

**SAN JUAN COUNTY, COLORADO**  
**BOARD OF COMMISSIONERS MEETING AGENDA**  
August 9, 2023

**CALL TO ORDER:** 3:00 P.M.

**OLD BUSINESS:**

Consider Bills and Authorize Warrants  
BOCC Regular Meeting Minutes for July 26, 2023

**APPOINTMENTS:**

3:00 P.M. - Chuck Cousino, Brian Devine - Onsite Wastewater Treatment System  
3:45 P.M. - Becky Joyce Public Health and Clinic Updates  
4:30 P.M. - Public Hearing – Improvement Permit Sketch Plan and Vacation Rental Application, Adam Rex for the development on the Forst Lode MS 18463 of a single-family dwelling and associated utility improvements and Vacation Rental located on Kendall Mountain adjacent to CR 33  
5:00 P.M. - Public Hearing – Land Use Permit Colby Barrett, Bonanza Boy LLC, Mining Remediation, Shelbyville Lode MS 18168 located in the Chattanooga Area near US Highway 550  
5:30 P.M. - Planned Unit Development Introduction - Silver Cloud Lodge Project, Colby Barrett, Bonanza Boy LLC, Shelbyville Lode MS 18168 located in the Chattanooga Area near US Highway 550  
6:00 P.M. - Martha Johnson, Social Services  
6:30 P.M. - Klem Branner – Silverton Singletrack Society

Other

**CORRESPONDENCE:**

CCI – Western District Meeting

**NEW BUSINESS:**

Treasure's Report  
Sales Tax Update  
Public Comment  
Commissioner and Staff Reports

**OTHER:**

**ADJOURN:**

**Next Regular Meeting – 6:30 PM, Wednesday August 23, 2023**

Join Zoom Meeting

<https://zoom.us/j/92136473203>

Meeting ID: 921 3647 3203

By Telephone: Dial 669-900-6833 and enter the Webinar ID 92136473203 when prompted.

You Tube (live and recorded for later viewing, does not support public comment):

[https://www.youtube.com/@sanjuancountycolorado\\_streams](https://www.youtube.com/@sanjuancountycolorado_streams)



SAN JUAN COUNTY BOARD OF COMMISSIONERS  
REGULAR MEETING WEDNESDAY, July 26, 2023  
AT 6:30 P.M.

Call to Order: The meeting was called to order by Chairman Austin Lashley. Present were Commissioners Scott Fetchenhier and Pete Maisel, County Attorney Dennis Golbricht and Administrator William Tookey.

Minutes: Commissioner Fetchenhier moved to approve the minutes of July 12, 2023 with the correction that Commissioner Maisel moved to approve the Sketch Plan application for the Mineral King Lode. Commissioner Maisel seconded the motion. The motion passed unanimously.

An Agreement with Bighorn Consulting Engineers was presented to the Commissioners for their review. The agreement is for developing a new heating system for the hospital building. Commissioner Maisel moved to approve the agreement as submitted. Commissioner Fetchenhier seconded the motion. The motion passed unanimously.

A request was presented to the Commissioners to change the time for the August 9, 2023 meeting and the date of the October 11<sup>th</sup> meeting due to scheduling conflicts. It was the consensus of the Commissioners to change the starting time of the August 9<sup>th</sup> meeting to 4:00 pm. (The August 9<sup>th</sup> meeting time was later changed to 3:00 pm by consensus of the Commissioners.) It was also the consensus of the Commissioners to change the October 11<sup>th</sup> meeting to October 9<sup>th</sup> at 6:30 pm.

The Commissioners discussed the need for dust control work on County Road 2. They agreed to review the issue at the August 9<sup>th</sup> meeting.

Having no further business, the meeting adjourned at 8:24 P.M.

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Austin Lashley, Chairman

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Ladonna L. Jaramillo, County Clerk



SAN JUAN COUNTY BOARD OF COMMISSIONERS MET AUGUST 9, 2023  
AND THE FOLLOWING BILLS WERE APPROVED FOR PAYMENT.

24534 SOUTHWEST APPLIANCE	FIX APARTMENTS APPLIANCES	769.86
24535 VISA	COMMUNICATION-SS BILLS	219.90
24536 IMAGENET CONSULTING	SHERIFFS BILL	114.54
24537 IDS INTEGRATED DOCUMENT	DVR TITLE	6.40
24538 SJC HISTORICAL SOCIETY	REIMB PLOWING CLEAN UP	110.00
24539 KLINKE & LEW CONTRACTORS	SJC SPRINKLER SYSTEM FIX	2300.00
24540 PRESTIGE DODGE	DODGE RAM EPD	63130.87
24541 MASTERS' TOUCH	TREAS DELINQUENT TAX NOTICE	443.30
24542 ANTEHM BLUE CROSS	MEDICAL INSURANCE	17559.81
24543 CBI	FINGER PRINTING	52.50
24544 VERO	BILLS	1151.59
24545 CREATIVE CRACKERJACK	GIFTS-CARDS	362.68
24546 CTSI	POLICY YEAR JULY 1 2023-2024	342.00
24547 CO DEPT OF REVENUE	2020 STATE TAXES DUE	1583.00
DD ABIGAIL H. ARMISTEAD	SHERIFF DEPUTY WAGES	3607.13
DD ADAM D. CLIFTON	SHERIFF DEPUTY WAGES	3815.50
DD AMIE R. BIOCCHI	SHERIFF ADMIN-NURSE WAGES	3298.24
DD ANTHONY D. EDWARDS	COMMUNICATIONS WAGES	4326.53
DD ARTHUR J. DONOVAN	EPD WAGES	4491.57
DD AUSTIN P. LASHLEY	COMMISSIONER WAGES	2273.99
DD BRUCE T. CONRAD	SHERIFFS WAGES	4295.98
DD DEANNA M. JARAMILLO	TREASURERS WAGES	3674.79
DD JOHN A. JACOBS	SHERIFF-RANGER WAGES	3601.95
DD KERI METZLER	CORONER WAGES	993.03
DD KIMBERLY A. BUCK	ASSESSORS WAGES	4234.99
DD KRISTINA L. RHOADES	SOCIAL SERVICE WAGES	2296.76
DD LADONNA L. JARAMILLO	COUNTY CLERK WAGES	3719.59
DD LINSLEY SWEET	DEPUTY CLK-AS WAGES	2299.80
DD PETER C. MAISEL	COMMISSIONER WAGES	2182.03
DD REBECCA B. JOYCE	NURSE WAGES	4620.13
DD REBECCA J. RHOADES	CUSTODIAN WAGES	1213.20
DD ROBERT W. GARDINER	NURSE ASSISTANT WAGES	2064.52
DD STEPHEN W. LOWRANCE	UNDERSHERIFF WAGES	4055.34
24548 CITIZENS STATE BANK	ANVIL PAYMENT	5558.98
24549 SCOTT L. FETCHENHIER	COMMISSIONER WAGES	2138.03
24550 TOMMY WIPF	VETS OFFICER WAGES	356.40
24551 WILLIAM A. TOOKEY	ADMINISTRATOR WAGES	4738.35
24552 CITIZENS STATE BANK	H S A SAVINGS	1600.00
24553 CITIZENS STATE BANK	FEDERAL TAXES WITHHELD	22502.02
24554 CITIZENS STATE BANK	STATE TAXES WITHHELD	3626.00
24555 GREAT-WEST LIFE	GROUP RETIREMENT	5879.62
24556 KANSAS CITY LIFE	DENTAL & LIFE INSURANCE	817.62
24557 AMWINS GROUP BANEFITS	VISION INSURANCE	170.97
24558 AFLAC	INDIVIDUAL INSURANCE	295.14



24559 MOTOROLA SOLUTIONS	SHERIFFS EFQUIPMENT	3180.00
24560 SILVER SAN JUAN	FIX FAUCET IN APT 5B	134.60
24561 SAUL'S CREEK ENGINEERING	ASSESSORS BILL	80.00
24562 STATEWIDE INTERNET PORTAL	ADDED EMAILS	46.20
24563 STATEWIDE INTERNET PORTAL	EMAIL ANNUAL RENEWAL	739.20
24564 TECHNOLOGYWEST	ELECTION CAMERAS IN FULL	6258.00
24565 TOWN OF SILVERTON	W/S THRU 06-30-23	3598.22
24566 IDS INTEGRATED DOCUMENT	JULY BILLING FOR AUGUST (REG)	72.37
24567 LINSLEY SWEET	REIMB SUPPLEMENT	164.90
24568 DR JOEL , INC	FIX ELECTION CAMERAS	2241.64
24569 SJC FIRE AUTHORITY	3RD QTR PAYMENT	12475.00
24570 SILVERTON AMBULANCE	SALES TAX MONTHLY PAYMENT	41933.33
14571 SILVERTON AMBULANCE	MONTHLY PAYMENT	7200.00
24572 STATEWIDE INTERNET PORTAL	GOOGLE WORKSPACE STARTER	115.50
24573 SAN JUAN BASIN AREA AGENCY	MATCH KERI METZLER AAA	3700.00
24574 VISA	BILLS	4439.61
24575 VERO	BILLS	1148.69
24576 WEX BANK	SHERIFFS FUEL	2356.94
24577 IMAGENET CONSULTING	SHERIFFS BILL	802.39
24578 CENTURY LINK	ELEVATOR ROOM	88.55
24579 SILVERTON HARDWARE	CUSTODIAN SUPPLIES	425.95
24580 BRUCE E. HARING MA LPC	MENTAL HEALTH PROGRAM	4942.00
24581 SILVERTON CLINIC	REIMB AUDREY RATHEY	1172.26
24582 4 CORNERS POWER GENERATOR	TRAVELED FOR PM SERVICES	489.52
24583 S.O.L. LTD LIABILITY COMPANY	NURSES BILL	500.00
24584 EVERBRIDGE INC	EPD BILL	2600.00
24585 VERIZON	SHERIFFS BILL	122.04
24586 GRAN FARNUM PRINTING	ELECTION ENVELOPES 2023	403.00
24587 CENTURY LINK	SHERIFFS BILL	72.22
24588 YUMA CO SHERIFFS OFFICE	REIMB SHERIFFS POSTAGE	33.10
24589 LA PLATA CO DETENTION FACILITY	JULY 23 JAIL BILL	65.00
24590 SILVERTON STANDARD	LEGALS	317.12
24591 NMS	BLOOD WORK	159.00
24592 IMAGENET CONSULTING	SHERIFFS BILL	114.54
TOTAL GENERAL		299319.54



# ROAD

DD DAVID L. ANDREWS	ROAD FOREMAN WAGES	3755.65
DD LOUIS K. GIRODO	ROAD OVERSEER WAGES	4602.46
DD MATHEW J. ZIMMERMAN	ROAD OPERATOR WAGES	3562.88
DD RUSTY D. MELCHER	ROAD OPERATOR WAGES	3680.94
7156 ANTHEM BLUE CROSS	MEDICAL INSURANCE	2430.02
7157 CITIZENS STATE BANK	FEDERAL TAXES WITHHELD	5499.84
7158 CITIZENS STATE BANK	STATE TAXES WITHHELD	844.00
7159 GREAT-WEST LIFE	GROUP RETIREMENT	685.48
7160 CITIZENS STATE BANK	H S A SAVINGS	300.00
7161 KANSAS CITY LIFE	DENTAL & LIFE INSURANCE	280.01
7162 AMWINS GROUP BENEFITS	VISION INSURANCE	36.88
7163 TOWN OF SILVERTON	W/S THRU 06-30-2023	566.01
7164 LAWSON PRODUCTS	BILL	56.00
7165 HONNEN EQUIPMENT	SUPPLIES	5924.81
7166 FOUR CORNERS WELDING	SUPPLIES	283.00
7167 WAGNER	PARTS	5845.00
7168 VISA	BILL	952.17
7169 SILVERTON HARDWARE	SUPPLIES	82.92
7170 DAVID L. ANDREWS	REIMB SUPPLIES	111.18
7171 JOHN DEERE FINANCIAL	JD GRDR PAYMENT	13179.90
7172 ALSCO	BILL	80.00
7173 CENTURY LINK	BILL	152.90
7174 CATERPILLAR FINANCIAL	D6TVP/WES00376 PAYMENT	5274.36
7175 WHISTLESTOP	FUEL REMAINDER	15.00
TOTAL ROAD		58201.41

GENERAL	299319.54
ROAD	58201.41
TOTAL ALL FUNDS	357520.95

WERE ALLOWED SETTLEMENT IN FULL OF SAN JUAN COUNTY COMMISSIONERS

\_\_\_\_\_  
AUSTIN LASHLEY, CHAIRMAN

\_\_\_\_\_  
SCOTT L. FETCHENHIER, COMMISSIONER

\_\_\_\_\_  
PETER C. MAISEL, COMMISSIONER

\_\_\_\_\_  
LADONNA L. JARAMILLO, CLERK



Most everything in [Regulation 43](#), (Colorado's OWTS regulation) references the "local board of health". The BoH is the entity that adopts the regulations, establishes fees, hears requests for variances, etc. The following sections are provided for context:

#### **43.4 Applicability**

##### **A. Regulations Adopted by Local Boards of Health**

###### **1. Regulation Coverage**

- a. An OWTS with design capacity less than or equal to 2,000 gpd must comply with regulations adopted by local boards of health pursuant to this regulation and the OWTS Act. Within the jurisdiction of the local public health agency, the regulations promulgated by the local board of health govern all aspects of OWTS permits, performance, location, construction, alteration, installation, and use.

##### **Primary Enforcement Responsibility**

1. The primary responsibility for enforcement of the provisions of the OWTS Act and the regulations adopted under said article will lie with the local board of health.

##### **Definitions,**

"Local board of health" means any local, county, or district board of health.

"Local public health agency" means any county, district, or municipal public health agency and may include a county, district, or municipal board of health to oversee On-site Wastewater Treatment System permitting and inspection or an on-site wastewater treatment system program. A local public health agency may designate another agency to administer the OWTS program.

##### **Procedures to Adopt or Revise Regulations by the Local Board of Health:**

- a. A local board of health must submit its proposed regulations to the Division for preliminary review at least 30 days prior to a public hearing before a local board of health.
- b. The local board of health must hold a public hearing on the proposed regulations before adopting final regulations.
- c. The local board of health must give notice of the time and place of the public hearing at least once and at least 20 days in advance in a newspaper of general circulation within its area of jurisdiction.

##### **Requirements for Variance Consideration**

- a. To consider a variance request, the local board of health must adopt a procedure for issuing variances.
- b. Where the local board of health adopts a variance procedure, the board must hear the variance request.
- c. The local board of health will determine what type of variances will require public hearings.



**\*\*\*COUNTY (OR AGENCY)\*\*\***  
**ON-SITE WASTEWATER TREATMENT SYSTEM**

**\*\*\*Add rule or regulation from XX.1\*\*\***

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Notes for use of this template:

- This regulation template is intended for those local boards of health and public health agencies that choose to streamline the regulation development process whereby there would be a simple adoption of the revision to Regulation 43 as defined within the sections of this template.
- Notes of red italicized text within \*\*\*sets of three asterisks\*\*\* are for your use. Information needs to be filled in as noted; and then the notes deleted.
- The section "XX" designation should be modified to fit your local ordinance designation format.
- Document revised: February 7, 2018.

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**XX.1 Title and Authority**

These requirements will be known as the "\_\_\_\_\_ County \*\*\*OR name Local Public Health Agency\*\*\* On-site Wastewater Treatment Systems \_\_\_\_\_." \*\*\*Add the type of rule (i.e., resolution, ordinance, rule, regulation, etc.\*\*\*

These requirements have been adopted by the \_\_\_\_\_, acting as a Board of Health \*\*\*the reference to the board of health may be needed (or not)\*\*\* pursuant to and under authority contained in the On-site Wastewater Treatment System Act, 25-10-101, et seq. C.R.S. and has designated the \_\_\_\_\_ \*\*\* Dept., Office, etc. \*\*\* to implement these \_\_\_\_\_ \*\*\*Edit as needed, or remove\*\*\* on behalf of the Board of Health.

**XX.2 Scope and Purpose**

**A. Declaration**

1. This regulation applies to On-site Wastewater Treatment Systems (OWTS) as defined in section 25-10-103(12), C.R.S.

**B. Purpose**

1. The purpose of these \_\_\_\_\_ \*\*\*ADD the type of rule from XX.1\*\*\* is to establish the minimum standards for the location, design, construction, performance, installation, alteration and use of OWTS with a design capacity less than or equal to 2,000 gallons per day within \_\_\_\_\_. \*\*\*name county or counties if Local Public Health Agency includes multiple counties\*\*\*

**C. Jurisdiction**

1. These \_\_\_\_\_ \*\*\*ADD the type of rule from XX.1\*\*\* apply to all OWTS in the unincorporated areas of the county and over all municipal corporations within the territorial limits of \_\_\_\_\_ \*\*\*name county or counties if Local Public Health Agency includes multiple counties\*\*\* but not over the territory of any municipal corporation that maintains its own public health agency including: \_\_\_\_\_. \*\*\*Include the optional municipality text only if there is a municipal public health agency located within your jurisdiction with a local public health agency. Otherwise delete from "but not" to the end of the sentence\*\*\*

**D. Prohibition of OWTS Where Public Sewer Service is Available and Feasible**

1. An OWTS permit must not be issued to any person when the subject property is located within a municipality or special district that provides public sewer service, except where such sewer service to the property is not feasible in the determination of the municipality



or special district, or the permit is otherwise authorized by the municipality or special district. [43.4(B)(11)]

E. Severability

1. Should any section, clause, or provision of these Regulations be declared by a court of competent jurisdiction to be invalid, such decision will not affect the validity of these Regulations as a whole, or any part thereof other than the part declared to be invalid.

**XX.3 Incorporation of Regulation 43**

A. Included By Reference

1. The requirements of the Colorado Water Quality Control Commission's "On-site Wastewater Treatment System Regulation, Regulation 43, 5 CCR 1002-43, Effective date, April 30, 2018", are made a part of these \_\_\_\_\_ *\*\*\*Add type of rule from XX.1\*\*\** and will apply except where identified as an option of the local public health agency or where these regulations are more stringent than Regulation 43, 5 CCR 1002-43, and included in these \_\_\_\_\_. *\*\*\*Add type of rule from XX.1\*\*\** All aspects of an On-site Wastewater Treatment System including, but not limited to, permits, design, performance, location, construction, alteration, inspection, maintenance and use must be as provided in Regulation 43 and any additional requirements contained in these \_\_\_\_\_ *\*\*\*Add type of rule from XX.1\*\*\**.
2. Allowable local options identified in Regulation 43 and the designated decisions for these \_\_\_\_\_ *\*\*\*Add type of rule in XX.1\*\*\** are identified in the attached "Appendix A to OWTS \_\_\_\_\_ *\*\*\*Add type of rule in XX.1\*\*\** for \_\_\_\_\_ County *\*\*\*or Agency\*\*\** Appendix A is made a part of these \_\_\_\_\_. *\*\*\*Add type of rule from XX.1\*\*\**

B. Excluded *\*\*\*this section will be included in the regulation only if your agency does not have an oversight program for higher level treatment systems. However, if you do have an oversight program, delete this section and then include the section on pg. 5 of this document that references the oversight program\*\*\**

1. Reductions in soil treatment area size or separation distances, and wide beds with higher level treatment units are not allowed under these \_\_\_\_\_. *\*\*\*Add type of rule from XX.1\*\*\** All designs must be based on TL-1 parameters as defined in Regulation 43. Area or separation distance reductions and wider beds for higher level treatment can only be allowed in the future if these Regulations are amended to include a program of oversight for inspection and maintenance of higher level treatment units, and this amendment is accepted by the Division.

**XX.4 Permits and Fees**

A. Permits [43.4(B)]

1. Prior to installing, altering, expanding or repairing an OWTS, the applicant must obtain a permit from \_\_\_\_\_. *\*\*\*Add name of the local public health agency\*\*\**
2. The permit application must include information identified in section 43.4(B)(3) of Regulation 43. *\*\*\*Note: You may also add additional requirements, see section 43.4(B)(3)(g).\*\*\**
3. An OWTS permit expires \_\_\_\_\_ *[Example: one year]* after the date of issuance if construction has not commenced. After expiration, a new application must be required to begin construction.
4. Any change in plans or specifications of the OWTS after the permit has been issued invalidates the permit unless the permittee receives written approval from the



\_\_\_\_\_. \*\*\*Add name of local public health agency\*\*\* After a permit is invalidated, a new application and subsequent permit is required to begin construction.

5. Repair permits must identify a reasonable period of time in which the owner must make repairs prior to expiration of the permit.
6. Application for a product development permit may be approved by the \_\_\_\_\_  
\*\*\*Add name of local public health agency\*\*\* consistent with requirements of section 43.4(l) of Regulation 43.

\*\*\*You may want to add to these requirements other conditions requiring a new permit such as a change in property ownership use permit. Note: Your local application may also want to include source and type of water supply, directions to property, requirements for as-built information, etc.\*\*\*

**B. Board of Health Review [43.4(B)(9)]**

1. When an application is denied by [Add the name of the local public health agency], an applicant may request review by the local board of health. [Consider adding a timeframe within which an applicant must request review and process (i.e., written request to whom, within how many days of denial, other administrative process items etc.)]

**C. Fees [43.4(B)(4)]**

1. Permit fees and fees for other services and tests associated with OWTS will be set by the Board of Health, in conformance with section 43.4(B)(4) and (5) of Regulation 43 and 25-10-107, C.R.S.
2. Waiver of fees [43.4(B)(4)(c)] \_\_\_\_\_ \*\*\*Add language here if a Board of Health has made provisions for the waiver of permit fees as these provisions need to be identified here. If not, delete this section\*\*\*

**D. Surcharge [43.4(B)(5)]**

1. A surcharge of \$23.00 will be collected for each permit issued by \_\_\_\_\_  
\*\*\*Add name of the local public health agency\*\*\*. Of that fee, the \_\_\_\_\_  
\*\*\*Add name of the local public health agency\*\*\* will retain three dollars to cover administrative costs and twenty dollars must be transmitted to the Colorado Dept. of Public Health and Environment for use in funding its OWTS program.

**XX.5 Inspections [43.4(E)]**

**A. Septic Tank [43.9(B)(3)(c)]**

1. The applicant must notify the local public health agency or its designee \_\_\_\_\_  
\*\*\*requirements for notice (how many days prior to inspection)\*\*\* so the local public health agency or its designee can conduct a field inspection of the septic tank before backfilling.

**B. Soil Treatment Area and Related Components [43.4(F)(3)]**

1. The applicant must notify the local public health agency or its designee \_\_\_\_\_  
\*\*\*requirements for notice (how many days prior to inspection)\*\*\* so the local public health agency or its designee can conduct a final field inspection of the soil treatment area and all related components of the OWTS before backfilling.

\*\*\*If you would like to require additional inspections, the local regulations must specify the stages of site evaluation, construction, installation, final grade, at which you would like to require inspections. See, section 43.4(E)(1). If you would like your local program to have additional inspections you should identify those here\*\*\*

**XX.6 Prohibition of OWTS in Unsuitable Areas [43.4(J)] \*\*\*If identified\*\*\***



A. *\*\*\*Add description of area(s) and requirements\*\*\**

**XX.7 Licensing *\*\*\*If conducted, if not, delete this section\*\*\****

- A. Systems Contractors [43.4(K)(1)]
  - 1. Licensing requirements...
- B. Systems Cleaners [43.4(K)(3)]
  - 1. Licensing requirements...
- C. Others, as may be required; i.e.; Competent Technicians, Designers, etc.
  - 1. Licensing requirements...

**XX.8 Variances [43.4(N)] *\*\*\*If allowed; if not, delete this section\*\*\****

- A. Variances Allowed
  - 1. The Board of Health may approve a variance from a requirement of this Regulation. Variances cannot be granted by staff.
  - 2. Approval of a variance must be based upon evidence presented by the applicant, or their designee, showing that the variance: \_\_\_\_\_. *[Example: a) would not be injurious to the public health, water quality, or environment; and b) would prevent a substantial hardship to the applicant.]*
  - 3. Variances must not be granted under the items identified in section 43.4(N)(5) of Regulation 43.
- B. Variance Procedure
  - 1. Variance requests must be provided \_\_\_\_\_. *[method, recipient, timing]*
  - 2. Variance requests must include all items identified in section 43.4(N)(2)(d) of Regulation 43.
  - 3. The applicant has the burden of proof to demonstrate that the variance is justified and will pose no greater risk to public health and the environment than would a system meeting these Regulations. The Board of Health must determine if this item has been addressed prior to granting a variance.
  - 4. The Board of Health has the authority to impose site-specific requirements and conditions on any variance granted.
- C. Variances Requiring Public Hearings *[If none, delete.]*
  - 1. \_\_\_\_\_ *[List here the types of variances requiring a public hearing such as all requests or certain kinds of requests. Examples: repairs, adjacent properties.]*
  - 2. \_\_\_\_\_ *[Example: Describe notice or Public Hearing procedures.]*

**XX.9 Transfer of Title Inspections [43.4.L] *[If not, delete this section]***

*\*\*\*[If included, this section must define the components of the program as required in section 43.4(L). If not, delete.]\*\*\**



**XX.10 Permit for the Continued Use of an On-site Wastewater Treatment System [43.4.M] *[If none, delete this section]***

\*\*\*[If included, must define the components of the program in these Regulations. See section 43.4(M). If not, delete.]\*\*\*

**XX.11 Special Soil Types Requiring Different Percolation Test Procedure [43.5(D)(4)(e)(6)] *\*\*\*If identified\*\*\****

- A. Requirements for \_\_\_\_\_ Soil *\*\*\*indicate local term\*\*\**
1. *\*\*\*Identify requirements. Edit example as needed.\*\*\** In areas with \_\_\_\_\_ soil, \_\_\_\_\_ is required.

**XX.12 Requirement for Soil Profile Test Pits or Percolation Holes to Remain Open [43.5(E)] *\*\*\*If identified\*\*\****

- A. Soil Profile Test Pit Excavations
1. *\*\*\*Identify requirements. Edit example as needed\*\*\** Soil profile test pit excavations must remain open until \_\_\_\_\_.
- B. Percolation holes
1. *\*\*\*Identify requirements. Edit example as needed\*\*\** Percolation Holes must remain open until \_\_\_\_\_.

**XX.13 Oversight program of inspections, maintenance, recordkeeping and enforcement for higher level treatment systems. [43.14(D)]**

*\*\*\*[This section will be included in the regulation only if you have chosen to implement a program of oversight and maintenance for higher level treatment systems. If you have this program, edit sections A – D below as appropriate to ensure that the requirements of 43.14.D.4.a are met; if you do not administer this program, delete this entire section]\*\*\**

- A. This program will be administered and enforced by \_\_\_\_\_. *\*\*\* Add name of local public health agency; OR, \*\*\** The \_\_\_\_\_ *\*\*\* Add name of local public health agency \*\*\** has designated the \_\_\_\_\_ *\*\*\*Add name of administering agency or entity\*\*\** to administer this oversight program. However, the enforcement of the requirements of this regulation will remain with the \_\_\_\_\_ *\*\*\*Add name of local public health agency \*\*\**
- B. Indicate the type of permit that may be required; Operating Permit, Use Permit, etc.
1. Permit requirements, permit term, etc.
- C. Monitoring, sampling or reporting requirements, if any
- D. Items necessary for enforcement or recordkeeping
1. Requirements for legal documents attached to deed; as required

**XX.14 Additional local requirements, as needed. *\*\*\*If identified\*\*\****

- A. *\*\*\*Subtitle\*\*\**
1. *\*\*\*Text\*\*\**
- B. *\*\*\*Subtitle\*\*\**
1. *\*\*\*Text\*\*\**



\_\_\_\_\_ *\*\*\*County or Agency\*\*\**  
On-site Wastewater Treatment System \_\_\_\_\_ *\*\*\*Add type of rule\*\*\**

Date  
Page 6 of 5

**Appendix A to OWTS Regulations for** \_\_\_\_\_ *\*\*\*County or Agency\*\*\**  
Attached



# Appendix A to OWTS

\*\*\*ADD the type of rule from XX.1\*\*\*

Local Public Health Agency:

## CROSSWALK

ITEM	REQUIREMENTS See Check Box for Decision Chosen.		Citation Reg #43	Citation Local Reg
Occupancy – Residential	Bedrooms 1 through 3: 2 people per bedroom	<input type="checkbox"/>	43.6.A.2e	
	All additional Bedrooms: 1 person per bedroom			
	All bedrooms: 2 persons per bedroom	<input type="checkbox"/>	43.6.A.2.f	
How the number of bedrooms in a home will be defined for flow requirements	Bedrooms: flow estimates will be determined from the number of bedrooms originally finished.	<input type="checkbox"/>		
	If unfinished area is present in house, system must also be sized for 1 or 2 more bedrooms based on an assumption that 150 square feet of unfinished space can be converted into a bedroom, if the space can meet applicable code requirements for a bedroom.	<input type="checkbox"/>	43.6.A.2.h	
Effluent Screen	May be used ( <i>owner's option</i> )	<input type="checkbox"/>	43.9.J.1	
	Required in all new septic tanks	<input type="checkbox"/>	43.9.J.1	
Length of Distribution Laterals (e.g., trenches or beds)	Limit the length of distribution lines to a maximum of 100 feet.	<input type="checkbox"/>	43.10.E.2.c	
	100 feet maximum for gravity fed from one end, and up to 150 feet if pressure dosed or effluent applied at center of lateral or chamber	<input type="checkbox"/>	43.10.E.2.b & c	
Inspection ports at initial (front) end of distribution line (e.g., lateral or chamber)	Not required	<input type="checkbox"/>		
	Required	<input type="checkbox"/>	43.10.F.6.d	
Vault Privies – new	Allow new vault privies	<input type="checkbox"/>	43.12.D.1.a	
	Prohibit new vault privies	<input type="checkbox"/>	43.12.D.1.a	
Vault Privies - existing	Allow continued use of existing vault privies	<input type="checkbox"/>	43.12.D.1.b	
	Require abandonment of existing vault privies	<input type="checkbox"/>	43.12.D.1.b	
Pit Privies - new	Allow new pit privies	<input type="checkbox"/>	43.12.D.2.c	
	Prohibit new pit privies	<input type="checkbox"/>	43.12.D.2.a	
Pit Privies - existing	Allow continued use of existing pit privies	<input type="checkbox"/>	43.12.D.2.c	
	Require abandonment of existing pit privies	<input type="checkbox"/>	43.12.D.2.b	
Slit trenches	Allow slit trenches	<input type="checkbox"/>	43.12.F	
	Prohibit slit trenches	<input type="checkbox"/>	43.12.F	
Reductions in STA size or separation distances for higher level treatment systems; OWTS O/M and LPHA oversight required	Allow reductions for higher level treatment.	<input type="checkbox"/>	43.14.D.2	
	Reductions for higher level treatment not allowed	<input type="checkbox"/>	43.14.D.3	
Transfer of Title inspections	Inspection of OWTS required prior to transfer of title	<input type="checkbox"/>	43.4.L.1	
	Inspection of OWTS NOT required	<input type="checkbox"/>	43.4.L.1	









## Clarification for the Installation of “Composting Toilets”

Composting toilets are seeing renewed interest in certain locations throughout Colorado. With access to sites in our more remote locations being quite difficult for construction equipment or service vehicles (pump trucks), individuals are continuing to look for more options for their onsite wastewater treatment systems (OWTS). Subsequently, the Water Quality Control Division (division) has experienced an increase in inquiries relative to the allowance for the installation of composting toilets.

This document is provided to clarify issues regarding the use of composting toilets at sites that are not connected to a sewer system, but are regulated under local permitting for on-site wastewater treatment systems.

Regulation 43 is the Colorado on-site wastewater treatment systems regulation. A reference to composting toilets is found within section 43.12.E.1 of Regulation 43, which states:

*“The local board of health may permit incinerating, composting and chemical toilets. The use of an incinerating, composting or chemical toilet will not reduce the required size of the OWTS as noted in section 43.8.A.”*

A reference to the Colorado Plumbing Board is provided within section 43.12.E.2 of Regulation 43, which states:

*“Permitting of an incinerating or composting toilet may also be subject to the jurisdiction of a local agency regulating plumbing or the Colorado Plumbing Board, whichever has jurisdiction over plumbing in the location.”*

Composting toilet installations are not specifically addressed in the provisions of the codes currently adopted by the Colorado Plumbing Board {2018 *International Residential Code*, (IRC) and *International Plumbing Code*, (IPC)}. Local jurisdictions are required by CRS 12-155 to utilize the code adopted by the Plumbing Board. The Colorado Plumbing Code is clear that residential structures must have sanitary plumbing per IRC Section R306. These codes, however, do include provisions for alternate materials, design, and methods of construction and equipment. In both codes, the language uses the reference to alternate items that are *approved*. The IRC defines *approved* as “Acceptable to the building official.” The IPC defines *approved* as “Acceptable to the code official or other authority having jurisdiction.”

The intent of all code provisions in the IRC includes minimum requirements to safeguard public health through sanitation. The purpose of Regulation 43 is to “... *preserve the environment and protect the public health and water quality*...” The approval and recognition of the various types of OWTS by Regulation 43 demonstrates the allowance of composting toilet installations in accordance with the referenced standards. Subsequently, local agencies may choose to allow composting toilets in accordance with the criteria within Regulation 43, or they may choose to restrict their use as appropriate.





According to section 43.12.E.3 of Regulation 43, a “...*composting toilet may be used for toilet waste where an OWTS is installed for treating wastewater remaining after removal of toilet waste.*” This section of Regulation 43 indicates that a composting toilet may only be used where an OWTS is installed. Further, section 43.8.A.1 of Regulation 43 states in part: “...*Installation of low flow fixtures or the separation of toilet waste or other sources of wastewater does not allow for the reduction in the size of an OWTS.*” Therefore, the OWTS must always be sized according to the requirements of section 43.10.C of Regulation 43, with no reductions allowed for the installation of a composting toilet.

In summary, these requirements allow local jurisdictions to approve the use of a composting toilet when an OWTS is installed and the applicable plumbing agency agrees.

#### Remote Access Locations

In some Colorado counties, there are remote backcountry locations without water supply, that receive frequent visitors by foot (e.g., hiking, snow shoeing, etc.), and are not accessible by vehicles, even seasonally. These locations may involve high volume camping sites, yurts, shelter cabins, etc. on private or public land (e.g., national forest). In order to protect the environment, water quality, and safeguard public health through sanitation, there is a need to control human waste and minimize open defecation in these areas. Composting toilets may be appropriate in this situation.

In the past, pit toilets have been used in some locations with toilet waste periodically removed by horseback; which is cumbersome and can also involve risk. The use of other technologies, such as composting toilets, may actually be beneficial in some of these limited situations. Alternative technologies may also include urine separation, and periodic removal of solids for off-site management. In these limited, remote locations, the local public health agency may choose to allow composting toilets or other appropriate alternatives.

<https://cdphe.colorado.gov/OWTS>



## MEMORANDUM

August 9, 2023

TO: Board of County Commissioners

FR: William A. Tookey

RE: Forst Lode MS 18463

Adam Rex has submitted an Improvement Permit application for the development of 2000 Sq. Ft. cabin, vacation rental and associated utility improvements on the Forst Lode MS 18463. The property is located on Kendall Mountain and will be accessed by Country Road 33.

The property is currently owned by Adam Rex and the taxes are current.

The application fees have been paid.

The adjacent landowners have been notified via US Mail of the proposed Improvement Permit application. The list of adjacent property owners and copy of the letter are included.

**Mountain Zoning District** requires a minimum parcel or lot area of 5 acres with a setback of 20 feet from public lands and 30 feet from private property lines. The Forst Lode is 10.36 acres. The proposed cabin would exceed the setback requirements.

The applicant has substantially met the requirements for application submittals as required by 3-102 Requirements for Uses and Improvements.

All applications for review will be examined initially to determine whether the proposal is consistent with the County's Master Plan.

**Master Plan Strategy LU-2.1 Encourages future development in the economic corridors which include the upper Animas Valley from Silverton to Eureka, Cement Creek from Silverton to Gladstone and the South County Line to just above the Mill Creek Subdivision. And Strategy LU-2.2 Identify areas in the growth corridors that are suitable for residential use considering natural hazards, habitat resources, scenic impacts and sensitivity to residential land uses. The proposed development is not located in the identified growth corridors. However, the Master Plan notes that private property rights are respected in San Juan County. The Plan also states that residential development on mining claims are to be built in low-visibility places outside of environmentally sensitive areas, leaving visible ridgelines and other scenic resources undeveloped and minimizing the impacts on the environment. I believe this application is attempting to meet the intent of the Master Plan.**



- a. Adequate potable water is available or can be developed to safely support the proposed use.

**The applicant plans to collect water from a spring on the property and store it in a 1500 gallon cistern located in the basement of the house. The applicant has submitted a Notice of Intent to Make Absolute for water rights on the spring.**

- b. Adequate sewage disposal can be provided to support the proposed use.

**The applicant has submitted an On-Site Wastewater Treatment Permit Application to San Juan Basin Health.**

- c. Will the proposed use have any adverse impact on public or private property in the vicinity of the development?

**The proposed improvements should have minimal impact on the adjoining properties. Adjoining property owners have been notified and at this time I have not received any comments from them.**

- d. Will the proposed use have any adverse effect on scenic values, historic sites or structures, air or water or environmental quality, wildlife, erosion or other geological conditions?

- 1. The applicant has included a scenic quality report. It appears that the cabin has been located to minimize the visual impact. The applicant did construct a 30' story pole on the cabin site and was unable to see the pole from US 550.**
- 2. After visiting the proposed building location, I do not believe that the site has any historic structures, artifacts or significance.**
- 3. The improvements should create minimal adverse impacts upon wildlife. All solid waste, garbage and refuse must be kept within the building, in a separate secure enclosed area or in wildlife/bear-resistant containers until it is properly disposed of at the Transfer station.**

- e. Adequate road access exists or can be developed to ensure access appropriate to the use.

**The applicant will access the property via CR 33. CR 33 goes through the property. CR 33 needs to be located on the certified survey plat.**

- f. The design and development of the site shall preserve, insofar as possible, the natural terrain and drainage of the land, the existing topsoil and existing vegetation. Disturbed areas shall be revegetated with native plant species



certified weed free as soon as possible after disturbance in order to prevent the establishment and dominance of non-native invasive species.

**The proposed improvement will preserve, insofar as possible, the natural terrain and drainage of the land. All disturbances will be revegetated with native plant species certified to be weed free.**

- g. Sites subject to hazardous conditions, for example avalanche, flood, land slide, rock fall, mud flow, open mine shaft, corrosive water, etc, shall be identified and shall not be built upon or used until satisfactory plans have been approved by the County for eliminating or appropriately mitigating such hazards. The provisions of Chapters 8, 9, 10 and 11 shall govern the evaluation of those natural hazards covered by such provisions.

**A portion of the property is located in an avalanche hazard area. However, the cabin would be constructed outside of the Avalanche Hazard. Access to the site would require crossing avalanche paths that could put the occupants and emergency responders at risk.**

**The County Geohazards Map identifies that the cabin will be built on a talus slope.**

- h. The applicant shall permit continued public access to any historic public trails that cross the property.

**The Topo Map identifies the Deer Park Trail crossing the property. The trail will need to be identified and added to the certified survey plat.**

- i. Individual building sites shall be placed on the Town of Silverton's utility billing system for water and refuse when water is hauled to the site., Any applicant who shows that it is obtaining water from an approved permitted well or is purchasing water from an acceptable source of potable water other than the Town of Silverton may be permitted to be placed on the Town of Silverton's billing system for refuse only.

**The applicant will be required to be placed on the Town's utility billing system for refuse.**

## **VACATION RENTAL**

The applicant has requested that the property be allowed for use as a vacation rental. The County Zoning and Land Use Regulations require the following:

1. That adequate emergency communications and off-street dedicated parking are available at all times to guests.

**The property does have cell phone access and will also have satellite internet. There will be two dedicated off-street parking spaces available on site during**



**the summer and fall season. There are no dedicated off-street parking spaces available during the winter. The applicant would have their guests park on CR 33.**

2. The proposed rental is safely accessible year-round not only to occupants but to emergency services as well.

**The applicant proposes to mitigate the avalanche danger by informing their guests with the avalanche path locations and cancelling reservations during extreme avalanche danger.**

The Commissioners have two separate issues to make a decision on. The first is the improvement permit to allow for the construction of a single-family dwelling. The second is the use of the property for a vacation rental. The Commissioners have the option to approve as submitted, approve with conditions, or deny.

### **Improvement Permit**

The San Juan Regional Planning Commission unanimously recommend approval of the improvement permit Sketch Plan to construct a single-family dwelling on the Forst Lode with the stipulation that following conditions be met prior to the issuance of an Improvement Permit:

1. That the applicant acknowledges that emergency services will not be available in a timely manner and perhaps not at all.
2. All improvements to the Forst Lode shall fully and completely comply with, and strictly conform to, all terms, conditions and restrictions contained in the San Juan County Zoning and Land Use Regulation, all permits issued, and all applicable State and Federal rules and regulations.
3. The Historic Review Committee visits the site prior to the Preliminary/Final review.
4. That the proposed improvements are identified and staked on site by a Colorado Licensed Surveyor.
5. That the applicant be placed on the Town of Silverton's Utility billing system for refuse.
6. The failure to comply with these conditions shall be grounds for the revocation of this Land Use Permit.
7. Any other conditions that the Commissioners deems necessary.

Staff would recommend that if you choose to approve the application with conditions that you remove condition 3 and that you allow the Preliminary and Final Plans to be consolidated in the next submittal.



### **Vacation Rental**

Staff's recommendation to the Planning Commission was that the request for a vacation rental be denied for the reason that the application did not comply with Sections 4-110.21(iii)(a) and 4-110.21(iii)(b) of the County Zoning and Land Use Regulations.

1. Section 4-110.21(iii)(a). adequate emergency communications and off street dedicated parking are available at all times to guests;
2. Section 4-110.21(iii)(b) The proposed rental is safely accessible year round not only to occupants but to emergency services as well;

The application does provide for emergency communications but provides for dedicated off street parking only during times when vehicles can access the property. The property does not have safe access year-round. The access to the property would require guests and emergency responders to cross several avalanche paths.

The Planning Commission tabled making a recommendation to the County Commissioners concerning the use of the property as a vacation rental to allow the applicant an opportunity to better explain how they can provide safe access to the property as and provide year-round access as required by Land Use Regulations.

The applicant has provided additional information concerning how they would mitigate the parking and safety issues.

The Commissioners can choose to table a decision on the vacation rental and allow the Planning Commission to review and provide the Commissioners with a recommendation. The Commissioners could determine that the additional information adequately addresses Sections 4-110.21(iii)(a) and 4-110.21(iii)(b) and approve the vacation rental conditional upon the approval of the Final Plan of the Improvement Permit and any other conditions that the Commissioners choose to impose. Or the Commissioners can determine that the application is still in non-compliance with Sections 4-110.21(iii)(a) and 4-110.21(iii)(b) and deny the application for cause.















**San Juan Regional  
Planning Commission**  
**SAN JUAN COUNTY      TOWN OF SILVERTON**  
**Silverton, Colorado 81433**  
**P.O. Box 223**

July 18, 2023

Board of County Commissioners  
San Juan County  
Silverton, CO 81433

Members of the Commission:

RE: County Improvement Permit Application  
Sketch Plan and Vacation Rental  
Application on Forst Lode MS 18463  
For Single-family dwelling and associated  
improvements on Kendall Mountain  
adjacent to CR 33.

At the regular meeting of the San Juan Regional Planning Commission on July 18, 2023, members of that Commission held a meeting to discuss the Proposed County Improvement Permit Application Sketch Plan for Proposed single-family dwelling and Vacation Rental Application. The Sketch Plan application includes proposed single-family dwelling located on Forst Lode MS 18463 located on Kendall Mountain adjacent to CR 33. The owner Adam Rex is present to answer questions.

After considerable discussion and background of the project, questions and presentations from William Tookey, Land use Administrator, and the applicant, the Planning Commission voted unanimously to recommend to the San Juan County Commissioners that you approve the proposed County Improvement Permit Application and Sketch Plan with the 7 proposed conditions of approval.

Regarding the Proposal for a Vacation Rental, the Planning Commission members voted unanimously to table the request.

