance area has been adjusted to the approved permit area of 11 acres.

Item 9

On Figure 4 – Post Mining Land Use and Reclamation Plan, features from both of the proposed reclamation plans are shown on this map, including the potential water feature and the potential pond backfill area (from the 2nd proposed reclamation plan). Please provide a separate reclamation plan map for each of the proposed reclamation plans showing how each portion of the affected lands will be reclaimed for each of the proposed plans, including the correct acreages. While the operator will have the option of choosing which reclamation plan to implement at the site (after TR-02 approval), the Division must calculate the required financial warranty based on the most costly reclamation plan proposed, in the event the permit was revoked and the State had to complete reclamation of the site. Alternatively, the operator could commit to one reclamation plan, and modify Figure 4 accordingly.

To: Amy Eschberger, DRMS

Date: 02/10/2021

Page 6

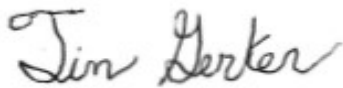
Response 9

Bivens proposes two final reclamation plans, Plan 1 and Plan 2. Both final reclamation plans include additional figures made to match quantities provided in Item 5. Please refer to updated TR-02 for the details of the two reclamation plans.

Thank you for your review of this Technical Revision to the Bivens Pit. The updated TR-02 is included in this letter. Please contact us if you have any questions regarding these actions.

Sincerely,

Telesto Solutions, Inc.



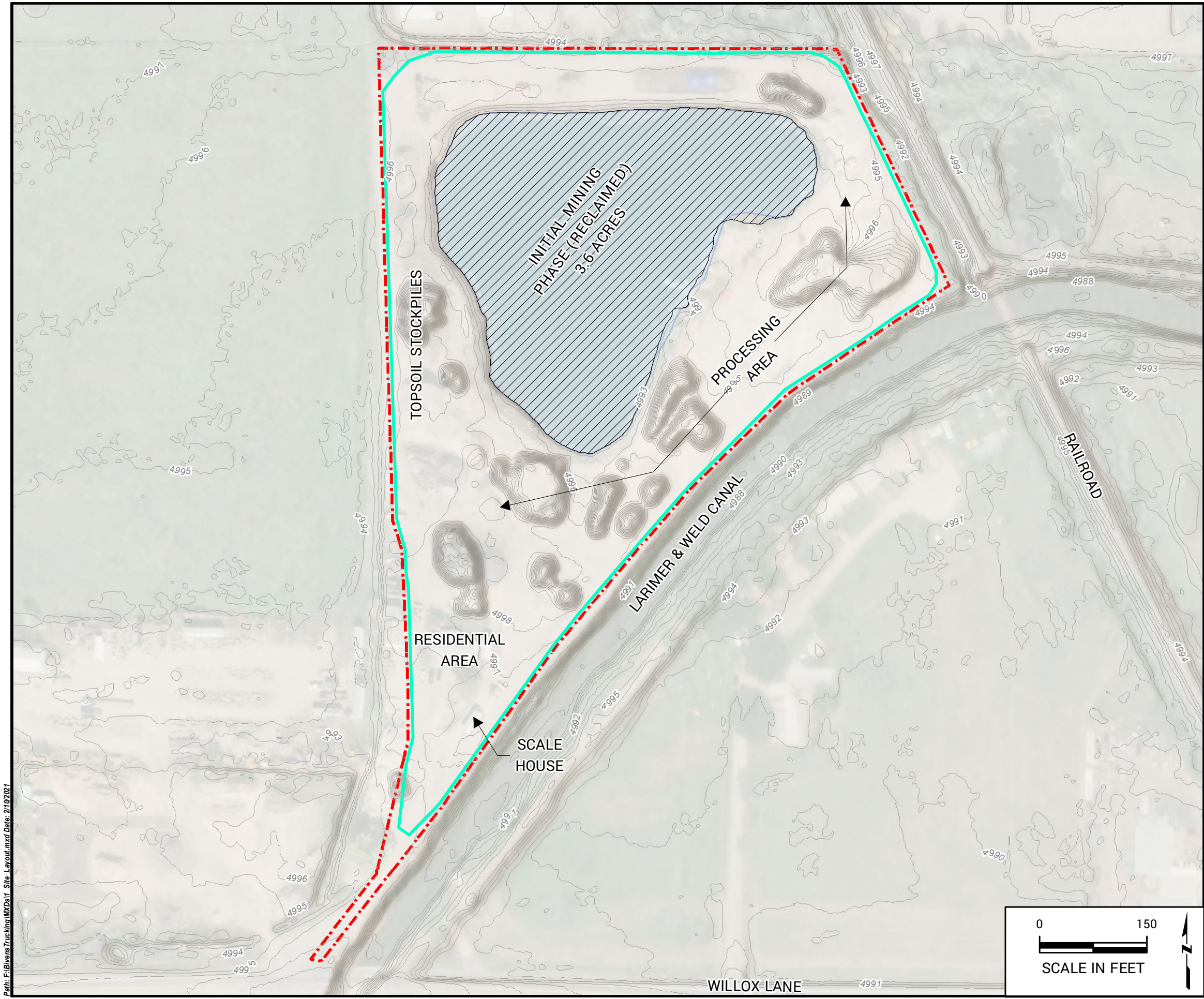
Tim Gerken
Staff Geologist

TJG:wln

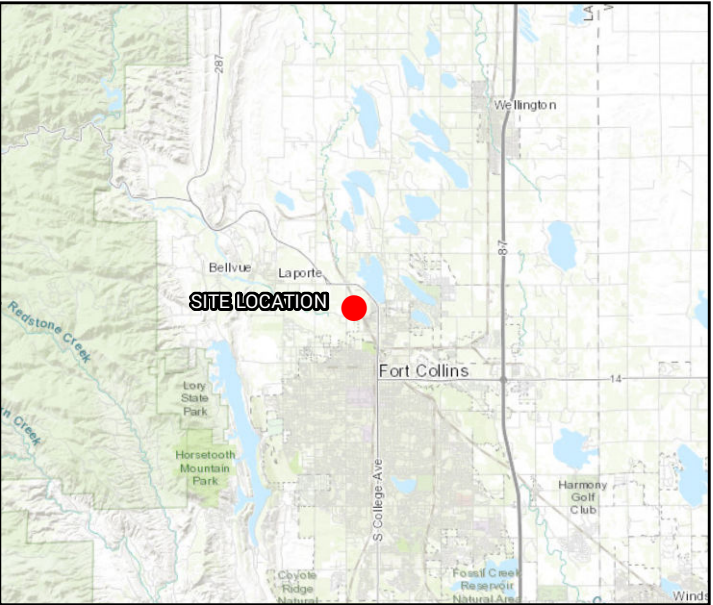
Enclosure

cc: Aaron Bivens, Bivens Trucking & Excavating, Inc.

Figures



- LEGEND
- PERMITTED DISTURBANCE AREA, 11.0 ACRES
 - INITIAL MINING PHASE (RECLAIMED), 3.6 ACRES
 - PERMIT BOUNDARY
 - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 1
SITE LAYOUT

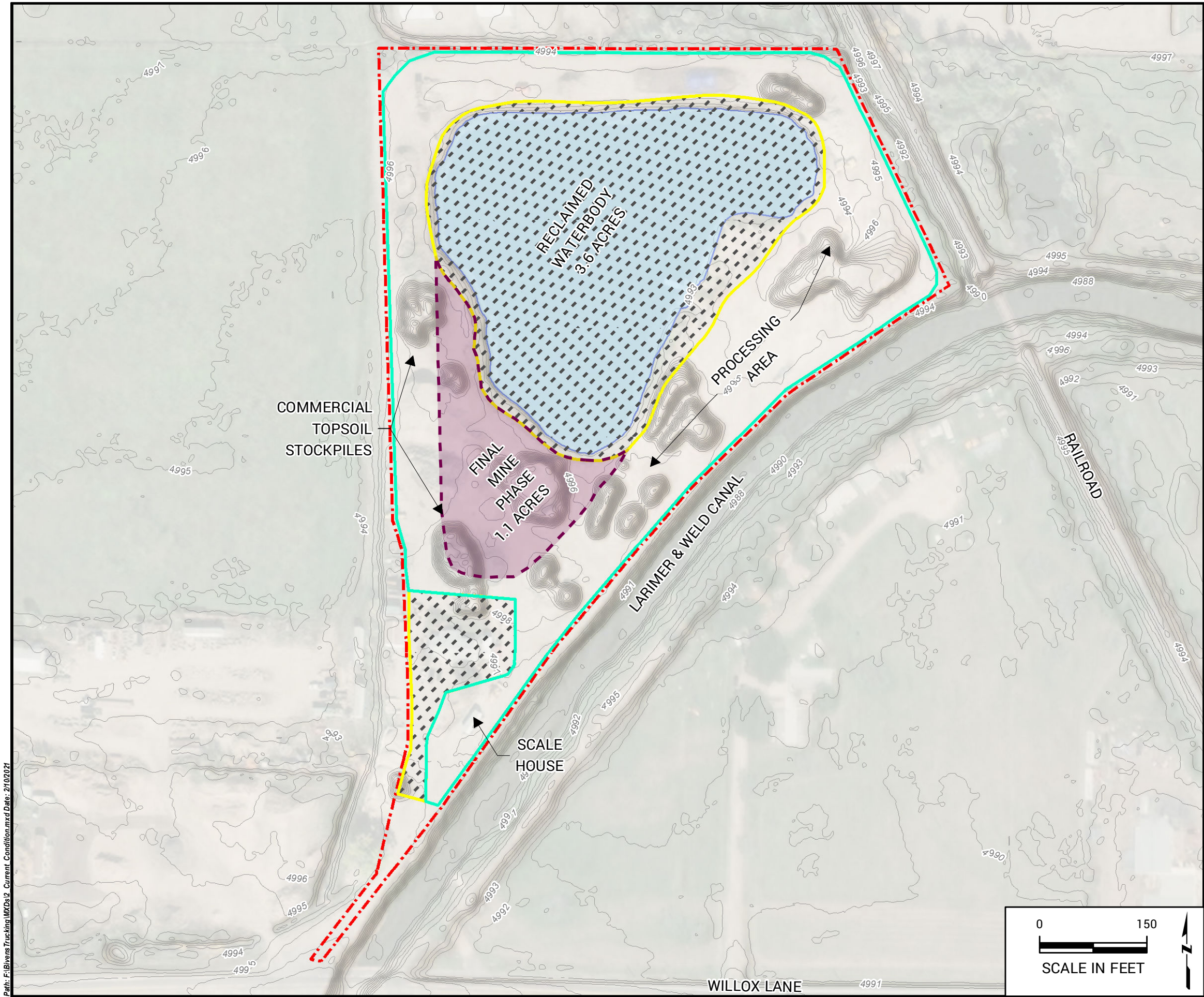
862 W WILLOX LANE
FORT COLLINS, COLORADO

PREPARED BY:

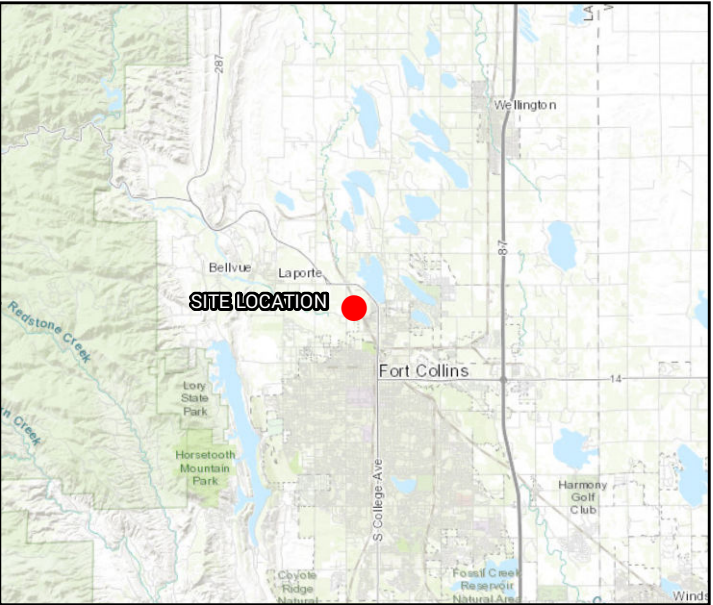
TELESTO
SOLUTIONS INCORPORATED
Loveland, Colorado (970) 484-7704
www.teleso-inc.com

