

Return by 2:30 pm (date) July 26, 2007 (time) to:  
 San Luis Valley  
 Resource Conservation and Development Council  
 2205 State Avenue  
 Alamosa, CO 81101

Bid Schedule  
 Amethyst Mine Reclamation Project

Item	Description	QTY	Unit	Unit Price	Amount
1.	Mobilization/Demobilization	1	Job	N/A	\$_____
2.	Excavate Repository	1	Job	N/A	\$_____
3.	Widen Channel	1	Job	N/A	\$_____
4.	Construct Terraces	1	Job	N/A	\$_____
5.	Modify Headwall at Trash Rack	1	Job	N/A	\$_____
6.	Additive Alternate A, Excavator w/Operator	25	Hours	\$_____	\$_____
7.	Additive Alternate B, Loader w/Operator	25	Hours	\$_____	\$_____
8.	Additive Alternate C, Add Limestone to Terraces	1	Job	N/A	\$_____
				GRAND TOTAL	\$_____

Contractor \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_ Fax \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tax ID # \_\_\_\_\_

**THIS BID DOCUMENT MUST BE RETURNED WITH YOUR BID**

## **SPECIAL CONDITIONS Amethyst Mine Reclamation**

### **PROJECT LOCATION**

The Amethyst Mine site is located north of Creede in Mineral County. The site can be accessed from the Bachelor Loop Road. Please see the attached map, Figure 1.

### **WORK SUMMARY**

The project work will include removal and stockpiling of waste material along West Willow Creek to widen the existing stream channel across the site; construction of terraces along the stream channel to reduce erosion of waste piles into the creek; reconstructing headwall entry into the upper grizzly/trash rack.

### **PRE-BID MEETING AND SITE SHOWING**

A mandatory pre-bid meeting and site showing will be held in the Creede Underground Mining Museum which is located at the north end of Creede on July 12, 2007 at 9:00 a.m. (see attached maps).

The Pre-Bid Meeting is for the purpose of showing prospective bidders the work site and vicinity. Bidders are advised to be prompt. A sign-in sheet will be available at the Pre-Bid meeting for firms to register their attendance. It is the bidder's responsibility to make certain their attendance is recorded on the sign-in sheet. Failure to sign-in or to attend the entire meeting will be cause for rejection of a bid.

Bidders are cautioned that, notwithstanding any remarks or clarifications given at this meeting and site showing, all terms and conditions of the contract documents remain unchanged unless they are changed by written amendment issued by the OWNER. If the answers to questions, or any amendment to the contract documents create ambiguities, it is the responsibility of the bidder to seek clarification prior to submitting a bid.

### **BID OPENING DATE**

The bid opening date for this project is July 26, 2007, 2:30 pm at the San Luis Valley Resource, Conservation and Development Council office located at 2205 State Avenue in Alamosa.

All bid openings are open to the public and bidders are welcome to attend and record the bid results. Please allow two weeks for receipt of bid results. Telephone requests cannot be honored because of time constraints.

### **BID SUBMITTAL**

Sealed bids in single copy for the work described herein will be received until the date and time specified above at the San Luis Valley Resource, Conservation and Development Council office located at 2205 State Avenue, Alamosa, Colorado 81101 and at that time publicly opened.

A responsive bid must include the following, properly completed:

- Bid Schedule
- List of Equipment Offered

This is a sealed bid. Telegraphic or electronic (FAX, Western Union, Telex, etc.) bids will NOT be accepted directly by the SLVRC&D in response to this bid.

**Bid Form.** Bids shall be submitted on the bid form furnished. Bids must be manually signed in ink. All bid items must be priced or the bid will be disqualified. In case of error in the extension of price, the unit price shall govern. If a Bid Schedule is included it must also be returned with the bid. The quantities listed on which unit prices are requested are estimates only. The prices indicated on the Bid Schedule and included in the Contract Documents shall include the cost of all labor and materials, equipment and services, and all other expenses necessary for the completion of the work. Alternate bids will not be accepted. Bids must be signed as follows:

**If the Bidder is a corporation:** The bid must be signed by an officer (President or Vice President), and the title indicated. The signature of the officer shall be attested to by the Secretary and properly sealed. Include the corporations Federal Employer ID Number in the "Tax ID" blank.

**If the Bidder is a proprietorship:** The OWNER must sign the bid and print or type his name, the business name and social security number.

**If the Bidder is a partnership:** The majority or general partner must sign the bid. The same person must sign the contract, if awarded. Also include the company name and tax ID Number.