Thank you for considering this recommendation.

Sincerely,  
The Planning Commission Members and  
James Weller, Chairman







# San Juan County Colorado Application for Improvement Permit

Applicant: Adam Rex

Date: 7/28/2023

Property: Forst Lode Claim

Description of build: 4 bed, 2 bath house, approximately 2000sqft

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# Application for Improvement Permit

San Juan County, Colorado

## Application for Improvement Permit

Applicant	Name	Adrian Rex	APPROVAL CHECKLIST	Initial	Date
	Address	PO Box 178	Land Use Administrator		
	Escalante UT 84726	Phone	Ownership of Surface		
Owner	Name	same as above	Ownership of Minerals		
	Address		Vicinity Map		
		435-618-1119	Certified Survey Plat		
Contractor	Name	same as above	Monumentation		
	Address		Basic Plan Map		
			Plans and Drawings		
Legal Description of Property:			Road System Relationship		
Forst Lodge, Mineral survey #18463			Zoning Compatibility		
			State Mining Permit		
			Owner Notification		
			Avalanche Hazard		
			Geologic Hazard		
			Floodplain Hazard		
			Wildfire Hazard		
			Mineral Resource Impact		
			Wildlife Impact		
			Historic Site Impact		
Township N, Range W, Section			Watershed Gearance		
Nature of Improvement Planned:					
2000 sqft cabin/vacation rental Septic System Propane Tank on exterior of house Drive way and parking area Solar Panels on roof Water piping and cistern to transport and store water			County Building Inspector		
			Building Permit		
			State Electrical Inspector		
			Electrical Permit		
Land Use Zone:			San Juan Basin Health Unit		
Applicant Signature			Sewage Disposal: Test		
			Design		
			Central Sewage Collection		
Date Application Requested			State Division of Water Resources		
Date Submitted for Permit			Adequate Water Source		
Date Permit Issued			Well Permit		
Date Permit Denied			Central Water Distribution		
Reason for Denial			U.S. Forest Service/BLM		
			Access Approval		
			State Division of Highways		
			Driveway Permit		
Receipt	FEE PAYMENT	Amount	Date		
	Application				
	Building Permit				
	Subdivision/PUD			Subdivision Variance	
	Hearing Notice			Subdivision Approval	
				PUD Approval	



## Project Overview

Hi my name is Adam Rex and I am applying to build a 2000 sqft, 4 bed, 2 bath house on Kendall Mountain, just off of County Rd 33. I'm a builder from Escalante Utah and I will be building the house myself. I have over 20 years of experience in construction and I take great pride in the homes that I build. I've built high end, modern homes in locations such as Lake Tahoe, California and in Escalante, Utah. Some examples of my work include the Escalante Cliff House and Birch Creek House in Escalante Utah ([escalantecliffhouse.com](http://escalantecliffhouse.com) & [birchcreekhouse.com](http://birchcreekhouse.com)).

The house will be used at times as a vacation rental. We understand that there are certain dangers that come from guests visiting this house, especially in the winter, and we plan on mitigating those risks so that staying at the house is as safe as staying at any other house in Silverton. Strategies for risk mitigation are explained in the "Vacation Rental Use" section of this document.

The house will be invisible from county road 33 or highway 550. We put story poles up on the property that are higher than the house will be, and we couldn't see them from either road.

The cumulative impact of the house on the surrounding properties will be very small for the simple fact that most of the surrounding land is BLM land. Within 1500' of the property, there are only 2 other properties, the Manson Claim and the Lady Forst Claim and both of those claims have no improvements.

This house will be completely off the grid and will be built in such a way as to cause minimal disturbance to the beautiful mountain landscape surrounding it. Water will be drawn from a spring on the property that will be piped to the house and stored in a 1500-gallon cistern in the basement of the house. This water will be used for domestic uses as well as for firefighting if the need arise.

Wastewater will be treated on site using a waste water treatment system.

For electricity, solar panels will be installed on the roof with batteries in the basement. For house heat, water heaters, stove and oven we will use propane. The propane tank will be 500 gallons and will sit just to the side of the house.

The development will be in compliance with San Juan County Dark Skies Regulations and San Juan County Fire Regulations.



## Vacation Rental Use

We plan on renting the house out as a short-term vacation rental so that others can enjoy it while we're not. The house will have adequate communications in all seasons via cell phone and satellite internet, which can be used for wifi calling. Guests will be informed that this is a remote mountain cabin and as such, first responders will have a hard time reaching them or in some cases won't be able to reach them for a long period of time, such as during a snowstorm.

### **Summer and Fall**

The house will be accessible during the summer by 4WD/OHV or on foot during the summer and fall. We will ensure that there is parking for at least 2 vehicles at the house and make it a rule that guests aren't allowed to park on CR33. We will reserve the right to cancel bookings if the fire danger in the area becomes extreme so as to not endanger our guests or first responders.

### **Winter**

During the winter, the property will be accessible via snow machine or skis. In the winter we will instruct people to park their cars at the beginning of CR33 where there is an open area in front of the big speed bump. Guests will be told to not park snow machines on CR33 so that the road can be groomed. We plan on mitigating the risk of avalanche in a couple of ways. In the directions/access info that we will give the guests, we'll inform them of the avalanche paths that they will cross on the way to the house and advise them to not stop in those locations. We will reserve the right to cancel reservations if the risk of avalanche becomes "extreme" so as to not endanger guests and emergency services.

### **Spring**

We anticipate that there will be a mud season in the spring where getting to the house will be impossible. Depending on the year we think this'll be sometime in the April-June timeframe. The house will remain unoccupied during mud season so that we or our guests aren't tearing up the road or getting stuck going to and from the house.



## Scenic Quality Report

### Overview

In February 2023 we went to the Forst Lode claim to erect a 30' story pole with an orange hunting vest on the proposed build site. 30' was chosen as this will be the max height for the house. It was immediately obvious that the trees surrounding the house are much higher than 30'. After setting up the pole, we went to try and spot it from CR33 and highway 550. As the pictures below show, it was impossible to see the story pole from either CR33 or highway 550, at an spot along those roads. After completing this exercise, we're confident that the finished house will be invisible from view, even after clearing trees around the house to lessen the fire hazard.



Figure 1. The location of the proposed building location, marked with the 30' story pole.





Figure 2. The location of the proposed building location, looking west.





Figure 3. The location of the proposed building location, looking west.





Figure 4. The location of the proposed building location, as seen from county road 33. There was no other location on the road from which one can see the building site. This is the closest spot to the build site.





Figure 5. Showing that the direction of the photo in figure 4 is looking SW towards the build site from county road 33.





Figure 6. A 10x zoom photograph taken from highway 550 looking NW across the Animas river. The red circle indicates the area where the story pole is. We were not able to visually locate the story pole from highway 550.



# Cumulative Impact Report

## **Summary**

The building of a house on the Forst Lode Claim will not have a large impact on surrounding land owners. This is mostly because there are only 2 claims within 1500ft of the ALO map produced for this project by Kim Buck. Those claims are the Lady Forst Claim and the Manson Claim. The details and description of the Claims are below. The data gathered for this report are the same as other cumulative impact reports that Lisa Adair has done in the past.

## **Manson Claim**

This claim is owned by Adam Rex (49%) and Michael Steadman (51%). The land is accessible as CR33 passes through it. The claim is 8.99 acres and contains some avalanche zone and geologic hazard zone. The property is mostly wooded with some clearing and is all below 11000ft. This property has no improvements on it and is unlikely to be built on for the simple fact that I, Adam Rex, own half of it and I have no desire to develop it.

## **Lady Forst Claim**

This claim is owned by William Rogers (100%). The land is accessible as CR33 passes through it. The claim is 8.25 acres and contains some avalanche zone and very little geologic hazard zone. The property is mostly wooded with some clearing and is before the Forst Lode claim as you drive from Silverton up CR33. This property has no improvements on it but could probably be built on some time in the future.



Town of  
**Silverton**  
San Juan County

## Address of Job Site: \_\_\_\_\_

NEW ☐ ADDITION ☐ ALTERATIONS ☐ REPAIR ☐ MOVE ☐ OTHER ☐

Property Owner:

Phone:

Mailing Address:

City:

State:

Zip Code:

Email Address:

Contractor:

Phone:

LOT NO(S): \_\_\_\_\_ BLOCK #: \_\_\_\_\_ ZONE: \_\_\_\_\_ (If Applicable) ADDITION: \_\_\_\_\_

Hazard: NONE ☐ FLOOD ☐ AVALANCHE ☐ SLOPE ☐

Req. if NEW Structure:      Survey Provided: YES ☒ NO ☐      Plot Plan Provided: YES ☒ NO ☐

Designed By

## CONCLUSION

80112

111616

TOTAL ENDS

TOTAL ROOMS

### Describe All Work To Be Done

Printed Name:

Signature: \_\_\_\_\_

## Index

3-6-23

(Staff Use ONLY)

Total Estimated Valuation of Work: \$ (including Labor and Materials):

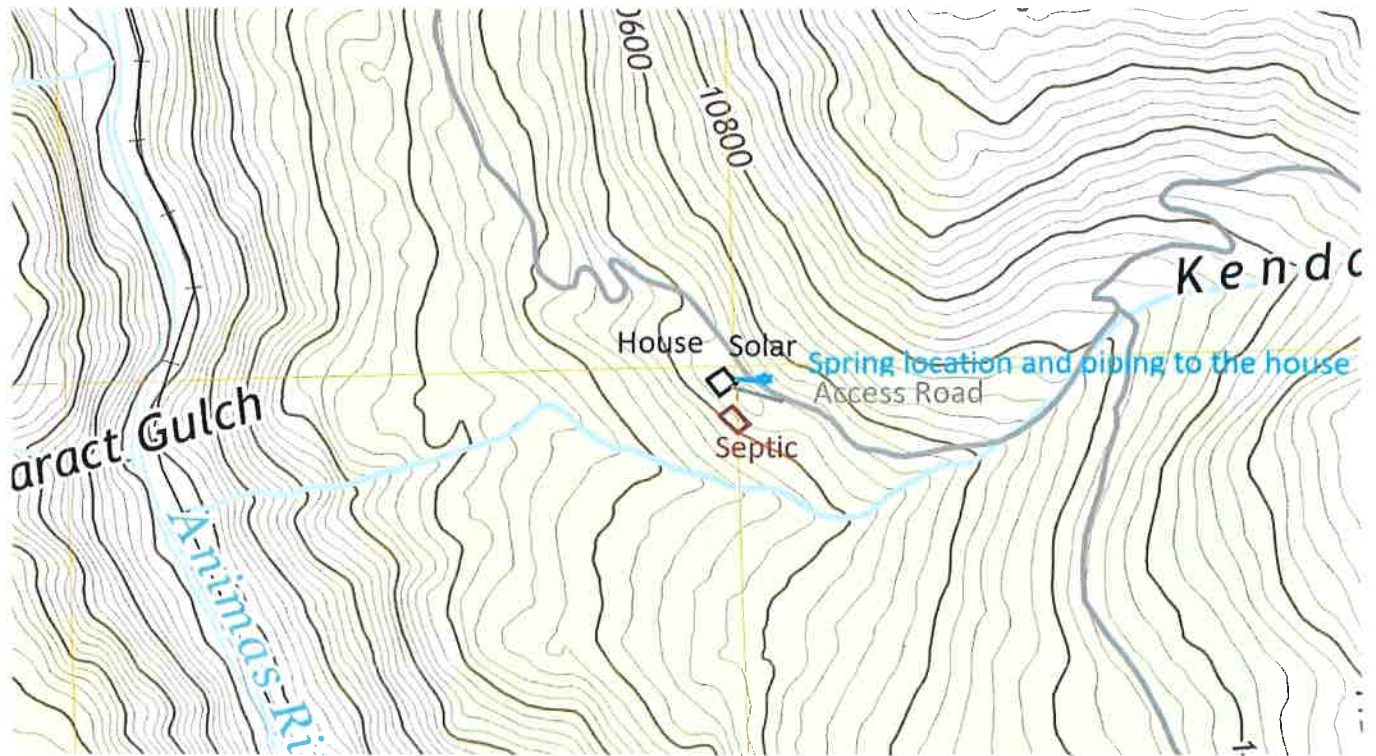
Estimated Permit Fee \$\_\_\_\_\_

## Certified Survey Plat



## Basic Plan Map

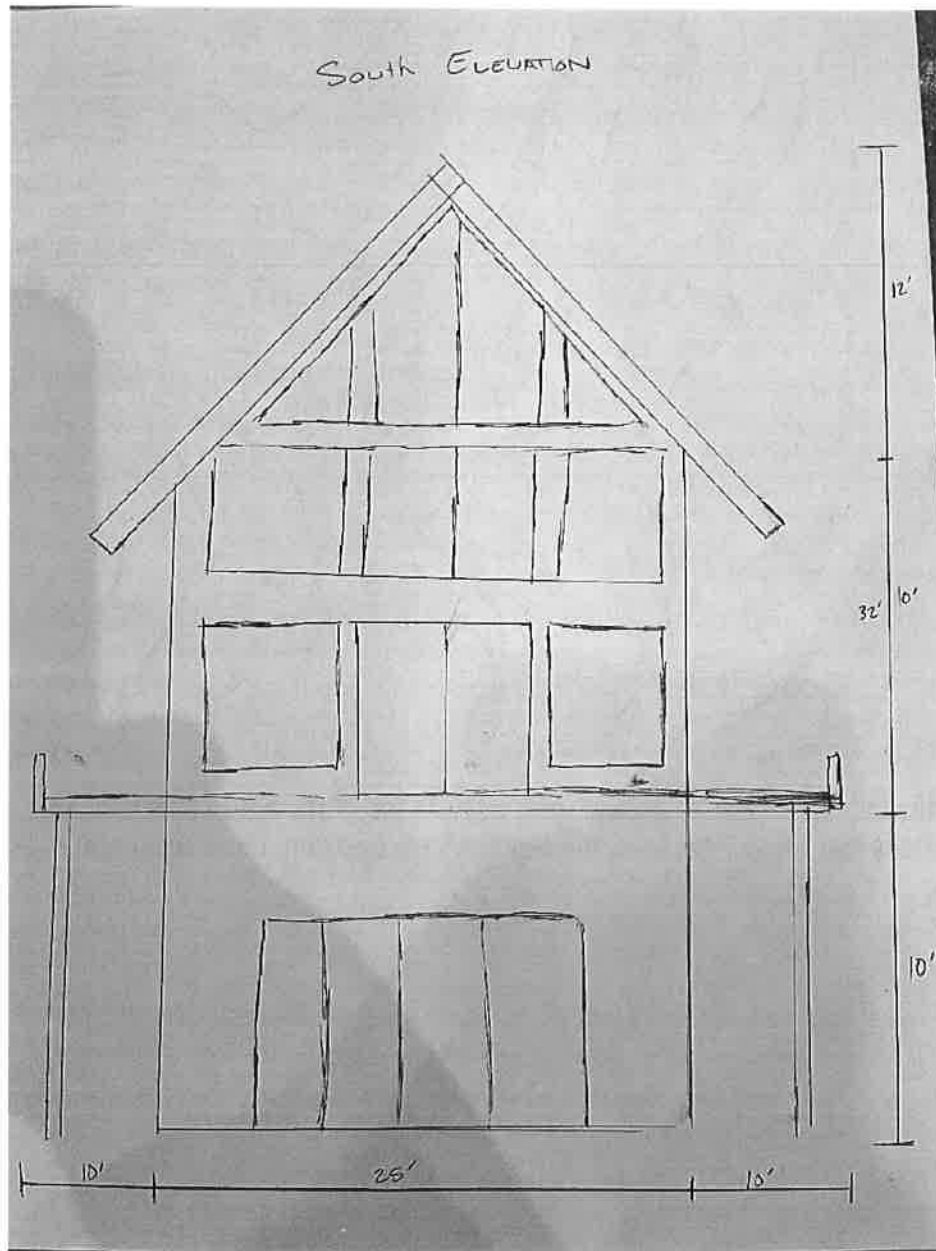
This map will be replaced by one that Dirk Hatter, surveyor, will produce.



The site plan above shows the location of the house and solar array on top of the house (black square), the spring location and piping to the house (blue line), the septic system (red) and the access road (grey).

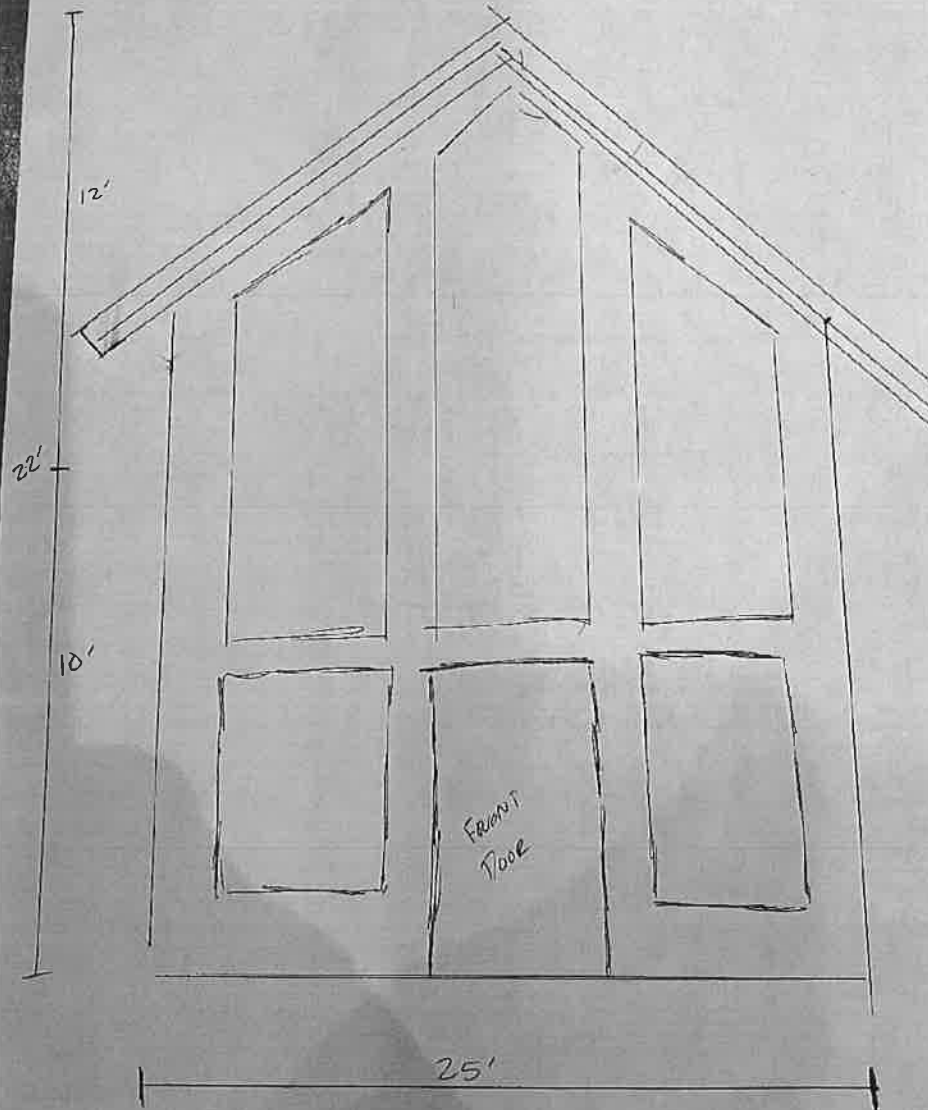


## Plans and Drawings



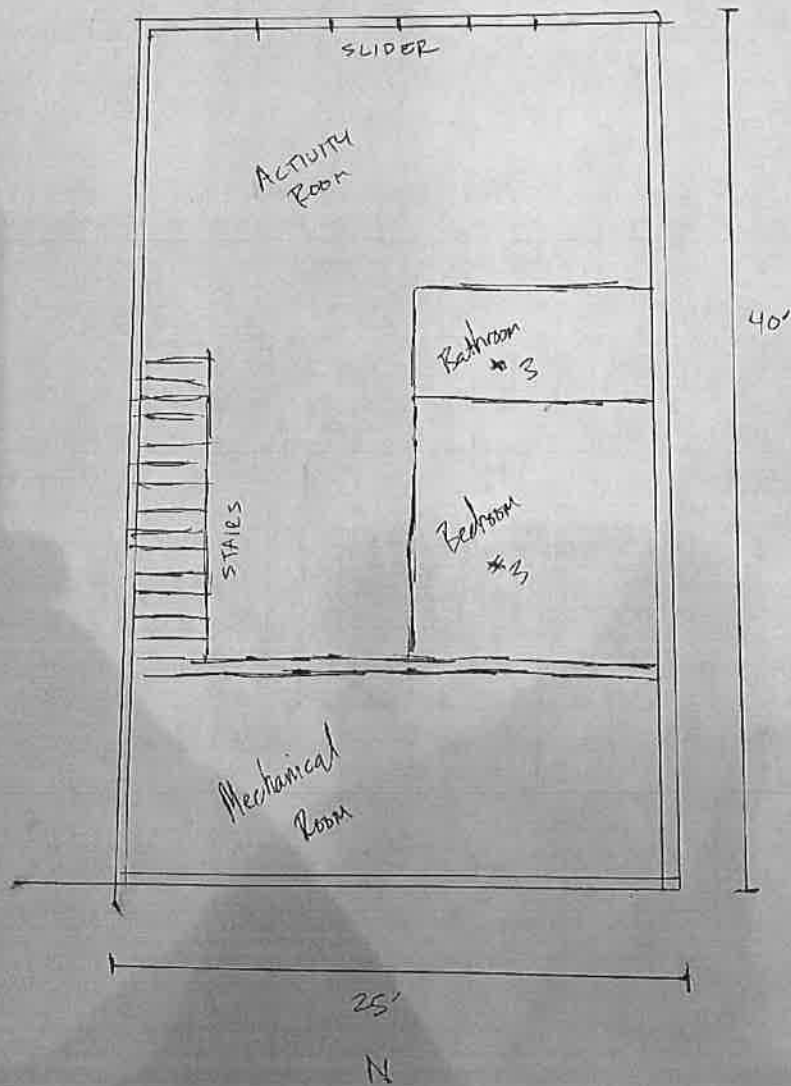


# NORTH ELEVATION

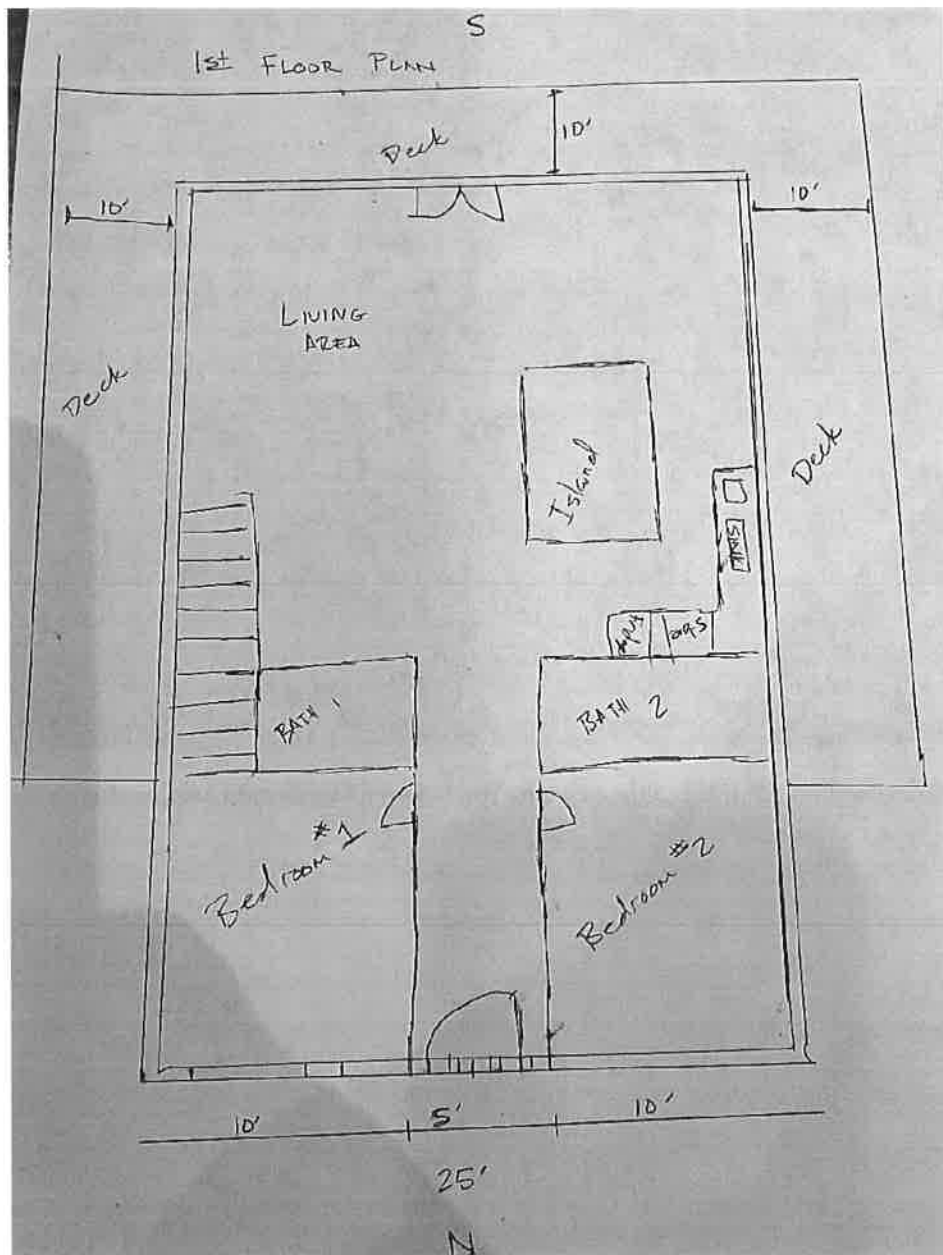




WALK OUT BASEMENT FLOOR PLAN











The exterior colors of the house will match this buildings giving the house a “Mountain Modern” style.



Road System Relationship

**BOARD OF COUNTY COMMISSIONERS**  
**San Juan County**

P.O. Box 466

Silverton, Colorado 81433

970-387-5671

RELATIONSHIP OF PROPERTY TO COUNTY ROAD AND STATE HIGHWAY SYSTEMS

I, the undersigned, applicant engaged in the processing of Application for Improvement Permit No. \_\_\_\_\_, San Juan County, Colorado, do hereby acknowledge the following facts:

1. The real property' which is the subject of said application is on this date located approximately 200 ~~from~~ from County Road No. 53, the nearest designated and publicly maintained county road.
2. Said County Road No. 53 is on this date maintained on an as-built basis by San Juan County.
3. The real property which is the subject of said application is on this date located approximately 3/4 ~~mi~~ mi from Colorado State Highway No. 550, the nearest designated state or federal highway.
4. Said Colorado State Highway No. 550 is on this date maintained on a year-round basis by either San Juan County or the Colorado Division of Highways.
5. A Driveway Permit will be necessary for any private access or egress relating to said real property which intersects any designated Colorado State Highway or Federal Highway.

Signed and dated this 6 day of March, 2023.

ATTEST:



Applicant

Position:



## Owner Notification



These images and this list were provided to me by Kimberly Buck, San Juan County Assessor.

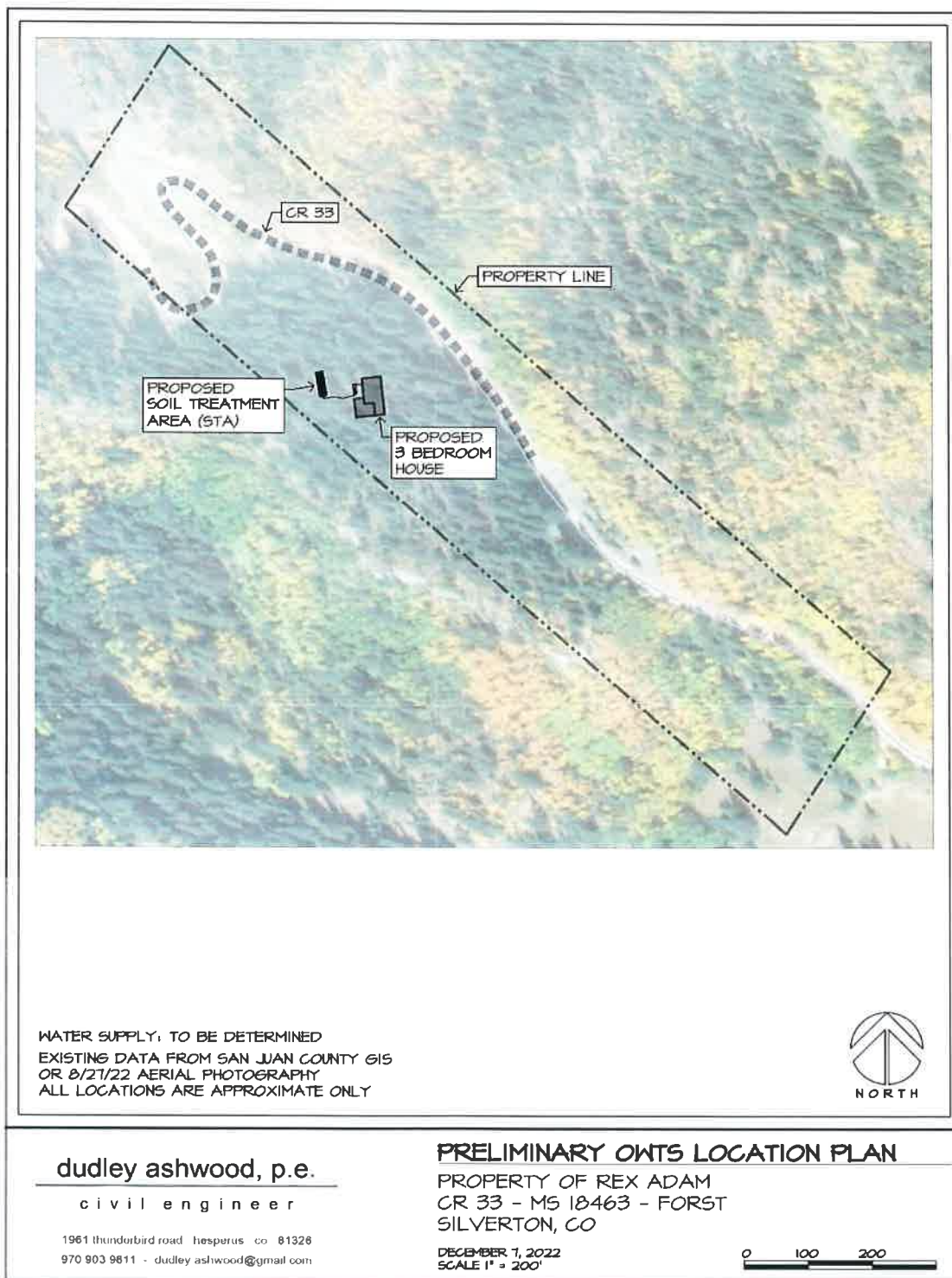




Account	Situs Address	Owner	MailingAddress	Legal Description	Website
N2159	TBD COUNTY ROAD 33, SILVERTON, CO 81433	ROGERS WILLIAM	15 CARDINAL AVE - W SAND LAKE, NY 12196- 2100	LADY FORST - 18463, LIMESTONE - 18463	<a href="https://property.spatialest.com/co/sanjuan/#/property/48290000010037">https://property.spatialest.com/co/sanjuan/#/property/48290000010037</a>
N2165	TBD COUNTY ROAD 33, SILVERTON, CO 81433	STEADMAN MICHAEL N	PO BOX 1552 - BOULDER, UT 84716-1552	MANSON - 18463 UND 51% INT IN 8.99 ACRES	<a href="https://property.spatialest.com/co/sanjuan/#/property/48290000010045">https://property.spatialest.com/co/sanjuan/#/property/48290000010045</a>
N2210	TBD COUNTY ROAD 33, SILVERTON, CO 81433	REX ADAM	PO BOX 178 - ESCALANTE, UT 84726-0178	FORST - 18463, MANSON - 18463 UND 49% INT	<a href="https://property.spatialest.com/co/sanjuan/#/property/48290000010452">https://property.spatialest.com/co/sanjuan/#/property/48290000010452</a>

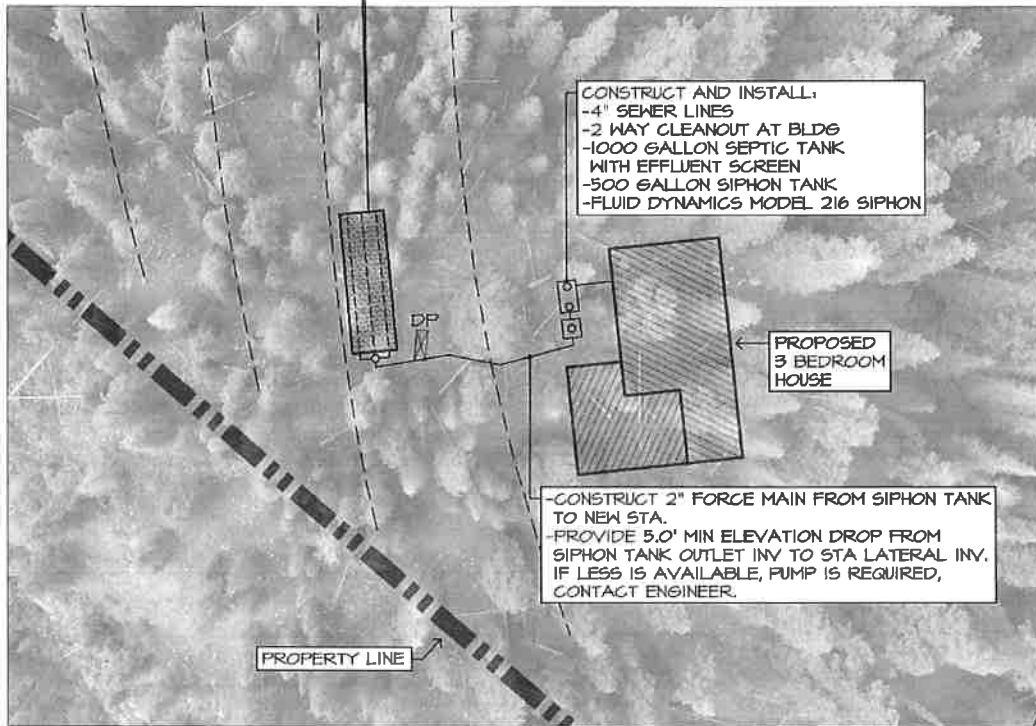


## Sewage Disposal: Test





- CONSTRUCT NEW SOIL TREATMENT AREA (STA) [UNLINED SAND FILTER BED WITH PRESSURE DISTRIBUTION]
- EXCAVATE 12' X 38' BED INTO FRACTURED BEDROCK, MIN 60" DEEP
- THOROUGHLY FRACTURE BEDROCK BY MECHANICAL/BLASTING MEANS TO RESULT IN FREE DRAINING CONDITIONS BELOW BED
- FILL BED WITH 36" MIN OF "SAND FILTER TREATMENT MEDIA" (SEE SAND SPECIFICATIONS ELSEWHERE)
- PLACE 8" LIFT OF 3/4" WASHED CRUSHED OR SCREENED STONE
- CONSTRUCT PRESSURE DISTRIBUTION SYSTEM (SEE NOTES ELSEWHERE)
- PLACE 4" LIFT OF 3/4" WASHED CRUSHED OR SCREENED STONE COVER
- COVER BED WITH GEOTEXTILE FABRIC
- COVER WITH 12" MIN SANDY LOAM / TOPSOIL. GRADE SYSTEM AREA TO DRAIN, AND ESTABLISH FINAL VEGETATIVE COVER (ALPINE MIX)



ALL LOCATIONS MAY VARY

LOCATE WELL/CISTERN  
MIN 50' FROM SEPTIC TANK  
MIN 100' FROM STA

WATER SUPPLY: TO BE DETERMINED  
EXISTING DATA FROM SAN JUAN COUNTY GIS  
OR 8/27/22 AERIAL PHOTOGRAPHY  
ALL LOCATIONS ARE APPROXIMATE ONLY



**dudley ashwood, p.e.**

civil engineer

1961 thunderbird road hesperus co 81326  
970 903 9811 · dudley.ashwood@gmail.com

## PRELIMINARY OWTS SITE PLAN

PROPERTY OF REX ADAM  
CR 33 - MS 18463 - FORST  
SILVERTON, CO

DECEMBER 1, 2022  
SCALE 1" = 40'





## On-Site Wastewater Treatment System (OWTS) Permit Application

Owner: Adam Rex Phone: 435-618-1119  
Project Address (street, town/city, zip): County Rd 33 TBD, Silverton Colorado 81433  
Assessor's Parcel #: 48290000010452 Subdivision: \_\_\_\_\_ Lot#: \_\_\_\_\_  
Lot Size: 14.74 (acres) # of Dwellings: 1 # of Bedrooms: 3 Water Supply: Spring  
List Commercial Uses (e.g., office, factory, event venue): None  
Owner's Mailing Address: PO Box 178, Escalante Utah 84726  
Owner's Email Address: rexexcavation@gmail.com

*\*For detailed parcel information please visit your county assessor's website or see your property tax statement\**

### On-site Wastewater Treatment System (OWTS) Permit Types

Choose the most applicable permit type from the list below and check the box in upper-left corner

<input checked="" type="checkbox"/> <b>New Construction - (\$1023.00)</b> <i>For new OWTS and complete system replacement</i> <ul style="list-style-type: none"> <li>Contact Registered Soil Technician and/or Professional Engineer (PE) or system designer for analysis and design development. A PE may be required dependent on site and soil conditions.</li> <li>A design must be submitted to SJBPH. SJBPH must have payment and application to review designs for permit issuance.</li> </ul>	<input type="checkbox"/> <b>Alteration - (\$973.00)</b> <i>For changes/additions to existing permitted OWTS</i> <ul style="list-style-type: none"> <li>Contact Registered Soil Technician and/or Professional Engineer (PE) or system designer for analysis and design development. A PE may be required dependent on site and soil conditions.</li> <li>A design must be submitted to SJBPH. SJBPH must have payment and application to review designs for permit issuance.</li> </ul>
<input type="checkbox"/> <b>Change Of Use - (\$473.00)</b> <i>For expanded use (e.g., bedroom count) of an existing permit without system modifications, OR new service connections (e.g., garages, shops) added to an existing permit</i> <ul style="list-style-type: none"> <li>For expanded use, provide a certification report from a Professional Engineer (PE) or system designer.</li> <li>For new service connections, provide a proposed site plan and describe scope of work below.</li> <li>Change of Use does NOT allow for connection of new uses (e.g., second dwellings, ADUs) unless the system was originally designed for it – use Alteration instead</li> </ul>	<input type="checkbox"/> <b>Minor Repair - (\$373.00)</b> <i>For replacement of OWTS components with no change to permitted use</i> <ul style="list-style-type: none"> <li>Submit application with payment, transfer of title inspection report (if available) and a simple site plan showing location of repairs.</li> <li>List repairs/scope of work below (e.g. tank replacement, aerators, pipe repairs, etc.)</li> <li>A permit is NOT required for repair of components that do not provide treatment (e.g., fencing, tank lids, inspection ports)</li> </ul>

Please describe in detail work to be completed: \_\_\_\_\_  
 Construction of a OWTS for a 3 bed, 2 bath house on the Forst Lode claim.

**Acknowledge:** (1) This application does not guarantee that an On-site Wastewater Treatment System ("OWTS") can be installed or a building permit issued; (2) The issuance of the OWTS permit does not imply any warranty by San Juan Basin Public Health as to the operation of the OWTS; (3) The OWTS must be constructed in accordance with the San Juan Basin Public Health On-site Wastewater Treatment System Regulations and any Conditions of Approval set by SJBPH; and (4) The owner of the property assumes the responsibility and liability for the proper maintenance of the OWTS.

Owner's Signature:  Date: 3-6-23  
 Submit completed application to [ph@sjbpublichealth.org](mailto:ph@sjbpublichealth.org) or at one of our office locations.

**This is NOT a permit; this application does not authorize construction or repairs.**  
**All OWTS construction/repair work must be performed by an installer licensed by SJBPH.**

I plan on submitting this application once my "San Juan County Application for Improvement" is accepted so that I don't incur the fee without being able to build. The email below states that SJBPH sees no reason why my application would be rejected.



**RE: Feasibility Comments San Juan County Due 03/07/2023 FW: Soil Test for Kendall Mountain House County Permit Application**

From: Brian Devine (bdevine@sjbpublichealth.org)

To: rextiama@yahoo.com

Date: Friday, February 17, 2023 at 01:39 PM CST

Spencer, as we discussed, obtaining an OWTS permit requires submission of a permit application, site and soil evaluation, and design document. Based on the available information, SJBPH has no reason to believe that a permit could not be issued for the parcel in question, MS 18463, subject to the completion of the aforementioned requirements.

Please let me know if we can provide additional information. The above does not guarantee issuance of an OWTS permit or favorable comment on a future land use application.

Have a good weekend,

**Brian Devine, MS**  
Environmental Health Director  
**970-335-2030**



## Adequate Water Source

### Notice of Intent to Make Absolute

N.O.I. #

(Assigned by SWCD)

The below identified applicant hereby notices its intent to make absolute an increment of the Animas Service Area conditional water right decreed in Case No. 06CW127 consistent with the terms and conditions decreed therein. Use additional pages as needed.

#### Applicant Information:

Name: Adam Rex Telephone: 435-618-1119

Email Address: rexexcavation@gmail.com

Mailing Address: PO Box 178 Escalante Utah 84726

(The approved NOI will be mailed to this address)

#### Prospective Water Right Increment Information:

Proposed Use of Water (e.g. domestic, irrigation, commercial):

Domestic

Proposed Source (groundwater, surface water):

Surface Water

Proposed Place of Use (include parcel # if possible):

48290000010452

Anticipated Amount of Depletions (number of acres irrigated, stock use, domestic surface area, and pond evaporation, etc. in the time periods per the 06CW127 decree). Please carry out to the 6<sup>th</sup> decimal place:

We want to use the water from a spring on my property for a 4 bedroom, 2 bathroom home on said property.



The applicant is advised and recognizes that the execution of this Notice of Intent to Make Absolute confers no right, title, or interest in water beyond the right to perfect an increment of the Animas Service Area conditional water right consistent with the decree in Case No. 06CW127.

Applicant is hereby given authority by Southwestern Water Conservation District and La Plata County to file an application to make the conditional water right absolute pursuant to the terms and conditions in Case No. 06CW127. The Southwestern Water Conservation District and La Plata County reserve the right to file opposition to such claim if deemed necessary.

  
Signed for the Applicant, (Title)

3-6-23  
(Date)

**Adam Rex**

Printed Name

**Governmental Endorsements:**

\_\_\_\_\_  
**La Plata County**

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
**Printed Name**

\_\_\_\_\_  
**SWCD**

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
**Printed Name**



# Kendall Mountain House Safe Access and Winter Parking for vacation rental guests

## Overview

On July 20<sup>th</sup>, the San Juan County planning commission reviewed the Improvement Permit Sketch Plan and Vacation Rental Application for the residence being proposed for construction on the Forst Lode Claim. The Improvement Permit Sketch plan was approved by the planning commission while the Vacation Rental Application was tabled due to concerns the planning commission had. Those concerns are outlined below as well as the proposed solutions.

## Safe Access to the Forst Lode Property

Accessing the Forst Lode Property during the winter involves traveling about a mile out of Silverton up CR33, which ascends Kendall Mountain. Accessing the cabin using this road requires that guests cross a known avalanche path known as the Idaho Gulch<sup>1</sup>.

The CAIC (Colorado Avalanche Information Center) puts out an avalanche forecast every day at 4:30PM for the major mountain ranges in Colorado, the San Juan Mountains being one of them<sup>2</sup>. The forecast predicts the next 2 days of avalanche danger above the treeline, near the treeline and below the treeline. The proposed cabin lies at 10400' elevation and is below the treeline. When we get within 2 days of a guest checking in, we will check the San Juan Mountains avalanche forecast and if the avalanche danger is high or extreme, the reservation will be cancelled.