PREPARED FOR:

**BIVENS TRUCKING &
EXCAVATING, INC.**



- LEGEND
- RECLAIMED AREA, 5.0 ACRES
 - PERMITTED DISTURBANCE AREA, 10.6 ACRES
 - RECLAIMED WATERBODY, 3.6 ACRES
 - FINAL MINE PHASE, 1.1 ACRES
 - PERMIT BOUNDARY
 - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 2
CURRENT CONDITION

862 W WILLOX LANE
FORT COLLINS, COLORADO

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**BIVENS TRUCKING &
EXCAVATING, INC.**

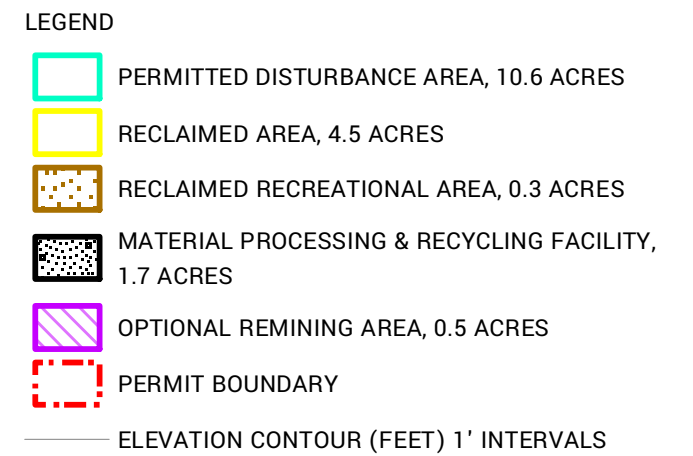


FIGURE 3
UPDATED MINE PLAN

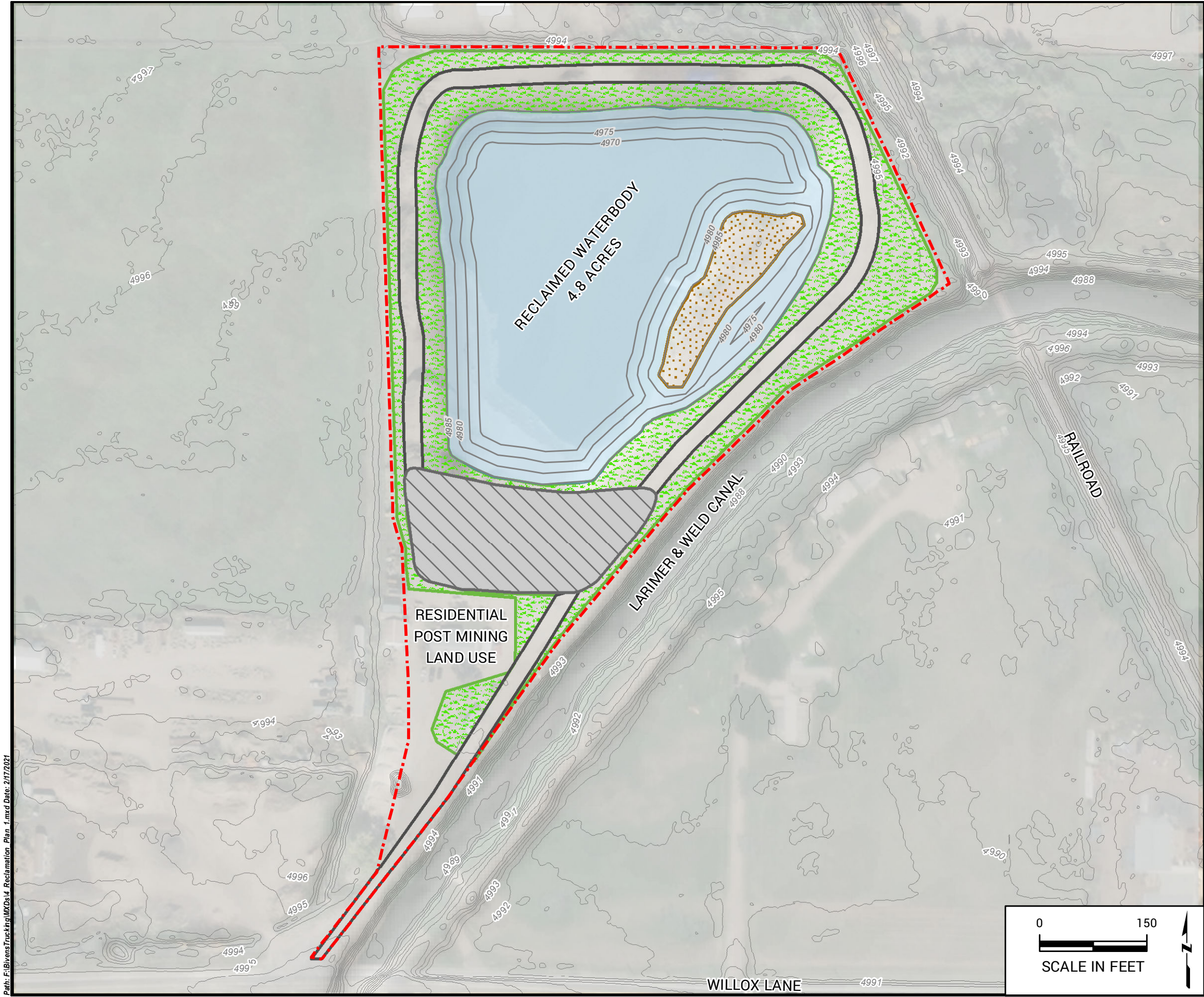
862 W WILLOX LANE
FORT COLLINS, COLORADO

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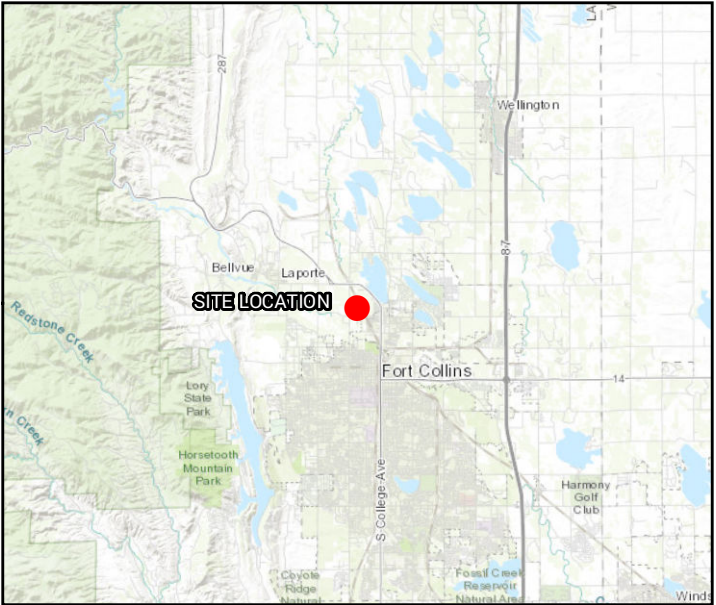


PREPARED FOR:

**BIVENS TRUCKING &
EXCAVATING, INC.**



- LEGEND
- RECLAIMED WATERBODY, 4.8 ACRES
 - REVEGETATION AREA, 3.0 ACRES
 - RECLAIMED RECREATIONAL AREA, 0.4 ACRES
 - RECLAIMED PARKING LOT, 1.0 ACRES
 - ROAD, 1.3 ACRES
 - PERMIT BOUNDARY
 - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 4
PLAN 1 - POST MINING LAND USE & RECLAMATION
PLAN

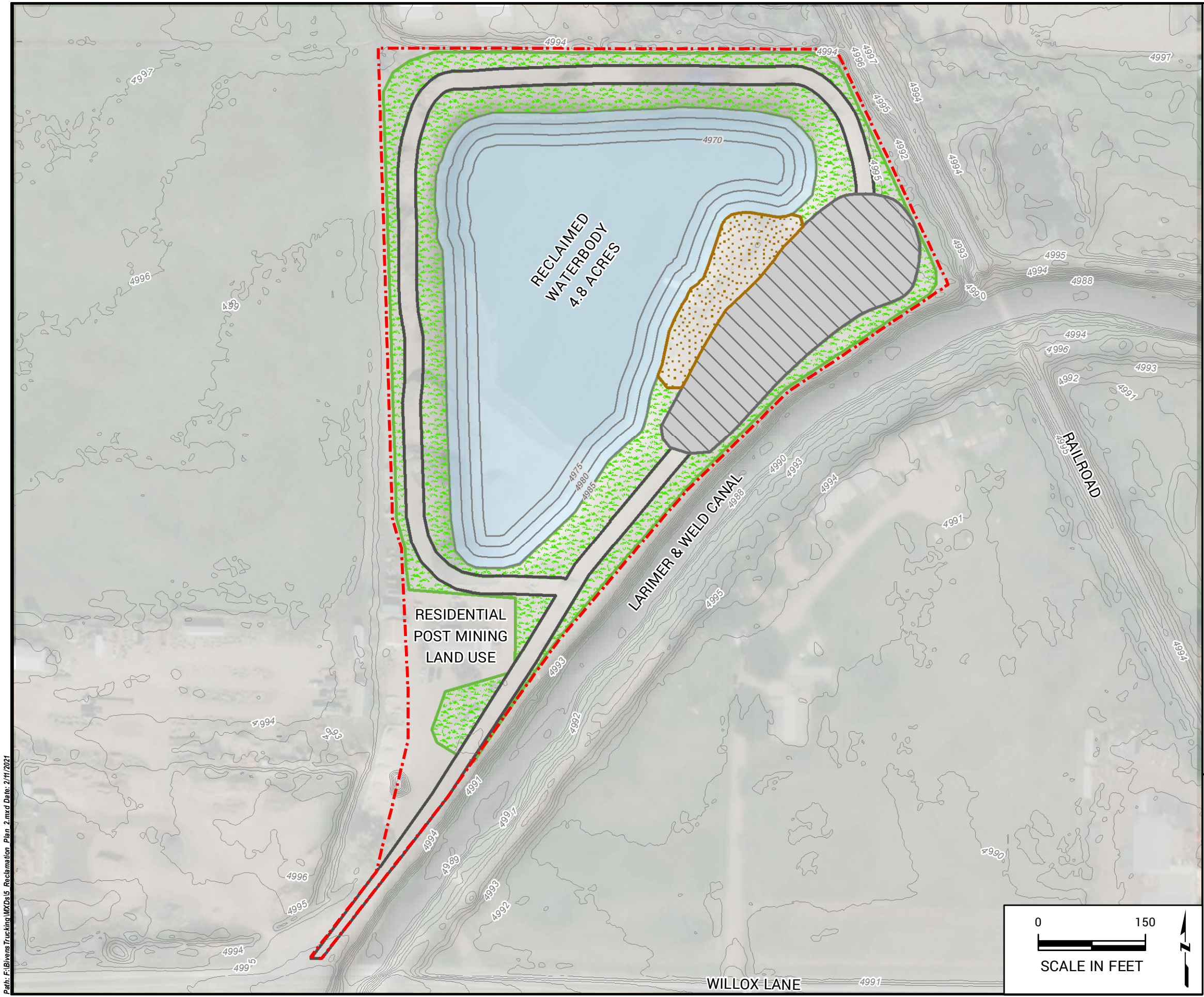
862 W WILLOX LANE
FORT COLLINS, COLORADO

PREPARED BY:

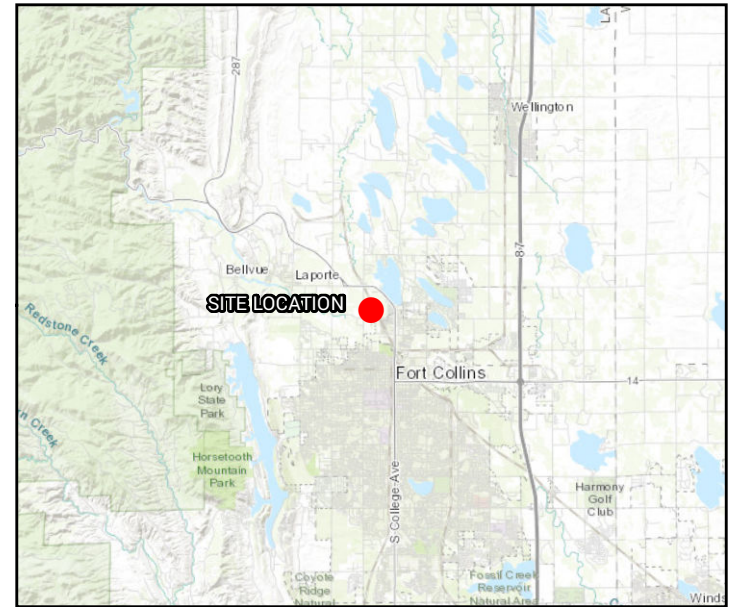
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PREPARED FOR:

**BIVENS TRUCKING &
EXCAVATING, INC.**



- LEGEND
- RECLAIMED WATERBODY, 4.8 ACRES
 - REVEGETATION AREA, 2.8 ACRES
 - RECLAIMED RECREATIONAL AREA, 0.4 ACRES
 - RECLAIMED PARKING LOT, 1.3 ACRES
 - ROAD, 1.3 ACRES
 - PERMIT BOUNDARY
 - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 5
PLAN 2 - POST MINING LAND USE & RECLAMATION
PLAN
862 W WILLOX LANE
FORT COLLINS, COLORADO

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SOLUTIONS INCORPORATED
Loveland, Colorado (970) 484-7704
www.teleso-inc.com

PREPARED FOR:
**BIVENS TRUCKING &
EXCAVATING, INC.**

To: Amy Eschberger, DRMS

Date: 2/16/2021

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Attachment 1

Technical Revision 1

Permit #: M-1985-184 Confidential?: N
Class: TR-01 Type-Seq.: _____
From: Killion Enterprises To: DMG
Doc. Name: Additional Info. + Extend Deadline
Doc. Date (if no date stamp): 10-31-03 Date



862 W. Willox Ln.
Fort Collins, CO 80524
Phone: 970-482-0358
Fax: 970-221-1626

October 29, 2003

Colorado Division of Minerals and Geology
Department of Natural Resources
1313 Sherman Street, Room 215
Denver, CO 80203-2273
ATTN: Erica S. Crosby

RECEIVED

OCT 31 2003

Division of Minerals and Geology

RE: Reclamation Plan Revision
Permit No. M-1985-184

Dear Erica,

We are submitting the reclamation plan revision for your review. Please extend our deadline to November 14, 2003 to allow enough time for processing.

Thank You,

A handwritten signature in cursive script that reads "Jamie Killion".

Jamie Killion
Enclosure (1)

AMENDMENTS AND ADDITIONS TO EXISTING RECLAMATION PLAN
M-1985-184
KILLION

-The surface water area will be approximately 4.5 acres at final reclamation.

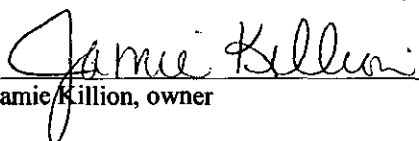
-In addition to mining, the land is used to store and process concrete and asphalt rubble, fill dirt, and topsoil. This material is brought onsite by contractors from different excavation sites in or around Fort Collins. Wood is not accepted and metal is accepted only in wire form and in small amounts.

-The amounts of materials on site average as such:

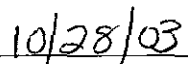
concrete rubble:	12,000 yd
asphalt rubble:	3,000 yd
processed concrete/asphalt:	4,000 yd
fill dirt:	3,000 yd
topsoil:	6,000 yd

-Unprocessed concrete and asphalt will make acceptable fill materials for the reclamation process including the stabilization of the shorelines and fill. Processed concrete and asphalt is 1" base course and 1.5" rock, both of which can be used for fill materials. The fill dirt and topsoil would then be placed over the rubble or base course and rock for finishing.

-Based on the average amounts, all of the onsite material can be used for reclamation. In the event that there is an excess of material after reclamation is complete Larimer/Weld Irrigation Company that manages the Eaton Ditch has asked that any extra concrete or asphalt rubble be placed against the banks of the ditch for erosion control. Any excess base course or rock can be sold for \$5.00 - \$7.00 per ton.



Jamie Killion, owner



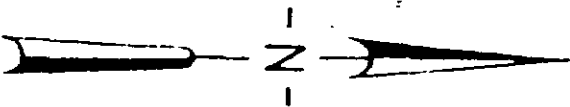
Date

4995

PERMIT AREA

15 2

CENTER SW 1/4
SEC. 35

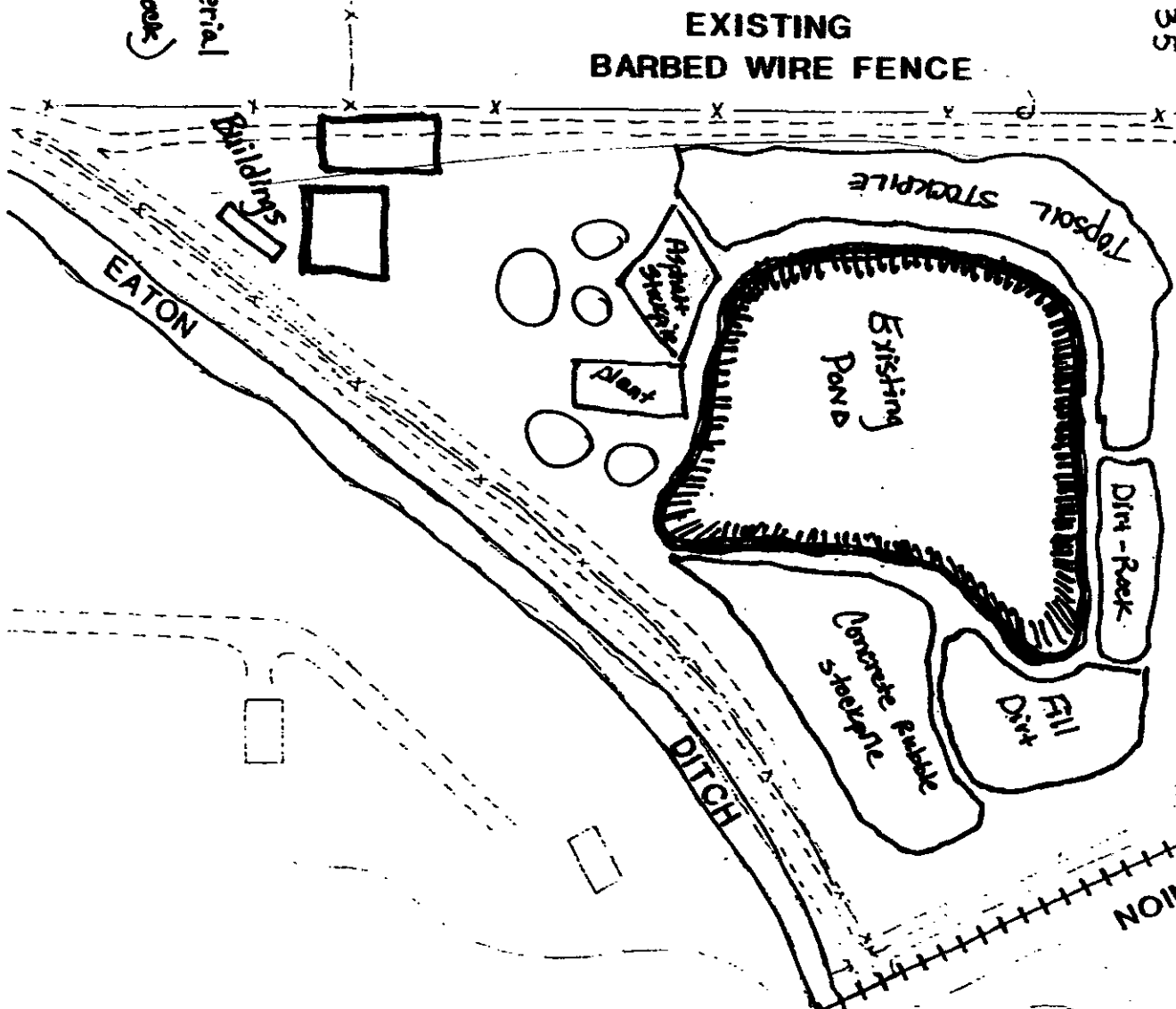


RECLAMATION PLAN

(Existing Layout)

10/28/03

○ = processed material
(Base Course & Rock)