**List of Equipment Offered.** The List of Equipment Offered form must be returned with each bid. All equipment to be used on the project must be listed. The CONTRACTOR must own, have a current lease for the equipment intended to be used to perform the work, or must furnish a statement of arrangements to rent, or otherwise procure, adequate equipment to perform the work. Inclusion of a piece of equipment on the List of Equipment Offered represents a commitment to devote that piece of equipment to the project work for the entire duration of the project. If several CONTRACTORS propose to join together to perform the work under this purchase order contract, equipment owned or controlled by each should be listed and the owner identified. A purchase order contract will not be awarded to a bidder who in the opinion of the OWNER (a) does not have adequate equipment, or (b) does not have firm and satisfactory arrangements to obtain adequate equipment to perform the work described in the Invitation and Bid.

## **BID AWARD**

Award will be made with reasonable promptness, by written notice to the low responsive and responsible bidder whose bid meets the requirements and criteria set forth in the Invitation for bid. These criteria will include, but not be limited to the lowest GRAND TOTAL PRICE, corrected if necessary for errors in price extension and/or addition, on the Bidder's equipment if a List of Equipment Offered is required with the bid, and capability to meet the performance time requirements. The GRAND TOTAL PRICE will be used for comparing bids only.

**Additive Alternates.** The lowest responsible bid will be determined by and the contract will be awarded on the base bid plus all additive alternates, to the extent that the addition of alternates results in a sum total within available funds to finance the contract. Additive alternates will be used in determining the lowest responsible bidder. An equal number of alternates shall be added to the base bid of each bidder within funds available to finance the contract for the purposes of determining the lowest responsible bidder. If this bid exceeds such amount, the right is reserved to reject all bids.

## **PROJECT DATES**

The project is scheduled for construction between August 13, 2007 and September 28, 2007. This includes ten (10) days mobilization time.

## **TIME OF COMPLETION**

The time of completion allowed for the project is 46 calendar days after receipt of the Notice to Proceed. This includes ten (10) days mobilization time.

## **LIQUIDATED DAMAGES**

The liquidated damages for this project will be \$400.00 per day.

## **NOTICE OF AWARD AND EXECUTION OF DOCUMENTS**

A Notice of Award will be sent to the apparent low bidder within four (4) days of the bid opening. The contract signing date and time will be set for seven (7) days after the bid opening. The San Luis Valley RC&D must receive the following:

- (a) Executed Agreement;
- (b) Fully-executed Performance and Payment Bonds, accompanied by appropriate power of Attorney, effectively dated;
- (c) Certificates of Insurance showing proof of required coverage and Additional insured Endorsement;
- (d) Project schedule;
- (e) A list of all subcontractors to be used on the project, the work tasks and dollar value to be subcontracted to each, and

If the above documents are not submitted properly by the contract signing date, the San Luis Valley RC&D may elect to award the contract to the next lowest bidder. Bidders are advised to keep close contact with San Luis Valley RC&D during this period.

## **CONDITIONS AFFECTING THE WORK**

In addition to examining the drawings and specifications, completion schedule, and other instructions, bidders shall visit the site and take such other steps as may be reasonably necessary to ascertain the nature and location of the work, including average climatic conditions and the general and local conditions which can affect the work or the cost thereof. Failure to do so will not relieve bidders from responsibility for estimating properly the difficulty or cost of successfully performing the work.

## **PROJECT WORK DESCRIPTION**

### **Bid Item #1 Mobilization and Demobilization**

This Bid Item covers the CONTRACTOR'S operations for:

- a. Payment of premiums for bonds and insurance acquired specifically for the construction of this project, including premiums for performance and payment bonds;
- b. Movement of personnel, equipment, operation supplies, and incidentals to the project site;
- c. Establishment of office, buildings, and other necessary temporary facilities at the project site;
- d. Preparatory work at the construction site; and,
- e. Demobilization of CONTRACTOR'S equipment and all other facilities, final project clean-up, and for all other work for which payment is not otherwise provided for under the contract.

The temporary facilities may include, but not be limited to the following:

- a. Workshops, offices, storage yards, and construction plant and equipment including spare parts, fuels, and oil;

- b. Sanitation facilities, communication facilities, and sprinkler trucks;
- c. CONTRACTOR's electrical power system; and,
- d. Other items such as water, compressed air, etc., not specifically listed but required for the functioning of construction activities.

Upon receipt of the Notice to Proceed, the CONTRACTOR shall furnish, mobilize, move in, and install such temporary works and equipment as are necessary for the successful completion of the work. The CONTRACTOR shall also operate and maintain such temporary works, equipment and construction plant throughout the period of construction. All applicable temporary works, such as sanitation facilities, shall fully comply with all rules and regulations.

Clearing and grubbing operations necessary for the temporary works, if any, shall also be included as mobilization.

Upon completion of the work under this Contract, the CONTRACTOR shall remove all temporary facilities and equipment. The CONTRACTOR shall remove from the work site all rubbish, unused materials, and shall fill and dress all holes and disturbances made for convenience, and leave all areas in good order and condition, subject to the approval of the PROJECT MANAGER.

If remobilization becomes necessary due to seasonal conditions beyond the CONTRACTOR'S control, remobilization costs will be paid based on documented actual costs. No remobilization payment will be made if delays necessitating remobilization were the CONTRACTOR'S responsibility.