"High" avalanche danger is the threshold that CDOT (Colorado Department of Transportation) uses to determine when to mitigate avalanche risk<sup>3</sup>. They usually do this by closing a portion of a highway that's at risk and triggering an avalanche above it. Since high avalanche danger is what CDOT has decided is the correct threshold for risk mitigation, we think it's also the right threshold for determining when to cancel reservations at the Forst Lode Vacation Rental.

In addition to cancelling reservations when avalanche danger is high, we will required guests to sign a waiver saying that they have reviewed the "Accessing the Kendall Mountain House Info for guests" (see below) and agree to hold both the owners of the Forst Lode vacation rental and San Juan County blameless for any injury resulting from an avalanche. In addition to signing the waiver, the "Accessing the Kendall Mountain House info for guests" notifies the guests that if the avalanche danger is too great, their reservation will be cancelled and they'll be given a full refund. The exact time frame and conditions that will trigger a cancellation of a reservation will be explained as well.

In the event that the avalanche danger meets the threshold for reservation cancellation during an existing reservation, the guests will be instructed to vacate the house the next morning, before 10am when the avalanche danger is less than in the afternoon.

## Accessing the Kendall Mountain House Info for guests

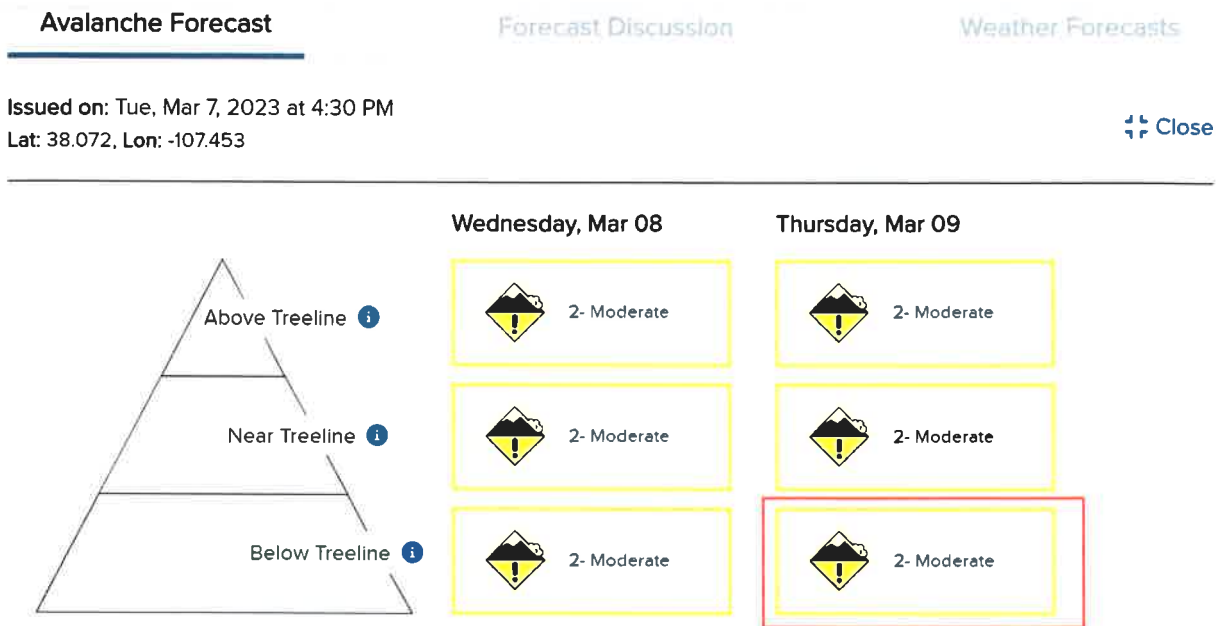
The Kendall Mountain House is located on very steep terrain on the side of Kendall Mountain. The house is accessible by a dirt road known as CR 33. When the road is snow free, CR33 requires a high clearance 4wd, an ATV, UTV, or similar means in order to reach the house. When the road has snow on it, the



snow is groomed and the house is accessible with a snow mobile, cross country skis or similar means to access the house.

During the winter, CR 33 crosses an avalanche path known as the Idaho slide. 48 hours before check in, avalanche risk will be assessed using the CAIC (Colorado Avalanche Information Center) forecast for the San Juan Mountains. If the avalanche danger below the tree line is high or extreme, your reservation will be cancelled and you'll be given a full refund (see the red rectangle in the image below). If you have an extended reservation and the avalanche danger becomes high or extreme during your stay at the house, you agree to vacate the house no later than the morning after the forecast is released.

Generally, avalanche risk goes up after a snowstorm. During the 2022-2023 winter, this condition was met 1 time, the first being December



### Release of Liability Form for Accessing the Kendall Mountain House

Kendall Mountain House LLC

Silverton, Colorado, 81433

Kendallmountainhouse@gmail.com

Release of Liability for Accessing Kendall Mountain House Vacation Rental During Avalanche Season in Silverton, Colorado

I, the undersigned, hereby agree to rent and access the Kendall Mountain House vacation rental property located in Silverton, Colorado, during avalanche season. In consideration of being permitted to stay at the property, I acknowledge and agree to the following terms and conditions:

1. **Acknowledgment of Risks:** I am aware that accessing the Kendall Mountain House vacation rental during avalanche season in Silverton, Colorado, involves inherent risks and dangers, including but not limited to avalanches, snowstorms, slippery conditions, falling objects, hidden



obstacles, and other hazards associated with mountainous and backcountry environments. I understand that these risks may result in property damage, injury, or even death.

2. **Assumption of Responsibility:** I acknowledge that I am solely responsible for my safety, the safety of guests I bring to the house, and the safety of any minors accompanying me during the rental period. I am responsible for staying informed about current avalanche conditions, weather forecasts, and any other relevant safety information provided by local authorities.
3. **Required Safety Measures:** I agree to comply with all safety measures and guidelines provided by the property owner or manager, including but not limited to avoiding high-risk areas, and staying informed about local avalanche forecasts.
4. **Release and Waiver:** In consideration of being allowed to access the Kendall Mountain House vacation rental during avalanche season in Silverton, Colorado, I hereby release, discharge, and hold harmless Kendall Mountain House LLC and San Juan County, their agents, employees, representatives, and affiliates from any and all liability, claims, demands, actions, or rights of action, whether personal to me or to third parties, which are related to or arise out of any loss, damage, or injury, including death, that may be sustained by me or my guests while staying at the property, regardless of whether such loss, damage, or injury is caused by the negligence of Kendall Mountain House LLC and San Juan County, or otherwise.
5. **Indemnification:** I agree to indemnify and hold harmless Kendall Mountain House LLC and San Juan County, its agents, employees, representatives, and affiliates from and against any and all claims, liabilities, judgments, costs, damages, and expenses (including reasonable attorney fees) arising out of or in connection with my use of the Kendall Mountain House vacation rental during avalanche season in Silverton, Colorado, including any claims brought by third parties.
6. **Insurance:** I understand that Kendall Mountain House LLC does not provide insurance coverage for my stay at the vacation rental property. I am responsible for securing my own insurance coverage, including but not limited to travel insurance, health insurance, and renter's insurance, to protect against any unforeseen events, accidents, or injuries.
7. **Severability:** If any provision of this Release of Liability form is deemed to be invalid or unenforceable, the remaining provisions shall continue to be valid and enforceable to the fullest extent permitted by law.

I have read and fully understand the contents of this Release of Liability form. I am signing this agreement voluntarily and without any inducement, assurance, or guarantee.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ (Printed Name)

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Emergency Contact (Name and Phone Number): \_\_\_\_\_



Parent/Guardian Signature (if participant is a minor): \_\_\_\_\_ (Printed Name of Parent/Guardian)

### **Auditing the Kendall Mountain House**

To ensure that these rules are followed, San Juan County can audit guest occupancy of the house in any the following ways:

-Audit our reservations. At any time, San Juan County can request to look at our past reservations to determine if any paying guest has stayed at the house when avalanche risk was high or extreme.

-Visit the property to determine if any paying guests are staying there when avalanche risk is high or extreme.

-Go onto the booking engine where the house is listed and verify if the house can be booked when avalanche risk is high or extreme. I suspect that this would be the easiest way to check because the county is probably already auditing booking engines to make sure there are no unauthorized vacation rentals operating in San Juan County, and this would be an easy additional task for that person to perform.

If the county ever determines that the access rules in this document are not being followed, the county has the right to revoke the business license of Kendall Mountain House LLC.

### **Parking for Forst Lode Vacation Rental Guests**

During the winter, guests will park in town and will leave their keys with the property manager, at this time that will be Karen Srebacic. As vacation rental manager, she has agreed to be responsible for moving the car as needed during the winter months. See the email correspondence between myself and Karen Srebacic below.

Re: Kendall Mountain Vacation Rental

From: Karen M Srebacic (kmsrebacic@gmail.com)

To: rextiama@yahoo.com

Date: Friday, July 28, 2023 at 01:35 PM CDT

Hi Spencer,

Yes, my vacation rental management company can be responsible for moving guests' vehicles in the winter.

Karen

On Fri, Jul 28, 2023 at 12:31 PM spencer rex <rextiama@yahoo.com> wrote:

Karen,

Per our phone conversation, my brother and I are trying to get approval to build a vacation rental up CR 33 and we need a vacation rental management company that could manage the guest vehicles in Silverton during the winter. That would just mean moving the vehicles if a road needs to be plowed or for avalanche hazard. Please respond and let me know if this is something we could get your help with.

Thanks  
Spencer

### **Sources:**

1) <http://www.avalanchemapping.org/IMAGES/Ouraysilvertonweb.pdf>



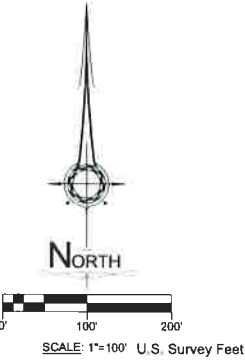
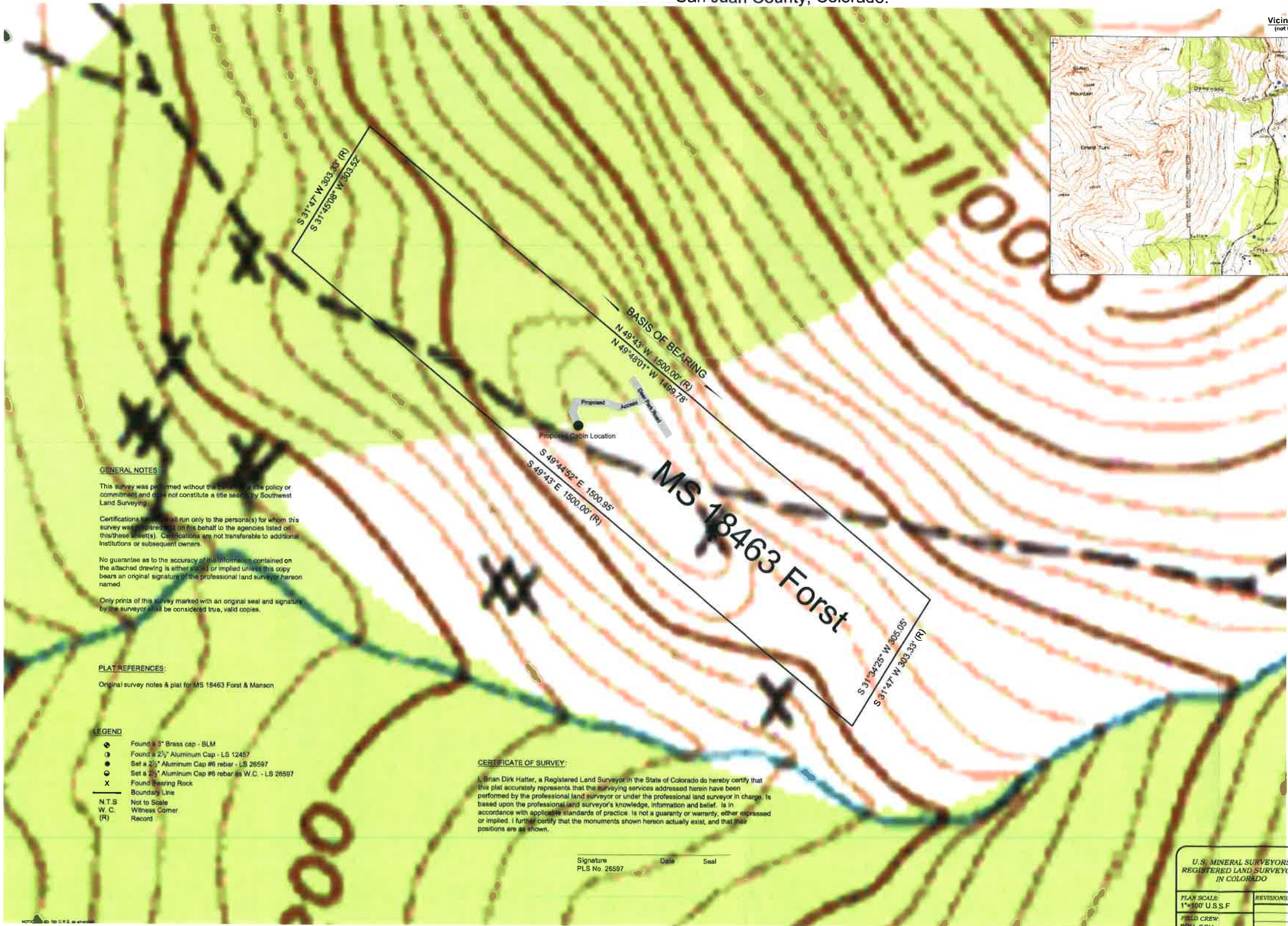
2) <https://avalanche.state.co.us/>

3) <https://www.codot.gov/travel/winter-driving/avalanche>



# Results of Survey

of MS 18463 Forst patented lode mining claim,  
located in suspended Township 41 North, Range 7 West, New Mexico Principal Meridian,  
San Juan County, Colorado.



**Basis of Bearing:**  
Line 3 - 4 MS 18463 Forst lode is assumed to bear  
N. 49°48'01\"/>

**GENERAL NOTES:**

This survey was performed without the intent of this policy or commitment and does not constitute a title search by Southwest Land Surveying.

Certifications hereon shall run only to the person(s) for whom this survey was performed and on his behalf to the agencies listed on this/these sheet(s). Certifications are not transferable to additional institutions or subsequent owners.

No guarantee as to the accuracy of the information contained on the attached drawing is either stated or implied unless this copy bears an original signature of the professional land surveyor hereon named.

Only prints of this survey marked with an original seal and signature by the surveyor shall be considered true, valid copies.

**PLAT REFERENCES:**

Original survey notes & plat for MS 18463 Forst & Manson.

**LEGEND**

- Found a 3\"/>

**CERTIFICATE OF SURVEY:**

I, Brian Dirk Hatter, a Registered Land Surveyor in the State of Colorado do hereby certify that this plat accurately represents that the surveying services addressed herein have been performed by the professional land surveyor or under the professional land surveyor in charge. It is based upon the professional land surveyor's knowledge, information and belief. It is in accordance with applicable standards of practice. It is not a warranty or warranty, either expressed or implied. I further certify that the monuments shown hereon actually exist, and that their positions are as shown.

Signature \_\_\_\_\_ Date \_\_\_\_\_ Seal \_\_\_\_\_  
PLS No. 26597

U.S. MINERAL SURVEYORS  
REGISTERED LAND SURVEYORS  
IN COLORADO

PLAT SCALE:  
1\"/>

**SOUTHWEST LAND SURVEYING LLC**  
1315 Shounden St., Silverton, CO 81433  
(970) 387-0600, Silverton, (970) 874-2880, Delta  
EMAIL: dhatter@lresources.us

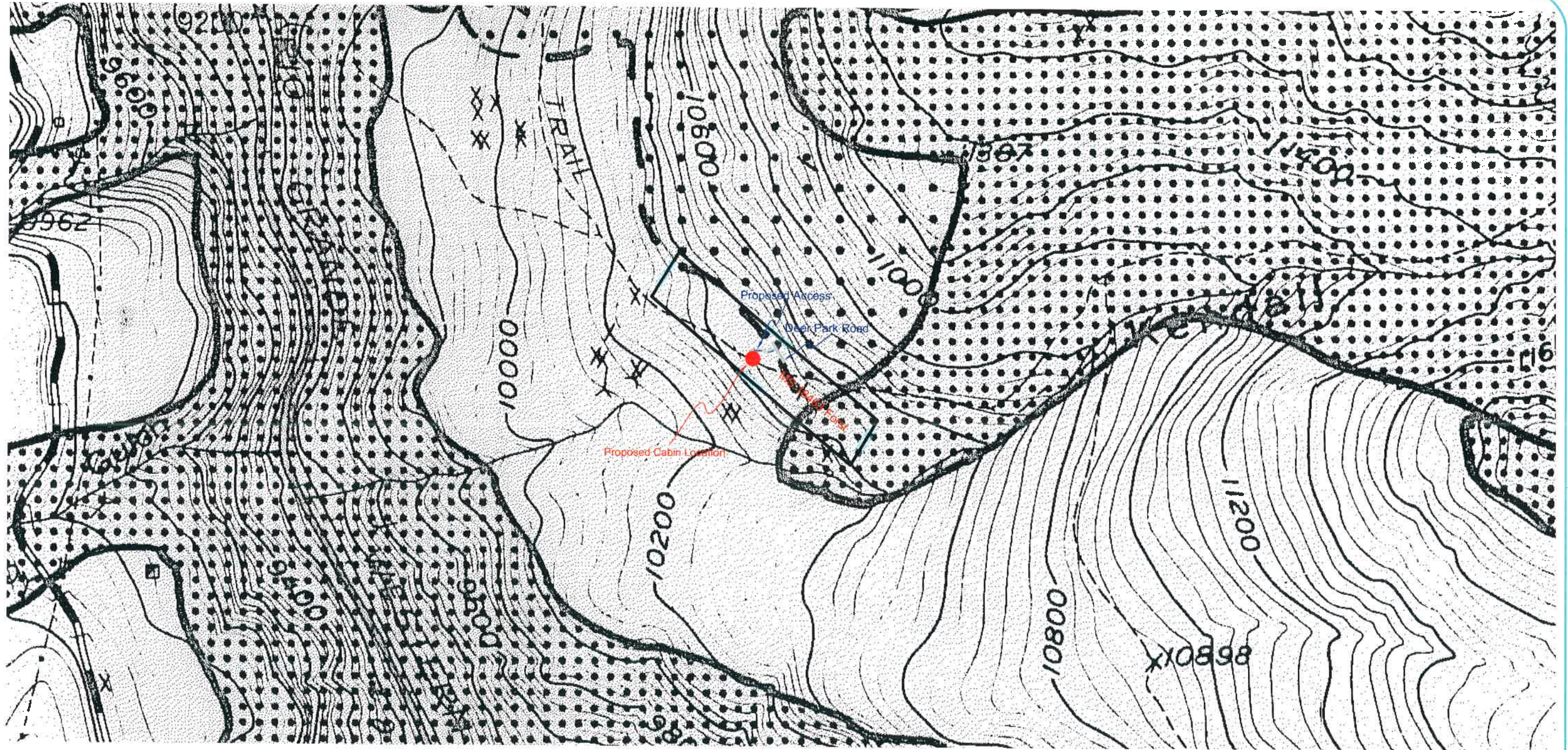
**Result of Survey**  
MS 18463 Forst  
located in suspended  
T 41 N., R 7 W., N.M.P.M.  
San Juan County, Colorado

Adam Rex  
P.O. Box 176  
Escalante Utah, 84726

DATE: \_\_\_\_\_ JOB #: 63-23

NOTES:  
ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY  
DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. ANY  
NO PRINT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE  
THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION HEREON APPEARS.





# Avalanche Map



**SOUTHWEST LAND SURVEYING LLC**  
1205 H Lane, Delta, CO 81416

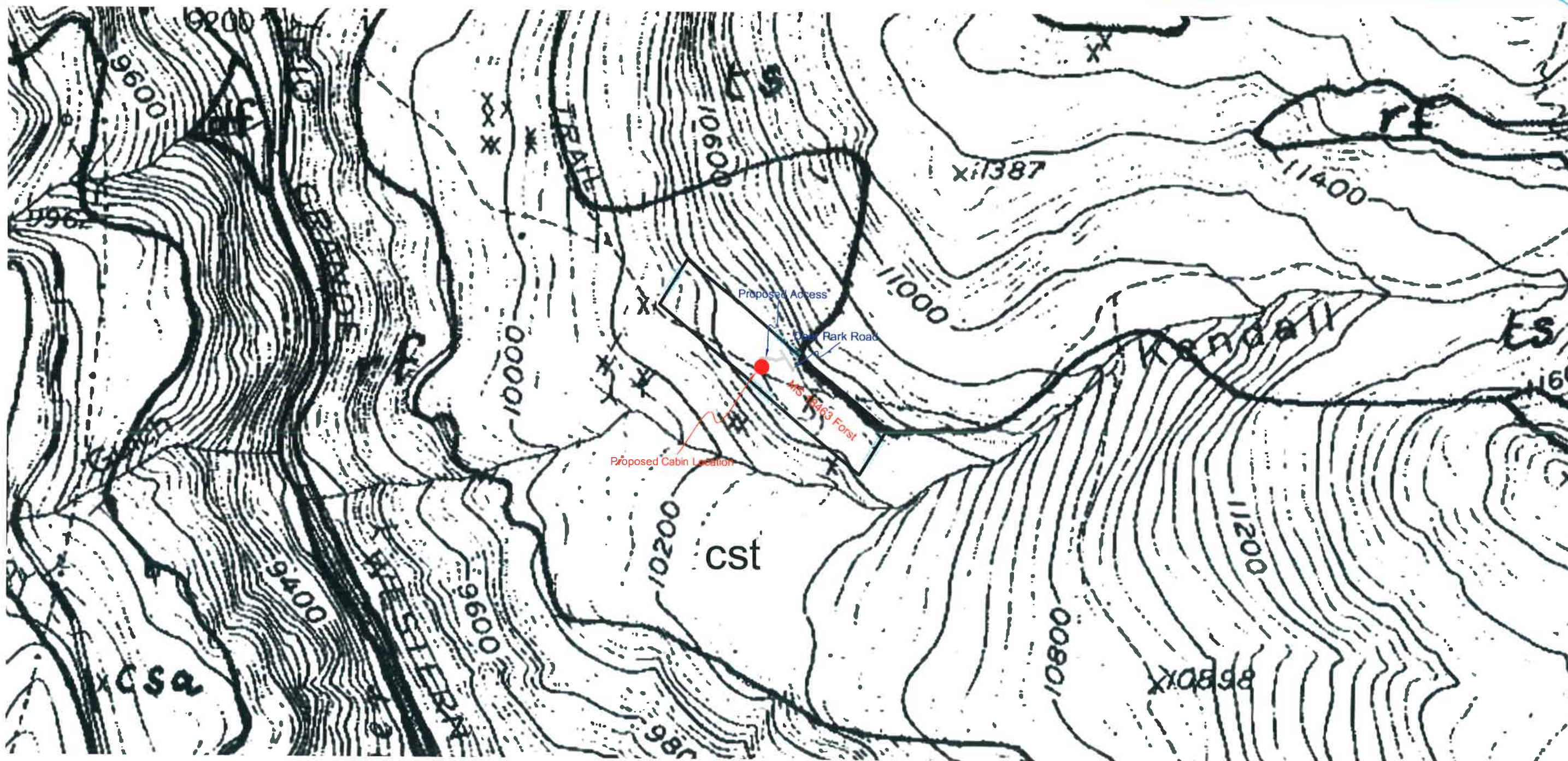
(970) 857 0600, Silverton  
(970) 874 2880, Delta  
email: [dhattens@resources.us](mailto:dhattens@resources.us)

Adam Rex  
Forst lode, MS 18463  
San Juan County Colorado  
Assessor Parcel No.  
48290000010452  
Silverton\_Geologic Map

Scale:  
1" = 600'  
Date  
5/10/2023  
Drafter:  
BDH  
Job Number:  
62-23 Adam Rex  
Sheet 1 of 1

Revisions:  
BDH 5/23/23





# County Geological Hazards Map



**SOUTHWEST LAND SURVEYING LLC**  
1205 H Lane, Delta, CO 81416

(970) 387-0600 - Silverton  
(970) 374-2850 - Delta  
email: [dhutten@silversources.us](mailto:dhutten@silversources.us)

**Adam Rex**  
**Forst lode, MS 18463**  
**San Juan County Colorado**  
**Assessor Parcel No.**  
**48290000010452**  
**Silverton\_Geologic Map**

Scale:  
**1" = 600'**  
Date:  
**5/10/2023**  
Drafter:  
**BDH**  
Job Number:  
**62-23 Adam Rex**  
Sheet **1 of 1**

Revisions:



## MEMORANDUM

August 9, 2023

TO: San Juan County Commissioners

FR: William A. Tookey

RE: Bonanza Boy LLC.

Mr. Colby Barrett representing Bonanza Boy LLC has submitted a Land Use Permit application to allow for the mining remediation on the Shelbyville Lode USMS 1868 and a Planned Unit Development (PUD) for the proposed Silver Cloud Lodge. The property is located near Mill Creek in the Chattanooga area on US Highway 550.

Mr. Colby Barrett dba Bonanza Boy LLC owns approximately 256 acres in the Chattanooga Area. The property is located in the Mountain Zoning District.

The adjacent landowners have been notified via US Mail of the proposed applications. The list of adjacent property owners and copy of the letter are included.

### **Mining Reclamation**

The Mining Reclamation would be constructed through the State of Colorado Voluntary Cleanup Program (VCUP). CDPHE would monitor and approve the remediation plan and implementation.

The remediation would only occur if the applicant was confident that the rest of his proposed project could be developed. Any mining remediation should be encouraged if it is done right and provides minimal adverse impact to the site. Of primary concern, due to the location of the properties would be any visual impact.

1-114 of the Zoning and Land Use Regulations identifies the Scenic Preservation Overlay District as all property located with 1500 feet of the centerline of US 550. Some but not all of the property is located with the Scenic Preservation Overlay District. Regardless of the property location any adverse visual impact needs to be minimized as much as possible.

After visiting the site, I do have some concerns about the visual and cultural impact that the remediation may create. The capping of the mine dump would create a visual and cultural impact upon the historic mining heritage of the site. The placement of rock gabions baskets needed to stabilize the dump would probably not be seen from the Scenic Preservation Overlay District or from US 550 but could have a considerable visual impact on the site itself.

The Planning Commission has unanimously recommended approval of the site remediation as submitted.

The County Commissioners may approve, approve with conditions or deny the application as submitted.



**Bonanza Boy LLC Planned Unit Development Sketch Plan Application.**

The Bonanza Boy LLC submitted a Sketch Plan Application for the development of the proposed Silver Cloud Lodge.

A Planned Unit Development is a project, improvement or development which is pre-planned in its entirety, with variation permitted from regulations in the context of the acceptance of the overall plan in its entirety on merits which outweigh the variation from regulations.

Because the application is a PUD it follows the procedures of the Chapter 7 Subdivision Regulations. The procedure allows 15 days for the Land Use Administrator to determine that the application is complete. The Planning Commission shall review the application no sooner than 20 days after the Administrator has determined the completeness. The application was submitted on June 27, 2023. The Administrative Determination was completed July 12, 2023. The Planning Commission could not review the application before August 1<sup>st</sup>. The applicant provided the Planning Commission with an introduction to the project during their July 18<sup>th</sup> meeting. The PUD application will go before the Planning Commission for recommendation during the August 15, 2023 Planning Commission Meeting.

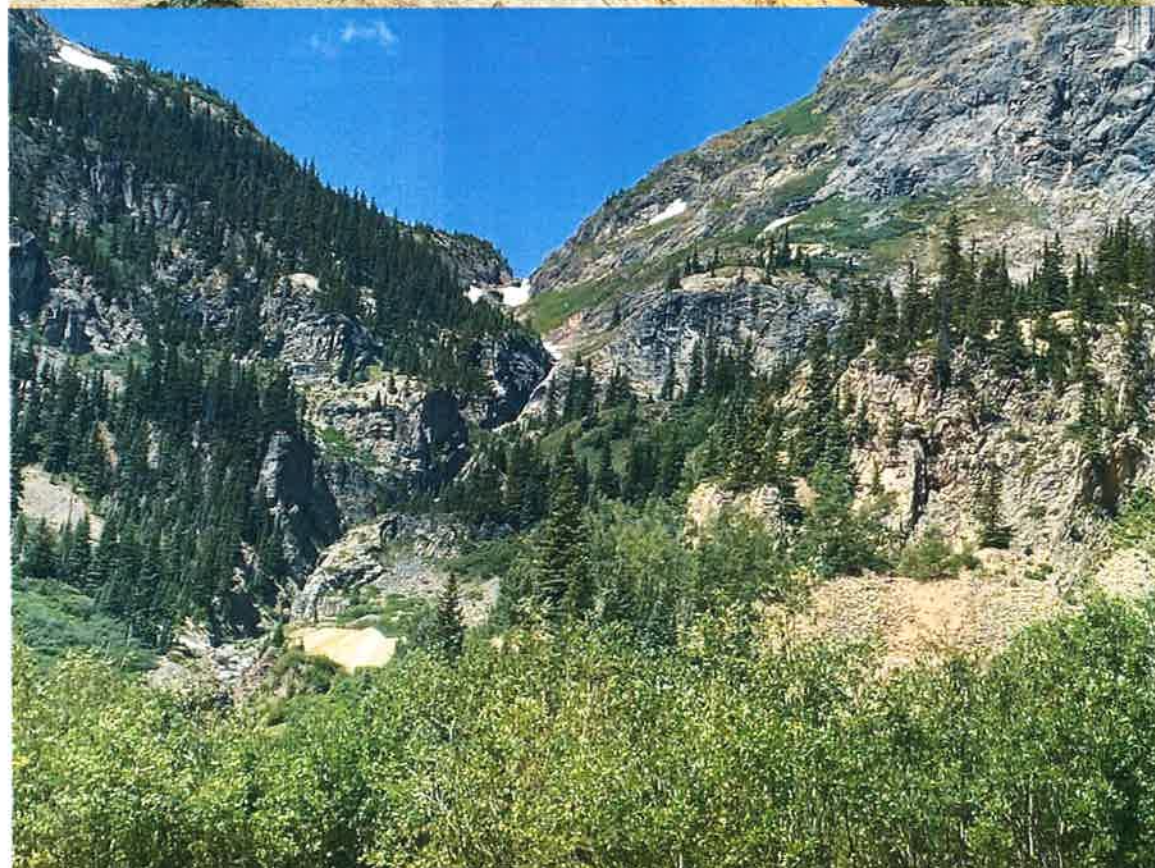
The August 9 meeting can be used as an introduction to the project. The applicant can present his project and the County Commissioners can ask questions and raise concerns or issues. The Public Hearing for the PUD Sketch Plan would probably come before the Commissioners during their September 13<sup>th</sup> meeting.

The applicant has asked for conceptual approval of the PUD. The Planning Commission could not recommend, nor could the County Commissioners grant a conceptual approval. The Planning Commission would review and recommend the sketch plan as presented. The County Commissioners would then make a determination on the sketch plan and the applicant could then decide if he was comfortable with moving the project forward to the preliminary plan.











**San Juan Regional  
Planning Commission**  
**SAN JUAN COUNTY      TOWN OF SILVERTON**  
**Silverton, Colorado 81433**  
**P.O. Box 223**

July 18, 2023

Board of County Commissioners  
San Juan County  
Silverton, CO 81433

Members of the Commission:

RE: County Land Use Permit Application:  
Bonanza Boy LLC, Mining Remediation,  
Shelbyville Lode MS 18168 located in the  
Chattanooga Area near US Highway 550  
And a Planned Unit Development for a  
Proposed Silver Cloud Lodge Located near  
Mill Creek in the Chattanooga area.

At the regular meeting of the San Juan Regional Planning Commission on July 18, 2023, members of that Commission held a meeting to discuss the Proposed County Land Use Permit Application to allow for the mining remediation on the Shelbyville Lode USMS 18168 and a Planned Unit Development (PUD) for the proposed Silver Cloud Lodge located near Mill Creek in the Chattanooga area on US Hwy 550. The owner Colby Barrett is present to answer questions.

After considerable discussion and going over the background of the project, questions and presentations from William Tookey, Land use Administrator, and the applicant, who showed a detailed computer rendition of what he is planning to accomplish. The Planning Commission then voted unanimously to recommend to the San Juan County Commissioners that you approve the proposed County Land Use Permit Application and Sketch Plan Application for the development of the proposed Silver Cloud Lodge.

Thank you for considering this recommendation.

Sincerely,  
The Planning Commission Members and  
James Weller, Chairman







LAND USE PERMIT  
San Juan County, Colorado

Applicant: <i>Charles E. ...</i>	Permit No. <i>...</i>
Address: <i>P.O. Box 12</i>	<i>...</i>
City and State: <i>Montana</i>	Telephone: <i>...</i>



Description of Use: The specimen was collected from the  
Pine - South - side Summit - 2000 ft. of the  
Columbia River. Since the water level  
in the Columbia River has risen since 1900.

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Date and Times of Use: 10-10-58 10:00 AM - 11:00 AM

Location of Use: 10-10-58 10:00 AM - 11:00 AM

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Areas of Concern: (Applicant should provide attachments for each relevant area)  
(Land Use Administrator will initial approval if appropriate)

Property Ownership _____	Permission of Property Owner _____
Vicinity Map _____	Plans and Drawings _____
Natural Hazards _____	Zoning Compatibility _____
Sanitation _____	Environmental Impacts _____
Building Permit _____	Federal and/or State Permits _____
Security _____	Emergency Services _____
Parking _____	Insurance Coverage _____
Clean Up _____	County Road Impact _____
Other _____	Other _____

Date Application Submitted:	By: (Signature) 
Date Permit Issued:	By: (Signature)
Conditions:	
Acceptance of Conditions:	By: (Signature)



## **PROJECT NARRATIVE**

**Sketch Plan Application for Proposed Silver Cloud Lodge/PUD  
and Land Use Permit Application for Phase 1 Proposed Mining Reclamation VCUP Project  
Shelbyville Lode USMS No. 18168 et al, Mill Creek, near Chattanooga on Highway 550  
San Juan County, Colorado  
Prepared by Applicant**

**Applicant/Owner:**

Colby Barrett, Bonanza Boy LLC, PO Box 992, Montrose.

**Type of Application:**

This is a County "Sketch Plan" Application, for a conceptual future proposed Planned Unit Development (PUD). The PUD is the Proposed Silver Cloud Lodge/PUD (named for a nearby mine). Phase 1 of the Proposed PUD is a 2023/2024 mining reclamation Voluntary Cleanup (VCUP) project.

**Project Location:**

Shelbyville Lode USMS No. 18168 et al, County Road 15/US Forest Service Road 821, Mill Creek, near Chattanooga and Highway 550, in San Juan County, Colorado.

**Executive Summary:**

The applicant is requesting the following from the County: 1. permission to begin the proposed mining reclamation Voluntary Cleanup (VCUP) of the Silver Crown Mine this summer, and 2. conceptual approval of the proposed lodge concept.

The proposed Silver Cloud Lodge structure will be a timber-frame building to be constructed on the footprint of the old Silver Crown mine historic buildings that once occupied the site. Although it is intended as a quasi-commercial endeavor, it will be designed to appear like a residential structure. The proposed Lodge is conceptually envisioned to consist of an approximately 4,000 total square footage, two-story main structure, with approximately 1,500 square feet footprint of attached/adjacent 1-story structures, and a small earth-sheltered solar greenhouse and wood-fired sauna. The Lodge is being designed in a historically accurate manner to closely emulate the buildings that existed on the site approximately 100 years ago. The adjacent Silver Crown Mine will be reopened and internally stabilized to house some of the necessary infrastructure for the Lodge, utilizing the old mine workings as well as some new tunnels/rooms/portals. The inert rock generated from the underground excavation/construction will be used to cap the existing historic mine waste rock piles as part of a Voluntary Cleanup (VCUP) mining reclamation project to be permitted by the Colorado Department of Public Health and Environment (CDPHE). The VCUP tax credit program ends on December 31, 2024, which is why the applicant is requesting that the County allow the VCUP to begin, as this cleanup work will take two seasons to complete. Conceptual plans for the lodge are included in this submittal, and detailed plans for the proposed lodge would be submitted to the County this fall, with no lodge construction proposed until 2025 at the earliest. Phase 1 of this conceptual proposed PUD would include the VCUP (2023-2024), while a future Phase 2 would be the proposed lodge (2025-2027), and a future Phase 3 would include a proposed garage/employee housing structure in the valley below (2026-2027). Future Phase 4 will include habitat enhancement of Mill Creek, wetlands creation, reforestation efforts, and recreational improvement including trail building, interpretive sign installation, installation of primitive dispersed campsites, establishing rock and ice climbing routes, and a possible future via ferrata in the Mill Creek Gorge.

The future proposed garage/employee housing structure for the lodge will be in the valley below (near the Artist Cabin and close to the old Chattanooga townsite), conceptually envisioned to include a small parking area, a 1,300 square foot garage, with a 1,300 square foot employee housing unit above the garage (one structure with approximately 2,600 square feet total). In accordance with typical local building design, all of the future proposed aboveground structures will be less than 35 feet tall.



**PROJECT NARRATIVE**  
**Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**  
**Prepared by Applicant**

All of the future proposed buildings will be super-insulated, off-grid, and powered by a combination of solar, micro-hydro, and biomass energy, stored in both battery and hydrogen systems. Although the applicant plans to use a fossil fuel-based generator at times during construction and during emergencies, the main power systems will be designed to be fully carbon-neutral.

Over the years, the applicant proposes to improve the property trails, designate some primitive dispersed tent campsites, reforestation efforts, stream restoration, bolted rock and ice climbing routes, and a possible future via ferrata (fixed rope hiking trail) in the Mill Creek canyon. The restoration of the Mill Creek stream ecosystem will be designed in coordination with the USFS, Trout Unlimited, the US Army Corps of Engineers, and other local agencies, with the possibility of reintroducing native Cutthroat Trout into the area (in coordination with the Colorado Department of Wildlife). In addition, all site work will be designed to create a net gain of wetlands at the site. This project will provide some much-needed outdoor recreation and mining heritage tourism infrastructure, which can help alleviate the current impacts encountered since this area has been recently “discovered,” and in an area between Silverton and Ouray where no basic tourism infrastructure currently exists. Again, the applicant is requesting a County approval of the overall lodge/PUD concept *before* undertaking the proposed upfront VCUP mining reclamation work and plan to deliver detailed plans for the lodge and garage/employee housing for County approval later this year.

**Property Description:**

The applicant owns nearly all of the private land in the upper Mill Creek Valley through a Colorado LLC (Bonanza Boy, LLC). The vast majority of the proposed improvements will take place in two locations: 1. Near the Silver Crown Mine Portal on three contiguous claims (Shelbyville Lode USMS No. 18168, Valley Lode USMS No. 570, and the Mountain Chief Lode USMS 560); 2. Down the valley near the Artist Cabin/old Chattanooga townsite (Bonanza Boy Mill Site USMS No. 16677B). Surface and Mineral Rights are in the possession of the applicant. There is one mining claim, the Silver Cloud Lode, located far up in the Mill Creek basin, where no development is proposed, which is only partly owned by the applicant.

**Acreage:**

The Applicant owns approximately 254 acres near Chattanooga.

**Parcel Number:**

Parcel Number 47770280040001. The Assessor property cards with the various Parcel Numbers for the project site and all of the adjacent claims are attached.

**Township Range Section:**

Township 42 North, Range 8 West, Sections 27 and 22, NMPM.

**Zoning:**

Mountain Zoning District. Some of the applicant’s mining claims are also located in the Scenic Preservation Overlay District (which includes all lands located within 1500 feet of Highway 550).

**Surrounding Area/Land Uses/Zoning:**

US National Forest (and vacant private mining claims also owned by the applicant) borders the Silver Cloud Lodge/PUD project site mining claims; while the Bonanza Boy Mill Site is bordered by the Stern’s Artist Cabin Vacation Rental (private land), and several CDOT-owned mining claims (near the Silver Ledge loadout structure on Highway 550).



## **PROJECT NARRATIVE**

### **Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**

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The first of the two future proposed aboveground structures is near the old Silver Crown Mine (approximate elevation 10,810 feet) in the Mountain Zoning District. It is not above 11,000 feet elevation, nor is it on Alpine Tundra, nor is it known to be in any of the County's Overlay Districts. The mine adit is currently draining about 20-30 gpm of water through the on-site mining waste rock pile. As part of a Voluntary Cleanup (VCUP), this adit water will be rerouted, so it no longer flows through the mine waste rock. Since the proposed adit drainage reroute will impact a very small area of wetlands, the work is being coordinated with the US Army Corps of Engineers (USACE) to ensure Nationwide Permit compliance so the overall plan will result in no net loss of wetlands. During the VCUP the applicant will also cap the on-site mining waste rock pile with inert rock and gravel produced as underground construction proceeds, permanently cleaning up the site for current and future generations.

The proposed accessory garage/employee housing structure on the Bonanza Boy Mill Site is located near the Artist Cabin vacation rental, in the Mountain Zoning District and the Scenic Preservation Overlay District. This area has some wetlands which are being delineated in coordination with the USACE. If there end up being any unavoidable wetlands impacts in the Chattanooga area, those impacts will be compensated with proposed wetlands mitigation as required by the USACE. The proposed wetlands creation typically required as part of the mitigation process will be part of an overall proposed ecological rehabilitation of the Mill Creek drainage and stream restoration, which is being designed with input from additional agencies such as USFS, Trout Unlimited, and will include input from the Colorado Division of Wildlife (especially if CDOW deems it feasible to reintroduce Native Cutthroat Trout as part of the Mill Creek rehabilitation).

#### **Proposed PUD:**

This is a conceptual "Sketch Plan" application, for a proposed future Planned Unit Development (PUD), named after a nearby mine, called the Silver Cloud Lodge/PUD. The Applicant is requesting an approval from the County of the general concepts for this proposed lodge/PUD (a County conceptual "Sketch Plan" proposed PUD approval).

#### **Phase 1 - Proposed VCUP (construction during 2023-2024):**

Phase 1 of the Proposed PUD is a proposed mining reclamation voluntary clean up (VCUP) project. The VCUP work is scheduled for summer/fall 2023 and summer/fall 2024, pending County approval. The Applicant is requesting a County Land Use Permit to begin the VCUP mining reclamation work. The 2023/2024 VCUP generally includes: opening an existing draining mine adit, rerouting the surface drainage around the on-site mining waste rock pile, generating inert rock fill from within the mine, using the rock fill to cap the waste rock pile, stabilizing the edge of the waste rock pile using gabions (wire cage basket blocks filled with native rock), investigating/excavating parts of the underground existing mine, and proposed stream restoration/water quality improvements. The name of the mine is the Silver Crown Mine, and the portal is located on the Shelbyville Lode. Phase 1 of this proposed PUD also includes some associated proposed site grading and drainage improvements.

#### **Future Phases:**

The Applicant is requesting County approval of the overall general concepts for this proposed PUD, prior to beginning Phase 1 (the VCUP mining reclamation work). Detailed plans for the additional proposed improvements associated with future phases of the PUD would be submitted to the County for further review in the fall of 2023. The future phases of the proposed Silver Cloud Lodge/PUD would generally consist of the following concepts: A future proposed lodge structure called the Silver Cloud Lodge, with some of the lodge facilities extending into the adjacent mine, outbuildings adjacent to the lodge structure, proposed grading/utilities for the lodge; a future proposed garage/employee housing structure, proposed grading/utilities for the proposed garage/employee housing structure, some future proposed designated



## PROJECT NARRATIVE

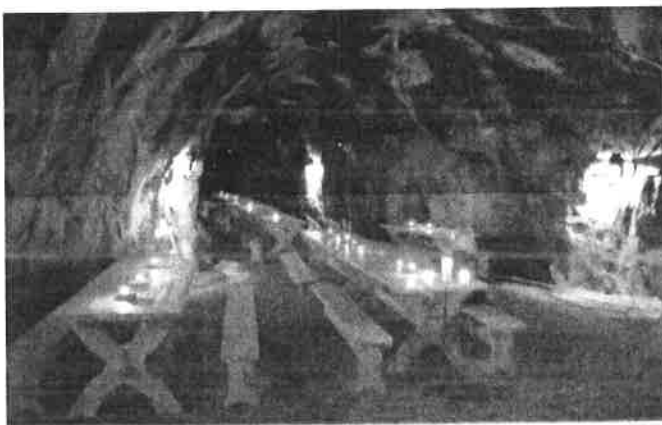
### Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)

Prepared by Applicant

dispersed primitive tent camping spots (likely to require a basic water/sewer “bathhouse”), stream/wetlands restoration conducted in collaboration with local nonprofits/agencies, and additional future proposed recreational and mining heritage tourism non-structure improvements.