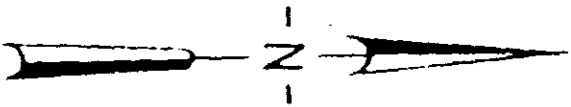
PERMIT AREA

1500

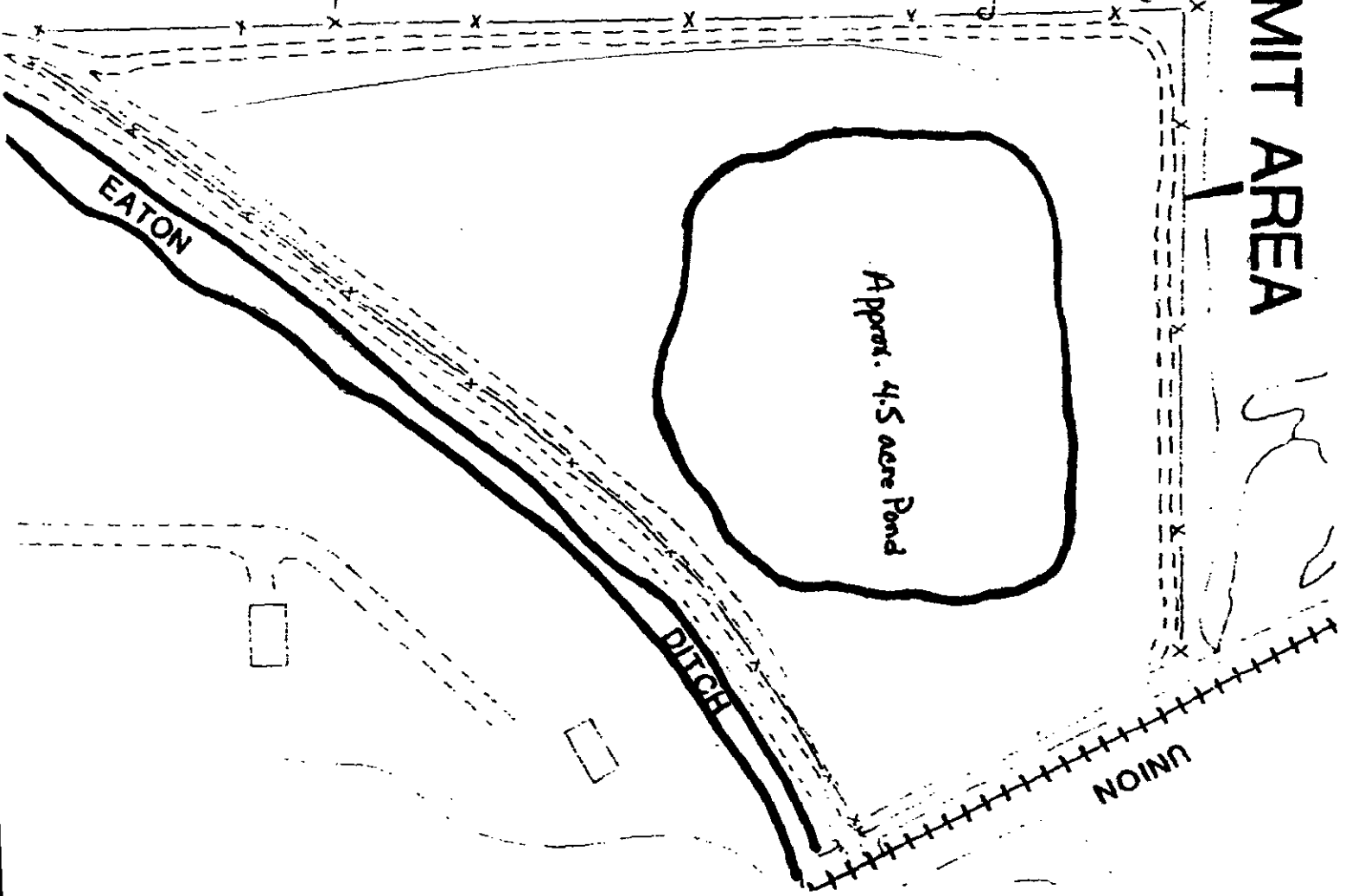
4995

CENTER SW 1/4,
SEC. 35

EXISTING
BARBED WIRE FENCE



RECLAMATION PLAN



To: Amy Eschberger, DRMS

Date: 2/16/2021

Page 9

Attachment 2

Larimer County Use by Special Review Material Recycling

2. NAUTA PIT NO. 2 SPECIAL REVIEW:

Staff Findings include that the proposed use complies with the intent and purposes of the Comprehensive Zoning Resolution and Comprehensive Plan; the proposed use is compatible with surrounding land uses and should have no significant impact on surrounding properties or land values in the neighborhood, and the proposal would not impair the public health, welfare, prosperity, or safety by creating undesirable traffic congestion, unsanitary conditions, overburdening of utilities or adverse environmental influences in the area. The recommendation of the Planning Commission/Department is approval of the Special Review and the "Public Street Capacity" waiver with the following conditions: (1) development and operation of the site to be consistent with the plans as submitted; (2) verification from the Larimer/Weld Ditch Company that they have no objections to the mining plan or to the discharge of water into the ditch; (3) haul trucks are to use only the roads indicated in the application, and (4) crusher would only be operated from 7:00 a.m. to 6:00 p.m., Monday through Friday.

3. JONES/VIKING FARMS EXEMPTION:

Staff Findings include that the Jones/Viking Farms Exemption was approved October 15, 1985, with the condition that an Ownership Certificate be received from the owner of Tract 3 indicating consent to the land division; applicants request that the Ownership Certificate requirement be removed, because the owners of Tract 3 are unwilling to execute a consent agreement, and the Assistant County Attorney states no objection to the condition being removed, as owners of Tract 3 would have little equitable grounds for objection to the County's action. The recommendation of the Planning Department is approval of the request to amend conditions of approval of the Jones/Viking Farm Exemption, by removing the condition that an Ownership Certificate be received from the owner of Tract 3.

M O T I O N

Commissioner Klason moved that the Board adopt the Staff Findings and approve Nauta Pit No. 1 Special Review; Nauta Pit No. 2 Special Review and Jones/Viking Farms Exemption, with the conditions outlined for each.

Motion carried 3-0.

4. HANSEN SPECIAL REVIEW:

Jerry White explained that the request is for special review to operate a grayhound breeding kennel on 10.13 acres zoned RE-Rural Estate. The proposal was originally for 50 animals and has been amended to 100. Staff Findings include that the proposed use complies with the intent and purposes of the Comprehensive Plan and Zoning Resolution; if operated and maintained properly, the kennel will have no significant impact on surrounding land uses

OVER
→

2nd Floor
 hereby certify that
 of the Proceedings
 (S L L)
 1964

Mary R. Bloom
Clerk to the Board

To: Amy Eschberger, DRMS

Date: 2/16/2021

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Attachment 3

Approved Augmentation Plan

CENTRAL FILES

RECEIVED

JUL 1 - '92

DISTRICT COURT, WATER DIVISION I, STATE OF COLORADO

Case No: 90-CW-129
(W-7813-74)

DECREE OF THE WATER COURT APPROVING PLAN FOR AUGMENTATION

CONCERNING THE APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION
OF:

CHARLES R. and CONNIE L. NAUTA in LARIMER COUNTY

THIS MATTER came on to be heard upon the Application of Charles R. Nauta and Connie L. Nauta for Approval of Plan for Augmentation filed in this Court on July 9, 1990. The Applicants appeared by and through their attorney, John E. Reid of NELSON, REID & SCHWARTZ. The Court being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Court has jurisdiction over this application.

The time for filing statements of opposition expired September 30, 1990. One statement of opposition to said application was filed by the Central Colorado Water Conservancy District and the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District.

The Findings and Ruling of the Referee, Raymond S. Liesman, were entered August 12, 1991, are generally embodied herein with some modification, and to the extent not so modified are confirmed and approved. Protest to the original Findings and Rulings of the Referee was filed by the State Engineer and the Division Engineer for Water Division No. 1.

All matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections and modifications made as are indicated by the evidence presented herein, IT IS HEREBY THE JUDGMENT AND DECREE OF THIS COURT:

1. The name, address and telephone number of the applicants:

Charles R. Nauta and Connie L. Nauta
832 Wood Street
Fort Collins, Colorado 80521
303-482-9537

CENTRAL FILES

2. The name and location of the structure augmented:

Nauta Pit #2, a sand and gravel mining operation located in the SE-1/4 of the SW-1/4 of Section 35, Township 8 North, Range 69 West of the 6th P.M. on a tract of land westerly of the Union Pacific right of way and northerly of the Eaton Ditch, Larimer County, Colorado. The center of the pit to be at a point approximately 1000 feet North and 1600 feet East of the SE Corner, Section 35.

There are no other water rights diverted from this structure.

3. Previous decrees for water rights used for augmentation:

- A. Date entered: February 6, 1979
- B. Case No.: W-7813-74
- C. Court: District Court, Water Division I
- D. Legal Description of points of diversion: SE-1/4 of SW-1/4 of Section 2, and N-1/2 of NE-1/4 of NW-1/4 of Section 11, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado
- E. Source: Salvage Water from Griffin Drain and Nauta Drain
- F. Amount: Griffin Drain 0.30 cfs; Nauta Drain 0.13 cfs
- G. Appropriation: Griffin Drain August 15, 1914; Nauta Drain June 1, 1964.
- H. Decreed use: Griffin Drain and Nauta Drain for irrigation of 40 acres to east of points of diversion and evaporation replacement.

4. Historic Use: Both the Griffin Drain water and the Nauta Drain water were historically used for the irrigation of 40 acres of alfalfa-grass hay meadows in the SE|SW| and SW|SE| of Section 2, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado, comprising 53 acre feet of water. Affidavits verifying actual diversion of the water emanating from these drain tiles for irrigation of said lands are of record in Case No. W-7813-74 in this Court and by this reference are incorporated herein.

5. Statement of Plan for Augmentation: Applicants shall provide replacement water from the adjudicated irrigation and evaporation replacement rights sufficient to augment any

stream depletion and return flow adversely affected by the mining operation conducted by applicant. Three sources of water consumption are associated with this mining operation: moisture loss in materials removed, dust suppression, and lake evaporation.

Moisture Loss In Materials

A maximum of 30,000 tons of material will be mined per year. At an average moisture content of four percent, 0.88 acre feet of water is required to augment this loss.

Dust Control

Applicant proposes to apply 1/8 inch of water three times per day for fifty days per year to control dust on the 1,500 linear feet of unpaved haul road on the premises. This equates to 1.08 acre feet of water per year.

Lake Evaporation

Area of Water Surface Left By Mining: 6.05 acres
 Gross Annual Lake Evaporation: 38.50 inches/year
 Net Annual Precipitation: 14.47 inches/year
 Effective Precipitation: 11.38 inches/year
 Net Annual Lake Evaporation: 27.12 inches/year
 Annual Lake Evaporation: 14.69 acre feet

Historic Consumptive Use

Wet Meadow - 5.60 acres x 27.4 inches	12.79 acre feet
Pasture Grass - 0.90 acres x 20.4 inches	1.53 acre feet
Gross Consumptive Use	14.32 acre feet
Less Effective Precipitation	6.16 acre feet
Net Consumptive Use	8.16 acre feet
Evaporation Replacement Required	6.53 acre feet

Of the 53 acre feet previously allotted for irrigation, it is assumed that fifty percent would be consumptively used leaving 26.50 acre feet for augmentation.

A maximum of 8.49 acre feet of augmentation per year will be required during active mining operations:

Moisture Loss	0.88
Dust Control	1.08
Lake Evaporation	14.69
Less Historic Consumptive Use	(8.16)
Augmentation Required	8.49

After mining is completed, an annual average of 6.53 acre feet of augmentation will be required.

6. Conditions of Approval:

- a) Augmentation shall be accomplished by adjusting the volume of replacement water on a monthly basis in relation to the actual consumption generated by the mining operation.
- b) The actual amount of replacement water to be provided by Applicants for moisture loss in materials shall be based on the actual volume of material mined on a monthly basis to be released during the next succeeding month.
- c) Replacement water to be provided for dust control shall be provided by Applicants on the days water is applied on Applicants premises for such purpose and shall be released in accordance with the chart appended hereto and by reference incorporated herein.
- d) Replacement water to be provided for lake evaporation shall be provided by Applicants on a monthly basis in proportion to the average monthly evaporation percentage as set forth in the chart appended hereto.
- e) Replacement water from the drains shall be deposited in the Nauta Storage Reservoir through which it shall pass prior to release to the Poudre River. Releases of replacement water shall be made from the Nauta Storage Reservoir to the Poudre River and shall be regulated by the Water Commissioner. Releases shall be monitored by flow measurement of the wasteway ditch that runs from the northeast corner of the Nauta Storage Reservoir to the Poudre River. Applicants shall receive a credit of fifty percent for all water delivered through the reservoir from the drains.
- f) Applicants shall maintain a monthly tabulation sheet setting forth the actual monthly data set forth in the chart appended hereto which shall include a report of the

actual amount of replacement water released in compliance with the terms and conditions of this agreement. Applicants shall operate the plan of augmentation so as to insure there is no deficit in the amount of replacement water.

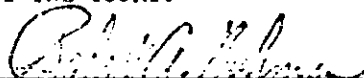
- g) Any further irrigation of lands historically irrigated by water from the Griffin Drain and the Nauta Drain shall be permanently curtailed.
 - h) The applicant shall install and maintain such measuring devices and maintain and provide such records as the Division Engineer may require for administration of this right.
- 7. The aforesaid terms and conditions are adequate to prevent injury to the owner of or persons entitled to use water under any vested water right or any decreed conditional water right.
 - 8. Applicants have applied for a well permit for the subject augmented premises which is now pending with the Office of the State Engineer. More than six months have elapsed since Applicants submitted said well permit application.
 - 9. Any change of water rights embodied in this augmentation plan from that set forth in the decree identified in paragraph 3 above will not injuriously affect the owner of or persons entitled to use water under any vested water right or any decreed conditional water right for the reason that all said established water rights have previously been adjudicated as salvage water indigenous to Larimer County, Colorado, and in administering this Ruling, the State Engineer shall be guided by the fact that a call to stop the diverting of water would not result in additional water reaching a natural stream.
 - 10. This plan of augmentation shall be subject to reconsideration by the water judge on the question of injury to the vested rights of others for a period of 5 years after Nauta Pit #2 is completed pursuant to CRS 37-92-304(6).
 - 11. This plan of augmentation meets all applicable requirements of C. R. S. Sections 37-92-103(9), 302(1)(2) and 305(8).