#### **Future Phase 2 - Proposed Lodge (tentatively scheduled for construction in 2025-2027):**

The proposed PUD conceptually includes two proposed future structures. The first would be the Silver Cloud Lodge structure, which would be located near the Silver Crown Mine portal on the Shelbyville Lode. At this time the lodge structure has been conceptually designed, and the Applicant will return to the County this fall with details and plans about the future proposed lodge. The lodge will have approximately 5 guest rooms that will be housed inside one of the recreated historic buildings and 5 guest rooms that will be installed inside the Silver Cloud Mine. This concept is unique to North America but has been successfully implemented in the historic Sala Silver Mine in Sweden, as shown below.



*Dining Room Inside Sala Silver Mine*



*Bedroom Inside Sala Silver Mine*

**Future Phase 3 - Proposed Garage/Employee Housing (tentatively scheduled for construction in 2026-2028):** The second proposed future structure would be an equipment storage garage, with employee/caretaker housing, located adjacent to the Artist Cabin (once occupied by the Stern family but now a vacation rental unit) lower down the valley at Chattanooga. At this time the garage/employee housing structure had been conceptually designed and will be sited on the Bonanza Boy Mill site. The Applicant will return to the County this fall with detailed plans about the future garage/employee housing structure, especially around wetland disturbance mitigation.

#### **Future Phase 4 – Proposed Recreational Improvements and Stream Improvements (tentatively scheduled for construction in 2025-2030):**

In the future, the applicant also proposes improvements to the outdoor recreational opportunities at the site which may include a trail network, a via ferrata, rock and ice climbing routes, and dispersed primitive tent campsites, as well as Stream Enhancement of Mill Creek.

The applicant intends to create a trail network throughout the property that will closely mirror the paths used by the early miners but will be constructed in accordance with USFS Trail design standards. Limited dispersed primitive campsites, accessible only by foot and not visible from the roads in the area may be created. In addition, multiple rock-climbing routes will be bolted, and limited ice-farming may be conducted during the winter. A via ferrata similar to those in Telluride and Ouray (in construction approach and appearance, not necessarily in size) will be built over the years in the Mill Creek Gorge. The intent of these improvements will be to provide more recreational opportunities to visitors of San Juan County. Note that



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### **Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**

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most of these improvements would be accessible only to groups with qualified local mountain guides, with all guiding work being subcontracted to guides from San Juan, Ouray, or San Miguel Counties.



*An Historic Mining Trail on the Property – Damaged by Years of Neglect – that Could Be Restored as Part of a Trail/Via Ferrata Network*

In the lower part of the valley on the Bonanza Boy Mill Site, the applicant proposes a network of wooden boardwalks with interpretive signs about the important wetland habitat in the area, and in the middle part of the valley the Applicant proposes a stream enhancement and wetlands creation project that will be designed and executed in conjunction with Trout Unlimited, the USFS, and other agencies and local non-profits.

#### **Site Access:**

Access to the VCUP site on the Shelbyville Lode is the following: CDOT State Highway 550, to the Chattanooga area to the tight hairpin curve called the Muleshoe Curve, to Mill Creek Road (US Forest Service Road 821/County Road 15). USFS Rd. 821/CR 15 crosses through the project site. The Applicant will comply with all requirements of the County Road and Bridge Department Supervisor and the US Forest Service. The applicant has met on site with the USFS and held a video conference about the VCUP operation and some proposed gate(s)/signs and a minor road realignment. CDOT and USFS Access Permits are being obtained for the proposed PUD. County “driveway permit” forms have been submitted to the County Road and Bridge Supervisor Louie Girodo, to obtain his comments/requirements. The Applicant is proposing to relocate a short stretch of CR 15/USFS Rd. 821 where it crosses through the Shelbyville Lode in order to create a wider turnaround radius. The gating concept and minor road realignment concepts are included in the attached. The US Forest Service will not require a commercial use permit for either the construction access for the VCUP or the lodge operations.

Access to the proposed future garage/employee housing structure is via State Highway 550 at Chattanooga. This structure will be located on a lot adjacent to the Artist Cabin (vacation rental owned by the Sterns).

#### **Power, Solar, Water, Heat, Generator, Woodstove, Internet, Phone, Trash:**

Power at this site is difficult, with the nearest grid-tie miles away and the valley shaded during much of the winter, with low stream flows during the winter as well. The simplest answer for power and heat would be the continued operation of noisy and smelly diesel generators, but this is not appropriate for the site aesthetics (for obvious reasons). Instead, power will be primarily produced in the spring, summer, and fall



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### Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)

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and stored using batteries, thermal banking, and, for the Lodge, compressed hydrogen gas for use in the winter. This power will be generated by a roof array of matte-finish, rust colored, low reflectivity building-integrated solar panels that will be custom-manufactured to look like a rusty metal roof (they will not be black, blue, or have the visual impact of “traditional” solar panels). Lodge power will also be generated from a Micro-Hydro system fed by a portion of Mill Creek and from the adit discharge of the Silver Crown Mine. The following permits will be secured prior to construction of this hydropower system:

1. Individual discharge permit from CDPHE
2. Water rights application
3. CWCB Injury with Mitigation Approval
4. Lease and Management of Water Rights (Annually)

During the spring, summer, and fall, the solar and micro-hydro will be more than enough for the needs of the lodge. The excess will be used to charge a large battery bank, then to heat a large thermal storage water tank, then to produce hydrogen gas using electrolysis, and to compress that gas into tanks for long-term storage. This hydrogen system at the lodge will be designed by a Professional Engineer, located underground, and stored at relatively low pressures to ensure safety. During the winter, when solar and hydro resources are scarce, the reverse cycle will occur as the thermal mass of the water and the batteries are utilized followed by running the hydrogen through either a generator or a fuel cell to produce both usable electricity and heat. The raw materials for this system are sunlight, liquid water, and gravity, and the outputs are simple as well: heat, electricity, and water vapor. Nothing else. The system will be similar to the Hans Olof Nilsson Hydrogen House near Gothenberg, Sweden. Although the system will be somewhat novel for the area, it is not “experimental” and will be constructed using commercially available standard components and principles.

Heat for the lodge will be provided in a similar way – both the electrolysis process (making hydrogen) and fuel cells (using hydrogen) produce heat that can be captured and used for hydronic and domestic hot water heating, which will benefit from the massive heat sink that is available in the Silver Crown Mine (from historical reports, the mine is over 3,200 feet long and is at a constant temperature of around 45 degrees). Using the mine’s constant temperature is a great way to allow for the operation of a super-efficient heat pump (which can sometimes struggle when input temperatures fall below freezing). The site will have a fossil fuel-powered generator for emergencies, as well as wood stoves. These multiple-redundant backup systems will ensure that our guests will be able to ride out any storm even in the case of multiple system failures.

The garage/employee housing will have much lower power demands, and as such will not have the micro-hydro or hydrogen systems. A simple solar array, with batteries and a backup generator will power that smaller structure.

Domestic water for the lodge will come from the mine adit itself, which flows around 30 gpm at quality levels that meet drinking water standards in almost all aspects. After minor treatment for potability, it will be used for domestic purposes and then piped into a septic treatment system that will be permitted by SJBPH. Reference the septic permit in the Attached. Excess water beyond the needs of the lodge will be fed into the micro-hydro system.

Water for the garage/employee housing will be from a well and/or spring, and waste will be piped into a septic treatment system that will be permitted by SJBPH. Reference the septic permit in the Attached.

Internet for both structures will be provided by Starlink. A satellite phone/Garmin Inreach and a CB radio will be available at both sites for emergency use. Trash will be internally stored in bear-proof facilities and periodically deposited at the waste transfer station in Silverton or Ouray.



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**Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**  
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**Hydropower System Details:**

The hydropower system will have two components: a small turbine that will be fed year-round by the excess water from the mine adit that is not needed for domestic purposes (approximately 20-30 gpm), and a seasonal flow from Mill Creek. Both will flow from the area near the lodge in underground pipes to a small underground hydro generation house in the valley below.

The Mill Creek water will be diverted from Mill Creek at about elevation 10,840' using a weir constructed of natural boulders and concrete. This weir will be designed to only capture the flow of Mill Creek *above* 0.25 cfs (typical low flow levels) and then also not capture any water above 4.0 cfs (typical high flow levels). This graduation will prevent Mill Creek from going dry due to the hydro generation and also allows for normal high flow events as well which can be important for stream health (see stream habitat improvements section later in this document). This water will drive a turbine and return to the Mill creek drainage at native velocity. The water from the adit will drive a separate turbine and will return to the Mill Creek Drainage at native velocity. The entire turbine house will be buried into the hillside like a bunker, with a heavy steel door. This will not only prevent any turbine noise from becoming noticeable, it will also virtually eliminate the visibility of the structure and will make it impervious to even the largest of avalanches.

Water usage for this hydro project is considered non-consumptive as all the water is returned to the stream and there is no evaporative loss. After construction is complete this non-consumptive use will be transferred to the applicant and decreed as a water right in court. An injury with mitigation process will also be followed to ensure that the hydro system does not negatively affect Mill Creek along the subject reach.

The turbine will not be tied to the grid, which reduces the regulatory burden immensely, but the applicant has also taken the additional step of drafting an Individual Discharge Permit from the CDPHE. This allows for periodic monitoring to ensure that the hydro generation isn't introducing trace amounts of grease or oil into Mill Creek.

Ken Gardner has been contracted to design and install the hydropower system. Ken's company has completed numerous projects throughout Colorado (including in the drainage immediately to the South) and is on the State supplied list of hydropower contractors.

**Propane:**

The Applicant plans to utilize propane for cooking and a backup heat system in the proposed future lodge. Propane will be kept in a buried permanent tank(s) due to avalanche hazard on portions of the site. A permanent propane tank is also expected for the proposed future garage/employee housing structure but will be above ground and screened.

**Exterior Lighting:**

For safety, a minimal amount of exterior lighting is proposed at each of the two proposed future structures. Exterior lighting will be in conformance with the requirements of San Juan County. No detailed structures/lighting are proposed at this time but will be included in the plans submitted to the County at a later date.

**Refuse:**

The Applicant will be responsible for bi-weekly trash disposal. According to County regulations, property owners are responsible for solid waste transportation and solid waste disposal fees. On-site trash will need



## **PROJECT NARRATIVE**

### **Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**

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to be contained within a structure at all times until removal to the Transfer Station. County applicants are required to sign up for Town of Silverton refuse billing upon approval of a County Permit.

#### **Landscaping:**

Landscaping is to consist of raking and removal of combustible ground cover near the structure, as recommended by the Colorado State Forest Service Firewise Practices, to develop adequate defensible space. Revegetation and screening will be provided by the Applicant in accordance with the requirements of San Juan County. Stream restoration including wetlands plantings, in conjunction with the Forest Service, CDOW and Trout Unlimited is proposed.

#### **Screening:**

For the required adequate screening of the proposed structures as viewed from any county Roads and the Highway, the applicant proposes the installation of imported evergreens at the lodge and willows at the garage/employee housing structure.

#### **Surveying:**

A survey plat for the Shelbyville Lode and adjacent mining claims was prepared by Colorado Licensed Professional Land Surveyor David Bulson of Telluride. A copy of the survey plat is included within this application for your review. Additional surveying is occurring at the site in July as part of the wetlands delineation for the Bonanza Boy Mill Site. Surveying will also be needed weekly during the VCUP project.

#### **Geology:**

Subsurface conditions in this area generally consist of topsoil overlying gravel soil. Geology maps for the Chattanooga/Mill Creek area indicate the gravel soil is generally Qal (Quaternary) alluvium (water-deposited), as well as some fluvial (river fan and floodwater-deposited) areas, and colluvium (gravity-deposited) slopes (such as talus). Underlying the surface soil is Tig (Sultan Mountain stock granitic intrusive) and Tsj (San Juan Formation volcanoclastic deposits) bedrock.

#### **Avalanche:**

The project site property boundaries have been overlaid onto the County Avalanche Hazard Maps. The plan sheet is included for your review. According to the County Avalanche Hazard Maps, portions of the property appear to be within a potential avalanche area. An avalanche study is included for your review. The report was prepared by Alan Jones, owner and Principal Consultant with Dynamic Avalanche Consulting Ltd. in Revelstoke, BC. Alan is a Professional Engineer and avalanche professional with 25 years of diverse avalanche and geotechnical engineering consulting experience. Alan has extensive experience in avalanche planning and operational projects in the transportation, mining, hydroelectric, and land development industries. He has worked on avalanche projects in the US (including Colorado), Canada, Argentina, Chile, Japan, and New Zealand. His experience includes highway avalanche safety, regional avalanche forecasting, and avalanche research.

The extensive avalanche study indicated that the Silver Crown mine portal area is one of the safest locations in the upper valley to build (which is likely why the old timers built there). The major slide paths will not affect the site, but there is still some residual avalanche risk from shorter slide paths and generalized powder pressure at the site that can be mitigated through appropriate structural design. Notably, the rock berms built by the old miners will be restored, all windows and doors will be rated to withstand a category 3 hurricane (125mph wind/40 psf pressure), the main buildings will be built into the slope and protected by avalanche defense barriers. In addition, much of the infrastructure will be inside the old mine, which will further limit avalanche risk. While the structures themselves will be protected from avalanches, there is a



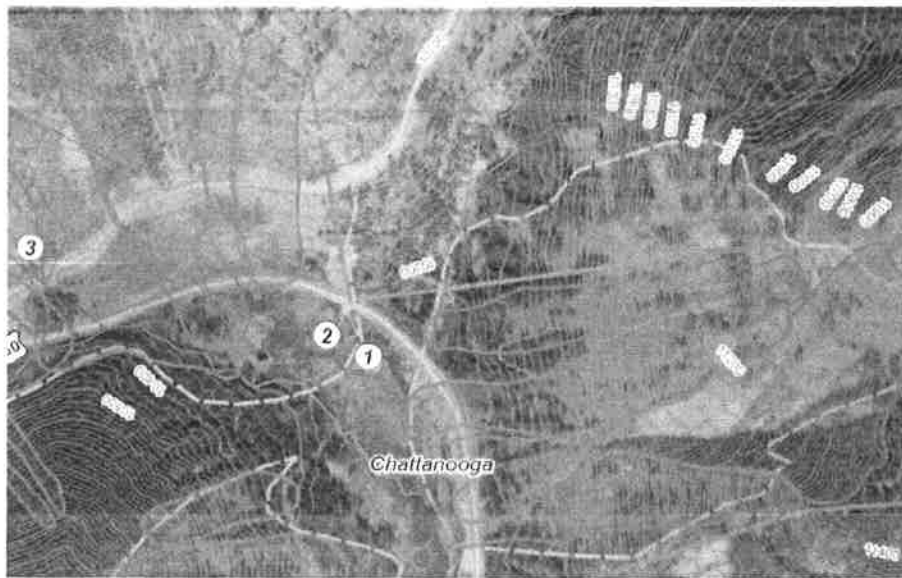
## PROJECT NARRATIVE

### Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)

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generalized danger in the valley from multiple slide paths. While this is true of much of San Juan County (and most of Highway 550), our operational plan will put avalanche exposure reduction for our guests and for the public as the highest possible priority. Measures will include gating the road during avalanche season, especially when we plow the road for access (to be permitted by USFS), ensuring that winter guests are guided by qualified and experienced local guides, and shutting the operation down during times of extreme avalanche hazard. We do not anticipate conducting any active avalanche mitigation at this time, but if that becomes necessary it will be done in accordance with relevant guidance and in conjunction with local and State authorities.

Garage/Employee Housing Site: The lower site near the Artist Cabin is just inside the edge of the shaded zone of the INSTAAR avalanche map *below* (see pink line). However, the detailed avalanche study showed that this build site was not in an identified avalanche path and was buildable without mitigation. To be extra cautious, we will design the windows and doors of the structure to withstand generalized powder impacts of approximately 40 psf (or 123 mph winds, like those seen in a category 3 hurricane). Note that this kind of window/door is required in every house built in Florida within one mile of the coast, so these materials are readily available.



#### Geohazards:

The project site property boundaries have been overlaid onto the County Geologic Hazard Maps. The plan sheet is included for your review. According to the County Geologic Hazard Maps, the proposed future lodge appears to be located in an area denoted as TS-talus slope (on the Shelbyville Lode), and the proposed future garage/employee housing structure in an area noted as CSM-colluvial slope.

#### Rockfall:

Neither of the sites are in the rockfall zones of the County Geologic Hazard map, but the lodge site near the Silver Crown mine portal does lie below a talus slope. To ensure that we were accounting for this possible hazard, the applicant (a licensed geotechnical engineer with over 15 years of relevant experience) had the rockfall hazard at the site modeled. The results indicate that any potential rockfall at the site will be contained by the avalanche defense berms and structures (see attached for rockfall energy and bounce height analysis).



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**Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**  
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**Flood:**

Neither of the build sites are in flood hazard areas.

**Wildfire:**

Although wildfire is a persistent risk in the San Juan Mountains, both build sites are in low-risk areas. The garage/employee housing site is over 150' from any trees, and the lodge site only has a sparse grove of trees to the North. Regardless, the applicant will consult with Colorado Firewise to ensure that this grove is managed in such a way as to reduce risk. Absent fire risk, it is the overwhelming preference of the applicant to not fell any trees in the area unless absolutely necessary, and to actually add trees to the sites (again, in coordination with Firewise) to continue the generalized reforestation of the Mill Creek valley that has naturally occurred since the Chattanooga townsite was abandoned in the early 20th century.

**Wetlands:**

There are wetlands in the Chattanooga area. The Applicant has a wetlands consultant working with the Army Corps of Engineers to address wetlands issues and ensure compliance. At the lodge site, rerouting the mine adit drainage will dry up a small portion of wetlands, which will be replaced lower in the valley as part of the Mill Creek stream habitat improvement project.

The garage/employee housing location has multiple wetlands. The applicant plans to fill a very small portion of those wetlands but also create additional wetlands on the same lot, and also build in a way that celebrates this important wetland habitat. This will be achieved by minimizing wetland filling, using native willow screenings, and installing low-profile pedestrian trail boardwalks with interpretive signs throughout. All wetlands construction, including signs and boardwalks, will be conducted with direction from the USACE and relevant local non-profits.

**Emergency Services:**

Emergency services are inherently limited in the backcountry, and the applicant acknowledges emergency services at this site may not be available in a timely manner and may not be available at all. However, prior planning can remove much of the risk associated with remoteness. Multiple forms of communication will be in place at both buildings (Starlink, Satellite Phone/Garmin Inreach, and CB radio) to contact emergency services. The future proposed garage/employee housing structure is close to Highway 550, making access relatively easy when the highway is open. When the highway is closed, the garage will house both vehicles that can travel by road and snowmobiles/snowcats that can transfer people from the lodge or the garage/employee housing to the road closure gate down valley. The lodge is 0.56 miles up USFS 821/CR 15 which presents more difficulty. However, during winter operations the road to the site may be used allowing for two means of transport: a vehicle (with a plow) and a snowcat/snowmobile. This redundancy will allow transport even if the road is inaccessible by transiting to the valley floor over the snow. In addition, both buildings will be equipped with appropriate fire suppression systems, and even the underground portions of the lodge will have a secondary emergency exit in case the main portal becomes impassable. Lodge personnel will be trained on the emergency services plan, which will include responses to various scenarios (skier becomes injured/buried while highway 550 is closed, a fire occurs at one of the buildings, an underground accident occurs, etc.). This emergency services plan will also describe lodge operations and closures, required employee training/certifications and gear, guide policies, etc.

Guest will sign waivers acknowledging they will be in avalanche/geohazard areas, and the County will not be liable in the event that emergency services may not be timely/available if they have an emergency while in those areas.



## **PROJECT NARRATIVE**

### **Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**

**Prepared by Applicant**

If the County agrees, the applicant will also propose installing an emergency/first aid closet in the garage/employee housing that would be available for EMT and Search and Rescue personnel for any emergencies in the area (not just for those involving guests of the lodge). The applicant's goal with the emergency services plan/infrastructure will be not only to mitigate risk for guests, but also help elevate the overall emergency response capability in the immediate area.

#### **Historic and Cultural Resources:**

The Shelbyville Lode is the location of the proposed VCUP mining reclamation project as well as the proposed future lodge structure. The history of the site includes the Silver Crown Mine (with existing portal), existing mine waste rock pile, draining mine adit, and several wooden structures on the site which have been gone for at least 80 years. The applicant plans to recreate one of the previous structures which will be the proposed future lodge structure. The Army Corps of Engineers noted that the applicant will need to have a consultant prepare a Cultural Resource Survey for this project for submittal to and approval by SHPO (State Historical Preservation Office). Jon Horn of Alpine Archaeological Consultants, a part time resident of Silverton, has prepared that Cultural Resource Survey for submittal to SHPO. His results indicate that the avalanche berms on site are significant. These will not be destroyed during lodge construction (indeed, they are an integral part of our avalanche/rockfall defense system, as they were for the old miners). The waste rock pile itself is also significant and will not be removed as part of VCUP construction. However, the pile will be capped with native rock – thereby changing its appearance – so it will be thoroughly photographed and characterized prior to being capped as part of the VCUP process. Those “before” photographs will be incorporated into the lodge décor and website, but also included on the interpretive sign that will be installed near FSR 821/CR 15 on the way up to the lodge for all to see. There are no existing structures (buildings) on site, with the exception of a historic brick rectangular foundation remnant, which likely once supported a metal boiler (and another similar, smaller, nearby historic brick remnant). Mr. Horn's work has indicated that the building area has been so disturbed over the years (especially in the 1940s) that no significant artifacts remain. Regardless, the lodge design will incorporate the brick boiler foundation into the proposed deck area as an educational mining heritage feature (again, with an interpretive sign). The Applicant has researched the Silver Crown Mine area and the Shelbyville Lode for a few years through work with the Archives and San Juan County Historical Society.

No historical relics/structures were observed on the Bonanza Boy Mill Site (adjacent to the Artist Cabin property), but Mr. Horn will be surveying that site as well to make sure. The original mineral surveys are included in this application, and they depict what was once on-site when those were surveyed approximately 100 years ago. The railroad existed in the general Chattanooga area and the historic alignment is being researched at present. In viewing local historic photos (and books such as *The Rainbow Route*), there does not appear to be any former railroad lines/beds near any of the proposed improvements.

#### **Elevation at Structure:**

The elevation at the VCUP site (and the proposed future lodge structure) is approximately 10,800 feet. That is below 11,000 feet elevation where the County has limits on cabin square footage. The garage/employee housing is at around 10,300 feet.

#### **Build Site Selections:**

One of the best ways to build resilient and safe structures in the mountains is to figure out where the old timers built and build on the same location (or, if possible, restore a historic structure). Those old timers didn't have geologic hazard mapping, Lidar, or the complex 3-dimensional avalanche and rockfall modeling programs that we do today. But they had an extreme level of common sense, and they were in tune with what the environment was telling them (or warning them about).



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Both of the proposed build sites meet this best practice. The upper buildings will be on nearly the same footprint as the old Silver Crown mine buildings, and the lower site near the Artist Cabin is close to where the old Chattanooga townsite was. This is not only a safer and more resilient way to choose a site location, it also limits additional disturbance to the environment.

**Lodge Building Envelope:**

The building envelope for the proposed future lodge structure is located adjacent to the existing Silver Crown Mine portal on the Shelbyville Lode in Mill Creek. The design of the proposed lodge structure and its building envelope were selected to closely emulate the historic structure that was on the site a century ago. The structure location was also selected in conjunction with the avalanche expert. The back of the structure is proposed to be built up against/into the hillside. There are some existing avalanche berms at the back of the previous structure which will be maintained. Adjacent to the lodge structure is the Silver Crown Mine, and part of the proposed lodge is tentatively designed to extend into the mine, including some of the guest rooms.

**Garage/Employee Housing Building Envelope:**

The building envelope for the proposed future shed/employee housing structure is located near the existing "Artist Cabin" (Stern's vacation rental) accessed from Highway 550. This area includes some important wetland habitat, but the wetlands there are not continuous, and contain a series of upland "islands" that are buildable. The applicant and their wetlands consultant evaluated each of the possible build sites using a decision matrix, examining the cost to build, the distance of wetlands crossing, the visibility of the structure from the road, the impact on the views for people renting the Artist Cabin, and the ability to screen the structure. The build site on the Southwest corner of the lot, farthest from the road and the Artist Cabin scored highest overall. Note that lower numbers are more favorable in this scoring matrix.

Build Site (Location in lot)	Cost to Build	Wetland Crossing Distance	Visibility from Road	Visibility from Artist Cabin	Screenability (with vegetation)	Parking Capacity	Total
#1 (N)	1	1	4	3	4	4	17
#2 (Center)	2	2	3	4	3	1	15
#3 (S)	3	3	2	2	2	1	13
#4 (SW)	4	4	1	1	1	1	12

A full wetlands delineation will be submitted shortly to the USACE to discuss plans and options. Access using the historic road on the property will prevent unnecessary wetland filling, and also allows natural water flow so that no downstream wetlands are inadvertently dewatered. If the USACE agrees, the applicant also proposes installing a series of low-profile pedestrian boardwalk trails throughout the wetland complex with interpretative signs about the importance of the alpine wetlands ecosystem.

**Structure Sizes:**

The proposed future lodge structure is currently being designed. It is planned to emulate the historic structure that once existed on the Shelbyville Lode. The approximate footprint of the proposed future lodge structure is 30 feet x 120 feet. The proposed future garage/employee housing structure which will be located close to the Artist cabin, is currently being designed and has approximate footprint of 28 feet x 48 feet. The applicant will submit detailed plans to the County for further review this fall, and no construction of any proposed future structures will commence before 2025.



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#### **Structure Heights:**

The height of the proposed future lodge structure (measured from the tallest part of structure to where the adjacent ground surface elevation will be the lowest, which yields the largest height measurement) is conceptually designed as 35 feet or less. The height of the proposed future shed/housing structure is conceptually designed as 35 feet or less.

#### **Structure Styles:**

The Applicant has been working for the past few years with a local architect – with advice from some members of the San Juan County Historical Society – to design the proposed future lodge structure to be close to the buildings that once existed on the Shelbyville Lode. The previous structure may have been sided with tar paper and batt wood strips. The applicant is proposing locally sourced, rough-sawn wood board siding instead of the historically accurate tar paper. The proposed garage/employee housing structure to be located at Chattanooga would be conceptually constructed of rough-sawn wood with rusted metal. Conceptual plans for both structures are included in this application, and detailed plans for both of the proposed future structures will be submitted to the County this fall. No structural construction is proposed prior to 2025.

#### **Building Plans:**

Draft building plans for the proposed future lodge and the proposed future garage/employee housing structure are included in this submittal for review. The plans are being developed currently and during this summer by Architects at the office of Tommy Hein in Telluride. No structure details are proposed at this time; the Applicant plans to submit those plans at a later date for further County review. Of note, the detailed building plans for the lodge require a full investigation of the underground workings beyond the collapsed Silver Crown portal. That portal can't be opened without County approval (as part of the VCUP) so this process of "sketch plan" approval to start the VCUP is the most appropriate way to proceed without this information.

#### **Building Materials:**

Photos of the proposed building materials provided by the Applicant and Architects are included within this submittal. The conceptual building materials for the proposed future lodge structure and the proposed future shed/housing structure generally consist of the following: Exterior locally sourced rough-sawn wood boards, rusted metal and/or galvanized metal, building-integrated rusted metal colored low reflectivity roof mounted solar panels, and native stone.

#### **Greenhouse:**

The Applicant has a small 3-season greenhouse proposed in the future adjacent to the proposed future lodge structure for growing salad greens and culinary herbs for use at the Lodge. This building will have some glass but will be sited at the North end of the lodge complex and as such will not be at all visible from Hwy 550 in summer or winter.

#### **Sauna:**

The Applicant has a small wood-fired sauna structure proposed in the future adjacent to or attached to the proposed future lodge structure.

#### **Underground Hydro House:**

The Applicant proposes a small structure to house the micro-hydro turbines as shown on the conceptual plans. This structure is approximately 1,200 feet to the East of the Lodge and will be built completely into the



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hillside adjacent to Mill Creek. As this area is prone to avalanche events, the only external wall will be constructed of reinforced concrete with a reinforced steel door and will resemble a “bunker.” The path to the hydro house will follow the historic road on the site, meaning that very little disturbance will be required to provide access (other than vegetation clearing).

**Additional Outbuildings:**

A restroom and shower facility for use of the primitive campers will be installed adjacent to or nearby the garage/employee housing facility. Details of this structure will be provided to the County this fall once the wetlands delineation has been completed.

**Portal Improvements:**

As part of the VCUP work, the Applicant plans to make a wood and metal entrance/door at the existing adit/portal of the Silver Crown mine on the Shelbyville Lode, using similar materials and methods as the old-time miners. The design will appear similar to a semicircular wooden barrel and will utilize timbers and repurposed steel sets sourced from a nearby mine.

**Underground Work and Safety:**

The lodge facility at the Silver Crown mine will have multiple rooms that will be built into the old mine. As such, underground safety is of utmost importance. The underground design has been completed by Brian Briggs, P.E., former CEO of Ouray Silver Mines, and will be constructed by miners with decades of experience in the San Juans and beyond (most coming to work on this project from the Revenue-Virginus after they were laid off there). In addition, the applicant has been working with DRMS to permit the underground infrastructure as a “tourist mine.” Although DRMS has taken the stance that this project is underground civil construction – not mining – we have mutually agreed that the safety procedures outlined in the DRMS “tourist mine” designation would be a conservative approach to underground safety for our guests.

During the VCUP project, the Silver Crown Mine portal is to be reopened, with an entrance constructed using timber and steel. The mine will be used as the rock fill source for capping the existing mine waste rock pile and for fill for the wire gabion baskets to stabilize the slopes of the waste rock pile. The rock competency inside the mine will be investigated at that time. The Applicant plans to install a up to five guest rooms that will face into the Mill Creek gorge, each having a glass wall to provide a view of the Mill Creek gorge and falls. That glass will be recessed into the cliff edge and will not be visible from Highway 550, any nearby County Roads, or any designated trails in use today.

**Future Primitive Dispersed Camping:**

Future proposed walk-in designated dispersed tent camping spots are shown on the conceptual PUD plans. The applicant assumes that the County would require at least a basic toilet/shower services/facility such as a “bathhouse.” The campground host and the water/sewer service/bathhouse would conceptually be located adjacent to or nearby the future proposed garage/employee housing structure. The detailed plans for the bathhouse would be submitted for the County’s review this fall.

**Recreation Improvements:**

In the future the applicant would like to construct the following: a “via ferrata” fixed rope/cable system (hiking trail in a portion of Mill Creek for hikers on steep terrain to be clipped in), on-site trail improvements, and potentially guided hiking/ice climbing and a possible small ice park.

**Gates:**

The following gates are proposed as part of this project:



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**Avalanche safety gate:** The Applicant and the Forest Service are discussing a proposed avalanche safety gate 500' up FSR 821 (past the lower parking lot that is close to Highway 550) which could be closed in the event of high avalanche hazard, allowing pedestrians/skiers to enter, but not passenger vehicles. If the Applicant plows FSR 821 (which is not currently plowed or accessible in the winter) then the Mill Creek area becomes more accessible to motorists in a way that it never has before. A gate close to Highway 550 could warn those in vehicles of high avalanche hazard while still permitting the normal pedestrian/ski traffic seen in the area.

**Temporary construction gate:** Because permitting for the avalanche safety gate may take years, a temporary gate and a sign describing the VCUP is proposed at the same location and will be closed during active VCUP construction, especially during blasting operations. Note that this location is past the lower parking lot on FSR 821/CR 15, which will be adequate access for passenger vehicles/fire trucks/ambulances to turn around. This gate will only be closed when construction is active and will be removed when the VCUP completes in the fall of 2024.

**Lodge driveway gates:** gates are proposed where the lower driveway into the lodge starts off of FSR 821/CR 15 and where the upper driveway into the lodge turns off of FSR 821/CR 15. Neither of these 2 gates will prevent traffic on FSR 821/CR 15, they will only prevent public access to the lodge itself. These gates will be located at least 30 feet from the edge of the FSR 821/CR 15 driving surface and will not block access/turnaround and when a vehicle is parked to open/close the gate.

No gates are proposed at the garage/employee housing site down in the valley near the Artist Cabin.

Details of the appearance of the gates are included in the USFS permits.

**Signage:**

The Applicant is working with the Forest Service to install a sign (and possibly a gate, as mentioned above) on the lower part of FSR 821/CR 15 which could be used to warn the public in the event of high avalanche hazard. If plowing occurs, then the Mill Creek area becomes more accessible thus a sign near the entrance of this road could warn those in vehicles of high avalanche hazard while still permitting pedestrian/ski traffic if a gate is not allowed. During VCUP construction (2023 and 2024) a sign will be located at the temporary gate describing the VCUP construction and timeline. Interpretive signs describing the history of the Silver Crown mine is also proposed at the upper turnaround location as well as an interpretive sign at the Bonanza Boy Mill Site describing the importance of the alpine wetland ecosystem. All proposed signs will be subject to sign permit applications processed through the County Building Department.

**Future Proposed FSR/County Road Realignment:**

Realignment of approximately 150' of FSR 821/CR 15 is shown in the USFS permit application. The applicant will comply with any requirements to grant the USFS and/or the County applicable road easements where the Forest Service/County Road crosses through the applicant's properties.

**Summer Parking:**

Summer parking is expected to occur at the proposed future lodge structure, and at the proposed future garage/employee housing structure for those guests that do not arrive in a 4WD vehicle and need a 4WD shuttle to the lodge. Future summer campers may also additionally utilize the parking lot at the bottom of Mill Creek Road and possibly the parking lot between the entrance to FSR 821/CR 15 and the Bonanza Boy Mill Site (which is owned by the applicant). The aggregate parking capacity at these four sites will be more than enough to accommodate any possible summer demand.



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#### **Winter Parking:**

Winter parking is expected to occur at the proposed future garage/employee housing structure when avalanche season begins. The parking area will not be located in an avalanche area (as per the previously supplied maps included with the avalanche study). Although the capacity for parking at this lower location is smaller than the aggregate parking available in the summer, the operations of the lodge will be scaled down as well (no winter camping is contemplated, for example).

#### **Snowcat/BV 206/4WD Shuttle:**

A 4WD will shuttle guests in the winter to the lodge if the road is plowed and accessible. If the road is not plowed, the 4WD will shuttle the guests to the parking lot at the bottom of FSR 821/CR 15, where they will transfer to a snowcat or BV 206 personnel carrier the final way to the proposed future lodge structure. The snowcat/BV 206 would be stored at the lodge and/or the garage at the Bonanza Boy Mill Site and would be occasionally tracked down the shoulder of the Highway between the Bonanza Boy Mill Site and Mill Creek.



*BV 206 Personnel Carrier*

#### **Plowing:**

Conceptually, plowing could be utilized in the future to provide winter access to the proposed future lodge structure. Plowing of a County Road (such as USFS Rd. 821/CR 15) typically requires a San Juan County plowing permit. The USFS would also need to approve the plowing concept, which they are reviewing, and at times or alternately a snowcat/BV 206 could be used instead of/in addition to plowing.

#### **Motorized/Nonmotorized:**

Employees at the site may utilize ATVs and snowmobiles to access various portions of the property for maintenance, for hauling supplies, and for emergency purposes (like evacuating a guest when Highway 550 is closed). However, the Mill Creek Valley is small, steep, and relatively quiet (aside from Highway 550 traffic noise). The applicant aims to keep it that way and does not anticipate allowing guest use of ATVs or snowmobiles or other motorized vehicles. In addition, where feasible electric vehicles will be utilized due to



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their relatively quiet operation. Public use of FSR 821/CR 15 for dirt bikes, ATVs, OHVs, etc. will of course be allowed, but the applicant does not anticipate allowing any use of public motorized vehicles on private land and will discuss adding language to any proposed signage with the USFS and the County to encourage motorized vehicles to stay on designated roads only.

#### Mine Tourism:

Conceptually, the PUD plans include that mining heritage tourists will be allowed inside the proposed mine if they would like to view the underground workings. This would require permitting and insurance similar to the Old Hundred Mine Tour. Since the mine portal is currently blocked, the extent of the workings (and the attractiveness as a mine heritage tour site) is unknown. However, the applicant has already worked with DRMS and will permit the mine as a “tourist mine” for safety and inspection purposes regardless of whether the underground workings conducive to full-scale tours or not.

#### Architectural Design Concepts:

The photo below is from around 1912 of the mine buildings around the Silver Crown mine. Those buildings have been gone for decades (apparently, they were cannibalized, with anything remaining burned over the years). The applicant is excited to bring them back. They won't be perfect replicas, but the photo below is the guiding light for design. While the interiors and the energy systems will leverage cutting edge technology, the exterior look and material selection will be something that miners from the 1910s would immediately recognize. In addition, much of the infrastructure for the lodge will be underground, which limits visual impact, energy use, and natural hazard risk.



For the lower structure near the Artist Cabin, historic photos of Chattanooga were the guide, in addition to making sure that the look fits with the historic ore bin across the road and the Artist Cabin adjacent.



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*Chattanooga Townsite*



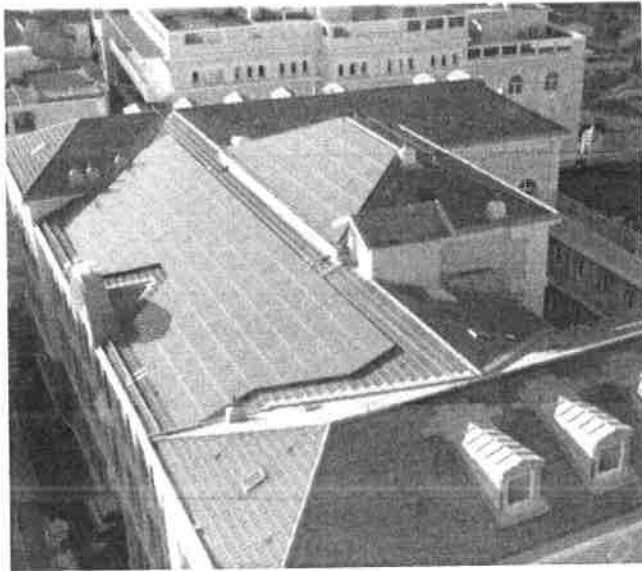
*Silver Ledge Load Out Building*

Tommy Hein, an architect based in Telluride, has developed a site plan and design for the structures. The lodge and the garage/employee housing will be timber-framed structures that will be constructed to match – as closely as possible – structures that existed on the sites in the past. Exterior materials will be materials that would have been familiar to the old-timers, including rusted and galvanized metal, rough-sawn wood, and natural stone. Conceptual building plans and ideas have been reviewed with the San Juan Historical Society for input, and the buildings will also be screened as much as practical using native vegetation. To the greatest possible extent, re-purposed and local materials (especially wood and stone) will be used in the construction. Windows and other materials will be low reflectivity in design. The sole exception to the use of historically accurate materials will be the roofs of the structures, which will be made up of low-profile, building-integrated solar panels that are colored to match a rusty metal look. Traditional black or blue solar panels would not fit the aesthetic of this site and will not be used. Thankfully, new technology from Europe allows for the installation of a completely solar roof without sacrificing aesthetics, and this technology will be used on both buildings. The photo below shows an installation of rusty orange solar panels on a historic



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structure in Europe. These panels can also be integrated into the roof itself to eliminate any gaps and look seamless, much like a rusty metal roof, which is how we would install them on the buildings at this site. Note that these panels would be over 2,200' away from Highway 550 in the case of the lodge and emplaced on the section of the roof facing away from Highway 550 in the case of the garage/employee housing, so the visual impact of the solar panels will be minimized even further.



**Additional Portals/Openings/Visibility:** The only other visible portions of the construction will be the portals of the mine, of which there will be seven: the main portal that will be framed in rusty steel and rough-sawn timbers; an emergency escape door that will again be made out of rusted steel (preferably a re-purposed door), and 5 “waterfall view” rooms that will have recessed glass facades and hinged rusty steel decks. The main mine portal will be visible from the parking area, but the other 6 openings will be tucked into the Mill Creek Gorge and not visible at all from any portion of Highway 550, FSR 821/CR 15, or any trails that currently exist in the area.





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*Waterfall Room Locations*

Exterior lighting will only be employed to safely light entry doors and deck areas while the structures are occupied. Lighting will promote a dark sky environment and will comply with section 4-110.17 of the land use code.

**Private and Public Access:**

No new driveways will be required to construct the lodge or the garage/employee housing. Access to the lodge will be via USFS Road 821/County Road 15, which goes directly to the site. The applicant has met with the USFS to confirm that no special permission is required to use this road (even for commercial purposes). However, upon the suggestion of the USFS, a road maintenance agreement has been submitted to the USFS allowing the applicant to conduct minor realignment, maintenance, plowing, and safety gating of the road (see attached). During avalanche season (November-May) the applicant proposes to gate and close the road to vehicular traffic with the exception of authorized users (including federal, state, and county government agencies, EMS, etc.). The road is currently closed naturally by snow from November-May, so this plan (much like the way the Yankee Boy Basin Road to the Revenue-Virginus Mine is managed) will not reduce public access to the site, but will reduce the safety risk associated with enabling random vehicles to travel the road during avalanche season.

The driveway to the garage/employee housing follows the historic wagon road/access road and is already in place, and only needs minor improvements. Any road improvements will be constructed using local gravel to the greatest extent possible, and all minor disturbed areas will be reclaimed using native vegetation and seed.

No foot trails exist on the property save for portions of isolated paths constructed by the old miners that have long since been abandoned, and none of the activities of the applicant will restrict the use of USFS 821/CR 15 for public access (by vehicle or by foot) to the Silver Cloud Mine. As an avid backcountry skier and



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hiker, the applicant will also endeavor to allow reasonable access by the public across their lands to hike or ski in the area but does not anticipate allowing public motorized access across private lands (in order to preserve the sensitive vegetation in the area).

#### Additional Voluntary Cleanup (VCUP) Details:

The first phase of this project will be a Voluntary Cleanup (VCUP) of the mine waste rock pile at the Silver Crown Mine. The VCUP permit has been submitted (attached) and construction should be able to commence immediately after County approval of this permit. The VCUP will take two construction seasons, and will have the following components:

1. Rerouting of the mine adit discharge water away from the waste rock to prevent any waste rock contaminants from leaching into Mill Creek;
2. Capping of the mine waste rock with inert native stone. Most of this native stone will be generated through the underground construction in the Silver Crown Mine. On the sloped of the waste rock pile, a reinforced slope consisting of geogrid-reinforced steel wire baskets filled with native rock will be placed.
3. Prevention of mine waste rock from the upper waste rock pile from continuing to fall into Mill Creek.

#### Stream Habitat Improvements:

The stretch of Mill Creek from the elevation of the lodge almost to the intersection of Highway 550 is fairly sterile for most of its length, with waste rock and waste rock drainage entering the creek in multiple locations. This section will undergo a stream restoration/enhancement process that will be conducted in coordination with the USFS, Trout Unlimited, the USACE, and the Colorado Division of Wildlife to improve the quality of Mill Creek by:

1. adding sinuosity, pools, and J-hooks to the stream;
2. improving and expanding the wetlands and vegetation on the site;
3. more-than-fully mitigating any impacts of the micro-hydro generation;
4. minimizing mine waste rock from entering the creek; and
5. (hopefully) successfully re-introducing native cutthroat trout into the creek.

The goal of the applicant is that this project will not only improve the beauty of Mill Creek, it will also reintroduce species that were lost over a hundred years ago and make the stream more resilient to changing climactic conditions that have resulted in more extreme wet and dry periods in the area.

Below are initial notes from Trout Unlimited on the potential enhancement of Mill Creek. Much of the information needed to finalize will take years, perhaps, to gather, and some of the actual enhancement work will be based on conditions encountered in the field, but these initial notes should give the County a picture of the general concept:

*"As shown in the screen shot below, the blue line represents approximately 900 linear feet of realignment that could occur. This alignment is approximate, but given the upstream bend and density of downstream vegetation, this seemed to work nicely.*

- o *The feasibility of something like this will need to be verified with LiDar, field survey, or any other elevation data you have available. The valley slope, and current slope of beginning and end tie in points, will determine how sinuous the proposed channel could be. For example, if up and downstream tie in reaches are fairly steep, longer meander bends would likely be short circuited before energy can be dissipated. This would be especially true if valley slope wouldn't support it. However, after walking up that portion of the floodplain, there is a noticeable change in slope.*

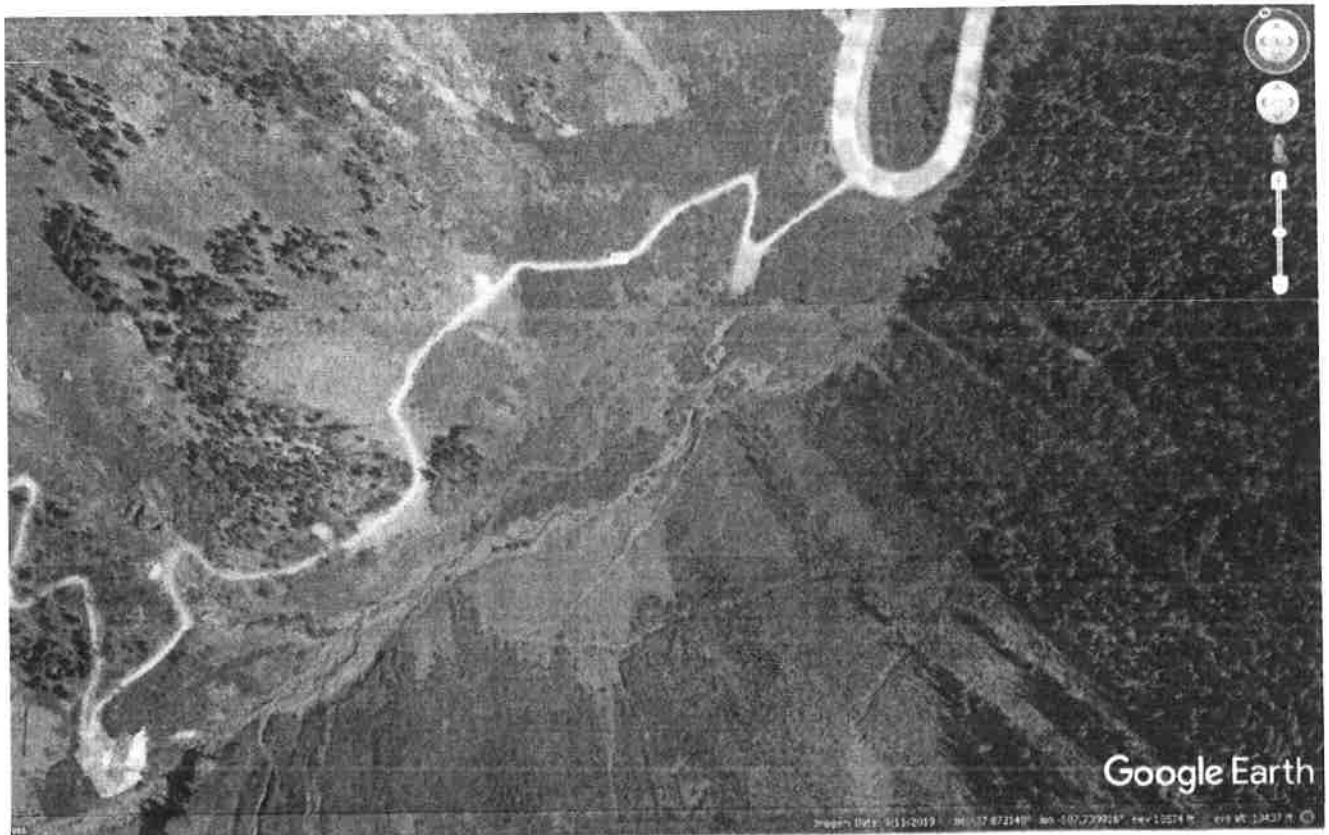


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- *The idea with realigning the stream to the NW would be the current density of willows and other riparian vegetation. The current path through the toe of the scree slope doesn't offer much for habitat, shade, or planform.*
  - *This would also give a buffer from avalanches on that adjacent slope.*
- *An emphasis on vegetation through this reach will be paramount for long term stability. There is a healthy source of willows across the floodplain that could be transplanted and used in future restoration phases.*
- *The portion of Mill Creek upstream of the proposed realignment could use some large boulder structures to help step flow, create plunge pools, and create more step-pool properties. These larger structures might also help attenuate flows to allow for some of the proposed downstream measures, while also providing stability below the mine area.*
- *Consider excavating mine waste along Mill Creek at toe of slope and consolidating them within larger pile footprint. This would reduce long-term O&M and allow for more natural reveg along stream banks.*
- *Benthic studies should be completed along the reach prior to consideration of any fish stocking or introduction of native species. MMI and bug counts will let you know if the food source is there to support fish. Also, any future stream restoration would hopefully encourage that macroinvertebrate community.*
  - *Fish barriers need to be evaluated at the downstream end of the project. This could be natural chemical barrier like the discharging mine [note: the "discharging mine" mentioned is a mine near where Mill Creek gets close to Hwy 550 at the Chattanooga curve and is on USFS land], or installation of a structural barrier when stream restoration takes place."*





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#### **Parcel Consolidation:**

It is the policy of San Juan County to limit each property owner to one dwelling regardless of the acreage owned. This policy has historically been carried out via parcel consolidation. The applicant willingly accepts this restriction and will consolidate all owned parcels to help the County further this important goal. However, the applicant is only a co-owner of the Silver Cloud claim and would ask that this parcel be excluded from parcel consolidation due to the split ownership.

#### **Historic Impact:**

One of the applicant's main goals with this project is to not only preserve but to rebuild some of the rich history of the area. In particular, the applicant plans to reopen the collapsed Silver Crown Mine portal, rebuild some of the structures at the site using historic photos for inspiration, and also educate their guests about the history of the area. At the applicant's request, a review of this project's impact to the nearby historic artifacts was completed prior to this application being filed. The Historic Society was also consulted about building design, material choices, and other details.

#### **Health Impact:**

Mining activity at the Silver Crown left behind a large waste rock pile and an adit that is producing water at a rate of 20-30 gpm that is currently draining through the waste rock into Mill Creek, with some of the waste rock also falling directly into the creek at times. The goal of the applicant is to develop this site in a way that not only prevents further destruction, but in a way that tangibly makes it better, cleaner, more beautiful, and more accessible to folks coming to San Juan County. The first step in this process was to engage with the CDPHE to institute a voluntary cleanup (VCUP) of the mine waste. Although this VCUP is the first stage of site development, it can't be considered without the overall site plan as a whole. For example, opening the mine and completing underground construction there – as well as digging retaining walls for the lodge – is the activity that will generate the clean fill material to cap the mine waste. Installing the water treatment for potable water inside the mine and rerouting the adit water for domestic use is the activity that will prevent the adit water from continuing to drain through the waste rock pile. Rehabilitating Mill Creek for the introduction of native cutthroat trout (if feasible) will also include preventing more waste rock from polluting Mill Creek.

The applicant has taken every opportunity to engage with and seek approval from local, State, and Federal authorities and has received valuable insight and guidance throughout this multi-year planning process.

#### **Road Impact:**

No new connection will be made to any road. The lodge is served by USFS 821/CR 15, and the applicant has submitted a permit to the USFS to maintain, plow, and slightly improve and reroute a portion that road (see attached permit).

#### **Local Employment and Buy Local:**

The construction process will employ multiple individuals from San Juan, Ouray, and San Miguel Counties. Notably, all of the underground work will be completed from miners that were laid off when the Revenue-Virginus Mine closed in 2021. When the lodge is operational, the applicant anticipates having a full-time manager, a housekeeper, and a chef, all housed either the lodge, the garage/employee housing, or in Silverton. Guiding services will be subcontracted to local guide agencies in San Juan, Ouray, and San Miguel Counties. Depending on need, the guides will either come in for the day or be housed at the B&B and/or garage/employee housing for overnight programs. Food will be almost exclusively sourced from farms on the Western Slope, with some of the herbs and salad ingredients being grown on-site in the small solar



**PROJECT NARRATIVE**  
**Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)**  
**Prepared by Applicant**

greenhouse. All other services will be outsourced with a preference given to local service providers in San Juan, Ouray, and San Miguel Counties.

**Information regarding County Regulations for: 5-106 MINE AND MILL TAILINGS AND DUMPS**

The information required for compliance with this section should be fully contained in the VCUP permit submitted to CDPHE. If the County has additional questions, the applicant will be happy to provide any required information.

**List of Experts and Authorities Consulted for this Project:**

The applicant has met on site with the following Authorities/Experts:

Mark Rudolph, Colorado Department of Public Health and Environment  
Kirsten Brown, Colorado Department of Reclamation, Mining, and Safety  
Lew Sovocool, United States Forest Service (Previous Lands & Realty Specialist, San Juan National Forest, Columbine Ranger District)  
Denise Kusnir, United States Forest Service (Previous Lands & Realty Specialist, San Juan National Forest, Columbine Ranger District)  
Jason Willis, Colorado Abandoned Mine Lands Program Manager, Trout Unlimited, Inc.  
Lucas West, Environmental Protection Specialist Minerals Program (DMME), Grand Junction Field Office

The applicant has met with the following Authorities/Experts in person or via video conference:

Fonda Apostolopoulos, P.E., Colorado Department of Public Health and Environment  
Bev Rich, Chairman, San Juan County Historical Society  
Fritz Klinke, San Juan County Historical Society  
Rebecca Smith, Forest Lands Program Manager, San Juan National Forest  
Erin Christensen, United States Forest Service  
Cody Jones, Civil Engineering Technician, United States Forest Service, San Juan National Forest, Supervisors Office  
Tucker Feyder, Regulatory Project Manager, Southern Colorado Branch, U.S. Army Corps of Engineers

The following individuals and agencies will be kept informed of the project and provide peer review of the Mill Creek Stream Enhancement portion of the project:

Ty Churchwell, Bonita Peak Mining District Community Advisory Group  
Mountain Studies Institute  
Colorado Division of Wildlife

The following consultants have provided services to generate this application:

Lisa Adair, P.E., Engineer Mountain  
Jeff Kurtz, Ph. D, GeoSyntec  
Jon Horn, M.A., RPA, Alpine Archaeological Consultants, Inc.  
Brian Briggs, P.E., BK Briggs and Associates  
Mary Presecan, P.E., PMP, LRE Water  
Courtney Shephard, J.D., Brownstein Hyatt Farber Schreck, LLP



## **PROJECT NARRATIVE**

### **Sketch Plan for Proposed Silver Cloud Lodge/PUD & Proposed PUD Phase 1 (VCUP)** **Prepared by Applicant**

Nicole Pieterse, J.D., Russell & Pieterse, LLC  
Kurtis Duncan, P.E., Slopeside Energy  
Ken Gardner, P.E., P.L.S, Gardner Hydro  
Dave Bulson, P.L.S., Bulson Surveying  
Bill Coughlin, Western Stream Works



BOARD OF COUNTY COMMISSIONERS  
San Juan County

P.O. Box 466

Silverton, Colorado 81433

303-387-5671

RELATIONSHIP OF PROPERTY TO COUNTY ROAD AND STATE HIGHWAY SYSTEMS  
SHELBYVILLE LODGE USFS No. 18168 ET AL, MILL CREEK,  
CR 15/USFS RD 821, NEAR CHATANCOGA & HIGHWAY 550

I, the undersigned, applicant engaged in the processing of Application for Improvement Permit No. \_\_\_\_\_, San Juan County, Colorado, do hereby acknowledge the following facts:

1. The real property which is the subject of said application is on this date located approximately ZERO from County Road No. 15, the nearest designated and publicly maintained county road. (CR 15/USFS RD 821)
2. Said County Road No. 15 is on this date maintained on a SEASONAL basis by San Juan County.
3. The real property which is the subject of said application is on this date located approximately 0.560 MILE from Colorado State Highway No. 550, the nearest designated state or federal highway.
4. Said Colorado State Highway No. 550 is on this date maintained on a year-round basis by either San Juan County or the Colorado Division of Highways.
5. A Driveway Permit will be necessary for any private access or egress relating to said real property which intersects any designated Colorado State Highway or Federal Highway.

Signed and dated this 2ND day of MAY 2023, 18

ATTEST:

\_\_\_\_\_  
Applicant

\_\_\_\_\_  
Position:



SAN JUAN COUNTY, COLORADO  
DRIVEWAY AND ROAD ACCESS PERMIT

Improvement  
Permit No. \_\_\_\_\_

Applicant: BONANZA POLY LLC ATTN CLAY BARRETT

P.O. BOX 942

MONTROSE CO 81402

PROJECT SITE:  
SHELBYVILLE  
LODE USFS  
NO. 18166 ETAL  
IN MILL CREEK  
NEAR CHATTANOOGA

Location of Proposed Driveway or Access on County Road No. 15

EXISTING ACCESS ROAD TO SILVER CROWN MINE PORTAL ON  
CR 15/USFS RD. 821 IN MILL CREEK NEAR CHATTANOOGA.

Description of Proposed Driveway or Access, including materials to be used:

PROPOSED CAPPING OF WASTE ROCK PILE AT MINE  
PORTAL AND GRADING OF SAME, AND PROPOSED  
STABILIZATION OF WASTE ROCK PILE EDGE  
USING GABION WALL; PROPOSED TEMPORARY  
GATE AND SIGNAGE DURING MINING REC. WORK.

Comment and Recommendations of County Road Supervisor:

Terms and Conditions of Issuance of Permit (or reason for denial):

Permit Approved \_\_\_\_\_ or Denied \_\_\_\_\_

Date: \_\_\_\_\_

Land Use Administrator: \_\_\_\_\_



5 May 2023

VIA E-MAIL

Mr. Colby Barrett  
Bonanza Boy, LLC  
PO Box 992  
Montrose, Colorado 81402  
cbarrett17@gmail.com

**Subject: Phase I Environmental Site Assessment  
Silver Crown Mine, Highway 550, Silverton, Colorado, 81426**

Dear Mr. Barrett:

In accordance with your authorization of Geosyntec Consultants, Inc.'s (Geosyntec's) approved scope of work on 8 March 2023, Geosyntec has prepared the enclosed Phase I Environmental Site Assessment report for Bonanza Boy, LLC for the above-referenced property. Enclosed is an electronic copy of the report.

Should you have questions regarding this submittal or need additional information, please do not hesitate to contact us. We appreciate the opportunity to be of service to you.

Sincerely,



Martina Litasi, PG(WY)  
Senior Geologist



Dr. Jeff Kurtz, PhD  
Senior Geologist





engineers • scientists • innovators

---

## **PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**Subject Property: Silver Crown Mine, Highway 550  
Silverton, Colorado 81426**

*Prepared for*

**Bonanza Boy, LLC  
PO Box 992  
Montrose, Colorado 81402**

*Prepared by*

**Geosyntec Consultants, Inc.  
1376 Miners Drive  
Lafayette, CO 80026**

**Project DE0553**

**30 May 2023**

---



## EXECUTIVE SUMMARY

This Executive Summary presents the results of the Phase I environmental site assessment (ESA) conducted by Geosyntec Consultants, Inc., and its subsidiaries and affiliates (collectively, “Geosyntec”) for the property located at and near the Silver Crown Mine, Highway 550, Silverton, Colorado (Site or Subject Property). The Subject Property is more specifically identified as a portion of San Juan County Parcel Number 47770280040001. This Phase I ESA was prepared in accordance with the scope of work, terms, and conditions described in Geosyntec’s verbal proposal approved on 8 March 2023. This Phase I ESA was conducted in accordance with ASTM International (ASTM) Standard E2247-16<sup>1</sup> to identify, to the extent feasible, “recognized environmental conditions” (RECs) at the Subject Property as the term REC is defined by E2247-16.

The Subject Property comprises an approximate 13-acre portion of the approximate 111-acre Parent Parcel (non-contiguous) and is accessed from its eastern Site boundary via Forest Road (FR) 821. The Subject Property is presently owned by Bonanza Boy, LLC (Bonanza Boy). At the time of Geosyntec’s Subject Property reconnaissance, the Site was not in use. The Subject Property was purchased in 2020, and according to historical records, the last recorded use of the property was for mining operations in 1969. Bonanza Boy intends to develop the approximate 0.75-acre area near the Silver Crown Mine adit with an underground lodge and surface support facilities.

Based on the information set forth in this Phase I ESA, Geosyntec has concluded the following:

### Recognized Environmental Conditions

- **Historic Mining Operations Including On-Site Waste Rock Pile:** Historic mining and milling activities in the vicinity of the Site began in the late 1880’s. Historical photographs of the site from 1912 and 2021 and aerial photographs between 1945 and 2021 show a large waste rock pile at the Silver Crown Mine, which was reportedly active between approximately 1882 and the early 1920’s. Based on the photographs and interviews with the current Site owner, the Silver Crown adit discharge flows through the waste rock pile, which could potentially transport metals into Mill Creek. Rusty and blue colored stained soils were also observed on-Site. Additionally, waste rock piles, stained soils, possible mine tailings, and mine water discharges due to historic mining activities on upgradient adjoining properties could also impact the Site. Limited information is available on these mining claims and historic mines, and their potential metals impacts to soils, surface water, and groundwater at the Site, on adjacent properties, and to nearby surface water bodies (i.e., Mill Creek). While water quality data collected in a downstream segment of Mill Creek (near Highway 550) and on-Site and nearby surface water sampling locations

<sup>1</sup> ASTM Standard E2247-16 is titled: “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property.”



indicate that the Silver Crown adit drainage and Mill Creek surface water has generally met applicable regulatory water quality standards, on-Site groundwater, waste rock, and soils at the Site have not been fully evaluated. Therefore, this finding is a REC.

#### **Controlled Recognized Environmental Conditions**

- No controlled recognized environmental conditions (CRECs) were identified during this Phase I ESA.

#### **Historical Recognized Environmental Conditions**

- No historical recognized environmental conditions (HRECs) were identified during this Phase I ESA.

#### **De Minimis Conditions**

- No de minimis conditions were identified during this Phase I ESA.

#### **Data Gaps**

Our assessment revealed the following data gaps, as defined by ASTM:

- ASTM E2247-16 states that “*interviews with past owners, operators, and occupants of the property who are likely to have material information regarding the potential for contamination at the property shall be conducted to the extent that they have been identified...*” Geosyntec was not provided with and did not identify owner contact information prior to the current Subject Property owner.
- Topographic maps and aerial imagery was not provided at five year-intervals or less pursuant to ASTM E2247-16. Topographic maps were provided beginning in 1897, but none were provided between 1902 and 1955, when Site development was initially shown. Geosyntec attempted to review additional topographic maps and supplement aerial imagery with additional imagery from Google Earth but was unable to reduce the intervals to five years or less. This is considered a data failure, and a data gap.
- Although Geosyntec assumed direction of groundwater flow at the Site, an exact direction cannot be confirmed from available information.
- Maps of historic underground mine workings showing the extent and conditions of on-Site and adjoining topographical and hydraulically upgradient mines were not provided, available, or reasonably ascertainable.



- During Geosyntec's reconnaissance, the majority of the Site was covered by snow, which limited visibility of ground conditions and parts of Mill Creek.

Collectively, these data gaps are not considered to be significant to the Findings or the identification of RECs at the Subject Property.



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Appendix C	User-Provided Documents
Appendix D	Regulatory or Agency Files
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## 1. INTRODUCTION

Geosyntec Consultants, Inc., and its subsidiaries and affiliates (collectively, “Geosyntec”) were retained by Bonanza Boy, LLC (Bonanza Boy) to conduct a Phase I environmental site assessment (ESA) at the Silver Crown Mine, Highway 550, Silverton, Colorado (Site or Subject Property). The Subject Property is an approximate 13-acre portion of an approximate 111-acre non-contiguous San Juan County parcel (Parcel Number 47770280040001). The Site location is shown on **Figure 1** (Site Location Map). A recent Site layout is depicted on **Figure 2** (Site Layout Map) and Site vicinity properties are depicted on **Figure 3** (Site Vicinity Map).

### 1.1 Objective

This Phase I ESA was conducted in general accordance with the scope and limitations of certain guidance contained within the ASTM International (ASTM) Standard Practice E2247-16. The primary purpose of the Phase I ESA was to identify, to the extent feasible, if one or more “recognized environmental conditions<sup>2</sup>” (RECs) exist at the Subject Property, as the “REC” terminology is defined by ASTM E2247-16. Deviations or exceptions to the guidance contained in the E2247-16 standards of practice are described in Section 1.4.

Geosyntec’s effort is to provide the User with a Phase I ESA that includes a search for the existence of potential or known surface or subsurface environmental impacts at the Subject Property. For the purposes of this Phase I ESA report, Bonanza Boy is the “User,” defined as “*the party seeking to use this practice [Practice E2247] to complete an environmental site assessment of the property...*” in partial fulfillment of the requirements of the All Appropriate Inquiry Rule under 40 CFR 312.

### 1.2 Scope of Services

The Phase I ESA scope of work included the following:

- Review of pertinent information/documents
- Review of environmental databases regarding the Subject Property and sites in the vicinity of the Subject Property pursuant to the E2247-16 Practice

---

<sup>2</sup> As defined by ASTM E2247-16, a Recognized Environmental Condition is: “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” *De minimis* conditions are not recognized environmental conditions.” The term *release* includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.



- Review of historical land usage via historical aerial photographs, fire insurance maps, city directories, property tax files, and topographic maps, as available
- Visit to the Subject Property for a visual reconnaissance of the major interior and exterior site features and use of adjoining properties
- Interviews with current and former owner/occupants knowledgeable with site operations
- Preparation of a Phase I ESA report

In accordance with Geosyntec's scope of work for this project, "non-scope considerations", as defined in ASTM E2247-16, were not evaluated as part of this Phase I ESA, unless as noted in Section 8.

Geosyntec's authorization and conduct to complete the scope of work are as follows:

**Table 1. Scope of Services Details**

<b>Scope Item</b>	<b>Detailed Information</b>
<b>Site Name or Reference</b>	Silver Crown Mine
<b>Site Address</b>	Above the Chattanooga Curve, Highway 550
<b>City, State, and Zip Code</b>	Silverton, Colorado 81426
<b>Parcel ID</b>	San Juan County 47770280040001
<b>Proposal Date</b>	8 March 2023
<b>Authorization Date</b>	8 March 2023
<b>Database Report Date</b>	9 to 13 March 2023
<b>Site Visit Date</b>	2 May 2023
<b>Current Owner/Occupant Interview Date</b>	3 April 2023 (via email)
<b>Previous Owner/Occupant Interview Date</b>	Interviews with prior owners and occupants were not conducted as part of this assessment (refer to Section 6.2)
<b>Local Agencies Interview Date(s)</b>	Various agencies were contacted as documented in Section 4.3.
<b>Report Date</b>	30 May 2023
<b>Viability Date</b>	30 November 2023
<b>Geosyntec Site Personnel</b>	Ms. Lisa Burgess
<b>Facility Personnel and Role</b>	Brian Briggs, Consultant/contractor
<b>Report Preparer(s)</b>	Ms. Olivia Bojan and Ms. Lisa Burgess



Scope Item	Detailed Information
Report Reviewer(s)	Ms. Martina Litasi and Dr. Jeffrey Kurtz
Environmental Professional <sup>1</sup>	Ms. Martina Litasi

Note 1. The Environmental Professional meets the requirements as stated in E2247-16.

The professional qualifications of the senior reviewers, including the signatory Environmental Professional are presented in Section 11.

### 1.3 Significant Assumptions

Geosyntec took no significant assumptions into account as part of this project.

### 1.4 Limitations, Deviations, and Exceptions

This Phase I ESA was conducted according to the agreed upon scope of work consistent with the ASTM Practice E2247-16, except as follows:

- ASTM E2247-16 states that *“interviews with past owners, operators, and occupants of the property who are likely to have material information regarding the potential for contamination at the property shall be conducted to the extent that they have been identified...”* Geosyntec was not provided with and did not identify owner contact information prior to the current Subject Property owner.
- Topographic maps and aerial imagery was not provided at five year-intervals or less pursuant to ASTM E2247-16. Topographic maps were provided beginning in 1897, but none were provided between 1902 and 1955, when Site development was initially shown. Geosyntec attempted to review additional topographic maps and supplement aerial imagery with additional imagery from Google Earth but was unable to reduce the intervals to five years or less. This is considered a data failure, and a data gap.
- Although Geosyntec projected the direction of groundwater flow at the Site, an exact direction cannot be confirmed from available information.
- Maps of historic underground mine workings showing the extent and conditions of on-Site and adjacent upgradient mines were not provided, available, or reasonably ascertainable.
- During Geosyntec's reconnaissance, the majority of the Site was covered by snow, which limited visibility of ground conditions and parts of Mill Creek.

This Phase I ESA did not include sampling rock, soil, groundwater, surface water, soil vapor, air, or on-Site substances or materials. However, Geosyntec reviewed historic waste rock leachate, adit drainage, and Mill Creek surface water sample data collected on-Site as well as upstream and



downstream from the Site (see Section 4.4). The findings and conclusions presented in this Phase I ESA are the result of professional interpretation of the information collected at the time of this study. Specified information contained in this report has been obtained from publicly available sources and other secondary sources of information. Although care has been taken in compiling this information, Geosyntec has not independently validated this information and provides no warranty as to its accuracy or completeness. The Phase I ESA does not necessarily include an exhaustive search of all available records nor does it include detailed assessment of all Phase I ESA findings. Therefore, Geosyntec cannot “certify” or guarantee that any property is free of environmental impairment; no warranties regarding the environmental quality of the property are expressed or implied.

### **1.5 Special Terms and Conditions**

No special contractual terms or conditions were taken into account as part of this project.

### **1.6 User Reliance**

This Phase I ESA report has been prepared solely for the benefit of Bonanza Boy (“User”). Geosyntec has issued the Phase I ESA report to Bonanza Boy and grants Bonanza Boy the right to rely on the report contents. Except as specifically set forth in Geosyntec’s proposal to Bonanza Boy to perform this work, no third party shall have the right to rely on Geosyntec opinions rendered in connection with the Services without Geosyntec’s written consent which may be conditioned on the third party’s agreement to be bound to acceptable conditions and limitations similar to those agreed to by Bonanza Boy. Please note that Geosyntec’s consent to provide a right-to-rely on the Phase I ESA report is subject to Bonanza Boy’s approval and to agreement to Geosyntec’s terms and conditions associated with Geosyntec’s performance of this specific Phase I ESA.



## 2. SUBJECT PROPERTY DESCRIPTION

The subject property description presented herein is derived from information provided by the User, Bonanza Boy, and information gathered during the research of historical records and the reconnaissance unless referenced otherwise.

### 2.1 Subject Property Location and General Characteristics

The Subject Property is located along Forest Road 821 (west of Highway 550), approximately 10 miles northwest of Silverton, Colorado. The Subject Property is located in a historical mining district and is surrounded by properties with mining claims dated to the late 1800s. The approximate 13-acre Site is a portion of an approximate 111-acre non-contiguous “Parent Parcel” (Table 2). The location of the Subject Property is shown on Figure 1. A recent Site layout is depicted on Figure 2 and a recent vicinity property layout is depicted on Figure 3. Ownership information, where available, is provided in Appendix A.

Table 2. Parcel Information

Parcel No.	Zoning	Owner	Approximate Area (Acres)	Land Use/Description
47770280040001 (Parent Parcel)	Mining	Bonanza Boy, LLC	111	Vacant forest land with mining activities. Mining claims include Giant King, Mountain Chief, Shelbyville, Silver Crown, Valley, Wonderful, Pride, Pueblo, Rebeca, Silver Storm, Sunnyside, Silver Cloud.  Developed mines include Silver Crown and Silver Cloud.
A portion of 47770280040001 (Subject Property)	Mining	Bonanza Boy, LLC	13	Vacant forest land with mining activities including Mountain Chief, Shelbyville, and Valley mining claims. The Silver Crown Mine is located in the center of the Subject Property.

Source: San Juan County Assessor

### 2.2 Current and Former Uses of the Subject Property

The Subject Property is presently owned by Bonanza Boy, LLC. At the time of Geosyntec’s reconnaissance, the Subject Property was not in use. Bonanza Boy is planning to develop the Site with a proposed lodging area. According to Bonanza Boy and historic records (further described in Section 3.10), the Subject Property was historically developed for mining activities, and the last



recorded operations were in 1969 according to Colorado Bureau of Mines Information Reports (Appendix C). No other historical Site uses were reported.

The Site is located in the Red Mountain mining district, which consisted of several mines that produced precious and base metals including gold, silver, copper, lead, and zinc. The boom-and-bust cycle began around 1882, and by 1922, the adjoining Silver Cloud Mine, reportedly one of the last remaining mines in the area, was abandoned. A photograph of the Silver Crown Mine dated 1912 (included in Appendix C) shows active mining operations, and areas of disturbed ground are observed in aerial photographs from 1945 to 2021. According to a 1974 report (Bennett, 1974), mining began around 1880 and by 1909, three tunnels had been developed, with the main tunnel extending to 3,500 feet. Due to the depressed metal market, no additional mining or surface work reportedly occurred after 1909. The main adit had collapsed by 1949. Based on aerial photographs, the Subject Property use appears to have remained largely unchanged since 1988.

### 2.3 Description of Structures, Roads, Other Improvements on the Subject Property

The Subject Property consists of vacant, forested and rocky sloped land. A dirt and gravel road (Forest Road 821) extends from Highway 550 to the proposed lodge area on the north side of Mill Creek. The road transitions to an unmaintained primitive road extending north from the proposed lodge area and provides access to the adjoining Silver Cloud Mine. Site drawings (included in Appendix C) also depict several remains of mining roads labeled as “currently impassable”. Current Site features observed during Geosyntec’s reconnaissance are presented on Figure 2.

### 2.4 Current and Prior Use of Adjoining and Surrounding Properties

At the time of completion of this Phase I ESA and in recent years, the vicinity surrounding the Subject Property consisted of vacant forested land and registered mining claims that are reportedly not actively producing. The land use immediately surrounding the Subject Property is summarized in Table 3 below.

**Table 3. Adjoining Property and Surrounding Land Use**

<b>Direction</b>	<b>Current Geosyntec-Observed Use<sup>1</sup></b>	<b>Identified Prior Use</b>	<b>Considered to be More Likely to Result in Surface/Subsurface Quality Impacts to the Subject Property (Yes/No)</b>
North	Vacant forested land	Mining claims (Milwaukee, Little Maud, Denver, Happy Jim, Golden Eagle, Silver Wedge, Silver King).	Yes



Direction	Current Geosyntec-Observed Use <sup>1</sup>	Identified Prior Use	Considered to be More Likely to Result in Surface/Subsurface Quality Impacts to the Subject Property (Yes/No)
		Unnamed Gold Mine and Silver Cloud Mine	
South	Mill Creek, followed by vacant forested land	Mill Creek	No
East	Highway 550, followed by vacant forested land	Highway, followed by the Chattanooga settlement, Chattanooga Curve Mine, and Ferricrete Mine	No
West	Vacant forested land	Mining claims (Upper Mill Creek Mine, Silver Cloud, Giant King, Pride, Wonderful), Upper Mill Creek Mine and Silver Cloud Mine	Yes

Note 1: Observations from Geosyntec's 2 May 2023 reconnaissance.

The adjoining properties were briefly inspected during the reconnaissance (from vantage point of the Subject Property or public rights-of-way) to observe the associated land use practices (e.g., condition, housekeeping, evidence of chemical usage/spills). Observations made for the adjoining sites are described later in this report (Section 5).

## 2.5 Physical Setting

A summary of the physical setting of the Subject Property and vicinity including topography, geology/hydrogeology, and water resources is presented in **Table 4**. Environmental Risk Information Services (ERIS) provided Geosyntec with a Physical Setting Report (PSR) for the area including the Subject Property which serves as a source of certain information. Other sources of information in **Table 4** are noted accordingly.



Table 4. Physical Setting

Topic	Information	Source
<b>Topography</b>		
USGS 7.5-Minute and 15-Minute Quadrangle Maps	Ophir, CO; Ironton, CO; Silverton, CO; Telluride, CO	U.S. Geological Survey (USGS)
Elevation	Elevation ranges from approximately 11,800 to 10,600 feet above mean sea level (ft AMSL).	ERIS PSR
General Topographic Gradient	The Site is located in the Mill Creek drainage, and there is a topographic slope to the southeast following Mill Creek as it flows into Mineral Creek.	USGS Quadrangle Map and Site Reconnaissance
<b>Soils &amp; Geology</b>		
Subject Property Soils	<p>The majority of the soils at the property are classified as rock outcrops from the Snowden and Cryorthents-Rubble land complexes (30-75 percent slopes), typical of mountain slopes and alluvial fans. The parent material consists of colluvium, slope alluvium, and residuum derived from rhyolite and volcanic tuff. These soils are well drained soils with high runoff potential.</p> <p>As shown on <b>Figure 2</b>, portions of the Site and Parent Property include historic mining waste rock, waterways, rubble land, and hard rock bedrock outcrops.</p>	ERIS PSR, Site Reconnaissance
Area Geology	<p>The Silver Crown deposit is considered a “lode fissure” reported to be over 7,000 feet long and at least 2,000 feet deep. Minerals in the vein are predominantly copper, galena, chalcopyrite, and iron.</p> <p>The Site and vicinity are underlain by Cenozoic and Tertiary age pre-ash-flow andesitic lavas, breccias, tuffs, and conglomerates, and Middle Tertiary intrusive rocks.</p> <p>Regional geology consists of the Silverton and San Juan Calderas including Tertiary age volcanic-intrusive complex containing gold, silver, and other mineral deposits.</p>	ERIS PSR; Bennett, 1974
<b>Water Resources</b>		



**Table 4. Physical Setting**

<b>Topic</b>	<b>Information</b>	<b>Source</b>
<b>Nearest Water Body</b>	Mill Creek adjoins the southern property boundary and is fed by Columbine Lake, located approximately 1.3 miles west of the Site. An unnamed tributary is present on-Site and intersects with Mill Creek. Mill Creek flows east into Mineral Creek, approximately one mile from the Site.	US Fish & Wildlife Wetland Map, ERIS PSR and USGS Quadrangle Map
<b>Estimated Groundwater Flow Direction<sup>3</sup></b>	No on-Site groundwater information was identified. Geosyntec projects the shallow groundwater flow in proximity to the Site to be to the southeast towards Mineral Creek, generally following the slope of the ground surface. However, local groundwater flow direction may vary depending on area groundwater pumping, surface water bodies, land use and development, localized topography, and other macro and micro features.	ERIS PSR
<b>Depth of Groundwater</b>	Based on a 1988 well construction log for a domestic well installed on a property approximately one mile east of the Site (elevation of approximately 10,300 ft AMSL), groundwater was observed approximately 10 feet below ground surface (ft bgs). Two monitoring wells were also installed approximately one mile southeast of the Site and reported depths to groundwater of 24 and 75 ft bgs.  Based on the proximity to Mill Creek and Site geology, the depth to water may be shallow near the creek and likely extends to several hundred feet deep in areas farther from the creek.	ERIS Topographic Maps and PSR, Colorado DWR
<b>Wetlands (on-Site)</b>	A riverine habitat is located along the southern property boundary, and in the eastern portion of the Subject Property near Mill Creek and the unnamed tributary. No part of the Subject Property is classified as wetlands by the US Fish and Wildlife Service. The Site is not included in a FEMA flood hazard zone.	NWI, US Fish & Wildlife Wetland Map, ERIS PSR
<b>Wells (on-Site)</b>	A search of local/regional water agency records by ERIS reported no wells on the Subject Property. No wells were observed on-Site during reconnaissance.	ERIS PSR & Site Reconnaissance (see Section 5)

<sup>3</sup> Local groundwater flow direction may vary depending on area groundwater pumping, surface water bodies, land use and development, localized topography, and other macro and micro features.



Table 4. Physical Setting

Topic	Information	Source
Nearby <sup>4</sup> Groundwater Supply and Monitoring Wells	<p>A search of local/regional water agency records by ERIS reported:</p> <ul style="list-style-type: none"> <li>Three records for wells constructed within 0.5 to 1 mile from the Subject Property were identified in the Colorado Division of Water Resources (DWR) Water Wells Permit Database. Two wells were reported as monitoring wells completed in September 2016 and plugged and abandoned in September 2019. One domestic water well was installed in 1988.</li> <li>Two records for well permits or permit applications were identified in the DWR Water Wells Permit Database for proposed locations between 0.5 and 1 mile from the Subject Property. No construction records associated with these permits were found.</li> </ul>	ERIS PSR

<sup>4</sup> ERIS searched federal and state water well databases within one mile of the Subject Property boundary.



### **3. USER-PROVIDED INFORMATION**

This section describes the information provided to Geosyntec by Bonanza Boy (the User of this Phase I ESA). This includes information that was provided in the User Questionnaire (**Appendix C**).

#### **3.1 Title Records**

Geosyntec was provided with an Improvement Location Certificate for the Subject Property, which is included in **Appendix C**.

#### **3.2 Environmental Liens or Activity and Use Limitations**

According to the User, a Planned Unit Development application or a Specific Use Permit are required for the proposed development. No other information regarding environmental liens or activity and land use limitations associated with the Subject Property were provided. The User did not supply Geosyntec with A search for such liens or activity and use limitations was not included as part of Geosyntec's scope of work.

#### **3.3 Specialized Knowledge**

The User indicated that it does not have specialized knowledge of environmental conditions at the Subject Property except for the waste rock pile, which was generated during historical mining operations.

#### **3.4 Knowledge of Hazardous Substances or Petroleum Products**

The User is not aware of any hazardous substances or petroleum products in, on, or under the Subject Property.

#### **3.5 Commonly Known or Reasonably Ascertainable Information**

The User is not aware of any commonly known or reasonably ascertainable information within the local community about the Subject Property that is material to RECs in connection with the Subject Property.



### 3.6 Valuation Reduction for Environmental Issues

The User has not informed Geosyntec regarding whether or not the valuation of the Subject Property has been reduced or otherwise impacted by environmental issues (as defined in AAI<sup>5</sup>) at the Subject Property.

### 3.7 Degree of Obviousness

The User has considered the degree of obviousness of the presence or likely presence of releases or threatened releases at the Subject Property and the ability to detect releases or threatened releases by appropriate investigation. Observed conditions indicating the presence or likely presence of releases or threatened releases at the Subject Property include leaching of metals from the waste rock pile adjacent to Mill Creek.

### 3.8 Litigation, Administrative Proceedings, and Notices

The User is not aware of (i) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Subject Property; (ii) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the Subject Property; or (iii) any notices from any governmental entity regarding any possible violations of environmental laws or possible liability relating to hazardous substances or petroleum products.

### 3.9 Reason for Performing This Phase I ESA

Geosyntec understands that Bonanza Boy engaged Geosyntec to perform this Phase I ESA for the Subject Property to identify RECs (as defined in ASTM E2247-16) in order to complete a Voluntary Cleanup Plan application for the Subject Property.

### 3.10 Pertinent Documents

The User provided Geosyntec with the documents summarized below, which are included in **Appendix C**. These documents include the Site and the Parent Property and may include vicinity properties.

*Improvement Location Certificate, Mill Creek Mineral Surveys Vicinity Map prepared by Bulson Surveying, dated 3 September 2020*

The drawing of the Site vicinity depicts seven mining claims in the Mill Creek drainage extending west from the Site, following Mill Creek. The proposed development area is located within the Shelbyville and Mountain Chief claims, while the Valley claim is adjacent to the southeast.

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<sup>5</sup> The "All Appropriate Inquiry Rule", enacted under the 2002 Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act: 40 CFR 312



Western claims shown in the drawing, listed from east to west, include Wonderful, Pride, Giant King, and Silver Crown. Waste rock piles are shown on the Giant King, Shelbyville, and Mountain Chief claims, and three portals are shown: one to the west of the Mountain Chief Lode, one west of the waste rock pile on the Shelbyville claim, and one to the west of the Valley Lode. The waste rock pile on the Shelbyville claim will be capped as a part of the remedial action plan described in Section 4.4.2 of the VCUP Application (Geosyntec, 2023). A dirt road provides access to the on-Site proposed lodge area on the Shelbyville claim from Highway 550. Other features from historical activities include rock works and stone foundations near the proposed development area.

*Silver Crown Site Layout prepared by Brian Briggs, dated 26 October 2022*

This drawing illustrates plans for the proposed lodge on-Site, including the layout of the proposed underground rooms and existing portal, and an estimate of the historic tunnel alignment. Along Forest Road 821 to the east of the lodge area, plans for a trout pond and parking area are depicted. The turbine house shown on the plan is no longer part of the proposed design.

*Silver Crown Site Layout, prepared by Brian Briggs, dated 30 December 2022*

This drawing shows the updated design for the proposed lodge on-Site, including a diversion ditch on the north side of the development area, a collection ditch leading to a sediment pond, which drains into Mill Creek, and a wastewater treatment plant on the west side of the development area, which will discharge to a leach field on the east side of Forest Road 821. The drawing also shows plans for a hydro plant and trout pond approximately 0.15 miles east of the lodge area.

*Silver Cloud General Location Map, prepared by Brian Briggs, dated 8 December 2022*

The map consists of an aerial image showing the Site location in relation to the town of Telluride, Colorado.

*Silver Cloud Project Stormwater Management Plan, prepared by B.K. Briggs & Associates, dated January 2023*

The Stormwater Management Plan (SWMP) was developed to reduce the potential impact of sediment-laden stormwater to Mill Creek. Key elements of the SWMP include: collection systems established for disturbed areas that will direct runoff to sediment ponds to prevent sediment discharge, on-site sediment controls consisting of entrenched and anchored straw erosion bales that will be routinely inspected and replaced as necessary, and upstream diversion ditches that will direct off-site runoff from above away from the construction site. Discharges of on-site stormwater to Mill Creek will be regulated through the Colorado Water Quality Control Division (WQCD) through a general discharge permit. Additionally, the sediment pond will only be present for the duration of construction, which is expected to be approximately five years. After construction completion, the drainage areas leading to the pond will be fully reclaimed. Currently, these areas are now almost devoid of vegetation and this plan is expected to improve the long-term reclamation



of the site and lessen the overall sediment load to Mill Creek. The SWMP also stated that unmineralized material excavated during lodge construction will be reused on-site.

*Excerpt from "Report on the Economic Geology of the Silverton Quadrangle, Colorado" by Frederick Leslie Ransome, dated 1901*

Assay results from 15 September 1985 indicate samples were tested for gold, silver, copper, lead, zinc, with the highest percentages reported for lead (maximum of 27.9%) and zinc (maximum of 11.1%). This file also contains an undated lease agreement describing the leasing of unspecified mining claims owned by Silver Crown, Inc. to Phelps Dodge Corporation.

*Colorado Bureau of Mines Information Reports, dated 1956 to 1969*

The Parent Property was owned by members of the Gilliland family and operated as a development or exploration mine for lead, zinc, copper, gold, and/or silver. The 1958 report also listed rare earth metals. Site geology is described as andesite breccia, latite, and lime. The mine employed between three and five men and generally operated approximately 100 days per year. In 1956, work began on the upper portal and a 112-foot tunnel had been completed on the lower level. By 1969, the mine had two portals and an approximately 400-foot tunnel; the mine reportedly operated for approximately 60 days in 1969. Surface work on the outcrop was only reported in 1959. The only surface buildings described were cabins in 1959 and tool sheds in 1963 and 1967; these structures were likely located on the Silver Cloud Mine property (northwest of the area proposed for development of the lodge).

*Slides prepared for the 2009 Annual Mining History Association (MHA) Conference by Karmen King*

The slides outline mining history in the region. The Silver Rush in the 1880's motivated the construction of a road connecting Ouray to Silverton, which would eventually become Highway 550. At the Chattanooga Junction, the closest settlement to the Site, freight enroute to Ouray was reloaded from wagons to pack trains on the way. Silverton Railroad construction began in 1887, and mine production in the Red Mountain district increased when the railroad reached Red Mountain Town in 1888. The Silver Panic of 1893 halted construction before the section between Albany and Ouray was completed.