IT IS ORDERED that the foregoing plan of augmentation is approved subject to the terms and conditions set forth above.

MAY 23 1992

DATED: _____, 1992.

BY THE COURT:



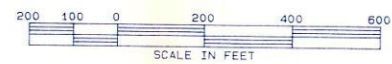
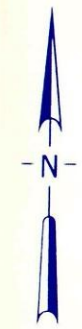
ROBERT A. BEHRMAN
Water Judge
Water Division No. 1
State of Colorado

Best Copy Available



PRESENT CONDITIONS
(OCT. 1, 1987)

Best Copy Available



LEGEND

- PERMIT BOUNDARY OF PIT #1
- BOUNDARY FOR HISTORICALLY IRRIGATED PROPERTY

NOTES:
1. AERIAL PHOTOS OBTAINED FROM COLORADO AERIAL PHOTO SERVICE.

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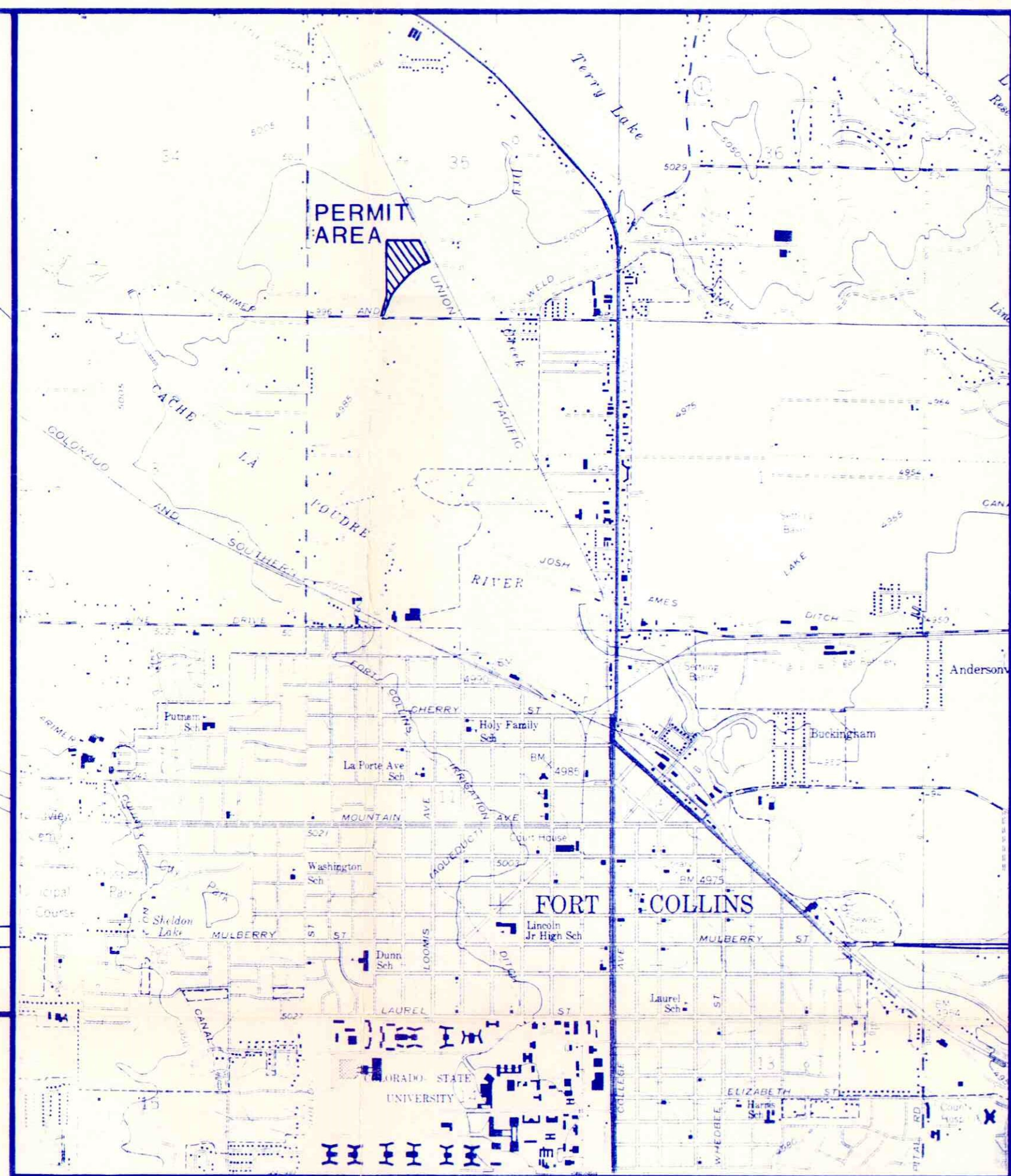
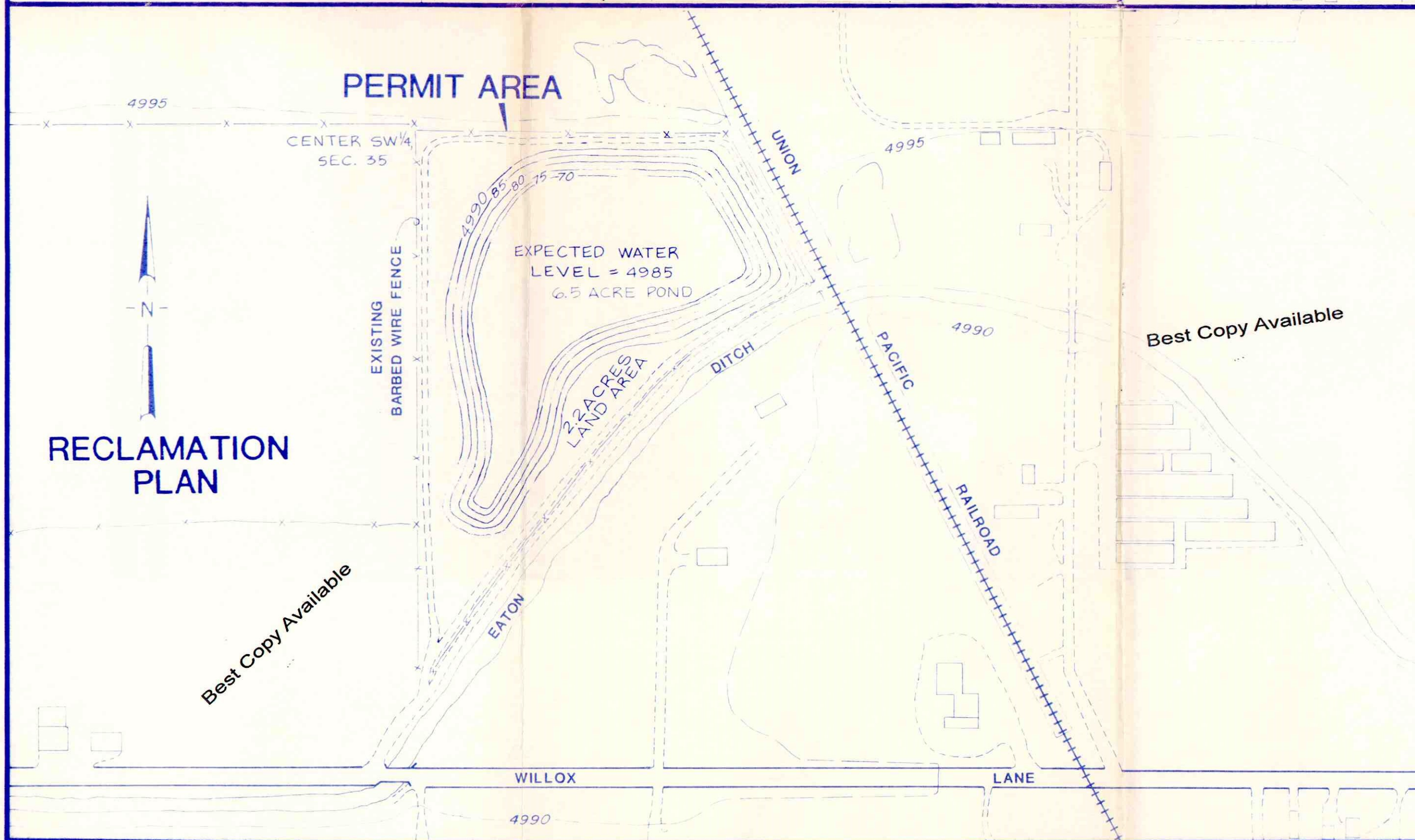
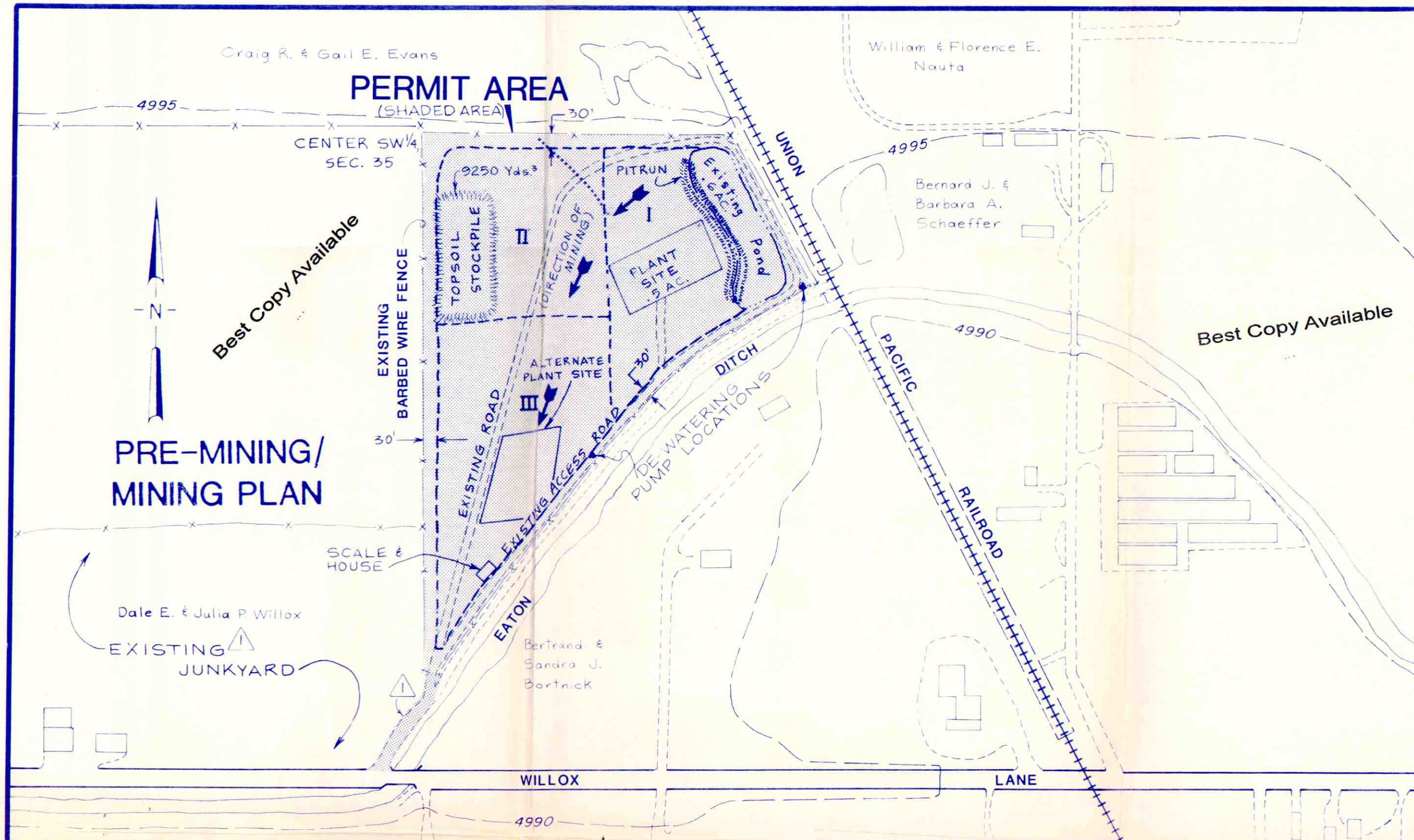
HISTORIC CONDITIONS
(MAY 15, 1972)

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<p>CHARLES R. NAUTA PROPERTY AUGMENTATION PLAN FOR PIT #2</p>			
	<p>TUTTLE APPLGATE RINDAHL, INC. Consultants for Land and Resource Development 11990 Grant Street, Suite 410 Denver, Colorado 80233 (303)452-6611</p>		<p>DATE: 2-29-88 JOB NO.: 88-0806 DRAWN BY: SJA CHECKED BY: CMA</p>
	<p>SCALE: 1" = 200'</p>		<p>SHEET 1 OF 1</p>
	<p>JUN 27 1990</p>		



SCALE: 1"=2000'

VICINITY MAP

LEGAL DESCRIPTION

A PORTION OF LAND IN THE SE 1/4 SW 1/4 OF SEC. 35 LYING WESTERLY OF UNION PACIFIC R.O.W. AND NORTHERLY OF EATON DITCH, T8N, R69 W OF THE 6th P.M., LARIMER COUNTY, COLORADO.

SCALE: 1"=200'

JUN 27 1990

CONTOUR INTERVAL= 5 FT.

1-10 B6 Add "exis. junkyard" note Add road into permit Area Add Adj. Landowners REVISIONS

CHARLES NAUTA PIT #2 PRE-MINING, MINING, & RECL. PLANS			
	TUTTLE, APPLGATE, RINDAHL, INC. 11990 GRANT STREET SUITE 410 DENVER, COLORADO (303)452-6611 80233		DATE 9-11-85
	JOB NO. 85-0806		DRAWN BY RJA
	CHECKED BY HCH		SCALE AS SHOWN
	SHEET 1 OF 1		SHEETS



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- _____ Site Name: _____

County _____ TR# _____ (DRMS Use only)

Permittee: _____

Operator (If Other than Permittee): _____

Permittee Representative: _____

Please provide a brief description of the proposed revision: _____



As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>



February 16, 2021

Via Electronic Mail

Amy Eschberger
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, Colorado 80203
amy.eschberger@state.co.us

**Subject: Bivens Trucking and Excavating, Inc –
Bivens Pit, Permit No. M-1985184,
September 2, 2020 Inspection. Updated TR-02**

Dear Ms. Eschberger:

Telesto Solutions, Inc. (Telesto) submits this letter on behalf of Bivens Trucking and Excavating, Inc. (Bivens) in response to your site inspection on September 24, 2020 and your TR-02 adequacy review of the Bivens Pit (M-1985-184) on January 8, 2021. This letter presents an update to the Technical Revision request to the Bivens Pit mine and reclamation plans. Primary topics of the revisions include a post mining land use (PMLU) of recreation and residential living quarters.

Existing Site Conditions

The current approved mine plan is for an 112c sand and gravel operation for an on 11 acre mine pit. At this time, operations and mining disturbed approximately 10.6 acres. The disturbed area includes the reclaimed Phase 1 pit (i.e., 3.6-acre pond), the stockpiling and processing areas around the pond, the 0.3-acre recreational area along the eastern edge of the pond, the truck scale and scale house, and the residential area located at the southern end of the site (Figure 1).

In 2003, the previous permittee, Jamie Killion, submitted the approved Technical Revision No. 1 (TR-1) (Attachment 1). TR-1 decreased the pond area from 6.05 acres to 4.5 acres at final reclamation. Additionally, TR-1 stated that any construction material stockpiled within the permit boundary would be considered reclamation backfill.

At this time, Phase 1 of the mine plan is complete. Currently, the pond is approximately, 3.6 acres. Approximately, 5.0 acres have been reclaimed in accordance with the approved reclamation plan. Approximately, 9,250 cy of topsoil mixed with fertilizer is located at the western edge of the site. Topsoil recycling, amending, and sales is an ongoing part of Bivens' business. Stabilization of the topsoil stockpiles is continual via mechanical means

Colorado Office (Corporate)

750 14th Street SW
Loveland, Colorado 80537
970-484-7704 / 970-484-7789 (FAX)

Grand Junction

751 Horizon Court, Suite 109
Grand Junction, Colorado 81506
970-697-1550

New Mexico Office

1303 Pope Street
Silver City, New Mexico 88061
575-538-5620 / 575-538-5625 (FAX)

(i.e., grading, loading, hauling sales). Bivens maintains enough topsoil on site to complete reclamation at any time. Thus, Bivens believes that their operations stabilizes the stockpiles, and, due to operation and sales, commit to stabilizing these piles by sloping and seeding with annual grasses as recommended in the site inspection report (DRMS, 2020) if no commercial activities occur for a year.

Since taking over the permit in 2009, Bivens stabilized and revegetated the pond shorelines in accordance with the approved reclamation plan (Figure 2). The site inspection report describes the successful shoreline reclamation and revegetation:

“During the inspection, the Division walked around the perimeter of the pond and observed its shorelines to be graded to 3H:1V or flatter and stable with good vegetative cover consisting of grasses and wetland vegetation (consisting primarily of cattails). Cobblestones have been placed along the pond slopes beneath the water line. Portions of the northwestern and eastern shorelines have been stabilized with boulders. Portions of the southern shoreline have been stabilized with cobblestones. No erosion problems were observed.” (DRMS, 2020).

Bivens requests acceptance of this Technical Revision 2 (TR-2) to the approved mine plan, reclamation plan, and TR-1 as described in the next two sections.

Updated Mine Plan

Bivens plans to continue mining the pit from Phase 1 (i.e., the existing pond) to the south and expanding the pond from 3.6 acres to a total pond size 4.8 acres (Figure 3). The proposed mining to the south of the current pond is described as the Final Phase. As an option to the Final Phase, Bivens may excavate an area that was previously mined and backfilled to create an island (Figure 3).

During the Final Phase, the operator may choose to mine the final phase “wet”. If the operator chooses to dewater the existing pit, the operator would berm in between and then mine out the last berm. Regardless, operator commits to obtaining all required water quality permits prior to the start of mining. Bivens will screen and crush mined material in the processing area. Bivens will incorporate aggregate/construction materials recycling into the mined material processing as approved by their Larimer County special use permit (Attachment 2). Bivens will continue to use the eastern edge of the permit area as the processing and storage area for additional mined material, concrete and asphalt rubble, fill dirt, sand and rock (Figure 3). The area will cover approximately, 1.7-acres within the permit area. A portion of the mined, crushed and/or recycled material will be sold and hauled off site. Bivens estimates no more than, 28,000 cy of imported materials will be stored on site at a time, per TR-1. Bivens may backfill a part or all of the Final Phase pit

with inert fill material as allowed in the current permit (e.g., material from the optional re-mined area).

Completion of mining the Final Phase will be congruous with construction material recycling operation until all material not needed for reclamation is sold and hauled off-site. At a minimum, Bivens will keep 1,050 cy of road base material onsite for reclamation of the 1.7 acres area. Stockpiled material, including concrete, asphalt, sand, fill dirt, topsoil, sand and rock will remain onsite and be considered as reclamation backfill material in the event the financial warranty was forfeited, and the State had to complete reclamation to the site.

During the Final Phase of mining, additional salvaged topsoil will be stored with existing topsoil stockpiles to the land to west/southwest of the pond. Topsoil will continue to be stripped at an 8 to 12-inch depth. If topsoil stockpiles exist in a non-commercial state for more than one growing season, then they will be sloped to 3:1 V or flatter and seeded with a fast-growing vegetative cover, per the approved permit.

During the Final Phase, the residential area will remain at its current location at the southern end of the site (Figure 3). This area includes a residential house, garage, carport, chain-link fence, rock bins and stockpile materials. The residential area is part of the requested TR-2 as an approved PMLU (see next section).

The eastern edge of the existing pond will remain as recreational beach area (Figure 3). The recreational area includes a sandy beach, trees, a small dock, gravel boat ramp, a few small cabins, a fire pit, picnic area, a playground, wooden fencing, and artistic structures. The recreational area covers approximately, 0.3-acre. The recreational area is part of the requested TR-2 as an approved PMLU (see next section).

Updated Post Mining Land Use and Reclamation Plan

Reclamation will be continuous throughout the Final Phase mining process. As more shoreline is created and expanding of the pond progresses, topsoil will be replaced, at a depth of 12-inches, along banks. The topsoil will be seeded with the approved seed mix (Table 1), as soon as practical (late fall or early spring). The banks will be graded a minimum 3H:1V slope from 5 feet above to 10 feet below expected water line. Shorelines and banks will be stabilized with boulders, cobblestones, and/or concrete riprap as needed to prevent erosion. The northern, reclaimed portion of the reclaimed shoreline will be left undisturbed.

Table 1 Reclamation Seed Mix

Species	Drill Seeded lbs PLS/Acre	Seed/ ft ²
Switchgrass	1.2	10.0
Slender Wheatgrass	2.9	10.0
Tall Wheatgrass	3.6	7.0
Alkali Sacaton	0.3	8.0
Total	8.0	35.0

Bivens request two potential reclamation plans, Plan 1 and Plan 2 as shown in Figures 4 and 5, respectively. The main difference in the two plans is Plan 1 involves an island left at the end of mining, while Plan 2 is without.

Reclaimed Pond

Under both reclamation plans, the pond will be used as water storage and for recreational. During mining, Bivens will place the re-mined material into the southern portion the Final Phase mine pit leaving a recreational island. In Plan 1, the total surface area of the waterbody, including the water feature would be 4.8 acres.

During mining, the shorelines will be graded to 3H:1 V slope, stabilized, and compacted. Reclamation will involve stabilizing the shoreline by placing riprap at the water's edge and seeding with the approved seed mix. The reclaimed pond shoreline on the northern end of the pond will not be disturbed and the existing beach area along the eastern shore (western shore of the island) will remain at 5:1 V:H for recreational access. Table 2 lists the reclamation quantities associated with shoreline reclamation.

Evaporative losses from the open water surface area is covered by the court-approved water augmentation plan (Attachment 3). Bivens in correcting an omission from the previous owners regarding a gravel-pit well permit, for which an application was submitted but a final permit never issued.

RV Parking

RV parking is included in both plans: Plan 1 has parking south of the pond, while Plan 2 has parking east of the pond shown in Figures 4 and 5, respectively. The reclaimed parking lots would be covered with 6-inches of road base material that is stockpiled onsite during mining. Parking areas will be graded to drain to the pond at a 0.5% slope. Table 2 summarizes the quantities for RV Parking reclamation.

Revegetation Areas

In addition to the vegetation area around the pond, reclamation includes revegetating the areas on both sides of the access roads, the perimeter of the RV parking lot, and the land around the residential area (Figures 4 and 5). Revegetation areas will be covered with 12 inches of topsoil, tilled, and drill seeded with the approved reclamation grass seed mix. Table 1 lists the proposed reclamation seed mix.

Access Roads

Reclaimed access roads will skirt the perimeter of the pond, and allow two entrances and exits from the parking areas (Figures 4 and 5). The access road widths will be no less than, 20-feet wide to allow two-way traffic and be topped with 6-inches of road base. At a minimum, this amount of road base material (in addition to the road base for the parking lot area) will be stored on site throughout the mining and saved for the reclamation process.

Truck Scale

Bivens will remove the truck scale and scale house at the end of operations. Approximately 16 yards of the concrete pad will be removed from underneath the structures. The removed concrete will be recycled, and mixed in with other fill material onsite to be used as fill material for shore stabilization around the pond. The area will be scarified, retopsoiled, and revegetated, per the approved permit. The topsoil used for reclamation has been accounted for in the site's total revegetated area.