According to the slides, operations at the Silver Crown Mine began around 1878. Six open adits were located in the creek. The mine consisted of two levels of "occupancy and surface workings" including earthen footers and a canvas camp. Remnants of a bridge or flume were later observed.

*Notes and historic newspaper articles collected by Karmen King*

Notes provided to the User by the previous owner described the early history of the mine and included several newspaper articles listing the former property owners, describing dangerous



avalanche conditions, and predicting large profits from the high-grade vein and lead ore in the Silver Crown group of mines. The group was reportedly owned by The Precious Metals Corporation in 1906, and surface improvements reportedly included an office, compressor house, shops, and a large boarding house. A 1909 article described bids for 2,000 feet of tunnel and drifting work, which was said to be the largest footage in a single contract in the country.

Newspaper articles from the early 1900s included an announcement that the Silver Crown Mining Company patents on the Giant King, Wonderful, Silver Crown, Valley, Mountain Chief, and Pride were filed for record and claims that the Silver Crown mine group would become one of the largest lead producers in the Red Mountain District.

### *History of Chattanooga*

In 1880, a small group of cabins for Silver Crown Mining Company miners working placer claims up Mill Creek was established near the confluence of Mill Creek and Mineral Creek. The camp was mostly abandoned by 1882 as work at the Silver Crown Mine slowed. However, the settlement continued to serve as the logical place to transfer wagon freight to pack animals to carry to the mines. In 1883, Chattanooga was created adjacent to the original settlement and the two camps eventually merged, and the town had several businesses by the end of 1883. The Silver Ledge Mill was constructed at the northern edge of Chattanooga, near the junction of Mill and Mineral Creek. Chattanooga's population reached a high of 300 in 1884. By 1888, Chattanooga had regular train service, servicing the Hoosier Boy, Silver Crown, and Silver Ledge mines. Major snow slides in 1888 and 1892 damaged several buildings, and the town's population and businesses declined significantly in the following years. The original Silver Ledge Mill had been abandoned by 1900, and a second mill was constructed in Chattanooga: the new mill included a zinc plant and electrical separators. After a fire at the mill in 1917, the Silver Ledge Mine was idle between 1917 and 1938 but resumed producing ore from 1940 to the mid-1950s.

### *History of the Silver Cloud Mine*

According to the article, the Silver Cloud Mine was established in 1876. An 1884 survey reported a 25-foot tunnel and a 14-foot tunnel, an open cut and discovery cut, and no buildings present on the property. The mine had many different owners between the late 1920s and 1950, when it was acquired by T.G. Gilliland, who carried out part-time exploration (according to Bureau of Mines reports, described above).

### *History of the Mountain Chief Mine*

In 1880, exposed veins of gray copper, galena, pyrites, and iron were discovered at the Mountain Chief Mine. A November 1883 survey of the lode and mill site reported a discovery cut, two open cuts, and plans for a 92-foot long tunnel. Mountain Chief was patented in 1884, and the article described ore varying from 20 to 8,000 ounces in silver per ton and "large bodies of low [milling]



grade ore.” By 1906, an office, compressor house, shops, and boarding house had been constructed presumably to the east of the Site (described as being near the railroad track and reportedly safe from snowslide danger). By 1907, electric power had been installed and the company was working a crosscut tunnel to the Wonderful vein. An ore chute at the Silver Crown properties reportedly contained 16.8% to 44.8% lead with “good gold, silver and copper values.” By 1909, a 3,000-foot tunnel had been completed, although the location or specific mine is not specified. In 1916, surface improvements included a boarding house, blacksmith shop, and 700 feet of rail tram.



## 4. RECORDS REVIEW

Geosyntec reviewed the following records, to the extent we found these to be available and reasonably ascertainable:

- Identified federal, state, and local environmental databases
- Identified historical aerial photographs
- Identified historical topographic maps
- Identified fire insurance maps
- Identified city directories
- Local authority permits and records
- Available property tax information

In addition to the standard sources above, Geosyntec reviewed available Subject Property-related documents provided by the User (Section 3.10) and reviewed environmental files obtained from regulatory agencies.

### 4.1 Standard Environmental Records Sources

#### 4.1.1 Database Search Approach

Geosyntec contracted ERIS to provide portions of the records reviewed as described below. ERIS conducted the environmental database search in an attempt to ascertain whether the Subject Property or neighboring properties were suspected of having environmental conditions that could have impacted the surface or subsurface at the Subject Property. ERIS reported specific records and search distances (from the approximate Site boundaries; shown larger than actual) for the environmental databases to be consistent with ASTM Practice E2247-16 and are discussed in the ERIS Database Report (ERIS, 2022f) presented in **Appendix B**. Database descriptions are included in the ERIS report.

The following sections discuss listings that are projected to be located upgradient of the Subject Property and have reported (or suspected) contamination or that have the potential for significant contamination that could have impacted the Subject Property (such as National Priorities List [NPL] or Mineral Resource Data System [MRDS] sites). The locations of these listed sites are shown on the Overview Map and Detail Map in the ERIS Database Report (**Appendix B**).



#### 4.1.2 Database Search Results – Subject Property

ERIS identified four database listings for the Subject Property. Within these databases, the Subject Property was listed under four different names. These databases and associated listings are as follows:

- **MRDS:** The Subject Property, under the names Silver Crown Mine, Silver Cloud Mine, and an unnamed mine, was listed in the MRDS database. These listings indicate these mines were past producers of gold, silver, copper, lead, and/or zinc. These listings do not indicate a release to the environment; however, mining activities have occurred at several of these locations as evidenced by portals, pits, and waste rock piles observed on aerial photographs and during Site reconnaissance, and there is a potential for impacts to the Subject Site from these activities.
- **SUPERFUND NRD:** The Site is located within the Bonita Peak Mining District (BPMD) study area. The BPMD is listed in the Superfund National Priorities List (Superfund) and Natural Resource Damages (NRD) sites database and consists of 48 historic mines or mining-related sources, leading to ongoing releases of metal-impacted water and sediments into Mineral Creek, Cement Creek, and Upper Animas River drainages. The Site is located within this district; however, based on a United States Environmental Protection Agency (USEPA) record review and interview with Dr. Jeffrey Kurtz of Geosyntec (see Section 6.3), none of the BPMD mines or facilities on or near the Site were listed in the Hazard Ranking System (HRS) scoring document for the BPMD Superfund Site, and the Site is not designated as a USEPA mining-related source and is not a subject of current remedial action plans. However, Site surface water was considered a background reference sampling location for USEPA human health and ecological risk assessments, further discussed in Section 4.3.4.

#### 4.1.3 Database Search Results – Vicinity Properties

The search of environmental databases identified 15 site listings for properties within one mile of the Subject Property, for mines listed in the MRDS database. Upper Mill Creek and an unnamed mine located upgradient of the Subject Property (likely the Silver Cloud Mine), and three unnamed mines are located on the adjoining property to the east. These listings indicate these sites were past producers of gold, silver, copper, lead, and/or zinc. These listings do not indicate a release to the environment; however, mining activities have occurred at several of these locations as evidenced by portals, pits, and/or waste rock piles seen on aerial photographs and during Site reconnaissance. Based on our evaluation, these upgradient listings have the potential to impact the Site. Underground mine workings have the potential to extend beneath the surface of the Subject Property and impact groundwater at the Site. Runoff contacting waste rock could impact surface water at the Site.



#### 4.1.4 Unplottable Sites

ERIS identified three “unplottable sites” which were not mapped by ERIS due to the lack of sufficient address information. The listings were SPILLS incidents that occurred at mile markers 51 and 57 on Highway 550; Geosyntec mapped these locations to be over 10 miles south of the Site.

- On 3 October 2005, approximately 100 gallons of diesel was released to soil when the saddle tanks of a tractor trailer were ruptured in a transportation accident. The response involved berming the area, absorbing the diesel, and blocking off a nearby culvert.
- On 12 October 2005, a one-car accident was reported in which a semi-truck landed on its side, releasing approximately 150 gallons of diesel. No water impacts were reported.
- On 22 August 2022, 50 gallons oil were spilled onto the highway shoulder from a vehicle due to unknown causes. No water impacts were reported.

Due to the distance from the Site, these incidents are not considered to have adversely impacted the surface or subsurface quality at the Site.

#### 4.2 Historical Use Information

Geosyntec contracted ERIS to provide standard historical records, including aerial photographs, topographic maps, city directories, and fire insurance maps (ERIS, 2022a-e). The sections below identify and summarize the historical information sources reviewed for the Subject Property and vicinity. A summary of the findings from the review of the historical sources is provided in **Table 5**. Copies of the historical records reports are included in **Appendix B**.

##### 4.2.1 Historic Aerial Photographs

ERIS provided aerial photographs from 1945, 1952, 1963, 1975, 1986, 1998, 2005, 2009, 2011, 2013, 2015, 2017, 2019, and 2021.

##### 4.2.2 Historical Topographic Maps

ERIS supplied portions of USGS topographical maps of the Subject Property and vicinity for 1897, 1901, 1902, 1955, 1972, 2013, 2016, and 2019.

##### 4.2.3 City Directories

Available business directories, including cross reference and telephone directories, were reviewed for Forest Road 821 and Highway 550 for 1998, 2000, 2003, 2008, 2012, 2016, 2020, and 2022.



#### 4.2.4 Fire Insurance Maps

Based on ERIS' search of fire insurance maps, there was no coverage for the Subject Property or adjoining properties.

#### 4.2.5 Property Tax Files

Geosyntec researched publicly available online tax records through San Juan County records. The information retrieved included property boundary information, property owner, and property size. The owner for the parcel of the Subject Property is listed as "Bonanza Boy, LLC c/o Colby Barrett." The retrieved tax map parcel information is provided in **Appendix A**.



Aerial Photographs	Topographic Maps	City Directory (CD)
<p><b>Subject Property:</b> From 1940 to 1952, the Site appeared to be undeveloped with some forested areas and a creek (Mill Creek) flowing west to east. By 1952, a road (Forest Road 821) is observed extending from Highway 550 to the northern boundary of the Site. By 1963, Forest Road 821 extends to the northwest portion of the Site. Areas of disturbed ground surface appear near the southern-most section of road in 1975, and in the northwest corner of the Site in 1998. No significant changes were observed between 1998 and 2021.</p> <p><b>Adjoining and Vicinity:</b></p> <p>Beginning in 1945, Highway 550 is visible to the east. The vicinity consists of steep slopes and drainages; forested land is observed to the northeast and southeast of the Site. By 1963, areas of disturbed ground are observed on the adjoining property to the north and a road appears on the property immediately south of Mill Creek. By 1975, the vicinity resembles current conditions.</p>	<p>The Subject Property ranges in elevation from 10,600 ft AMSL to 11,800 ft AMSL. No definitive changes in elevation over time were noted from the topographic map review.</p> <p><b>Subject Property:</b> The Site appeared vacant from 1897 to 1902. The 1897 map shows a creek (Mill Creek) flowing west to east through the Site. Later maps show two or three tributaries flowing north to south and intersecting with Mill Creek. By 1955, the Silver Crown Mine is identified near the center of the Site. Beginning in 2013, no individual structures are shown on the maps.</p>	<p><b>Subject Property:</b> The Site address was not listed in the database search.</p> <p><b>Adjoining and Vicinity:</b> No listings were identified along Forest Road 821. Businesses listed along Highway 550 in 2000, 2003, 2016, 2020, and 2022 were located over 3 miles from the Site and include St. Paul Ski Lodge, Bent Images Whistle Stop (printing and engraving), Mineral Creek Auto Service, and Molas Lake Campground.</p>
<p><b>Adjoining and Vicinity:</b></p> <p>In 1897, the Silverton railroad is shown approximately 0.25 miles east of the Site. Mill Creek borders the Site to the south, and Columbine Lake is located to the west. No structures are shown within 0.5 miles of the Site, but the Chattanooga settlement/mining district is shown approximately 0.75 miles east of the Site, along the railroad. In the 1901 map, additional tributaries are shown to the southwest and northeast flowing into Mill Creek. On the 1955 topographic map, widespread mining activity (prospects and mine tunnels/adits) is depicted in the vicinity, including west (upgradient) of the Site along Mill Creek and on the adjoining property to the north. Mining activity was documented earlier than 1955, but earlier maps do not appear to show these structures. The land to the southeast of the Site is depicted as forested. Beginning in 2013, no individual structures or features are shown on the maps.</p>		



### 4.3 Local, County, State, and Federal Files

Geosyntec contacted local, county, and state agencies via telephone and electronic mail to inquire as to whether they possessed relevant records regarding the Subject Property. Relevant information is summarized below. Excerpts of relevant regulatory agency documents are presented in **Appendix D**.

#### 4.3.1 Local Fire Department Records

Geosyntec contacted the Town of Silverton Fire Department via email on 13 March 2023 to request records of environmental incidents at the Subject Site. As of the date of this report a response has not been received.

#### 4.3.2 City or County Records

Geosyntec searched the San Juan Basin Public Health<sup>6</sup> website and the Town of Silverton Online Documents<sup>7</sup> website. No records of septic systems or other relevant documents pertaining to the Subject Property or vicinity were found.

#### 4.3.3 State Records

Geosyntec searched the Colorado Department of Public Health and Environment (CDPHE)<sup>8</sup> online database for information relevant to the environmental condition of the Subject Property and vicinity properties. No records for the Subject Property or vicinity properties were found. The Colorado Division of Reclamation, Mining and Safety (DRMS) permit database<sup>9</sup> was also searched, and permits were not found for the Subject Property or vicinity properties. None of the mines included in the DRMS list of mines with potential impacts to streams (August 2015) are located on or upstream of the Subject Property.

The Silver Creek Mine was not The Colorado Abandoned Mine Land (AML) Water Quality Information online map<sup>10</sup> did not identify any mines upgradient or in the vicinity of the Site.

#### 4.3.4 Federal Records

Geosyntec searched the USEPA ECHO<sup>11</sup> and Envirofacts<sup>12</sup> databases. No records for the Subject Property or vicinity properties were found.

<sup>6</sup> <https://sjbpublichealth.org/187/Septic-Systems>

<sup>7</sup> <https://townofsilverton.colorado.gov/online-documents>

<sup>8</sup> <https://cdphe.colorado.gov/environmentalrecords>

<sup>9</sup> <https://maps.dnrgis.state.co.us/drms/ln dex.html?viewer=drms>

<sup>10</sup> <https://erams.com/map/>

<sup>11</sup> [Enforcement and Compliance History Online | US EPA](#)

<sup>12</sup> <https://enviro.epa.gov/>



The Bureau of Land Management (BLM) National Data online mapping<sup>13</sup> identified 10 closed mining claims related to Burro #5 on adjoining property upgradient of the Site. Downgradient of the Site, an additional 46 closed mining claims were listed. The Silver Crown Mine was not identified in this database.

#### 4.4 Other Documents Reviewed

Geosyntec reviewed the following documents obtained from the United States Geological Survey (USGS) and USEPA related to the Site:

*Mine Inventory and Compilation of Mine-Adit Chemistry Data. Chapters E5 and E6 of Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed, San Juan County, Colorado. USGS Professional Paper 1651. 2007.*

This paper summarizes an inventory of past-producing mines, mills, and smelters in the Animas River watershed study area. Mine locations have been verified by project personnel or by local residents of Silverton and the surrounding area who have a working knowledge of the mining industry in the region. Six historic mines located at or adjoining the Site were identified in the Red Mountain district (Figures 2 and 5 and Tables 1-2 in Chapter 5 of the paper): Upper Mill Creek Mine, Silver Cloud Mine, Silver Crown Mine, Silver King Mine, Silver Ledge Mill, and Chattanooga Curve Mine.

The Silver Ledge Mill was identified in the table of mills, large mill-tailings deposits, and smelter sites (Table 3 in Chapter 5). The Silver Ledge Mill is located at an elevation of approximately 10,500 ft AMSL between Highway 550 and Mineral Creek, downgradient of and approximately 0.6 miles east of the Site.

Table 4 in Chapter 5 of the paper lists “physical parameters that may contribute to the environmental effect of historical mines”: the Silver Crown Mine was the only mine out of the six identified in the Red Mountain district in Tables 1-2 of the paper that was also included in Table 4. According to the table, the mine did not have an adit drainage that flowed over a mine waste dump and no “kill zone” indicated by dead vegetation surrounding the outflow. Tables 5 and 6 in Chapter 5 list adit chemistry data for the Silver Crown Mine, indicating near neutral pH and low metals content for the discharge.

Table 2 in Chapter 6 presents a ranking of mine-waste sites based on size and results from passive leach tests conducted by Fey, Nash, and others (2000). Results for the Silver Crown Mine show high acid generation but relatively low metal release. Mine-adit discharge had a pH value of 5.7, “seemingly buffered by the propylitic rocks”. Seepage through the dump had a similar pH, suggesting little or no reaction with the dump waste.

<sup>13</sup> <https://blm-egis.maps.arcgis.com/apps/webappviewer/index.html?id=6f0d84c7931440a8a80bfe20eddd7550>



*Aquatic Baseline Ecological Risk Assessment, Bonita Peak Mining District Superfund Site, San Juan County, Colorado. USEPA. February 2019.*

In this Aquatic Baseline Ecological Risk Assessment (BERA) prepared for the BPMD, a section of Mill Creek slightly downstream of the Site was used as a background reference location and was considered upgradient of any anthropogenic features that might be sources of contamination. Surface water samples were collected from Mill Creek at the intersection of Highway 550 and Forest Road 821 and near the confluence of Mill and Mineral Creek (as shown on BERA Figure 1-3). Results presented in the BERA for the upstream Mill Creek location indicate low pH and slightly elevated metals concentrations (aluminum, beryllium, lead, and silver), suggesting natural sources of these metals in the watershed. According to BERA Tables 7.1, 7.3, and 10-1, surface water concentrations of aluminum, lead, and silver as well as lead and manganese in sediment pose potential ecological concern for aquatic community-level receptors. Both sample locations are downstream of the Site, and these metals may be attributed to natural sources or other sources not associated with the Site. Table ES-1 in the BERA indicates no effect or low toxicity for most aquatic communities in the Mill Creek watershed.

*Terrestrial Baseline Ecological Risk Assessment, Bonita Peak Mining District Superfund Site, San Juan County, Colorado. USEPA. December 2020.*

The Terrestrial BERA also identified a section of Mill Creek slightly downstream of the Site as a background reference location and used Mill Creek at the intersection of Highway 550 and Forest Road 821 and Mill Creek near the confluence with Mineral Creek as surface water sampling locations (BERA Figure 3.1e). As shown in Table ES.1 of the risk assessment, lower level to acceptable risks were identified for plant, invertebrate, mammalian, and some bird communities. The BERA stated that the results suggest that “natural and/or minimally impacted habitats have potential to impact sensitive ecological receptors.”

*Human Health Risk Assessment, Bonita Peak Mining District Superfund Site, San Juan County, Colorado. USEPA. June 2019.*

This Human Health Risk Assessment (HHRA) assessed current and potential future health risks to humans that may occur as a result of exposure to mining-related contaminants in the study area. The section of Mill Creek downstream of the Site, where the creek intersects Highway 550, was used as a background reference location for surface water and overbank soil. The HHRA concluded that estimated lead risks due to exposure to background soil were below the USEPA health-based goal.

Geosyntec received additional reports related to the Subject Property from the User. These documents are summarized below and are included in **Appendix C**.

*Report on the Silver Crown Mine, San Juan County, Colorado, prepared by Norman L. Bennett, dated 1974.*



This report described the Site geology and history of mining exploration, evaluated the potential for future mining operations, and provided a cost estimate for the recommended operations.

Mining began in 1880, and a 3,500-foot tunnel was completed by 1909, in addition to two smaller tunnels of unknown length. The mine was idle between 1909 and 1946 due to the depressed metal market. Inspection and repairs were completed in 1946, and no drilling or surface work was reported since 1909. The main adit reportedly collapsed between 1909 and 1949. The mine changed owners multiple times since 1949; the owner at the time of this report was Ken Hodgson and Company.

The report described the deposit as a “lode fissure” observed to be over 5 feet wide and visible for roughly 1.5 miles, exposed by the gorge cut by Mill Creek. Assay results on a sample collected from the outcrop indicate 20.5% zinc, 19.6% lead, and 0.43% zinc. Visible ore minerals included galena, sphalerite, pyrite, tetrahedrite, and possibly chalcocite. The report estimated an annual production of 50,000 tons.

*Improvement Location Certificate, Mill Creek Mineral Surveys, prepared by Bulson Engineering, dated 3 September 2022*

This figure depicts the seven mining claims included in San Juan Parcel 47770280040001 that are located along Mill Creek (Silver Crown, Giant King, Pride, Wonderful, Mountain Chief, Valley, and Shelbyville). Features including waste rock piles, portals, and stone foundations are shown on-site and upstream of the Site.

*Historical photos of Silver Crown Mine waste rock pile and adit drainage, dated 1912 and 2021*

The photos show the historical and current adit discharge into Mill Creek after flowing through the waste rock pile at the Silver Crown Mine. The photograph from 1912 shows several mine structures above the bank of the creek. These structures no longer appear in the 2021 photograph.

*Silver Crown Site Layout, prepared by Brian Briggs, dated 26 October 2022*

This figure depicts the proposed layout for the Silver Cloud Lodge, which includes seven guest rooms, a wine cellar, main room and dining hall, and entrances, and external features to the east of the proposed lodge, including an ATV parking area and trout pond. The proposed turbine house shown on the plan was removed from the design.

*Historical Data: Surface Water, Adit Drainage, and Waste Rock Leachate Results*

Between 1991 and 2023, USEPA, USGS, the United States Forest Service (USFS), WQCD, Site personnel, and Geosyntec personnel collected waste rock, adit drainage water, and Mill Creek surface samples from upstream, downstream, and on-Site. This data was reviewed and compared to the applicable standards, and the results are summarized in Tables 1 through 4 of the VCUP



application (Geosyntec, 2023). In general, metals concentrations in the adit discharge and surface water are below stream standards with some exceptions for zinc and lead. However, text from the 2022 Regulation 34 hearing states that these metals may be naturally present, and that concentrations may be “infeasible to clean up to the level of table value standards.”



## 5. SUBJECT PROPERTY RECONNAISSANCE

A reconnaissance of the Subject Property was conducted in accordance with the information provided in **Table 1**. The Site reconnaissance included personnel interested in developing the Subject Property who escorted Geosyntec personnel on the Subject Property. Photographs taken during the reconnaissance are included in **Appendix E**. Adjoining properties were observed from their perimeters.

The focus of the reconnaissance, was to identify evidence of hazardous substances and petroleum products used, stored, or discarded and inspected the Subject Property for areas of disturbed or discolored soil, suspect equipment, and building materials that may contain hazardous substances; areas of distressed vegetation; wastewater discharge areas; storage tanks/septic systems; waste management and disposal areas; lagoons; pits; sumps; surface water management areas; and stained surfaces. No structures were observed at the Site. Most of the subject property was snow-covered, which limited the inspection of surrounding rock and vegetation.

### 5.1 Utility Service and Materials Management Provider Information

The utility service and materials management providers and practices at the Subject Property are summarized (**Table 6**) from information supplied during Geosyntec's Site reconnaissance.

**Table 6. Subject Property Utilities and Materials Management**

<b>Utility Service/Materials Management</b>	<b>Service Provider</b>
<b>Electricity</b>	None identified.
<b>Natural Gas</b>	None identified.
<b>Sanitary wastewater disposal</b>	None identified.
<b>Industrial wastewater disposal</b>	None identified.
<b>Drinking water supply</b>	None identified.
<b>Irrigation water supply</b>	None identified.
<b>Stormwater disposal</b>	Stormwater management systems were not observed.
<b>Solid (non-hazardous) waste disposal</b>	None identified.
<b>Hazardous waste disposal</b>	None identified.
<b>Universal waste</b>	None identified.

### 5.2 Interior and Exterior Observations

Observations made during the reconnaissance for the Subject Property are documented in **Table 7**.



### 5.3 Adjoining Property Reconnaissance

During the Site reconnaissance, Geosyntec observed the adjoining properties from the Subject Property or public vantage points in an attempt to identify possible sources of obvious environmental impairment that could affect soil and groundwater quality at or result in vapor migration into the Subject Property as a result of surface water runoff, groundwater transport, or similar pathways. No structures were observed on adjoining properties. Adjoining properties including the Parent Parcel were mostly snow-covered and bedrock outcrops, colluvium, and forested land were observed. Where bedrock was exposed, some rusty and blue staining was visible. Geosyntec saw no obvious evidence of chemical storage or releases to the ground at adjoining properties. Additional information regarding adjoining land use is provided in Section 2.4.



**Table 7. Interior and Exterior Observations**

<b>ASTM Section E2247-16</b>	<b>Feature or Condition</b>	<b>Description</b>
<b>Interior and Exterior Observations</b>		
9.4.11	General Usage of Hazardous Substances and Petroleum Products	No chemical or fuel storage and usage was observed.
9.4.12	Aboveground Storage Tanks (ASTs)	No evidence of ASTs was observed during Geosyntec's Site visit.
9.4.12	Underground Storage Tanks (USTs)	No evidence of USTs was observed during Geosyntec's Site visit.
9.4.13	Odors	No odors were identified during the Site visit.
9.4.14	Pools of Liquids	Pooling water was observed near the collapsed adit entrance, which extended to the south along the western edge of the waste rock pile. No staining or oily sheen was visible in the water.
9.4.15	Drums $\geq 5$ Gallons	No drums were observed during Geosyntec's site visit.
9.4.16	Hazardous Substances and Petroleum Products Containers	None observed during Geosyntec's site visit.
9.4.17	Unidentified Substances/Containers	None observed during Geosyntec's site visit.
9.4.18	Indication of PCBs	None observed during Geosyntec's site visit.



Table 7. Interior and Exterior Observations

ASTM Section E2247-16	Feature or Condition	Description
<b>Interior Observations</b>		
9.4.19	Heating and Cooling Systems	As no structures were observed on-Site, no heating and cooling systems were observed.
9.4.20	Stains/Corrosion	As no structures were observed on-Site, no stains or corrosion were observed.
9.4.21	Drains and Sumps	As no structures were observed on-Site, no drains or sumps were observed.
<b>Exterior Observations</b>		
9.4.22	Pits, Ponds, or Lagoons	No pits, ponds or lagoons were observed. One collapsed adit was observed near the waste rock pile.
9.4.23	Stained Soil or Pavement	Stained sediment and rock were observed in the waste rock pile where it was not snow-covered. Reddish-yellow staining was observed on rocks near at the east and west edges of the pile. Reddish, yellow, and bluish staining was observed at the top of the waste rock pile that was exposed at the top of the east-facing slope.
9.4.24	Stressed Vegetation	Where exposed, no obviously stressed vegetation indicative of a chemical discharge or application was observed at the Subject Property.
9.4.25	Solid Waste	The Subject Property is currently vacant and reportedly does not generate solid waste. No information was provided regarding waste disposal during previous operations.



Table 7. Interior and Exterior Observations

ASTM Section E2247-16	Feature or Condition	Description
9.4.26	Wastewater and Stormwater Discharge	Industrial wastewater is currently not generated at the Subject Property. It is unknown if wastewater was generated during historic operations of the Subject Property. Stormwater likely infiltrates the ground surface and appears to follow surface topography toward Mill Creek and collects in on-Site tributaries. Stormwater management systems were not observed.
9.4.27	Wells	No supply or groundwater monitoring wells were observed on-Site.
9.4.28	Septic Systems	No evidence of an on-site septic system (e.g., vent pipes, earthen mounds) was observed during the reconnaissance.



## **6. INTERVIEWS**

### **6.1 Interview with Current Owner/Occupant/User**

Geosyntec received written responses to interview questions via email from Brian Briggs on 3 April 2023. Information obtained from these responses is included in this report.

### **6.2 Interview with Previous Owner/Occupant**

Geosyntec requested but was not provided with contact information for previous owners/operators of the Subject Property. Interviews with prior owners and occupants were not conducted as part of this assessment. This is considered a data gap (see Section 7).

### **6.3 Interview with Local Agencies**

Geosyntec contacted local and county agencies via electronic mail to ask whether they possessed relevant records regarding the Subject Property, as discussed in Section 4.3.

### **6.4 Additional Interviews**

Geosyntec interviewed Dr. Jeffery Kurtz for information related to the BPMD which includes the Subject Site. Dr. Kurtz has been involved with the BPMD since the 1980s with the USGS and Colorado Division of Natural Resources (DNR) resulting in USGS publications and a state publication on natural acid-rock drainage. Dr. Kurtz has also been involved with the BPMD Superfund site process since April 2016 representing a client in negotiations with the USEPA, including areas of concern for individual mine site reclamation work. Dr. Kurtz indicated that historic mining activities at the Site were not currently part of the USEPA's clean-up action.



## 7. FINDINGS AND CONCLUSIONS

Geosyntec has conducted a Phase I ESA in conformance with the scope and limitations of ASTM Practice E2247-16 of the Subject Property located above the Chattanooga Curve on Highway 550, Silverton, Colorado. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

Following the Findings and Opinions section (Section 7.1), we present identified data gaps and conclusions (Sections 7.2 and 7.3) regarding any identified RECs, Controlled (CRECs), Historical RECs (HRECs), or *de minimis conditions* associated with the Subject Property.

### 7.1 Findings and Opinions

This assessment has revealed several findings that could represent an environmental condition on the Subject Property. Each finding and our opinion relative to its significance as an environmental condition is discussed below.

#### Recognized Environmental Conditions (RECs)

As defined by ASTM E2247-16, a REC is: *"the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."*

- **Historic Mining Operations Including On-Site Waste Rock Pile:** Historic mining and milling activities in the vicinity of the Site began in the late 1880's. Historical photographs of the site from 1912 and 2021 and aerial photographs between 1945 and 2021 show a large waste rock pile at the Silver Crown Mine, which was reportedly active between approximately 1882 and the early 1920's. Based on the photographs and interviews with the current Site owner, the Silver Crown adit discharge flows through the waste rock pile, which could potentially transport metals into Mill Creek. Rusty and blue colored stained soils were also observed on-Site. Additionally, waste rock piles, stained soils, possible mine tailings, and mine water discharges due to historic mining activities on upgradient adjoining properties could also impact the Site. Limited information is available on these mining claims and historic mines, and their potential metals impacts to soils, surface water, and groundwater at the Site, on adjacent properties, and to nearby surface water bodies (i.e., Mill Creek). While water quality data collected in a downstream segment of Mill Creek (near Highway 550) and on-Site and nearby surface water sampling locations indicate that the Silver Crown adit drainage and Mill Creek surface water has generally met applicable regulatory water quality standards, on-Site groundwater, waste rock, and soils at the Site have not been fully evaluated. Therefore, this finding is a REC.



### Controlled Recognized Environmental Conditions

A CREC is a “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

- No CRECs were identified during this Phase I ESA.

### Historical Recognized Environmental Conditions

An HREC is “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls) ”

- No HRECs were identified during this Phase I ESA.

### De Minimis Conditions

A *de minimis* condition is a condition that “generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies ”

Based on the information Geosyntec obtained, Geosyntec has concluded that there are no *de minimis* conditions.

### Data Gaps

In accordance with ASTM E2247-16, this section documents data gaps in the information obtained and reviewed as part of this Phase I ESA and discusses the associated significance. A data gap is defined in ASTM E2247-16 as being “a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information.” A significant data gap is a data gap that affects the ability of the environmental professional to identify a REC.

Identified data gaps are presented below:



- ASTM E2247-16 states that “*interviews with past owners, operators, and occupants of the property who are likely to have material information regarding the potential for contamination at the property shall be conducted to the extent that they have been identified...*” Geosyntec was not provided with and did not identify owner contact information prior to the current Subject Property owner.
- Topographic maps and aerial imagery was not provided at five year-intervals or less pursuant to ASTM E2247-16. Topographic maps were provided beginning in 1897, but none were provided between 1902 and 1955, when Site development was initially shown. Geosyntec attempted to review additional topographic maps and supplement aerial imagery with additional imagery from Google Earth but was unable to reduce the intervals to five years or less. This is considered a data failure, and a data gap.
- Although Geosyntec assumed direction of groundwater flow at the Site, an exact direction cannot be confirmed from available information.
- Maps of historic underground mine workings showing the extent and conditions of on-Site and adjoining topographical and hydraulically upgradient mines were not provided, available, or reasonably ascertainable.
- During Geosyntec’s reconnaissance, the majority of the Site was covered by snow, which limited visibility of ground conditions and parts of Mill Creek.

Collectively, these data gaps are not considered to be significant to the Findings or the identification of RECs because sufficient information was obtained from other sources that has been used to inform our opinion.

## 7.2 Conclusions

Geosyntec has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E2247-16 of the Subject Property located above the Chattanooga Curve, Highway 550, Silverton, Colorado. Any exceptions to, or deviations from, this practice are described in Section 1.4 of this report. This assessment has revealed evidence of one REC. No *significant* data gaps were identified.



## 8. NON-SCOPE CONSIDERATIONS

This section presents client-requested non-scope considerations for additional due diligence that exceed AAI requirements as previously described in Section 1.4. No non-scope considerations were requested as part of this scope of work.



## 9. REFERENCES

- ASTM. 2016. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property. E2247-16.
- Bennett, N.L. 1974. Report on the Silver Crown Mine, San Juan County, Colorado. December 15.
- ERIS. 2023a. *Fire Insurance Map Research Results*. Environmental Risk Information Services. March 9.
- ERIS. 2023b. *Topographic Map Research Results*. March 9.
- ERIS. 2023c. *Historical Aerial Report*. March 10.
- ERIS. 2023d. *Physical Setting Report*. March 9.
- ERIS. 2023e. *City Directory Report*. March 13.
- ERIS. 2023f. *Database Report*. March 10.
- USEPA. 2019. Aquatic Baseline Ecological Risk Assessment. Bonita Peak Mining District Superfund Site, San Juan County, Colorado. February.
- USEPA. 2020. Terrestrial Baseline Ecological Risk Assessment. Bonita Peak Mining District Superfund Site, San Juan County, Colorado. December.
- USEPA. 2019. Human Health Risk Assessment. Bonita Peak Mining District Superfund Site, San Juan County, Colorado. June.
- USGS. 2007. Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed. San Juan County, Colorado. USGS Professional Paper 1651.



10. ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



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Signed by Martina Litasi - Geosyntec Consultants

The qualifications of the above-signed professional are included in Section 11.



## 11. QUALIFICATIONS OF STAFF

Martina Litasi, P.G. (wy)

Ms. Litasi is a Senior Geologist with over 22 years of experience in environmental consulting and project management. Her expertise is in subsurface contaminant fate and transport investigations with a focus on the vapor intrusion pathway. Ms. Litasi is an experienced manager of soil, groundwater, and vapor intrusion investigation and remediation projects at a broad array of facilities under a wide variety of regulatory programs. She has completed and provided review of over 100 Phase I ESAs, according to ASTM standards (ASTM E1527-13/21 and E2247-16), EPA's All Appropriate Inquiry (AAI) Rule, and client specific standards for a broad range of facilities and private clients throughout the United States. Ms. Litasi has completed external training for the ASTM E1527-13 standard and meets the requirements of an "Environmental Professional", as described in EPA's AAI Rule. Ms. Litasi holds a Bachelors degree in Geology from the University of Colorado, Boulder.

Jeffrey Kurtz, PhD

Dr. Kurtz is a Senior Geologist with over 30 years of geochemistry, statistics, and data management experience in water resources Superfund litigation, site investigations, and environmental forensics, with emphasis on permitting, water quality, and metals issues. Dr. Kurtz has acted as a testifying expert for several mining companies in Colorado. He was responsible for assessing appropriate ambient water quality data, reversibility of anthropogenic sources, and appropriate temporary modifications or site-specific surface water quality standards for arsenic, cadmium, copper, lead, manganese, and zinc. He assisted with stakeholder negotiations and presented testimony before the Colorado Water Quality Control Commission for Temporary Modification and Basin Hearings. As a Geologist for the Bonita Peak Mining District National Priority List project, Dr. Kurtz provided comments on related USEPA documents and input on additional surface water sampling locations essential for accurately identifying loading from a mine source as opposed to natural background mineralization; provided oversight on the design and implementation of remedial work under two Administrative Settlement Agreements and Order on Consents for mine sites listed in the Interim Record of Decision; and designed and implemented long-term monitoring for surface water. As a Geologist for the USGS field investigation (1996-2002), Dr. Kurtz was responsible for geological mapping in Palmetto Gulch, near Red Mountain to establish natural background concentrations of metals and acidity in the Animas River. This information was used by the Abandoned Mined Land Reclamation department of the BLM to prioritize mine cleanup area and was utilized to reclassify the ultimately attainable cleanup levels for the Animas River in this portion of the basin.

Olivia Bojan

Ms. Bojan is a Senior Staff Professional with over three years of experience completing environmental due diligence site assessments and limited environmental compliance reviews at various commercial, industrial, and residential properties located throughout the United States.



Lisa Burgess

$$= \frac{1}{2} \left( \frac{1}{2} \right)^2 = \frac{1}{8}$$





## 1.0 REMEDIATION PLAN DESIGN

The purpose of this Remediation Plan is to cap an in-place historic mine dump (waste rock resulting from turn of the century mining operations). The dump is estimated to contain up to up to 20,000 tons of waste rock with various amounts of sulfide minerals containing Pb, Zn, Ag, Cd, and Mn, among others.

A minimum two-foot cap of benign basic andesitic rock (San Juan Tuff) will be excavated on site for the cap. On slopes the cap will be from 4 to 8 feet thick. Heavy metals concentrations in excavated materials were characterized by Geosyntec (see Silver Crown Mine VCUP Application). Environmental covenants and use restrictions will be enacted to ensure the long-term performance of the historic dump cap.

### 1.1. SITE LOCATION AND DESCRIPTION

The current site location and description is given in *Figure 1 – Existing Conditions*, attached in Appendix A. The site is located approximately seven miles from the Town of Silverton, Colorado on County Road 15 with an address of 0560 CR 15, Silverton Colorado. The Site is accessed off State Hwy 550 approximately 0.5 miles up CR 15. The road to site is rugged requiring 4wd high clearance vehicles which precludes use of larger than 10 ton on-highway haulage vehicles.

### 1.2. CAP DESIGN AND MATERIAL PLACEMENT

*Figure 2 – Pad and Waste Grading* describes the Dump and Cap Design to final grade. The cap will require approximately 1,818 cubic yards of fill material to be placed on top of the historic dump and slope as a cap. The in-place volumetrics are given in Table 1 below.

Table 1. Silver Cloud VCUP - Inplace Volumetrics							
Site Feature	Area (SF)				Volume (CY)		Difference ( - Import)
	Total	Cut	Fill	On Grade	Cut	Fill	
Barrow Area B	N/A	N/A	N/A	N/A	1,657	-	1,657
Grading	24,481	15,962	8,250	269	1,644	1,613	31
Barrow Area A	392	330	18	44	46	2	44
Cap Material Required	24,545	-	24,545	-	-	1,818	(1,818)
<b>Totals</b>	<b>49,418</b>	<b>16,292</b>	<b>32,813</b>	<b>313</b>	<b>3,347</b>	<b>3,433</b>	<b>(86)</b>

Barrow locations (A and B) are shown on *Figure 2 – Pad and Waste Grading*. Borrow area A, a surface cut at the north edge of the project, will provide at least forty-four cubic yards of talus composed of San Juan Tuff for capping material. The remainder of capping



material (1,657 in-place cubic yards) will be from Borrow area B which will excavated in clean San Juan Tuff underground.

*Figure 3 – Cut / Fill Map* shows the relative cut and fill thicknesses once the cap has been placed. The need for Underground Barrow is the lack of suitable surface material from the site and the extreme terrain. Haulage of material from off-site is precluded due to the hazardous road limiting trucks to ten ton double-axel with high ground clearance.

Using on-site borrow locations were selected due to the quantity of fill required for the cap. The cap requires 1,818 cubic yards to be placed, which results in approximately 260 loads trucked in by 10-ton trucks. Hauling fill with similar characteristics would have deleterious impacts to CR-15 as well as heavy on highway impacts to Hwy 550 during peak tourist season.

A geotextile (Mirafi 180N or equivalent) will be placed on top of the graded mine waste dump and will be overlain by a Geosynthetic Clay Liner (Bento Mat GCL DN-H5 or equivalent). Six inches of screened capping material (-1/2 inch) over will be placed over the GCL and then covered by a minimum of eighteen inches of run of mine (ROM) San Juan Tuff capping material.

The slope shall be constructed with welded wire mesh forms. The wire form detail and wall construction detail can be seen on *Figure 5 – Wall Details* and *Figure 6 – Typical Details*. The forms measure 1.5 ft x 1.5 ft x 10 ft. A row of forms shall be placed at the toe of the slope and filled with benign San Juan Tuff.

Two layers of geofabric (Mirafi HP270 or equivalent) shall be installed from the back of the wire form into the slope one at the toe of the forms and the other at half height. The length shall be field fit by the contractor and will increase in length as the height of the slope increases. This geotextile shall be buried with fill material or with benign San Juan Tuff. Each additional row shall be placed 7.5 inches from the top of the previous row and constructed in an identical manner to the previous layer. This will result in an overall slope angle of approximately 69 degrees. Other alternative slope configurations are also presented in Figure 5.

### **1.3. COST ESTIMATE**

The remediation project has been broken down into eight tasks. A discussion of each task and a summary of the anticipated remediation cost can be seen below. The detailed breakdown of this cost is presented in Appendix B.

#### **Mobilization**

Mobilization will take 2-weeks and will consist of prepping equipment for the project, hauling it to site, and staging infrastructure and consumable storage including setting two explosive magazines on site. Mobilization is estimated to cost \$48,240.



## **Security and Stormwater Control Install**

The installation of fences, gates, and stormwater controls are anticipated to take 2-weeks. This will include a perimeter security fence, gate, stormwater diversion and collection ditches, the stormwater sediment pond, pond discharge, stormwater controls at the base of the slope. Securing the site is a high priority due to the nature of the remediation as well as the use of explosives. Security and Stormwater Controls is estimated to cost \$46,453.

## **Cap Grading**

Cap grading is estimated to take 2-days. The cap grading will cut the pad surface elevation to two feet below the final elevation requirement to make room for the compacted fill. The material that is graded will be placed onto the sides of the dump slope. Cap Grading is estimated to cost \$10,420.

## **Surface Borrow Area A**

The Surface Borrow Area A will take 1-week to construct. This involves cutting back the hillside on the north edge of the site and installing a short retaining wall. This same wall will be used in later development once remediation is complete. The Surface Borrow Area A is estimated to cost \$22,070 to complete.

## **Portal Rehabilitation**

The portal rehabilitation is expected to take 2-weeks to complete. This will consist of digging out the current portal, installing steel sets to support the portal area, and installation of additional ground support as determined in the field. The Portal Rehabilitation is estimated to cost \$89,873.

## **Underground Borrow Area B**

The Under Ground Borrow area will 25-weeks days to complete. Once the portal has been rehabilitated mining crews will expand one hundred of existing historic tunnel from 4x7ft to approximately 9x9ft. After 100ft of tunnel expansion a large excavation will be created to supply the capping material (approximately 100ft x 20ft x 12ft). If additional material is required, an additional eighty-five feet of tunnel behind the larger excavation will be created. The material that is removed during this phase will be used for the final cap. The Underground Borrow Area B is estimated to cost \$781,808.

## **Slope Construction**

The Slope Construction will occur contiguous with excavation from borrow areas A & B. Slope construction will consist of placement of borrow material in 6-inch-thick lifts and compacted to 95% dry density, to a final depth of at least two feet. Once Slope



construction is completed the Mirafi 180N will be laid down over the entire graded area, followed by the GCL and then covered with six of graded San Juan Tuff followed by a minimum of eighteen of ROM as a wear surface. Slope Construction is estimated to cost \$283,002.