Residential Area

Bivens requests the residential area and associated structures, located at the southern end of the site, remain following final reclamation (Figure 4) as an approved PMLU. The residential area and associated structures cover approximately, 0.5-acre.

Table 2 Reclamation Quantities

Item	Plan 1	Plan 2	Units	Notes
	Quantity			
Unreclaimed Shoreline	1,101	693	ft	Not including already reclaimed area
Seeding Area	0.25	0.16	ac	10' strip around shoreline
Rip Rap	122	77	cy	3' wide, 1' thick at water's edge
RV Parking Lot	1.0	1.3	ac	
Grading	565	734	cy	Assumes area left flat after mining, triangle to triangle cross-section
Average Grading Dist	70	70	ft	Estimated centroid to centroid
Road Base	810	1,050	cy	Area times 6 inches
Reclaimed Access Roads	1.3	1.3	ac	
Widths	20	20	ft	
Road Base	1,050	1,050	cy	Area times 6 inches
Revegetation	3.0	2.8	ac	
Topsoil	4,840	4,520	cy	Area times 12 inches

Summary

For TR-2, Bivens includes the following mine plan revisions:

- Continue mining the remaining mining phase (Final Phase 1.3 acres)
- Process mined materials in conjunction with construction recycling
- Cessation of mining and processing operations indicates the end of mining

For TR-2, Bivens submits the following changes to the PMLU and reclamation plan 1:

- Include recreation and permanent residence as an approved PMLU
- Road-base covered RV parking to the south of the pond and access roads around the pond
- Revegetated lands surrounding the access roads, residential area, and RV parking/water park
- 4.8 acres of open water storage (pond) with sloped 3H:1V
- 1101 feet of pond shoreline will need to be reclaimed
- A water feature (included in the total pond size of 4.8 acres) and recreational beach island (increased by 0.1 acres)

For TR-2, Bivens submits the following changes to the PMLU and reclamation plan 2:

- Include recreation and permanent residence as an approved PMLU
- Road-base covered RV parking to the east of the pond and access roads around the pond
- Revegetated lands surrounding the access roads, residential area, and RV parking
- 4.8 acres of open water storage (pond) with slopes ranging from 5H:1V (recreation area) to 3H:1V for remaining areas
- 693 feet of pond shoreline will need to be reclaimed

Furthermore, for TR-2, Bivens commits to storing enough road base material and topsoil onsite required for reclamation Plan 2. So regardless of which reclamation plan Bivens decides to proceed with, enough material will be stored onsite.

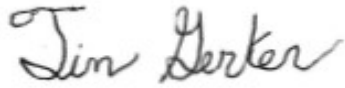
Thank you for your review of this Technical Revision to the Bivens Pit. Please contact us if you have any questions regarding these actions.

Sincerely,
Telesto Solutions, Inc.

To: Amy Eschberger, DRMS

Date: 2/16/2021

Page 8

A handwritten signature in black ink that reads "Tim Gerken". The script is cursive and fluid.

Tim Gerken
Staff Geologist

TJG:wln
Enclosure
cc: Aaron Bivens, Bivens Trucking & Excavating, Inc.

Form No. GWS-27 01/2020	COLORADO DIVISION OF WATER RESOURCES DEPARTMENT OF NATURAL RESOURCES 1313 Sherman St., Ste 821, Denver, Colorado 80203 Phone: (303) 866-2223 DWR Web: dwr.colorado.gov Email: dwrpermitsonline@state.co.us		For Office Use only
REVIEW INSTRUCTIONS PRIOR TO COMPLETING FORM			
GRAVEL PIT WELL PERMIT APPLICATION			
1.	TYPE OF PERMIT <input type="checkbox"/> NEW PIT(S) <input type="checkbox"/> PIT(S) EXIST, CONSTRUCTED AFTER DEC. 31, 1980		
2.	APPLICANT INFORMATION NAME(S) _____ Mailing Address _____ City, St. Zip _____ Phone (w/ area code) _____ Email: _____		
3.	CONSULTANT/ATTORNEY/OPERATOR CONTACT (If different than #2) NAME(S) _____ Mailing Address _____ City, St. Zip _____ Phone (w/ area code) _____ Email: _____		
4.	GENERAL LOCATION OF PIT(S): COUNTY _____ _____ 1/4 _____ 1/4, Sec. _____ Twp. _____ <input type="checkbox"/> N. <input type="checkbox"/> S., Range _____ <input type="checkbox"/> E. <input type="checkbox"/> W. _____ P.M.		
5.	Estimated maximum water surface to be exposed: _____ Acres. Number of Pits _____.		
6.	Estimated depth of pit(s) _____ Ft. Estimated depth to groundwater _____ Ft.		
7.	Estimated date to expose groundwater _____; date to complete mining _____.		
8.	ATTACHMENTS: (Check which have been attached.) (a) <input type="checkbox"/> Scaled map of pit area with range, township, & section clearly identified (REQUIRED). (b) <input type="checkbox"/> Copy of the reclamation permit, if applicable. (c) <input type="checkbox"/> Copy of pre 1/15/89 water conservancy dist. or water user assoc. augmentation agreement, if applicable. (d) <input type="checkbox"/> Copy of proposed substitute water plan or augmentation plan application, if applicable. (e) <input type="checkbox"/> Copy of court approved augmentation plan, if applicable. Case No. _____ (f) <input type="checkbox"/> Other _____		
9.	Detailed description of any use, other than evaporation, and method of diversion, rate of diversion, and annual amount of diversion of any water withdrawn from the pond.		
10.	Will dewatering occur within the DRMS permit boundary <input type="checkbox"/> Yes <input type="checkbox"/> No		
11.	I (we) have read the statements made herein and know the contents thereof, and that they are true to my (our) knowledge. [Pursuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.]		
Sign or enter name(s) of submitter		If signing print name & title	Date (mm/dd/yyyy)
For Office Use only			
Court Case No. _____ Div. _____ Co. _____ WD _____ Basin _____ MD _____ Use _____			

GRAVEL PIT WELL PERMIT APPLICATION – INSTRUCTIONS

Applications must be computer generated online, typewritten, or printed in BLACK or BLUE INK. ALL ITEMS in the application must be completed. Incomplete applications may be returned for more information. Attach additional sheets if more space is needed. **If filing online see online filing instructions!** You may also print, scan and email the completed form to: dwrpermitsonline@state.co.us

This applications is for use in applying for a well permit for a gravel pit that exposes groundwater to evaporation as required under the provision of 37-90-107(6) or 37-90-137(11), C.R.S. If this is not such a gravel pit, use General Purpose Application Form GWS-45. A permit is not required if the pit was constructed prior to December 31, 1980 and has not been operated or reactivated after that date.

FEES This application requires a nonrefundable filing fee of \$100. One application is required for each DRMS permit area. After submitting this form to dwrpermitsonline@state.co.us, you'll be provided with the payment options.

A substitute supply plan or augmentation plan may be required for approval where groundwater was exposed after December 31, 1980. These plans are submitted separately and a filing fee of \$1,593.00 is required. These plans may not be needed in areas where water is available and all other water rights are satisfied.

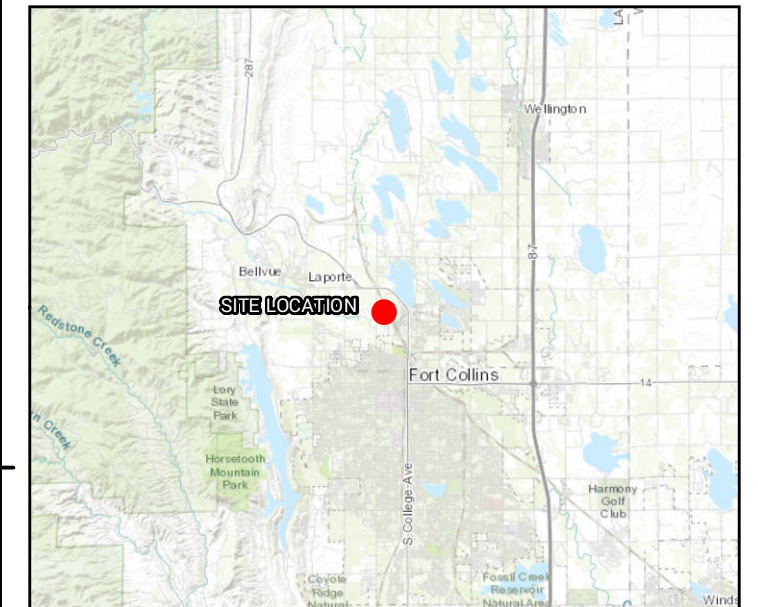
-
- ITEM 1 TYPE OF PERMIT - Check the appropriate box.
- ITEM 2 APPLICANT INFORMATION - This is the applicant's name and the mailing address where all correspondence will be sent. Include the phone number.
- ITEM 3 CONSULTANT/ATTORNEY/OPERATOR CONTACT - If there is someone different than the applicant to be contacted for additional information, then complete this item.
- Indicate the name of the gravel pit and the assigned DRMS number (include any prior DRMS/MLRD permit numbers that may be associated with this pit.
- ITEM 4 LOCATION OF WELL - The general location of the well (pit) must be indicated and include a quarter/quarter, Section, Township, Range and Principal Meridian. An outline of the pit(s) on a USGS 7 1/2 minute quadrangle map is desirable.
- ITEM 5 Indicate the maximum number of acres of groundwater to be exposed to the atmosphere and the total number of excavated areas (pits) covered within the DRMS permit.
- ITEM 6 Indicate the estimated proposed or actual depth of the pit(s), and estimated depth to groundwater.
- ITEM 7 Indicate the estimated dates of beginning to expose groundwater and completing the mining.
- ITEM 8 ATTACHMENTS - The list of attachments to this application provides information which is necessary to the evaluation. A scaled map of the pit area tied to a section corner is required.
- ITEM 9 USE - Complete this item if water is to be used for any purpose other than evaporation, those uses must be detailed. The information required includes but is not limited to the volume of gravel mined, the method of diversion of water from the pit, the pumping rate in gallon per minute, the average annual amount of water diverted or used in acre-feet, and the proposed use.
- ITEM 10 DEWATERING – Specify whether dewatering will occur within the DRMS permit boundary.
- ITEM 11 SIGNATURE - The individual signing the application or entering their name (and title if applicable) must be the applicant or an officer of the corporation/company/agency identified as the applicant or their attorney. An authorized agent may also sign or enter their name on the application if a letter signed by the applicant or their attorney is submitted with the application authorizing that agent to sign or enter their name on the applicant's behalf. Payment must be received via phone if filing online at 303.866.3581 (Records Office) prior to processing the application.

IF YOU HAVE ANY QUESTIONS regarding any item on the application form, please call the Division of Water Resources Ground Water Information Desk (303-866-3587), or the nearest Division of Water Resource Field Office located in Greeley (970-352-8712), Pueblo (719-542-3368), Alamosa (719-589-6683), Montrose (970-249-6622), Glenwood Springs (970-945-5665), Steamboat Springs (970-879-0272), or Durango (970-247-1845).

Scaled Map of Bivens Pit

 PERMIT BOUNDARY

SE1/4 SW1/4, Sec. 35, T.8.N., R 69 W., 6th P.M



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 1
LOCATION MAP

862 W WILLOX LANE
FORT COLLINS, COLORADO

PREPARED BY:

TELESTO
SOLUTIONS • INCORPORATED
Loveland, Colorado (970) 484-7704
www.teleso-inc.com

PREPARED FOR:

**BIVENS TRUCKING &
EXCAVATING, INC.**

Copy of Court Approved Augmentation Plan

CENTRAL FILES

RECEIVED

JUL 1 - '92

DISTRICT COURT, WATER DIVISION I, STATE OF COLORADO

Case No: 90-CW-129
(W-7813-74)

DECREE OF THE WATER COURT APPROVING PLAN FOR AUGMENTATION

CONCERNING THE APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION
OF:

CHARLES R. and CONNIE L. NAUTA in LARIMER COUNTY

THIS MATTER came on to be heard upon the Application of Charles R. Nauta and Connie L. Nauta for Approval of Plan for Augmentation filed in this Court on July 9, 1990. The Applicants appeared by and through their attorney, John E. Reid of NELSON, REID & SCHWARTZ. The Court being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Court has jurisdiction over this application.