## Demobilization

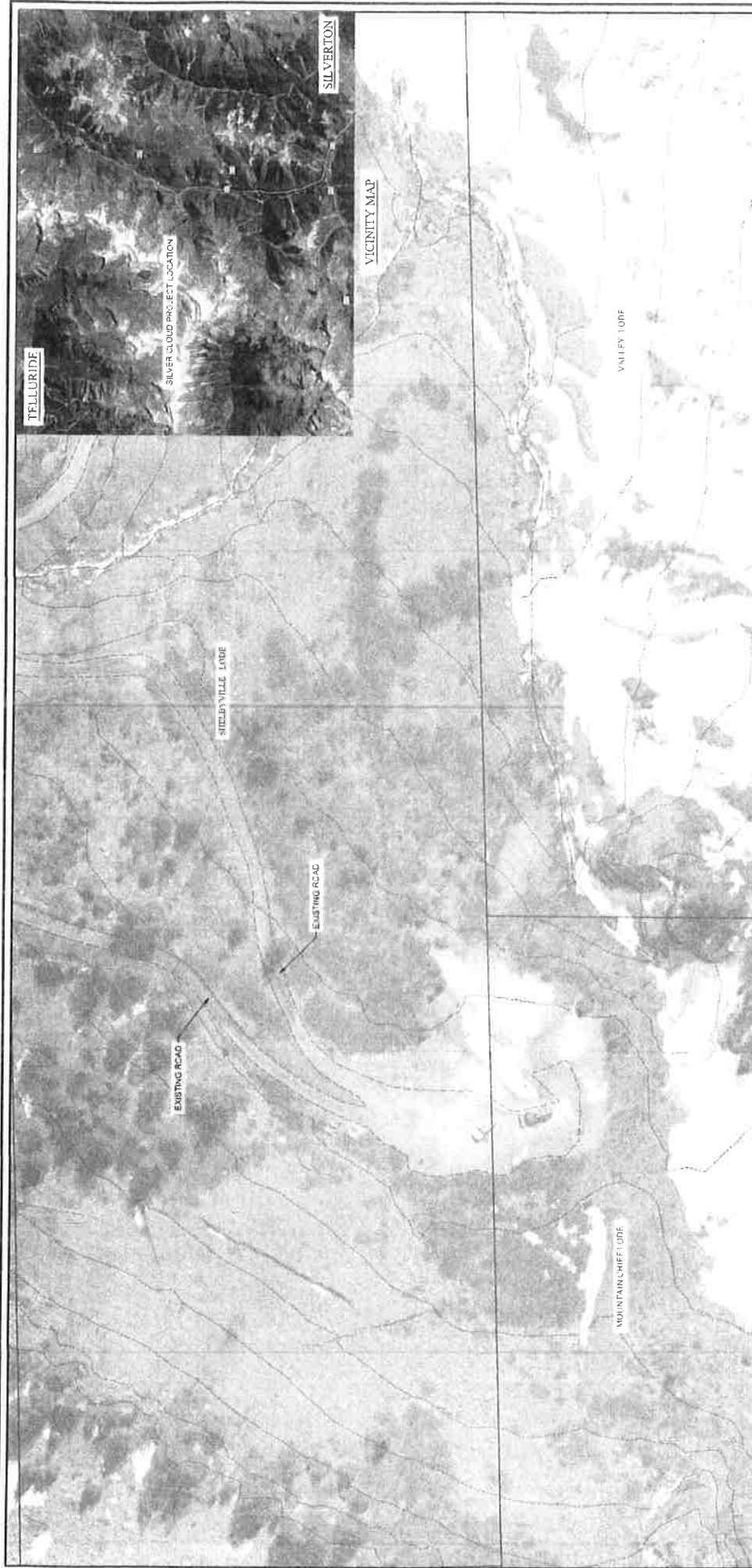
Demobilization will last 1 week and consists of removing all temporary fences, storm water control measures, and decontaminating all equipment and tools before removal from the site. Demobilization will cost \$26,380.

## Cost Summary

An estimated project cost summary is given below. Detailed projections for labor, material and consumables are given in Appendix B.

TASK COST SUMMARY								PAGE	2
FIRM AND LOCATION								OF	12
B.L. Briggs & Associates, LLC 2015 Oak Point Circle, Memphis, TN 38105								DATE	07/2/2021
PROJECT									
Slope Construction								CLIENT	
								Slope Construction	
TASK	ACTIVITY	TOTAL LABOR	DIRECT EXPENSES	EQUIPMENT	TRAVEL	SUBTOTAL	SUBS	Management Surcharge	TOTAL
1	Mobilization	\$ 32,280	\$ -	\$ 9,360	\$ -	\$ 41,640	\$ 6,000	\$ 600	\$ 48,240
2	Security and Stormwater Control Install	\$ 34,780	\$ 3,730	\$ 7,570	\$ -	\$ 46,080	\$ -	\$ 373	\$ 46,453
3	Cap Grading	\$ 8,540	\$ -	\$ 1,880	\$ -	\$ 10,420	\$ -	\$ -	\$ 10,420
4	Surface Borrow Area A	\$ 17,390	\$ -	\$ 4,680	\$ -	\$ 22,070	\$ -	\$ -	\$ 22,070
5	Portal Rehabilitation	\$ 42,380	\$ 34,912	\$ 9,080	\$ -	\$ 86,382	\$ -	\$ 3,491	\$ 89,873
6	Underground Borrow Area B	\$ 453,900	\$ 203,544	\$ 104,010	\$ -	\$ 761,454	\$ -	\$ 20,354	\$ 781,808
7	Slope Construction	\$ 82,450	\$ 163,593	\$ 20,600	\$ -	\$ 286,643	\$ -	\$ 16,359	\$ 283,002
8	Demobilization	\$ 16,800	\$ -	\$ 2,980	\$ -	\$ 19,780	\$ 6,000	\$ 600	\$ 26,380
9	Construction Oversight and Management (20%)								\$ 261,649
Total		\$ 688,520	\$ 405,779	\$ 160,170	\$ -	\$ 1,254,468	\$ 12,000	\$ 41,778	\$ 1,569,895





**LEGEND**

- EXISTING CONTOURS (500' INTERVAL)
- PROPOSED CONTOURS (5' FOOT INTERVAL)
- EXISTING STREAM

**2019 Otter Pond Circle**  
Montrose, CO 81401  
(970) 596-1982  
bbiggs@bkbassoc.com

**Silver Crown**  
EXISTING CONDITIONS  
Drawing No.: C1  
DATE: 05-12-2023 DRAWN BY: TAL  
SCALE: NTS APPROVED BY: BKB  
FILE: SILVER CLOUD SWAMP MAP.DWG

**ENGINEER'S CERTIFICATION**

I, **Thomas Austin Leach**, being a Registered Professional Engineer in the State of Colorado, do hereby certify that this drawing has been completed by me or under my direct supervision and that I am a duly licensed and qualified engineer and my knowledge and belief:

**DATE**      **REVISION**

DATE	REVISION

**North Arrow**

Scale: 1" = 100'

**2019 Otter Pond Circle**  
Montrose, CO 81401  
(970) 596-1982  
bbiggs@bkbassoc.com



- LEGEND**
- EXISTING CONTOURS (5 FOOT INTERVAL)
  - PROPOSED CONTOUR (5 FOOT INTERVAL)
  - EXISTING STREAM
  - CRIST OF EXISTING WASTE ROCK
  - EXCLUSION ZONE
  - FENCE OF EXCLUSION ZONE
  - DIVERSION DITCH
  - COLLECTION DITCH

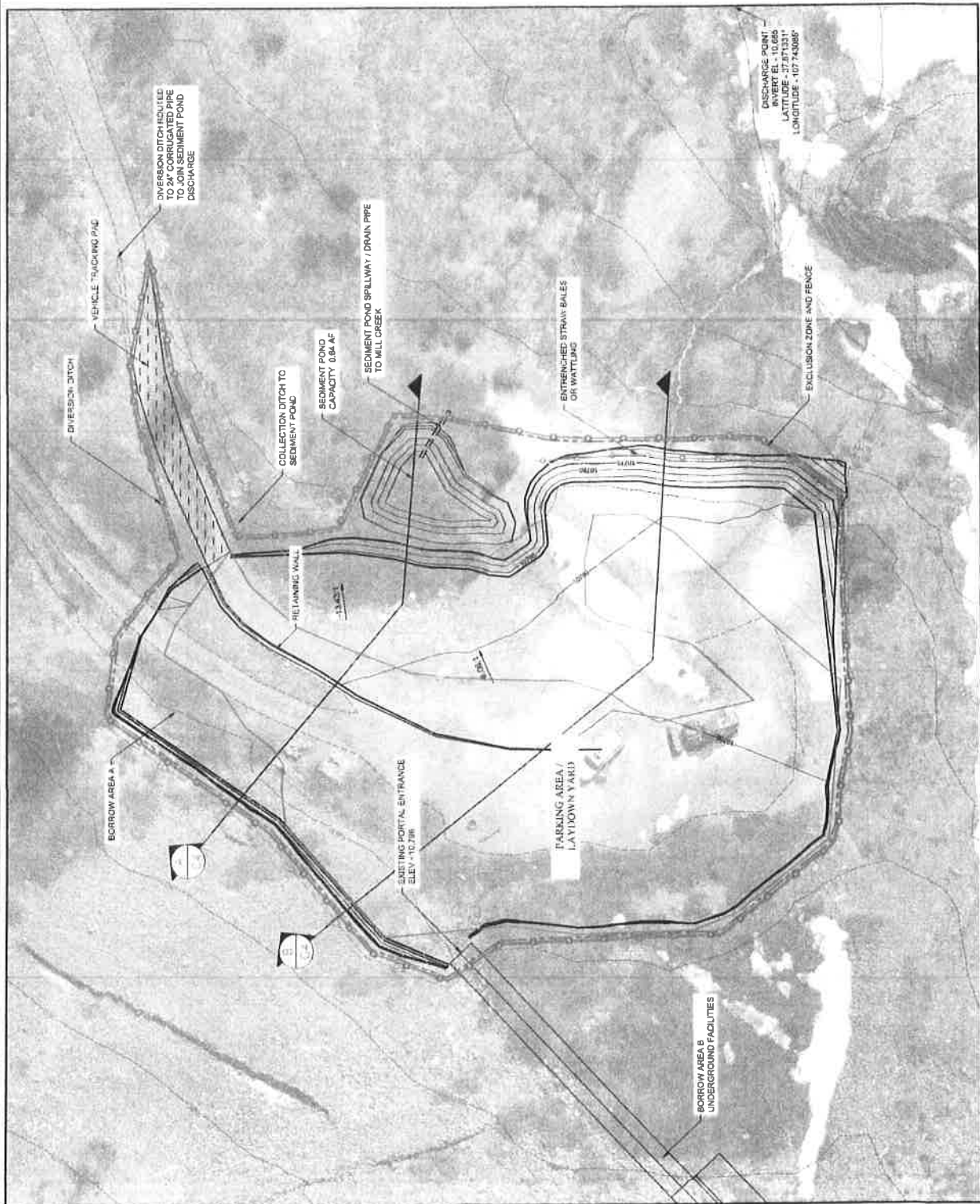


Engineer's Certification  
 I, Travis Austin Leach, being a Registered Professional Engineer in the State of Colorado, do hereby certify that the work shown on these plans has been completed by me or under my direct supervision and that it is in accordance with the best of my knowledge and belief.



2019 Otter Pond Circle  
 Montrose, CO 81401  
 (970) 596-1982  
 bbriggs@otterpondcircle.com

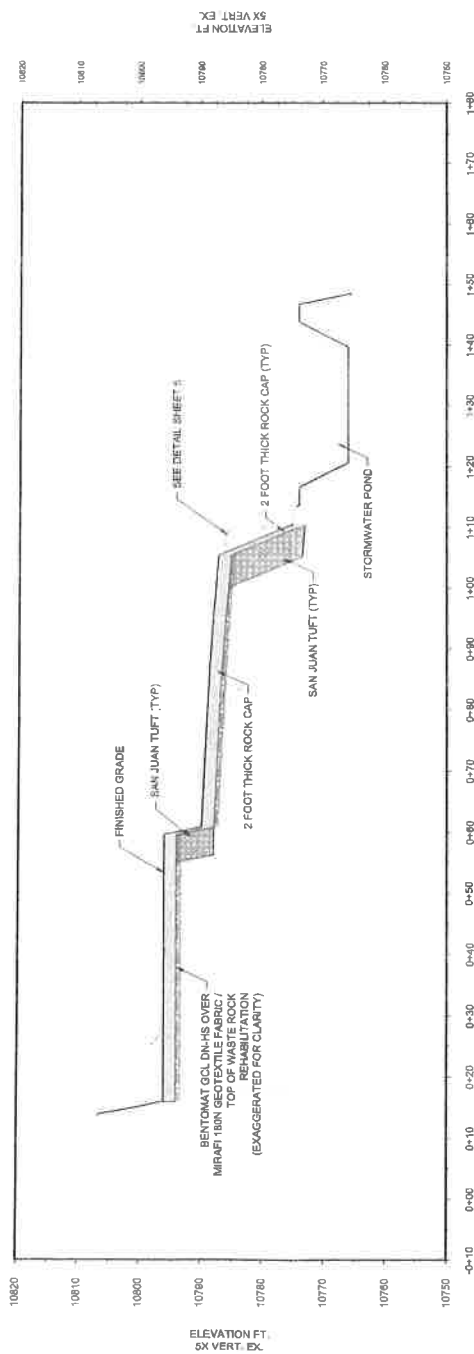
DATE	05-12-2023
SCALE	NTS
FILE	SILVER CLOUD SWMT MAP.DWG
DRAWN BY	TAL
APPROVED BY	BKB
DRAWING NO.	C2
PAD AND WASTE GRADING	
SILVER CROWN	



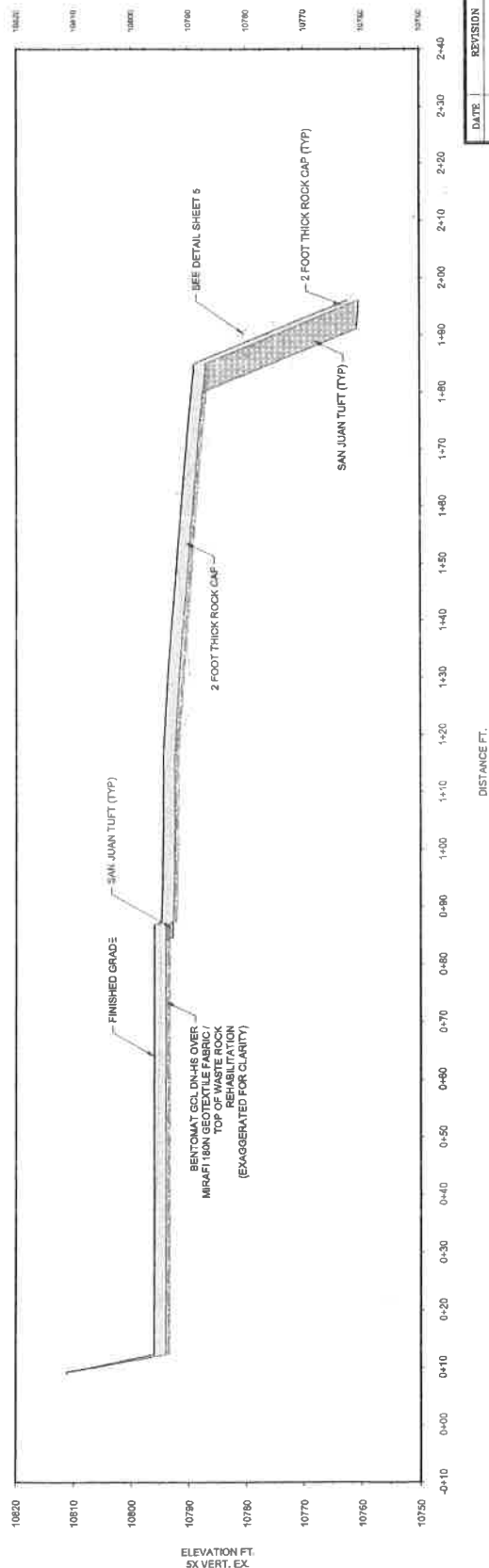








**A** TYPICAL CROSS SECTION



**B** TYPICAL CROSS SECTION



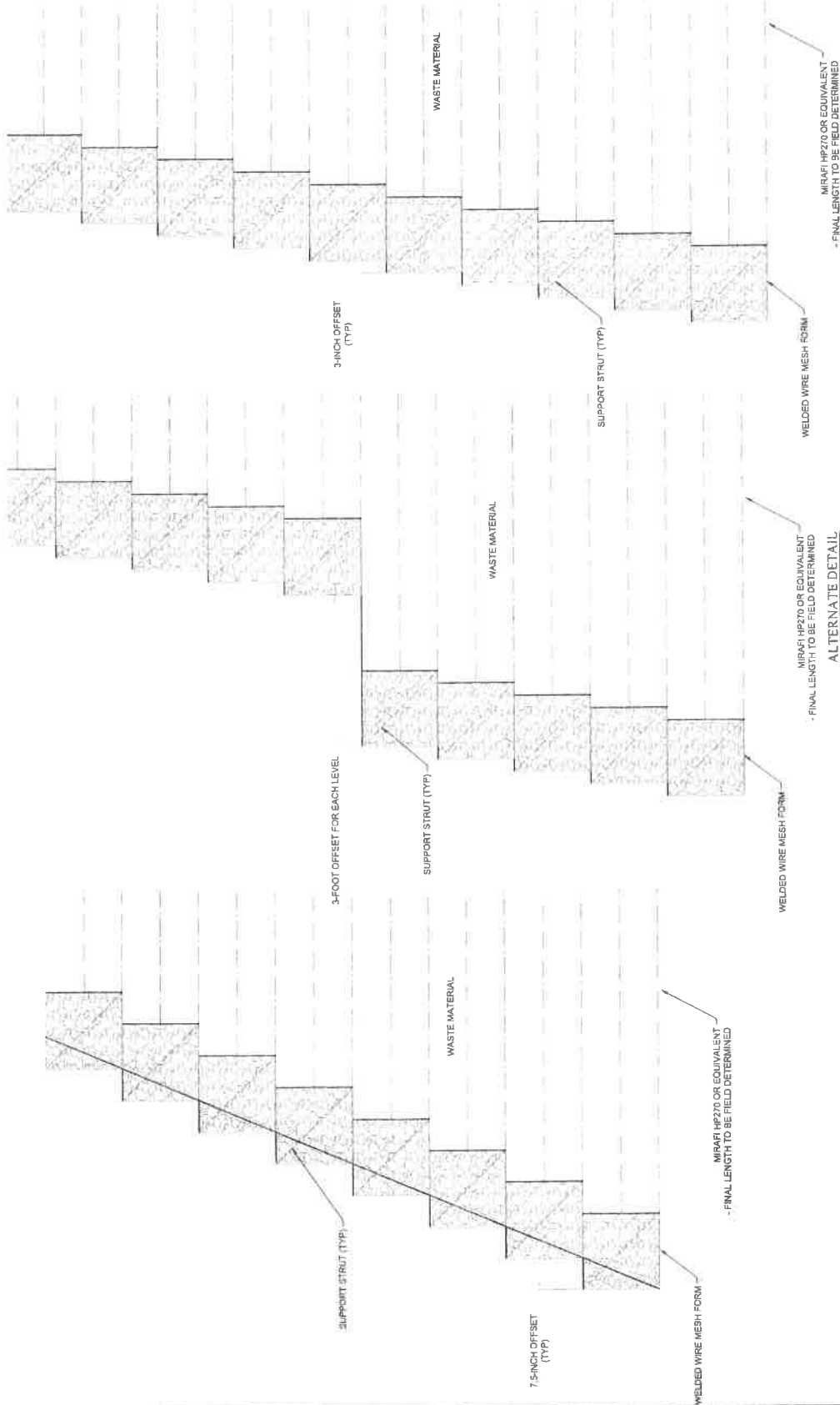
**Engineer's Certification**—Travis Austin Leach, being a Registered Professional Engineer in the State of Colorado, do hereby certify that this drawing has been completed by me or under my direct supervision and that it is true and correct to the best of my knowledge and belief.

[illegible]

**Silver Crown  
CROSS SECTIONS**

Drawing No.: C4





Engineer's Certification  
 I, Brian B. Briggs, a duly Licensed Professional Engineer in the State of Colorado, do hereby certify that this drawing was prepared by me or under my direct supervision and that it is true and correct to the best of my knowledge and belief.



2019 Otter Pond Circle  
 Montrose, CO 81401  
 (970) 586-1982  
 bbriggs@bkassoc.com

DATE	REVISION

**BORROW AREA A  
WALL DETAIL**

Silver Crown  
 WALL DETAILS  
 Drawing No.: C5

DATE: 06-12-2023	DRAWN BY: TAL
SCALE: NTS	APPROVED BY: BKB
FILE: SILVER CLOUD SWAMP MAP.DWG	







# **COST PROPOSAL INDEX**

## **COST PROPOSAL INDEX**

### **FIRM AND LOCATION**

B.K. Briggs & Associates, LLC  
2019 Otter Pond Circle, Montrose, CO 81401

### **PROJECT MANAGER**

Brian Briggs

PAGE  
OF  
DATE

1  
12  
5/25/2023

### **PROJECT**

Silver Cloud - VCUP

### **JOB LOCATION**

Colby Barrett, Silverton, CO

### **INDEX**

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TASK COST SUMMARY

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SUBCONTRACTOR COST SUMMARY

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LABOR COST BUILDUP

OTHER DIRECT COST BUILDUP

MATERIALS BUILDUP

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UG DEVELOPMENT CONSUMABLES DETAIL

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FIRM AND LOCATION		PROJECT MANAGER				PAGE OF			
P. A. Engineering, Inc. 400 E. 1st St. Tulsa, OK 74101		PROJECT MANAGER				2			
PROJECT		DATE				12			
P. A. Engineering, Inc. 400 E. 1st St. Tulsa, OK 74101		DATE				6/25/2021			
CLIENT		CLIENT							
CLIENT		CLIENT							
TASK	ACTIVITY	TOTAL LABOR <sup>1</sup>	DIRECT EXPENSES	EQUIPMENT	TRAVEL	SUBTOTAL	SUBS	Management Surcharge <sup>2</sup>	TOTAL
1	Mobilization	\$ 32,280	\$ -	\$ 9,360	\$ -	\$ 41,640	\$ 6,000	\$ 600	\$ 48,240
2	Security and Stormwater Control Install	\$ 34,780	\$ 3,730	\$ 7,570	\$ -	\$ 46,080	\$ -	\$ 373	\$ 46,453
3	Cap Grading	\$ 8,540	\$ -	\$ 1,880	\$ -	\$ 10,420	\$ -	\$ -	\$ 10,420
4	Surface Borrow Area A	\$ 17,390	\$ -	\$ 4,680	\$ -	\$ 22,070	\$ -	\$ -	\$ 22,070
5	Portal Rehabilitation	\$ 42,380	\$ 34,912	\$ 9,090	\$ -	\$ 86,382	\$ -	\$ 3,491	\$ 89,873
6	Underground Borrow Area B	\$ 453,900	\$ 203,544	\$ 104,010	\$ -	\$ 761,454	\$ -	\$ 20,354	\$ 781,808
7	Slope Construction	\$ 82,450	\$ 163,593	\$ 20,600	\$ -	\$ 266,643	\$ -	\$ 16,359	\$ 283,002
8	Demobilization	\$ 16,800	\$ -	\$ 2,980	\$ -	\$ 19,780	\$ 6,000	\$ 600	\$ 26,380
9	Construction Overhead and Management (20%)								
Total		\$ 688,520	\$ 405,779	\$ 160,170	\$ -	\$ 1,254,468	\$ 12,000	\$ 41,778	\$ 1,569,895



LABOR COST SUMMARY			PAGE OF	3 12
FIRM AND LOCATION S. K. Brigg & Associates 2019 Old Bridge Road, Suite 200, Raleigh, NC 27601		PROJECT MANAGER S. K. Brigg		DATE 10/1/10
PROJECT Bentley		CLIENT Bentley		
LABOR CATEGORY	RATE	HOURS	TOTAL LABOR COSTS	
Principal	\$ 225.00	0	\$	
Project Manager	\$ 200.00	36	\$ 36,000	
Engineer III	\$ 175.00	0	\$	
Engineer II	\$ 150.00	0	\$	
Engineer I	\$ 125.00	0	\$	
Engineering Tech III	\$ 138.00	0	\$	
Engineering Tech II	\$ 121.00	0	\$	
Engineering Tech I	\$ 110.00	0	\$	
Land Survey Crew and Equipment	\$ 230.00	0	\$	
Land Surveyor	\$ 150.00	0	\$	
Senior Construction Manager	\$ 200.00	0	\$	
Construction Manager	\$ 150.00	0	\$	
Construction Engineer	\$ 125.00	50	\$ 18,750	
Construction Inspector	\$ 110.00	0	\$	
Safety Supervisor	\$ 110.00	30	\$ 14,520	
Office Manager	\$ 75.00	59	\$ 44,250	
Administrative Assistant	\$ 50.00	0	\$	
UG Supervisor	\$ 135.00	0	\$	
Miner I	\$ 110.00	1071	\$ 117,700	
Miner II	\$ 105.00	1071	\$ 112,350	
Miner III	\$ 85.00	1071	\$ 90,950	
Construction Tech I	\$ 105.00	600	\$ 63,000	
Construction Tech II	\$ 100.00	580	\$ 58,000	
Construction Tech III	\$ 85.00	0	\$	
Equipment Operator	\$ 95.00	0	\$	
Mechanic	\$ 100.00	1330	\$ 133,000	
Electrician	\$ 105.00	0	\$	
Welder	\$ 100.00	0	\$	
Welder's Helper	\$ 75.00	0	\$	
<b>Labor Subtotal</b>		<b>6,772</b>	<b>\$ 688,520</b>	







# DIRECT EXPENSES COST SUMMARY

OF 12

## FIRM AND LOCATION

B. H. S & L Inc. 1000  
1800 E. 1st St. St. Louis, MO 63103

## PROJECT MANAGER

1800 E. 1st St.

## DATE

5/25/81

## PROJECT

1800 E. 1st St.

## CLIENT

1800 E. 1st St.

## OTHER DIRECT COST:

REPRODUCTION  
DRAWINGS  
INTERFAC AND SUPPLIES  
PORTAL EQUIP. SUP  
FUEL

\$  
\$  
\$ 405,778.80  
\$  
\$

\$ 405,778.80

ODC Management Surcharge  
(10% OF SUBTOTAL)

\$ 40,577.88

\$ 446,356.68

## TOTAL ODC Cost

## TRAVEL

AIRFARE  
AIRTEL MILEAGE  
LODGING  
REF. FUEL  
EX. 12.5000

\$  
\$  
\$  
\$  
\$

\$ -

SUBTOTAL ODCs AND TRAVEL

\$ 446,356.68

## EQUIPMENT

\$ 12,000.00

## SUBCONTRACTORS

\$ 1,200.00

## SUBCONTRACTOR MANAGEMENT (10%)

SUBTOTAL SUBCONTRACTORS

\$ 13,200.00

TOTAL \$ 459,556.68















# DIRECT EXPENSES COST BUILDUP

FIRM AND LOCATION		PROJECT MANAGER		PAGE OF						
B K Bridges & Associates LLC		Thomas Bridges		8 12						
2014 Ohio Turnpike/Route 1, Montrose, OH 43061				5/25/2011						
PROJECT		CLIENT								
Ohio Turnpike		Ohio Turnpike, Silverton, OH								
ACTIVITY DESCRIPTION	REPRODUCTION		DRAWINGS		MATERIALS AND SUPPLIES		RENTAL EQUIPMENT		TOTAL (TRAVEL ONLY)	TOTAL (W/O TRAVEL)
	PAGES	RATE	TOTAL	SHEETS	RATE	TOTAL	UNIT	RATE		
1 Mobilization		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
2 Gravel and Construction Layout Project		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ 3,730
3 Graveling		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
4 Asphalt Paving Area A		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
5 Final Gravelation		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ 34,912
6 Drainage Ditch Area B		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ 203,544
7 Drainage Ditch Area B		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ 163,593
8 Mobilization		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
9		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
10		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
11		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
12		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
13		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
14		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
15		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
16		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
17		\$ 0.10	\$ -		\$ 5.00	\$ -		\$ -	\$ -	\$ -
TOTAL	0	\$ -	\$ -	0	\$ -	\$ -	0	\$ -	\$ 405,779	\$ 405,779

See Materials and Supplies Itemization



\$552.00

**TASK NUMBERS**

Materials/Supplies	Category	Unit Cost	Unit	Mobilization		Stormwater Control Install		Cap Grading		Surface Borrow Area A		Portal Rehabilitation	
				Quant.	Ext. Cost	Quant.	Ext. Cost	Quant.	Ext. Cost	Quant.	Ext. Cost	Quant.	Ext. Cost
<b>Slopes / Retaining Walls</b>	Material												
1.5x1.5x100 Welded Wire	Material	\$375.00	each		\$		\$		\$		\$		\$
Mini H- 270	Material	\$1,650.00	4500 sq ft		\$		\$		\$		\$		\$
Mini 100 M per 4500 sq ft	Material	\$1,550.00	4500 sq ft		\$		\$		\$		\$		\$
Matiles/Silt Fence	Material	\$0.73	ft		\$		\$		\$		\$		\$
Agri-drain	Material	\$500.00	each	1000	\$	730	\$		\$		\$		\$
Gate & Security Fence	Material	\$2,500.00	each	1	\$	500	\$		\$		\$		\$
	Material			1	\$	2,500	\$		\$		\$		\$
<b>Portal Consumables (See Unit Cost Sheet)</b>	Material	\$1,114.00	day		\$		\$		\$		\$		\$
Portal Sels	Material	\$26,000.00	LS		\$		\$		\$		\$	8	\$ 8,912
UG Mining Consumables (See Unit Cost Sheet)	Material	\$2,056.00	day		\$		\$		\$		\$	1	\$ 26,000
	Material				\$		\$		\$		\$		\$
Bento Mat GCL DHA-15 Liner	Material	\$0.60	sq ft		\$		\$		\$		\$		\$
Benlonite (1 bag per 10 rolls)	Material	\$8.00	bag		\$		\$		\$		\$		\$











Unit Cost Development  
Silver Cloud VCUP  
Portal Installation

**Total estimated cost calculation (per heading):**

Cost Per Shift \$ 1,114 \$/shift

**assumptions:**

**OPERATING TIME**

Operating Days/Year 22 days/year  
Shifts per day shifts  
Hours per shift hours  
Rounds per shift 1.0 rounds

**Material cost calculation (per heading):**

	Units	Cost per unit	Number per round	Number per shift	Cost per shift	Cost per round
<b>Ground Support:</b>						
Micky Bolt - 2' w/ Plate	ea	6.00	1.00	1.00	6.00	
Split Set - 3' w/ Plate	ea	8.50	-	-	-	
Split Set - 6' w/ Plate	ea	14.00	2.00	2.00	28.00	
Dywidag - 8' w/ Plate	ea	23.75	-	-	-	
Cable Bolt - 6' w/ plate	ea	-	-	-	-	
Eye Bolt - 24"	ea	7.95	-	-	-	
Blue Shell	ea	2.60	-	-	-	
Welded Wire - 4'x8'	ea	23.00	1.00	1.00	23.00	
Chain Link 8'x50' roll	ea	3,981.12	0.25	0.25	995.28	
Shotcrete	50 lb bag	11.54	-	-	-	
Dywidag Resin	Box	-	0.05	0.05	-	
Split Set Driver	ea	61.41	0.01	0.01	0.61	
Micky Driver	ea	61.41	0.01	0.01	0.61	
Split Set Knock-off Dolly	ea	55.45	0.01	0.01	0.55	
Split Set Knock-off Micky Dolly	ea	55.45	0.01	0.01	0.55	
Dag Spinner	ea	120.00	0.01	0.01	1.20	
Dag Tightener	ea	120.00	0.01	0.01	1.20	
<b>Drill Steel:</b>						
2.5' Steel	ea	53.37	0.01	0.01	0.53	
4' Steel	ea	66.08	0.01	0.01	0.66	
6.5' Steel	ea	84.98	0.01	0.01	0.85	
8.5' Steel	ea	102.55	0.01	0.01	1.03	
<b>Bits:</b>						
Cross Top - 1-3/8"	ea	15.63	0.01	0.01	0.16	
Reamer w/ Pilot - 2-1/2"	ea	190.00	-	-	-	
Bit Kicker	ea	63.29	0.01	0.01	0.63	
8' Scaling Bar	ea	63.97	0.01	0.01	0.64	
Rock Drill Oil	gal	14.35	0.10	0.10	1.44	
<b>Blasting:</b>						
Emulsion (Dyno AP 1 1/2x16)	lb	5.36	-	-	-	
Dynomix ANFO (pneumatic Loaded)	lb	0.53	-	-	-	
16' Nonel LP (0-18)	ea	5.13	-	-	-	
10g Trojan Stinger	ea	1.30	-	-	-	
Primacord 5 / 25gr	ft	0.31	-	-	-	
Cobra Fuse Assembly 2M	ea	7.46	-	-	-	
Loading poles	ea	32.00	-	-	-	
Pull Wire Fuse Lighters	ea	3.70	-	-	-	
Electric Starter Detonator	ea	8.00	-	-	-	
14 gage duplex wire	ft	0.41	-	-	-	
20 gage duplex wire	ft	0.62	-	-	-	
<b>Alimak Rail:</b>						
Alimak Spacer	ea	25.00	-	-	-	
Alimak Rail - 2m	ea	863.22	-	-	-	
Alimak Rail - 1m	ea	689.50	-	-	-	
Alimak Wall Bracket	ea	36.00	-	-	-	
<b>Utilities:</b>						
Mine Phone Line	ft	0.25	-	-	-	
<b>Hose:</b>						
Hose - 1/2"	ft	1.78	0.20	0.20	0.36	



Hose - 1"	ft	2.16	0.20	0.20	0.43
1" Wire Braided Whip Check	ea	8.05	0.01	0.01	0.08
Pipe:					
4" HDPE	ft	4.65	2.00	2.00	9.30
2" HDPE	ft	1.28	2.00	2.00	2.56
Fittings:					
1/2" Double Spud	ea	19.44	0.01	0.01	0.19
1" Double Spud	ea	22.55	0.01	0.01	0.23
1/2" Female Spud	ea	12.81	0.01	0.01	0.13
1/2" Male Spud	ea	17.90	0.01	0.01	0.18
1" Female Spud	ea	14.68	0.01	0.01	0.15
1" Male Spud	ea	18.84	0.01	0.01	0.19
1/2" Wingnut & Stem	ea	18.50	0.01	0.01	0.19
1" Wingnut & Stem	ea	16.50	0.01	0.01	0.17
1/2" Hose Splice and Punch Lock	ea	8.00	0.01	0.01	0.08
1" Hose Splice and Punch Lock	ea	8.00	0.01	0.01	0.08
1/2" Punch Lock Band	ea	0.70	0.01	0.01	0.01
1" Punch Lock Band	ea	0.60	0.01	0.01	0.01
2" Victrolc Valve	ea	314.93	0.01	0.01	3.15
4" Victrolc Valve	ea	280.24	0.01	0.01	2.80
2" Vic to 2" Thread	ea	17.28	0.01	0.01	0.17
4" Vic to 4" Thread	ea	37.22	0.01	0.01	0.37
1" Ball Valve	ea	12.95	0.01	0.01	0.13
2"x1" NPT reducers (FXF)	ea	5.78	0.01	0.01	0.06
1:x1/2" NPT reducers (FXF)	ea	4.40	0.01	0.01	0.04
4"x2" Vic reducer	ea	37.22	0.01	0.01	0.37
4" Vic Clamps	ea	20.76	0.01	0.01	0.21
2" Vic Clamps	ea	12.53	0.01	0.01	0.13
Ventilation:					
Vent Bag - 24"	ft	15.05	-	-	-
Hardline - 30"	ft	29.50	1.00	1.00	29.50
Totals				\$	1,114 \$



Unit Cost Development  
Silver Cloud VCUP  
10x10 Rubber Tire Drift

Total estimated cost calculation (per heading):

Cost Per Shift	\$	2,056	\$/shift	
Cost Per Round	\$	2,056	\$/round	4.568859285
Unit Cost	\$	457	\$/ft	

Assumptions:

OPERATING TIME

Operating Days/Year	days/year
Shifts per day	shifts
Hours per shift	hours

TONNAGE CALCULATIONS PER ROUND

Rounds per shift	1.0	rounds
Width	10.0	ft
Height	10.0	ft
Drilled length	4.5	ft
Pulled length	4.50	ft
Pulled volume	450.0	cu ft/round
Tonnage factor ore (solid)		cu ft/ton
Tonnage per Shift	38.5	tons
Advance per Shift	4.5	ft
Pulled V (ft³)	450.00	
borehole cf/ft	0.0103	
Powder (cf/hole)	0.0386	
Powder Type	1	
Booster (T/F)	TRUE	

HOLE CALCULATIONS PER ROUND

Hole Diameter	1.375	Inches
Total Holes per Round	50	Holes
Dead Holes	2	

Material cost calculation (per heading):

	Units	Cost per unit	Number per round	Number per shift	Cost per shift	Cost per round	Cost per foot
<b>Ground Support:</b>							
Micky Bolt - 2' w/ Plate	ea	6.00	7.00	7.00	42.00	42.00	9.33
Split Set - 3' w/ Plate	ea	8.50					
Split Set - 4' w/ Plate	ea	10.66	12.00	12.00	127.92	127.92	28.43
Dywidag - 8' w/ Plate	ea	23.75	2.00	2.00	47.50	47.50	10.56
Cable Bolt - 6' w/ plate	ea	-					
Eye Bolt - 24"	ea	7.95	1.00	1.00	7.95	7.95	1.77
Blue Shell	ea	2.60	1.00	1.00	2.60	2.60	0.58
Welded Wire - 4'x8'	ea	23.00	6.00	6.00	138.00	138.00	30.67
Chain Link 8'x50' roll	ea	3,981.12	0.25	0.25	995.28	995.28	221.17
Shotcrete	50 lb bag	11.54					
Dywidag Resin	Box	-	0.10	0.10			
Split Set Driver	ea	61.41	0.05	0.05	3.07	3.07	0.68
Micky Driver	ea	61.41	0.05	0.05	3.07	3.07	0.68
Split Set Knock-off Dolly	ea	55.45	0.05	0.05	2.77	2.77	0.62
Split Set Knock-off Micky Dolly	ea	55.45	0.05	0.05	2.77	2.77	0.62
Dag Spinner	ea	120.00	0.05	0.05	6.00	6.00	1.33
Dag Tightener	ea	120.00	0.05	0.05	6.00	6.00	1.33
<b>Drill Steel:</b>							
2.5" Steel	ea	53.37	0.05	0.05	2.67	2.67	0.59
4" Steel	ea	66.08	0.10	0.10	6.61	6.61	1.47
6.5" Steel	ea	84.98	0.10	0.10	8.50	8.50	1.89
8.5" Steel	ea	102.55	0.02	0.02	2.05	2.05	0.46
<b>Bits:</b>							
Cross Top - 1-3/8"	ea	15.63	0.10	0.10	1.56	1.56	0.35
Reamer w/ Pilot - 2-1/2"	ea	190.00	0.05	0.05	9.50	9.50	2.11
Bit Knocker	ea	63.29	0.04	0.04	2.53	2.53	0.56
8" Scaling Bar	ea	63.97	0.01	0.01	0.51	0.51	0.11
Rock Drill Oil	gal	14.35	1.00	1.00	14.35	14.35	3.19
<b>Blasting:</b>							
Emulsion (Dyno AP 1 1/2x16)	lb	5.36					
Emulsion (Dyno AP 1 1/2x32)	lb	2.71					
Dynomix ANFO (pneumatic Loaded)	lb	0.53	110.99	110.99	58.82	58.82	13.07
16" Nonel LP (0-18)	ea	5.13	32.00	32.00	164.16	164.16	36.48
10g Trojan Stinger	ea	1.30	62.40	62.40	81.12	81.12	18.03
20g Trojan Stinger	ea	-					
Primacord 5 / 25gr	ft	0.31	4.80	4.80	1.49	1.49	0.33
Primacord 10 / 50gr	ft	0.59					
Primacord 21 / 100gr	ft	1.10					
Cobra Fuse Assembly 2M	ea	7.46	2.00	2.00	14.92	14.92	3.32
Loading poles	ea	32.00	0.08	0.08	2.56	2.56	0.57
Pull Wire Fuse Lighters	ea	3.70	1.60	1.60	5.92	5.92	1.32
Trunkline	ft	0.18					
Electric Starter Detonator	ea	8.00	1.00	1.00	8.00	8.00	1.78
14 gage duplex wire	ft	0.41	30.00	30.00	12.30	12.30	2.73



20 gage duplex wire	ft	0.62	30.00	30.00	18.60	18.60	4.13
<b>Alimak Rail:</b>							
Alimak Spacer	ea	25.00	-	-	-	-	-
Alimak Rail - 2m	ea	863.22	-	-	-	-	-
Alimak Rail - 1m	ea	689.50	-	-	-	-	-
Alimak Wall Bracket	ea	36.00	-	-	-	-	-
<b>Utilities:</b>							
Mine Phone Line	ft	0.25	6.00	6.00	1.50	1.50	0.33
<b>Hose:</b>							
Hose - 1/2"	ft	1.78	1.60	1.60	2.85	2.85	0.63
Hose - 1"	ft	2.16	1.60	1.60	3.46	3.46	0.77
1" Wire Braided Whip Check	ea	8.05	0.01	0.01	0.06	0.06	0.01
<b>Pipe:</b>							
4" HDPE	ft	4.65	6.00	6.00	27.90	27.90	6.20
2" HDPE	ft	1.28	6.00	6.00	7.68	7.68	1.71
<b>Fittings:</b>							
1/2" Double Spud	ea	19.44	0.30	0.30	5.83	5.83	1.30
1" Double Spud	ea	22.55	0.30	0.30	6.77	6.77	1.50
1/2" Female Spud	ea	12.81	0.30	0.30	3.84	3.84	0.85
1/2" Male Spud	ea	17.90	0.30	0.30	5.37	5.37	1.19
1" Female Spud	ea	14.68	0.30	0.30	4.40	4.40	0.98
1" Male Spud	ea	18.84	0.30	0.30	5.65	5.65	1.26
1/2" Wingnut & Stem	ea	18.50	0.10	0.10	1.85	1.85	0.41
1" Wingnut & Stem	ea	16.50	0.10	0.10	1.65	1.65	0.37
1/2" Hose Splice and Punch Lock	ea	8.00	0.30	0.30	2.40	2.40	0.53
1" Hose Splice and Punch Lock	ea	8.00	0.30	0.30	2.40	2.40	0.53
1/2" Punch Lock Band	ea	0.70	1.80	1.80	1.26	1.26	0.28
1" Punch Lock Band	ea	0.60	1.80	1.80	1.08	1.08	0.24
2" Victrolc Valve	ea	314.93	0.10	0.10	31.49	31.49	7.00
4" Victrolc Valve	ea	280.24	0.10	0.10	28.02	28.02	6.23
2" Vic to 2" Thread	ea	17.28	0.10	0.10	1.73	1.73	0.38
4" Vic to 4" Thread	ea	37.22	0.10	0.10	3.72	3.72	0.83
1" Ball Valve	ea	12.95	0.30	0.30	3.89	3.89	0.86
2"x1" NPT reducers (FXF)	ea	5.78	0.10	0.10	0.58	0.58	0.13
1"x1/2" NPT reducers (FXF)	ea	4.40	0.10	0.10	0.44	0.44	0.10
4"x2" Vic reducer	ea	37.22	0.10	0.10	3.72	3.72	0.83
4" Vic Clamps	ea	20.76	0.16	0.16	3.32	3.32	0.74
2" Vic Clamps	ea	12.53	0.16	0.16	2.00	2.00	0.45
<b>Ventilation:</b>							
Vent Bag - 24"	ft	15.05	0.10	0.10	1.51	1.51	0.33
Hardline - 30"	ft	29.50	3.00	3.00	88.50	88.50	19.67
<b>Totals</b>					\$ 2,056	\$ 2,056	\$ 457






Department of Social Services  
Phone 970-387-5631 \* Fax 970-387-5326  
Martha Johnson, Director  
5/31/2023

Date 6/27/2023  
Transmittal No. 5

Vendor	Date	Num	Amount
La Plata County	05/31/2023	11646	\$ 3,191.25
San Juan Cty	05/31/2023	11647	\$ 4,879.63
<b>TOTAL</b>			<b><u>\$ 8,070.88</u></b>

I, MARTHA JOHNSON, Director of Social Services of San Juan County of Colorado, hereby certify that the payments listed above are available for inspection and have been paid to the payees listed.