The time for filing statements of opposition expired September 30, 1990. One statement of opposition to said application was filed by the Central Colorado Water Conservancy District and the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District.

The Findings and Ruling of the Referee, Raymond S. Liesman, were entered August 12, 1991, are generally embodied herein with some modification, and to the extent not so modified are confirmed and approved. Protest to the original Findings and Rulings of the Referee was filed by the State Engineer and the Division Engineer for Water Division No. 1.

All matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections and modifications made as are indicated by the evidence presented herein, IT IS HEREBY THE JUDGMENT AND DECREE OF THIS COURT:

1. The name, address and telephone number of the applicants:

Charles R. Nauta and Connie L. Nauta
832 Wood Street
Fort Collins, Colorado 80521
303-482-9537

CENTRAL FILES

2. The name and location of the structure augmented:

Nauta Pit #2, a sand and gravel mining operation located in the SE-1/4 of the SW-1/4 of Section 35, Township 8 North, Range 69 West of the 6th P.M. on a tract of land westerly of the Union Pacific right of way and northerly of the Eaton Ditch, Larimer County, Colorado. The center of the pit to be at a point approximately 1000 feet North and 1600 feet East of the SE Corner, Section 35.

There are no other water rights diverted from this structure.

3. Previous decrees for water rights used for augmentation:

- A. Date entered: February 6, 1979
- B. Case No.: W-7813-74
- C. Court: District Court, Water Division I
- D. Legal Description of points of diversion: SE-1/4 of SW-1/4 of Section 2, and N-1/2 of NE-1/4 of NW-1/4 of Section 11, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado
- E. Source: Salvage Water from Griffin Drain and Nauta Drain
- F. Amount: Griffin Drain 0.30 cfs; Nauta Drain 0.13 cfs
- G. Appropriation: Griffin Drain August 15, 1914; Nauta Drain June 1, 1964.
- H. Decreed use: Griffin Drain and Nauta Drain for irrigation of 40 acres to east of points of diversion and evaporation replacement.

4. Historic Use: Both the Griffin Drain water and the Nauta Drain water were historically used for the irrigation of 40 acres of alfalfa-grass hay meadows in the SE1SW1 and SW1SE1 of Section 2, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado, comprising 53 acre feet of water. Affidavits verifying actual diversion of the water emanating from these drain tiles for irrigation of said lands are of record in Case No. W-7813-74 in this Court and by this reference are incorporated herein.

5. Statement of Plan for Augmentation: Applicants shall provide replacement water from the adjudicated irrigation and evaporation replacement rights sufficient to augment any

stream depletion and return flow adversely affected by the mining operation conducted by applicant. Three sources of water consumption are associated with this mining operation: moisture loss in materials removed, dust suppression, and lake evaporation.

Moisture Loss In Materials

A maximum of 30,000 tons of material will be mined per year. At an average moisture content of four percent, 0.88 acre feet of water is required to augment this loss.

Dust Control

Applicant proposes to apply 1/8 inch of water three times per day for fifty days per year to control dust on the 1,500 linear feet of unpaved haul road on the premises. This equates to 1.08 acre feet of water per year.

Lake Evaporation

Area of Water Surface Left By Mining: 6.05 acres
 Gross Annual Lake Evaporation: 38.50 inches/year
 Net Annual Precipitation: 14.47 inches/year
 Effective Precipitation: 11.38 inches/year
 Net Annual Lake Evaporation: 27.12 inches/year
 Annual Lake Evaporation: 14.69 acre feet

Historic Consumptive Use

Wet Meadow - 5.60 acres x 27.4 inches	12.79 acre feet
Pasture Grass - 0.90 acres x 20.4 inches	1.53 acre feet
Gross Consumptive Use	14.32 acre feet
Less Effective Precipitation	6.16 acre feet
Net Consumptive Use	8.16 acre feet
Evaporation Replacement Required	6.53 acre feet

Of the 53 acre feet previously allotted for irrigation, it is assumed that fifty percent would be consumptively used leaving 26.50 acre feet for augmentation.

A maximum of 8.49 acre feet of augmentation per year will be required during active mining operations:

Moisture Loss	0.88
Dust Control	1.08
Lake Evaporation	14.69
Less Historic Consumptive Use	(8.16)
Augmentation Required	8.49

After mining is completed, an annual average of 6.53 acre feet of augmentation will be required.

6. Conditions of Approval:

- a) Augmentation shall be accomplished by adjusting the volume of replacement water on a monthly basis in relation to the actual consumption generated by the mining operation.
- b) The actual amount of replacement water to be provided by Applicants for moisture loss in materials shall be based on the actual volume of material mined on a monthly basis to be released during the next succeeding month.
- c) Replacement water to be provided for dust control shall be provided by Applicants on the days water is applied on Applicants premises for such purpose and shall be released in accordance with the chart appended hereto and by reference incorporated herein.
- d) Replacement water to be provided for lake evaporation shall be provided by Applicants on a monthly basis in proportion to the average monthly evaporation percentage as set forth in the chart appended hereto.
- e) Replacement water from the drains shall be deposited in the Nauta Storage Reservoir through which it shall pass prior to release to the Poudre River. Releases of replacement water shall be made from the Nauta Storage Reservoir to the Poudre River and shall be regulated by the Water Commissioner. Releases shall be monitored by flow measurement of the wasteway ditch that runs from the northeast corner of the Nauta Storage Reservoir to the Poudre River. Applicants shall receive a credit of fifty percent for all water delivered through the reservoir from the drains.
- f) Applicants shall maintain a monthly tabulation sheet setting forth the actual monthly data set forth in the chart appended hereto which shall include a report of the

actual amount of replacement water released in compliance with the terms and conditions of this agreement. Applicants shall operate the plan of augmentation so as to insure there is no deficit in the amount of replacement water.

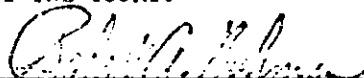
- g) Any further irrigation of lands historically irrigated by water from the Griffin Drain and the Nauta Drain shall be permanently curtailed.
 - h) The applicant shall install and maintain such measuring devices and maintain and provide such records as the Division Engineer may require for administration of this right.
- 7. The aforesaid terms and conditions are adequate to prevent injury to the owner of or persons entitled to use water under any vested water right or any decreed conditional water right.
 - 8. Applicants have applied for a well permit for the subject augmented premises which is now pending with the Office of the State Engineer. More than six months have elapsed since Applicants submitted said well permit application.
 - 9. Any change of water rights embodied in this augmentation plan from that set forth in the decree identified in paragraph 3 above will not injuriously affect the owner of or persons entitled to use water under any vested water right or any decreed conditional water right for the reason that all said established water rights have previously been adjudicated as salvage water indigenous to Larimer County, Colorado, and in administering this Ruling, the State Engineer shall be guided by the fact that a call to stop the diverting of water would not result in additional water reaching a natural stream.
 - 10. This plan of augmentation shall be subject to reconsideration by the water judge on the question of injury to the vested rights of others for a period of 5 years after Nauta Pit #2 is completed pursuant to CRS 37-92-304(6).
 - 11. This plan of augmentation meets all applicable requirements of C. R. S. Sections 37-92-103(9), 302(1)(2) and 305(8).

IT IS ORDERED that the foregoing plan of augmentation is approved subject to the terms and conditions set forth above.

MAY 23 1992

DATED: _____, 1992.

BY THE COURT:



ROBERT A. BEHRMAN
Water Judge
Water Division No. 1
State of Colorado

Original Gravel Pit Application
(Permit Never Finalized)

HEATER RESOURCES

07-13-90	3:38 P	
032472	68.00	
NNX006	P0813	
GVLALC	70.00	
PITU10	P0860	
S/T	130.00	
TTL	130.00	
	CHEQUE	130.00
CHG	0.00	
	ITH	2
CL-1	145465	

CHEQUE 133.00

ITK 2

CL-1 1A5485

Att 8/28/90
315485

☐ NEW PIT(S)☒ PIT(S) EXIST, CONSTRUCTED AFTER DEC. 31, 1980

☐ REACTIVATION OF PRE JAN. 1, 1981 PIT(S)

NAME(S) Charles R. Nauta and Connie L. Nauta

Mailing Address 832 Wood Street

City, St Zip Fort Collins, CO 80521

Phone (303) 482-9537

3. ADDRESS OF LOCAL CONTACT (If different than #2)

NAME(S) John E. Reid, Attorney at Law

Mailing Address 215 West Oak, Suite 720

City, St. Zip Fort Collins, Colorado 80521

Phone (303) 482-3633

4. GENERAL LOCATION OF PIT(S): COUNTY LARIMER

SE 1/4 SW 1/4, Sec. 35 Twp. 8 ☒ N. ☐ S, Range 69 ☐ E. ☒ W. 6th P.M.

5. Total number of water surface acres (to be) exposed 6.50 . Total Number of Pits One (1) .

6. Estimated total depth of pit 12 feet. Estimated depth to groundwater 1.5 feet.

7. (a) Estimated date to begin excavation October 1985 , to complete excavation approximately 15 yrs.

8. ATTACHMENTS: (Check which have been attached.)

(a) ☒ Scaled map of pit area tied to a Section or 1/4 Corner (Required).

(b) ☐ Copy of the reclamation permit if applicable.

(c) ☐ Copy of Pre 1/15/89 Water Conservancy Dist. or Water User Assoc. Augmentation Agreement if applicable

(d) ☒ Copy of proposed Augmentation or Temporary Supply Plan if applicable.

(f) ☐ Copy of Court approved Augmentation Plan if applicable.

(n) ☒ Other Owner's check for \$130.00 payable to Office of the State Engineer

9. Detailed description of the use and method of diversion of any water withdrawn from the pond.
Three sources of water consumption are associated with Nauta Pit #2 consisting of moisture loss in materials extracted, water used in dust suppression and surface evaporation.

10 I (we) have read the statements made herein and know the contents thereof, and that they are true to my (our) knowledge. [Pursuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.]

Name/Title (Please type or print)
Charles R. Nauta
Connie L. Nauta

Signature *Charles R. Nanto*
Comptroller & Auditor

Date
July 5, 1990

For Office Use only

Court Case No. _____ Div. 1 Co. 35 WD 03 Basin _____ MD _____ Use _____



**OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES**

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581

August 23, 1990

Charles R. Nauta
832 Wood Street
Fort Collins, CO 80521

RE: Gravel Pit Well Permit Application, Receipt No. 315485

Dear Mr. Nauta:

This letter is to acknowledge receipt of the above referenced gravel pit well permit application and supporting documentation. Before we can act on your permit application, the proposed substitute supply plan must be reviewed since the ground water is hydraulically connected to an over-appropriated stream system. The provisions of Senate Bill 120 which require the registration of gravel pits pursuant to C.R.S. 37-90-137(11) also anticipates that the services of outside consultants will be required in the evaluation of any proposed substitute supply plan.

It is the policy of this office that if it appears that we will not be able to act on an application in a timely manner, due to some delay in evaluation of the substitute supply plan, we will return the application to the applicant to await completion of the evaluation of that plan. As the Well Permit Evaluation Section anticipates that there will be some delay in the evaluation of the substitute supply plans, we are returning your permit application to you, to be held until such time as your substitute supply plan has been approved by the Engineering Section of this office.

All supporting documentation attached to your application is being retained in our files. When you have received approval of your substitute supply plan, please return the original gravel pit well permit application to this office with appropriate amendments, if necessary, to agree with the approved plan.

Feel free to contact this office if you have any questions.

Sincerely,

Mr. Kris Murthy, P.E.
Water Resources Engineer
Ground Water Section

Enclosure