  
MARTHA JOHNSON

7-5-2023

I, Austin Lashley, Chairman of the San Juan County Board of Commissioners, hereby certify that the payments as set forth above have this date been approved and warrants in payment thereof issued upon the Social Services Fund.



Austin Lashley



8:18 AM  
06/27/23  
Accrual Basis

**San Juan County Social Services  
Profit & Loss Budget vs. Actual  
January through December 2023**

						TOTAL	
	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jan - Dec 23	Budget
<b>Ordinary Income/Expense</b>							
<b>Income</b>							
400.001 REVENUE-State Alloc	5,837.77	5,834.67	6,106.69	9,634.17	6,266.52	33,679.82	140,272.00
400.010 Property Tax Current	0.00	1,589.26	3,112.96	1,535.25	3,683.72	9,921.19	15,100.00
400.020 Specific Ownership tax	102.95	89.02	77.69	81.20	76.62	427.48	1,505.00
400.040 Penalties/Int on Tax	0.00	0.00	0.00	0.16	0.47	0.63	72.00
400.145 REVENUE-CSGB Grant	999.11	0.00	0.00	0.00	0.00	999.11	1,000.00
400.180 REVENUE-EOC	37.50	0.00	0.00	37.50	0.00	75.00	480.00
400.220 REVENUE-Program Refunds	200.00	300.00	300.00	0.00	0.00	800.00	0.00
<b>Total Income</b>	<b>7,177.33</b>	<b>7,812.95</b>	<b>9,597.34</b>	<b>11,288.28</b>	<b>10,027.33</b>	<b>45,903.23</b>	<b>158,429.00</b>
<b>Expense</b>							
500.100 EXPENSE-Administration	4,868.71	5,049.60	5,891.11	5,948.51	6,036.35	27,794.28	71,000.00
500.110 EXPENSE-Adult Protectio	0.00	0.00	0.00	0.00	0.00	0.00	1,440.00
500.120 EXPENSE-Child Care	26.61	0.00	0.00	0.00	0.00	26.61	600.00
500.130 EXPENSE-Child Support	74.19	41.28	34.53	0.00	34.53	184.53	324.00
500.140 EXPENSE-Child Welfare	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00
500.145 EXPENSE-CSGB Grant	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00
500.150 EXPENSE-Colorado Works	0.00	0.00	0.00	0.00	0.00	0.00	67,000.00
500.160 EXPENSE-Core Services	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	10,000.00	24,000.00
500.200 EXPENSE-LEAP	564.44	297.85	218.89	3,424.46	0.00	4,505.64	1,200.00
500.210 EXPENSE-OAP	0.00	0.00	0.00	0.00	0.00	0.00	24.00
<b>Total Expense</b>	<b>7,533.95</b>	<b>7,388.73</b>	<b>8,144.53</b>	<b>11,372.97</b>	<b>8,070.88</b>	<b>42,511.06</b>	<b>167,588.00</b>
<b>Net Income</b>	<b>-356.62</b>	<b>424.22</b>	<b>1,452.81</b>	<b>-84.69</b>	<b>1,956.45</b>	<b>3,392.17</b>	<b>-9,159.00</b>



**San Juan County**  
**CDHS Allocation and Expenditures report**  
For State Fiscal Year 2022-23  
**5/31/2023**

FIPS

111

Program	Allocation	Expenditures	Remaining	% Remaining	% of Fiscal Year Remaining
CDHS County Admin	77,281	16,242	61,039	78.98%	8.33%
CDHS ARPA (F302.4013)	828	0	828	100.00%	8.33%
HCPF Regular	23,781	8,122	15,659	65.85%	8.33%
HCPF Enhanced	48,465	1,492	46,973	96.92%	8.33%
<b>APS Admin</b>	<b>1,460</b>	<b>2,639</b>	<b>-1,179</b>	<b>-80.76%</b>	<b>8.33%</b>
APS Client	2,000	0	2,000	100.00%	8.33%
Child Care	7,303	159	7,144	97.83%	8.33%
CARE CRSSA Funding	1,052	-76	1,128	107.23%	8.33%
CARE CRSSA Funding Expan	3,968	-83	4,051	102.08%	8.33%
Colorado Works	44,193	-1,647	45,840	103.73%	8.33%
Colorado Works HB 22-1259 ARPA	2,504	178	2,326	92.88%	8.33%
Child Welfare 80/20	25,528	0	25,528	100.00%	8.33%
Child Welfare 100%	2,209	491	1,718	77.78%	8.33%
Child Welfare PRTF	1,151	0	1,151	100.00%	8.33%
<b>CORE 80/20</b>	<b>8,724</b>	<b>8,000</b>	<b>724</b>	<b>8.30%</b>	<b>8.33%</b>
CORE 100%	16,276	14,000	2,276	13.98%	8.33%
SEAP	374	0	374	100.00%	8.33%
LEAP outreach	244	0	244	100.00%	33.33%
LEAP outreach incentive	26,000	5,351	20,649	79.42%	8.33%
Locked-in PHE Enhanc	2,239	0	2,239	100.00%	8.33%
<b>SNAP</b>	<b>97</b>	<b>97</b>	<b>0</b>	<b>0.00%</b>	<b>8.33%</b>
<b>Total</b>	<b>295,677</b>	<b>54,965</b>	<b>240,712</b>		







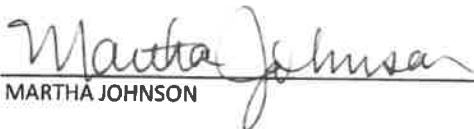


Department of Social Services  
Phone 970-387-5631 \* Fax 970-387-5326  
Martha Johnson, Director  
6/30/2023

Date 7/25/2023  
Transmittal No. 6

Vendor	Date	Num	Amount
La Plata County	06/30/2023	TBD	\$ 4,144.41
San Juan Cty	06/30/2023	TBD	\$ 4,730.10
Rhoades, Krissy	06/30/2023	TBD	\$ 56.00
Silverton Family Learning	06/30/2023	11648	\$ 6,961.32
Silverton Schools	06/30/2023	11649	\$ 12,500.00
<b>TOTAL</b>			<b><u>\$ 28,391.83</u></b>

I, MARTHA JOHNSON, Director of Social Services of San Juan County of Colorado, hereby certify that the payments listed above are available for inspection and have been paid to the payees listed.

  
MARTHA JOHNSON

8-4-2023

I, Austin Lashley, Chairman of the San Juan County Board of Commissioners, hereby certify that the payments as set forth above have this date been approved and warrants in payment thereof issued upon the Social Services Fund.

Austin Lashley



1:36 PM  
7/25/23  
Accrual Basis

**San Juan County Social Services**  
**Profit & Loss Budget vs. Actual**  
January 1 through July 25, 2023

							<b>TOTAL</b>	
	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Actual	Budget
<b>Ordinary Income/Expense</b>								
<b>Income</b>								
400.001 REVENUE-State Alloc	5,837.77	5,834.67	6,106.69	9,634.17	6,266.52	27,485.07	61,164.89	78,201.32
400.010 Property Tax Current	0.00	1,589.26	3,112.96	1,535.25	3,883.72	1,722.33	11,643.52	14,906.45
400.020 Specific Ownership tax	102.95	89.02	77.69	81.20	76.62	167.36	594.84	1,245.32
400.030 Delinquent Property Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.040 Penalties/Int on Tax	0.00	0.00	0.00	0.16	0.47	4.24	4.87	40.84
400.145 REVENUE-CSGB Grant	999.11	0.00	0.00	0.00	0.00	0.00	999.11	500.00
400.180 REVENUE-EOC	37.50	0.00	0.00	37.50	0.00	0.00	75.00	272.26
400.220 REVENUE-Program Refunds	200.00	300.00	300.00	0.00	0.00	0.00	800.00	0.00
<b>Total Income</b>	<b>7,177.33</b>	<b>7,812.95</b>	<b>9,597.34</b>	<b>11,288.28</b>	<b>10,027.33</b>	<b>29,379.00</b>	<b>76,282.23</b>	<b>96,166.19</b>
<b>Expense</b>								
500.100 EXPENSE-Administration	4,868.71	5,049.60	5,891.11	5,948.51	6,036.35	6,602.58	34,396.86	40,838.71
500.110 EXPENSE-Adult Protectio	0.00	0.00	0.00	0.00	0.00	105.46	105.46	816.77
500.120 EXPENSE-Child Care	26.61	0.00	0.00	0.00	0.00	0.00	26.61	340.32
500.130 EXPENSE-Child Support	74.19	41.28	34.53	0.00	34.53	0.00	184.53	183.77
500.140 EXPENSE-Child Welfare	0.00	0.00	0.00	0.00	0.00	180.98	180.98	568.94
500.145 EXPENSE-CSGB Grant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00
500.160 EXPENSE-Colorado Works	0.00	0.00	0.00	0.00	0.00	19,461.32	19,461.32	36,524.19
500.180 EXPENSE-Core Services	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	12,000.00	13,612.90
500.200 EXPENSE-LEAP	564.44	297.85	218.89	3,424.46	0.00	41.49	4,547.13	680.65
<b>Total Expense</b>	<b>7,533.95</b>	<b>7,388.73</b>	<b>8,144.53</b>	<b>11,372.97</b>	<b>8,070.88</b>	<b>28,391.83</b>	<b>70,902.89</b>	<b>94,066.25</b>
<b>Net Income</b>	<b>-356.62</b>	<b>424.22</b>	<b>1,452.81</b>	<b>-84.69</b>	<b>1,956.45</b>	<b>987.17</b>	<b>4,379.34</b>	<b>1,099.94</b>



**San Juan County**  
**CDHS Allocation and Expenditures report**  
For State Fiscal Year 2022-23  
**6/30/2023**

FIPS

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Program	Allocation	Expenditures	Remaining	% Remaining	% of Fiscal Year Remaining
CDHS County Admin	93,523	19,859	73,664	78.77%	0.00%
CDHS ARPA (F302.4013)	828	0	828	100.00%	0.00%
HCPF Regular	23,781	9,050	14,731	61.94%	0.00%
HCPF Enhanced	48,465	1,612	46,853	96.67%	0.00%
<b>APS Admin</b>	<b>1,460</b>	<b>3,143</b>	<b>-1,683</b>	<b>-115.26%</b>	<b>0.00%</b>
APS Client	2,000	0	2,000	100.00%	0.00%
Child Care	7,303	2,255	5,048	69.12%	0.00%
CARE CRSSA Funding Expan	3,968	-94	4,062	102.36%	0.00%
Colorado Works	42,546	31,966	10,579	24.87%	0.00%
Colorado Works HB 22-1259 ARPA	2,504	231	2,273	90.76%	0.00%
<b>Child Welfare 80/20</b>	<b>25,528</b>	<b>28,418</b>	<b>-2,890</b>	<b>-11.32%</b>	<b>0.00%</b>
Child Welfare 100%	2,209	2,209	0	0.00%	0.00%
Child Welfare PRTF	1,151	0	1,151	100.00%	0.00%
CORE 80/20	8,724	7,724	1,000	11.46%	0.00%
CORE 100%	16,276	16,276	0	0.00%	0.00%
SEAP	374	0	374	100.00%	0.00%
LEAP outreach	244	41	203	83.00%	25.00%
LEAP outreach incentive	26,000	5,351	20,649	79.42%	0.00%
Locked-in PHE Enhanc	2,239	0	2,239	100.00%	0.00%
SNAP	97	97	0	0.00%	0.00%
<b>Total</b>	<b>309,220</b>	<b>128,140</b>	<b>181,080</b>		







# Fund Status Report

San Juan County

## Report Selection Criteria:

Selected Fund Type: ALL  
 Include Encumbrances? NO  
 Include Pri Yr Liabilities? NO  
 Printed in Alpha by Fund Name? NO  
 Exclude Additional Cash? NO

Fiscal Year: 2023  
 From Period: 7  
 To Period: 7

From Date: 7/1/2023  
 Thru Date: 7/31/2023  
 Option: Period

## Selected Funds :

	Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
General Fund (01)					
010 - COUNTY GENERAL FUND	\$1,711,776.95	\$554,270.07	(\$507,135.17)	\$0.00	\$1,758,911.85
020 - COUNTY ROAD & BRIDGE	\$137,367.43	\$26,916.22	(\$52,282.83)	\$0.00	\$112,000.82
030 - CONTINGENT FUND	\$54,554.94	\$0.00	\$0.00	\$0.00	\$54,554.94
035 - AMENDMENT 1-EMERGENCY FUN	\$30,000.00	\$0.00	\$0.00	\$0.00	\$30,000.00
040 - SOCIAL SERVICE FUND	\$78,483.25	\$29,595.57	(\$24,340.95)	\$0.00	\$83,737.87
045 - AFFORDABLE HOUSING FUND	\$407,797.18	\$11,925.24	\$0.00	\$0.00	\$419,722.42
050 - CONSERVATION TRUST	\$12,665.74	\$34.24	\$0.00	\$0.00	\$12,699.98
051 - LODGING TAX FUND	\$458,040.30	\$663.85	(\$25,000.00)	\$0.00	\$433,704.15
052 - TOURISM BOARD FUND	\$5,951.93	\$25,000.35	(\$13,624.10)	\$0.00	\$17,328.18
055 - NOXIOUS WEED FUND	\$1,988.18	\$0.00	\$0.00	\$0.00	\$1,988.18
060 - TOWN OF SILVERTON	\$13,962.16	\$51,058.95	(\$51,058.95)	\$0.00	\$13,962.16
070 - DURANGO FIRE PROTECTION DIS	\$0.00	\$7,445.21	(\$7,445.21)	\$0.00	\$0.00
080 - SOUTHWEST WATER CONSERVAT	\$59.60	\$2,899.32	(\$2,899.32)	\$0.00	\$59.60
090 - ADVERTISING FEES	\$10,668.40	\$0.00	\$0.00	\$0.00	\$10,668.40
100 - REDEMPTION	\$312.30	\$4,240.42	(\$4,240.42)	\$0.00	\$312.30
110 - SCHOOL GENERAL	\$0.00	\$97,043.82	(\$97,043.82)	\$0.00	\$0.00
116 - SCHOOL BOND	\$0.00	\$11,397.82	(\$11,397.82)	\$0.00	\$0.00
200 - SPECIAL ASSESSMENTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
210 - 911 AUTHORITY	\$66,616.83	\$3,360.23	(\$3,332.44)	\$0.00	\$66,644.62
220 - TREASURER'S FEES	\$19,678.05	\$60.00	\$0.00	\$0.00	\$19,738.05
230 - ASSESSOR'S PENALTY	\$5,548.41	\$0.00	\$0.00	\$0.00	\$5,548.41
240 - TREASURER'S DEEDS/FORECLOS	\$10,985.14	\$0.00	(\$63.36)	\$0.00	\$10,921.78
250 - CLERK TECHNOLOGY FEES	\$5,038.40	\$33.00	\$0.00	\$0.00	\$5,071.40
260 - ADMIN FEE	\$2,698.42	\$0.00	\$0.00	\$0.00	\$2,698.42
270 - PEAK INVESTMENTS	\$33,711.58	\$110.69	\$0.00	\$0.00	\$33,822.27
280 - ABATEMENTS	(\$2,333.91)	\$0.00	\$0.00	\$0.00	(\$2,333.91)

Operator: djaramillo

8/3/2023 11:45:30 AM

Page 1 of 3

Report ID: GLLT85a



## Fund Status Report

San Juan County

## Report Selection Criteria:

Selected Fund Type: ALL  
 Include Encumbrances? NO  
 Include Pri Yr Liabilities? NO  
 Printed in Alpha by Fund Name? NO  
 Exclude Additional Cash? NO

Fiscal Year: 2023  
 From Period: 7  
 To Period: 7

From Date: 7/1/2023  
 Thru Date: 7/31/2023  
 Option: Period

## Selected Funds :

	Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
300 - ESCROW-AMBULANCE	\$83,164.95	\$99.55	\$0.00	\$0.00	\$83,264.50
350 - ESCROW-COMPUTER EQUIP	\$4,261.37	\$20.00	\$0.00	\$0.00	\$4,281.37
360 - ASSESSOR/TREASURER ESCROW	\$3,399.26	\$28.18	\$0.00	\$0.00	\$3,427.44
400 - ESCROW-GRAVEL	\$144,912.01	\$45.00	\$0.00	\$0.00	\$144,957.01
410 - COUNTY BARN ESCROW	\$52,919.12	\$208.64	\$0.00	\$0.00	\$53,127.76
420 - ROAD EQUIP PURCHASE ESCROW	\$73,279.90	\$223.18	\$0.00	\$0.00	\$73,503.08
430 - LOST 4-WHEELERS ESCROW	\$4,026.66	\$15.00	\$0.00	\$0.00	\$4,041.66
440 - SEARCH & RESCUE ESCROW	\$15,245.72	\$65.54	\$0.00	\$0.00	\$15,311.26
450 - COURTHOUSE ESCROW	\$68,149.70	\$2,011.28	\$0.00	\$0.00	\$70,160.98
460 - MSI ESCROW	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
470 - EMERGENCY PREPAREDNESS	\$2,509.34	\$32.27	\$0.00	\$0.00	\$2,541.61
500 - HISTORICAL ARCHIVES ESCROW	\$431.95	\$9.55	\$0.00	\$0.00	\$441.50
550 - ASPHALT ESCROW	\$88,675.80	\$331.82	\$0.00	\$0.00	\$89,007.62
570 - FOREST RESERVE ESCROW	\$125,648.18	\$0.00	\$0.00	\$0.00	\$125,648.18
590 - EMERGENCY SERVICES SALES TA	\$1,710,025.94	\$36,858.15	\$0.00	\$0.00	\$1,746,884.09
600 - FIRE TRUCK FUND	\$88,141.89	\$286.82	\$0.00	\$0.00	\$88,428.71
650 - LAND USE ESCROW	\$60,544.11	\$125.46	\$0.00	\$0.00	\$60,669.57
700 - WORKFORCE HOUSING ESCROW	\$3,236.29	\$69.55	\$0.00	\$0.00	\$3,305.84
750 - ESCROW-SHERIFF VEHICLE	\$43,869.83	\$32.73	\$0.00	\$0.00	\$43,902.56
800 - PUBLIC TRUSTEE	\$30.00	\$108.00	(\$43.00)	\$0.00	\$95.00
810 - SPECIFIC OWNERSHIP TAX	\$30,156.95	\$18,312.59	(\$30,156.96)	\$0.00	\$18,312.58
820 - TAX HOLDING FUND	\$281,718.19	\$128,413.02	(\$278,109.60)	\$0.00	\$132,021.61
900 - ADVANCED COLLECTIONS	\$121.67	\$0.00	\$0.00	\$0.00	\$121.67
950 - WEST SIDE SPECIAL IMP. DISTRICT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
960 - HOSPITAL GRANT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
* Fund Type Total *	\$5,950,040.11	\$1,013,351.33	(\$1,108,173.95)	\$0.00	\$5,855,217.49

Operator: djaramillo

8/3/2023 11:45:30 AM

Page 2 of 3

Report ID: GLLT85a



# Fund Status Report

San Juan County

## Report Selection Criteria:

Selected Fund Type: ALL  
 Include Encumbrances? NO  
 Include Pri Yr Liabilities? NO  
 Printed in Alpha by Fund Name? NO  
 Exclude Additional Cash? NO

Fiscal Year: 2023

From Period: 7  
 To Period: 7

From Date: 7/1/2023

Thru Date: 7/31/2023  
 Option: Period

## Selected Funds :

Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
* Report Total *	\$5,950,040 11	\$1,013,351 33	(\$1,108,173 95)	\$0 00
				\$5,855,217 49







San Juan County

# Composition of Cash Balances and Investments

As Of: 7/31/2023 Including Account Details

	Net Bank Balance	Investments	Cash on Hand/ In Transit	Total
<i>Cash and Cash Items</i>				
Cash on Hand	\$0.00	\$0.00	\$200.00	\$200.00
Cash on Hand:	\$0.00	\$0.00	\$200.00	\$200.00
<i>Demand and Time Deposits</i>				
<i>Citizens State Bank</i>				
Tourism Fund Checking	\$17,450.57	\$0.00	\$0.00	\$17,450.57
Affordable Housing Checking	\$438,338.85	\$0.00	\$0.00	\$438,338.85
911 Authority Checking Checking	\$66,988.69	\$0.00	\$0.00	\$66,988.69
General Checking Checking	\$2,931,655.46	\$0.00	\$0.00	\$2,931,655.46
Citizens State Bank:	\$3,454,433.57	\$0.00	\$0.00	\$3,454,433.57



Investment Pool

		Cash on Hand/			
		Net Bank Balance	Investments	In Transit	Total
<i>Investment Pool</i>					
Citizens State Bank	100120367	\$0.00	\$1,057,772.01	\$0.00	\$1,057,772.01
	Citizens State Bank:	\$0.00	\$1,057,772.01	\$0.00	\$1,057,772.01
COLOTRUST	CO-01-0646-8001	\$0.00	\$1,047,748.74	\$0.00	\$1,047,748.74
	COLOTRUST:	\$0.00	\$1,047,748.74	\$0.00	\$1,047,748.74
Sigma Financial Corporation	GTR-041850	\$0.00	\$295,063.17	\$0.00	\$295,063.17
	Sigma Financial Corporation:	\$0.00	\$295,063.17	\$0.00	\$295,063.17
		\$3,454,433.57	\$2,400,583.92	\$200.00	\$5,855,217.49





Willy Tookey &lt;admin@sanjuancolorado.us&gt;

**Please RSVP: Western District Meeting on August 25**

1 message

**Reagan Shane** <rshane@ccionline.org>

Mon, Aug 7, 2023 at 5:07 PM

To: Reagan Shane &lt;rshane@ccionline.org&gt;

Cc: John Swartout <JSwartout@ccionline.org>, Gini Pingenot <gpingenot@ccionline.org>, Katie First <kfirst@ccionline.org>, Eric Bergman <ebergman@ccionline.org>, Brittney Becerra <bbecerra@ccionline.org>, "Steve O'Dorisio (sodorisio@adcogov.org)" <sodorisio@adcogov.org>, "Liz Smith - Gunnison (EKSmith@gunnisoncounty.org)" <EKSmith@gunnisoncounty.org>, Sue Hansen <shansen@montrosecounty.net>, "Kathay Rennels (kathay.rennels@colostate.edu)" <Kathay.Rennels@colostate.edu>, "Griffith, Megan" <Megan.Griffith@colostate.edu>

Good afternoon, Western District!

We're quickly approaching our next District Meeting, which will be on **Friday, August 25, from 10:00 AM to 2:00 PM at the Montrose County Event Center** (1036 N 7<sup>th</sup> St, Montrose, CO 81401 – note that we *may* have a remote option but are still figuring out details).

Lunch will be provided – thank you to CSU Extension for sponsoring! – so **please RSVP to me by Friday, August 18 so we can get an accurate count for lunch.**

We're working on finalizing the agenda currently and will circulate it ahead of the meeting. A calendar invitation with these details will be sent tomorrow and will be kept up to date with the latest details.

Thanks everyone. We're looking forward to seeing you all in a couple of weeks!

Reagan

**Reagan Shane**

Legislative & Policy Advocate

Colorado Counties, Inc.

303.859.9288 (c)







### Emergency Services Sales Tax

	2018	2019	2020	2021	2022	2023	% Change	5-Year Ave.
January	5,693.58	22,652.17	22,081.29	35,673.96	42,007.94	38,798.45	(0.08)	32,242.76
February	9,500.78	20,193.73	38,888.47	40,698.37	51,602.55	49,470.71	(0.04)	40,170.77
March	8,924.66	28,148.22	30,899.33	39,142.28	64,129.75	50,505.67	(0.27)	42,565.05
April	22,040.87	52,719.27	32,992.58	39,017.29	54,305.90	50,263.76	(0.08)	45,859.76
May	23,915.42	32,415.46	28,328.62	53,200.16	64,390.89	66,881.55	0.04	49,043.34
June	13,364.73	17,201.80	20,323.77	38,209.24	36,187.24	74,396.48	0.51	37,263.71
July	36,977.68	35,279.36	29,408.23	54,965.11	58,069.60	36,858.14	(0.58)	42,916.09
August	54,297.30	74,723.11	62,795.11	139,369.81	119,039.47	131,561.66	0.10	105,497.83
September	100,795.88	126,269.99	120,650.92	164,773.79	154,524.58		(0.07)	133,403.03
October	82,850.46	103,635.85	108,852.60	139,222.51	142,140.85		0.02	115,340.45
November	88,859.04	101,380.60	107,416.93	136,598.38	133,850.03		(0.02)	113,621.00
December	34,697.06	45,399.97	63,130.77	93,550.49	84,746.99		(0.10)	64,305.06
<b>Total</b>	<b>481,917.46</b>	<b>660,019.53</b>	<b>665,768.62</b>	<b>974,421.39</b>	<b>1,004,995.79</b>	<b>498,736.42</b>	<b>0.03</b>	<b>757,424.56</b>
Year to Date	174,715.02	283,333.12	265,717.40	440,276.22	489,733.34	498,736.42	0.02	







Year to Date	Town Sales Tax						5-Year Ave.	
	2018	2019	2020	2021	2022	2023 % Change		
January	17,803.62	17,777.51	28,417.92	40,358.55	48,401.82	43,654.63	(G:11)	35,722.09
February	24,144.03	26,379.98	39,259.76	45,122.36	56,934.96	49,412.31	(G:15)	43,421.87
March	23,836.90	33,717.73	34,763.49	46,228.85	81,691.27	56,271.57	(G:45)	50,534.58
April	24,868.07	75,356.86	37,422.14	46,611.62	60,354.74	58,492.54	(G:03)	55,647.58
May	21,945.84	32,071.64	24,839.85	60,352.89	59,047.63	65,473.02	G:10	48,357.01
June	17,527.63	21,650.46	22,518.84	43,589.40	41,669.35	95,511.31	G:56	44,987.87
July	53,182.66	50,243.72	29,239.56	74,281.24	71,269.47	44,246.65	(G:61)	53,856.13
August	80,166.62	105,875.94	90,106.11	190,977.70	163,532.09	185,303.71	G:12	147,159.11
September	151,431.83	179,274.96	170,982.30	233,606.46	217,481.13		(G:07)	190,555.33
October	121,288.07	151,774.01	155,155.28	192,817.13	193,304.52		G:00	162,867.80
November	130,755.88	146,395.83	153,802.89	189,389.35	183,632.90		(G:03)	160,795.37
December	50,151.94	64,974.75	83,368.79	129,991.56	117,612.17		(G:11)	89,219.84
TOTAL	717,103.10	905,493.39	869,876.93	1,293,327.11	1,294,932.05	598,365.74	G:00	1,016,146.51







County Sales Tax							
	2018	2019	2020	2021	2022	2023 % Change	5yr. Average
January	4,970.71	7,799.87	6,854.79	16,723.50	18,815.24	-2.11%	11,032.82
February	13,859.09	12,885.86	22,860.78	19,987.28	25,634.49	13.82%	19,045.50
March	11,861.72	11,246.33	14,595.18	16,402.87	20,922.98	-1.85%	15,005.82
April	10,399.61	8,857.05	15,280.29	15,820.09	26,540.36	-21.00%	15,379.48
May	16,321.32	19,708.91	12,778.47	24,773.54	43,984.48	-5.87%	23,513.34
June	4,601.13	5,827.74	9,946.40	17,549.36	10,146.13	40.51%	9,614.15
July	5,985.49	6,206.92	17,737.22	13,668.65	21,647.93	-46.96%	13,049.24
August	6,568.03	13,486.95	10,921.79	32,028.49	26,943.45	-6.88%	17,989.74
September	9,579.78	22,429.05	21,745.79	30,048.75	29,774.28	-0.92%	22,715.53
October	11,057.45	13,774.16	18,726.14	29,953.36	34,135.62	12.25%	21,529.35
November	11,187.78	15,070.58	17,785.19	29,182.27	30,541.07	4.45%	20,753.38
December	5,273.24	7,547.72	17,476.46	19,698.95	17,991.84	-9.49%	13,597.64
<b>Total</b>	111,665.35	144,841.14	186,708.50	265,837.11	307,077.87	13.43%	203,225.99
Year to Date	74,567.10	86,019.63	110,974.92	156,953.78	194,635.06	-2.88%	







### Lodging Tax Revenue

	2018	2019	2020	2021	2022	2023	% Change	5 yr. Average
January	126.80	885.93	3,729.44	543.94	1,034.65	8,688.65	88.09%	2,976.52
February	8,318.23	10,816.00	14,088.47	20,282.97	17,982.00	21,651.33	16.95%	16,964.15
March	3,097.25	145.07	454.00	660.00	11,775.69	5,698.15	-106.66%	3,746.58
April	2,002.98	33.00	-	1,489.56	1,091.00	68.78	-1486.22%	536.47
May	11,375.54	17,612.98	14,069.00	30,651.70	31,766.09	30,512.00	-4.11%	24,922.35
June	1,356.34	952.07	300.40	1,007.32	1,525.85	3,654.58	58.25%	1,488.04
July	2,702.84	170.21	573.00	11,854.90	2,241.00	663.85	-237.58%	3,100.59
August	11,477.00	14,372.43	13,978.56	57,659.81	31,076.00	26,017.87	-19.44%	28,620.93
September	7,956.78	2,738.12	139.00	248.50	718.26		65.40%	2,360.13
October	666.79	2,848.73	780.48	1,346.59	1,473.79		8.63%	1,423.28
November	43,574.04	47,263.00	58,396.70	76,493.41	71,800.28		-6.54%	59,505.49
December	2,029.95	1,790.37	1,918.52	3,364.85	2,534.04		-32.79%	2,327.55
<b>Total</b>	<b>\$ 94,684.54</b>	<b>\$ 99,627.91</b>	<b>\$108,427.57</b>	<b>\$205,603.55</b>	<b>\$175,018.65</b>	<b>\$ 96,955.21</b>	<b>-17.48%</b>	<b>136,672.44</b>















Remote Town Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	226.94	2,665.41	7,137.41	18,727.85	6,501.09
February	49,386.28	5,252.72	6,744.78	7,164.49	9,212.54
March	894.21	4,049.16	10,221.18	9,734.40	10,861.19
April	852.39	5,391.71	6,870.33	7,026.64	13,421.87
May	2,696.78	4,983.35	9,701.78	7,962.66	10,946.74
June	3,444.00	7,827.11	13,826.19	17,869.99	11,026.74
July	2,981.52	11,801.24	16,736.42	14,542.52	
August	2,652.50	12,441.45	14,756.06	12,933.86	
September	2,286.57	10,544.18	12,717.24	10,280.87	
October	2,018.43	8,487.00	27,347.76	17,708.75	
November	2,827.77	5,994.61	9,195.92	7,803.27	
December	4,688.76	7,310.95	12,788.01	8,628.52	
TOTAL	74,956.15	86,748.89	148,043.08	140,383.82	61,970.17
YTD	57,500.60	30,169.46	54,501.67	68,486.03	61,970.17

Remote County Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	41.21	3,806.85	3,628.40	5,753.99	7,165.10
February	84.44	4,410.17	2,876.38	5,470.91	6,625.40
March	398.52	3,226.13	4,696.12	20,226.35	8,333.13
April	151.91	3,304.40	5,449.37	3,221.41	7,054.33
May	325.95	2,775.50	6,212.46	5,873.38	6,677.71
June	661.74	2,510.43	7,899.27	7,016.18	9,251.92
July	861.00	4,350.51	8,226.05	5,981.69	
August	1,050.42	4,023.33	6,509.70	6,176.77	
September	1,028.90	4,221.36	6,365.70	7,226.03	
October	825.95	3,659.87	5,435.83	6,589.09	
November	924.35	2,933.00	7,277.72	7,730.04	
December	9,228.08	4,317.03	6,835.25	8,003.28	
TOTAL	15,582.47	43,548.58	71,412.25	89,269.12	45,107.59
YTD	1,663.77	20,043.48	30,762.00	47,562.22	45,107.59

Remote Emergency Services Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	167.86	4,051.74	6,735.19	15,300.16	8,540.81
February	30,969.48	6,049.12	6,019.09	7,896.61	9,898.07
March	809.27	4,560.71	9,322.30	18,724.25	11,995.67
April	628.71	5,443.90	7,699.31	7,612.23	12,796.80
May	1,892.28	4,857.16	9,945.76	8,646.96	11,014.56
June	2,570.26	6,471.47	13,577.53	15,552.84	12,673.34
July	2,405.48	10,111.26	15,600.53	12,826.79	
August	3,702.92	10,307.22	13,290.24	11,943.37	
September	2,075.54	9,243.47	11,926.06	10,941.10	
October	1,780.63	7,604.14	20,488.41	15,185.16	
November	2,348.89	5,585.20	10,295.36	9,707.69	
December	8,712.17	7,274.58	12,263.74	10,394.20	
TOTAL	58,063.49	81,559.97	137,163.52	144,731.36	66,919.25
YTD	37,037.86	31,434.10	53,299.18	73,733.05	66,919.25

Total Remote Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	436.01	10,524.00	17,501.00	39,782.00	22,207.00
February	80,440.20	15,712.01	15,640.25	20,532.01	25,736.01
March	2,102.00	11,846.00	24,239.60	48,685.00	31,189.99
April	1,633.01	14,140.01	20,019.01	17,860.28	33,273.00
May	4,915.01	12,616.01	25,860.00	22,483.00	28,639.01
June	6,676.00	16,809.01	35,302.99	40,439.01	32,952.00
July	6,248.00	26,263.01	40,563.00	33,351.00	
August	7,405.84	26,772.00	34,556.00	31,054.00	
September	5,391.01	24,009.01	31,009.00	28,448.00	
October	4,625.01	19,751.01	53,272.00	39,483.00	
November	6,101.01	14,512.81	26,769.00	25,241.00	
December	22,629.01	18,902.56	31,887.00	27,026.00	
TOTAL	148,602.11	211,857.44	356,618.85	374,384.30	173,997.01
YTD	96,202.23	81,647.04	138,562.85	189,781.30	173,997.01







Town Sales Tax (month collected)																		
	2018	2019			2020			2021			2022			2023			% Change	5-Year Ave
		Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total		
January	23,836.90	33,491.06	226.94	33,718.00	32,098.08	2,665.41	34,763.49	39,091.44	7,137.41	46,228.85	62,963.42	18,727.85	81,691.27	49,770.48	6,501.09	56,271.57	(0.31)	50,534.64
February	24,868.07	25,970.59	49,386.28	75,356.87	32,169.42	5,252.72	37,422.14	39,866.84	6,744.78	46,611.62	53,190.25	7,164.49	60,354.74	49,280.00	9,212.54	58,492.54	(0.03)	55,647.58
March	21,945.84	31,177.43	894.21	32,071.64	20,790.69	4,049.16	24,839.85	50,131.71	10,221.18	60,352.89	49,313.23	9,734.40	59,047.63	54,611.83	10,861.19	65,473.02	0.11	48,357.01
April	17,527.63	20,798.07	852.39	21,650.46	17,127.14	5,391.71	22,518.85	36,719.07	6,870.33	43,589.40	34,642.71	7,026.64	41,669.35	82,089.44	13,421.87	95,511.31	1.29	44,987.87
May	53,182.66	47,514.29	2,696.78	50,211.07	24,256.22	4,983.35	29,239.57	64,579.46	9,701.78	74,281.24	63,306.81	7,962.66	71,269.47	33,299.91	10,946.74	44,246.65	(0.38)	53,849.60
June	80,166.62	102,431.94	3,444.00	105,875.94	82,279.01	7,827.11	90,106.12	177,151.51	13,826.19	190,977.70	145,662.10	17,869.99	163,532.09	174,276.97	11,026.74	185,303.71	(0.14)	122,763.54
July	151,431.83	176,293.44	2,981.52	179,274.96	159,181.07	11,801.24	170,982.31	216,870.04	16,736.42	233,606.46	202,938.61	14,542.52	217,481.13			-	(0.07)	185,508.86
August	121,288.07	149,121.51	2,652.50	151,774.01	142,713.83	12,441.45	155,155.28	178,061.07	14,756.06	192,817.13	180,370.66	12,933.86	193,304.52			-	0.00	155,184.65
September	130,755.88	144,109.26	2,286.57	146,395.83	143,258.72	10,544.18	153,802.90	176,672.11	12,717.24	189,389.35	173,352.03	10,280.87	183,632.90			-	(0.03)	161,238.96
October	50,151.94	62,956.32	2,018.43	64,974.75	74,881.79	8,487.00	83,368.79	102,643.80	27,347.76	129,991.56	99,903.42	17,708.75	117,612.17			-	(0.10)	83,145.00
November	17,777.51	25,590.15	2,827.77	28,417.92	34,363.94	5,994.61	40,358.55	39,205.90	9,195.92	48,401.82	35,851.36	7,803.27	43,654.63			-	(0.10)	32,735.68
December	26,379.98	34,571.00	4,688.76	39,259.76	37,811.41	7,310.95	45,122.36	44,146.95	12,788.01	56,934.96	40,783.79	8,628.52	49,412.31			-	(0.13)	40,208.90
TOTAL	719,312.94	854,025.06	74,956.15	928,981.21	800,931.32	86,748.89	887,680.21	1,165,139.90	148,043.08	1,313,182.98	1,142,278.39	140,383.82	1,282,662.21	443,328.63	61,970.17	505,298.80		-
YTD	221,527.73			318,883.98			238,890.02			462,041.70			477,564.55			505,298.80	0.06	400,535.81







Emergency Services Sales Tax (month collected)																		
	2018	2019			2020			2021			2022			2023			% Change	5-Year Ave.
		Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total		
January	8,924.66	27,980.65	167.86	28,148.51	26,847.59	4,051.74	30,899.33	32,447.80	6,735.19	39,182.99	48,829.59	15,300.16	64,129.75	41,964.86	8,540.81	50,505.67	-21.24%	42,573.25
February	22,040.87	21,749.81	30,969.48	52,719.29	26,943.46	6,049.12	32,992.58	33,038.78	6,019.09	39,057.87	46,409.30	7,896.61	54,305.91	40,365.69	9,898.07	50,263.76	-7.44%	45,867.88
March	23,915.42	31,606.19	809.27	32,415.46	18,988.97	4,560.71	23,549.68	43,877.86	9,322.30	53,200.16	45,666.63	18,724.25	64,390.88	54,885.88	11,995.67	66,881.55	3.87%	48,087.55
April	58,262.95	16,573.10	628.71	17,201.81	14,879.87	5,443.90	20,323.77	30,509.93	7,699.31	38,209.24	28,575.01	7,612.23	36,187.24	57,551.93	12,796.80	70,348.73	94.40%	36,454.16
May	36,977.68	33,423.78	1,892.28	35,316.06	24,551.07	4,857.16	29,408.23	45,019.35	9,945.76	54,965.11	49,422.64	8,646.96	58,069.60	25,843.58	11,014.56	36,858.14	-36.53%	42,923.43
June	54,297.30	72,152.85	2,570.26	74,723.11	56,773.64	6,471.47	63,245.11	125,792.28	13,577.53	139,369.81	103,486.63	15,552.84	119,039.47	118,888.32	12,673.34	131,561.66	10.52%	105,587.83
July	100,795.88	123,864.51	2,405.48	126,269.99	110,539.66	10,111.26	120,650.92	149,173.26	15,600.53	164,773.79	141,697.79	12,826.79	154,524.58			-	-6.22%	117,244.60
August	82,850.46	101,317.76	3,702.92	105,020.68	98,545.37	10,307.22	108,852.59	125,932.27	13,290.24	139,222.51	130,197.48	11,943.37	142,140.85			-	2.10%	101,290.19
September	88,859.04	99,005.06	2,075.54	101,080.60	98,173.46	9,243.47	107,416.93	124,672.32	11,926.06	136,598.38	122,908.93	10,941.10	133,850.03			-	-2.01%	101,308.58
October	34,697.06	43,619.35	1,780.63	45,399.98	55,526.63	7,604.14	63,130.77	73,062.08	20,488.41	93,550.49	69,561.83	15,185.16	84,746.99			-	-9.41%	58,101.13
November	22,652.17	19,732.41	2,348.89	22,081.30	30,125.87	5,585.20	35,711.07	31,712.58	10,295.36	42,007.94	29,090.76	9,707.69	38,798.45			-	-7.64%	28,972.64
December	30,306.85	30,176.30	8,712.17	38,888.47	33,466.13	7,274.58	40,740.71	39,338.81	12,263.74	51,602.55	39,076.51	10,394.20	49,470.71			-	-4.13%	36,324.32
Total	564,580.34	621,201.77	58,063.49	679,265.26	595,361.72	81,559.97	676,921.69	854,577.32	137,163.52	991,740.84	854,923.10	144,731.36	999,654.46	339,500.26	66,919.25	406,419.51		
Year to Date	204,418.88			240,524.24			200,418.70			363,985.18			396,122.85			406,419.51	2.60%	321,494.10







	County Sales Tax (month collected)																
	2019			2020			2021			2022			2023			% Change 5yr. Average	
	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total		
January	11,205.30	41.21	11,246.51	10,788.33	3,806.85	14,595.18	12,774.47	3,628.40	16,402.87	15,168.99	5,753.99	20,922.98	17,377.67	7,165.10	24,542.77	0.17	17,542.06
February	8,772.61	84.44	8,857.05	10,870.13	4,410.17	15,280.30	12,943.71	2,876.38	15,820.09	21,069.45	5,470.91	26,540.36	15,309.31	6,625.40	21,934.71	(0.17)	17,686.50
March	19,310.39	398.52	19,708.91	9,542.34	3,236.13	12,778.47	20,077.43	4,696.12	24,773.55	23,758.13	20,226.35	43,984.48	33,211.29	8,333.13	41,544.42	(0.06)	28,557.97
April	5,675.84	151.91	5,827.75	6,642.00	3,304.40	9,946.40	12,099.99	5,449.37	17,549.36	6,924.72	3,221.41	10,146.13	9,999.63	7,054.33	17,053.96	0.68	12,104.72
May	5,876.94	325.95	6,202.89	14,961.72	2,775.50	17,737.22	7,456.19	6,212.46	13,668.65	15,774.55	5,873.38	21,647.93	8,052.51	6,677.71	14,730.22	0.58	12,154.08
June	12,825.21	661.74	13,486.95	8,411.36	2,510.43	10,921.79	24,129.22	7,899.27	32,028.49	19,927.27	7,016.18	26,943.45	15,956.71	9,251.92	25,208.63	(0.16)	17,316.37
July	21,568.05	861.00	22,429.05	17,395.28	4,350.51	21,745.79	21,822.70	8,226.05	30,048.75	23,792.59	5,981.69	29,774.28			-	(0.01)	22,535.43
August	12,723.74	1,050.42	13,774.16	14,702.81	4,023.33	18,726.14	23,443.66	6,509.70	29,953.36	27,958.85	6,176.77	34,135.62			-	0.14	20,736.02
September	14,041.68	1,028.90	15,070.58	13,563.83	4,221.36	17,785.19	22,816.57	6,365.70	29,182.27	23,315.04	7,226.03	30,541.07			-	0.05	16,597.35
October	6,721.34	825.95	7,547.29	13,816.59	3,659.87	17,476.46	14,263.13	5,435.83	19,698.96	11,402.75	6,589.09	17,991.84			-	(0.09)	12,123.07
November	5,930.45	924.35	6,854.80	13,790.50	2,933.00	16,723.50	11,537.52	7,277.72	18,815.24	10,696.88	7,730.04	18,426.92			-	(0.02)	12,265.17
December	13,632.71	9,228.08	22,860.79	15,682.24	4,317.03	19,999.27	18,779.24	6,835.25	25,614.49	21,742.70	8,003.28	29,745.98			-	0.16	20,827.58
Total	138,284.26	15,582.47	153,866.73	150,167.13	43,548.58	193,715.71	202,143.83	71,412.25	273,556.08	221,531.92	89,269.12	310,801.04	99,907.12	45,107.59	145,014.71		
YTD			65,330.06			81,259.36			120,243.01			150,185.33			145,014.71	(0.03)	112,406.49