No measurement for payment will be made for mobilization and demobilization. Payment of two-thirds of the lump sum price bid will be made with the first monthly progress payment after completion of the work described in the attached specifications for mobilization. Payment of one-third of the lump-sum price bid will be made with the final progress payment for the work if demobilization has been completed. If the price bid for mobilization and demobilization is greater than 15 percent (15%) of the total contract price, invoices supporting the mobilization costs will be required before payment is approved.

## **Bid Item #2 Excavate Repository (See Figure 2.)**

Due to the large amount of waste material that will be excavated to increase the stream width, a waste repository will be constructed to accommodate that material. The repository will be constructed on the northeast end of the Amethyst project site as denoted on the attached site map. Approximately 1500 in-bank cubic yards of weathered rhyolite bedrock will be generated during excavation of the repository. The PROJECT MANAGER will stake the boundaries of the repository area. The excavated material will need to be stockpiled onsite for use in terrace construction and capping of the waste material after placement within the repository site. It is the CONTRACTOR'S responsibility to insure the stockpiled material doesn't interfere with other construction steps.

A sufficiently sized excavator (Caterpillar 325 hydraulic excavator or equivalent) will be required to excavate the weathered bedrock within the repository. Bedrock refusal upon excavation of the repository will be determined by the PROJECT MANAGER. If insufficient clean material is generated to complete terrace construction due to bedrock refusal within the repository area then material from another onsite borrow area will be utilized to complete terraces. If bedrock refusal of excavation results in insufficient storage capacity within the repository, then waste material will be placed throughout the site as directed by the PROJECT MANAGER.

All trees removed during repository excavation shall be mulched onsite. Mulched material will be stockpiled for placement on completed repository cap.

There will be no measurement for payment for Bid Item #2. Payment for this task will be reflected in a lump sum bid under Item #2 on the Bid Schedule. This lump sum bid will cover all costs for the above described work.

**Bid Item #3 Widen Channel** (See Figure 2.)

West Willow Creek flows directly through the Amethyst waste pile, and is actively eroding waste material. To reduce the interaction between West Willow Creek and the Amethyst waste pile, the stream channel will be widened to accommodate 2 terraces along the eastern end of the Amethyst site. The new channel will be approximately 32ft. wide prior to terrace installation. Currently the creek channel averages 10ft. in width, so extensive excavation of waste material will be required to achieve the new channel width.

As shown on the attached diagram (Figure 2), waste will be removed from the north side of the creek beginning at the eastern end of the waste pile and working west for approximately 300ft. Mine waste material will be removed from the surface of the pile to stream elevation or bedrock, whichever is shallower. The waste to be removed over that distance averages 21ft. in depth and 22ft. in width. It is estimated that 4500 cubic yards of waste material will need to be removed to sufficiently widen the stream channel for terrace installation. The slope remaining after excavation may not exceed 1.5h:1v.

All waste material removed during stream widening will be placed within the repository boundary or as directed by the PROJECT MANAGER. Waste material within the repository will be contoured to match the existing hillside with no slopes exceeding 1h:1v, and capped with a minimum of 1ft. of repository spoils. Stockpiled mulch will be spread evenly over repository cap.

There will be no measurement for payment for Bid Item #3. Payment for this task will be reflected in a lump sum bid under Item #3 on the Bid Schedule. This lump sum bid will cover all costs for the above stated work.

**Bid Item #4 Terrace Construction** (See Figures 2 and 3.)

Terraces will be constructed along the newly widened West Willow Creek channel to reduce sloughed waste material from entering the creek. Approximately 800 lineal ft. of terrace will be constructed, with 300ft. along the north side of the creek and 500ft. along the south side of the creek.

The terraces shall consist of non-mineralized material supplied from the excavated repository stockpile or from other onsite locations as designated by the PROJECT MANAGER. The material will be well graded from cobble to sand size. If bedrock was exposed during stream widening in the terrace areas, that bedrock will be incorporated into the terrace therefore reducing the total amount of material required. Approximately 1200 cubic yards of material will be required for terrace construction.

The terraces shall be a minimum of 5ft. in height at the stream bank and will slope downward to the waste pile at 4h:1v. The terraces will be approximately 10ft. wide or of sufficient width to maintain a 12ft. stream channel. Riprap with a minimum  $D_{50} = 2\text{ft.}$  and well graded in the  $D_{50}$  to  $D_{100}$  range will be placed along the stream side of the terraces as toe protection. The toe protection will extend up the terrace 2ft. from channel bottom. Riprap must be placed close together to minimize spaces between the individual rocks. Riprap will also be placed along the north side of the creek leading into the terrace. This riprap shall extend 20ft. upstream from the terrace along the creek bank and shall extend a minimum of 5ft. up the creek bank.

Approximately 140 cubic yards of riprap will be required for terrace construction. If insufficient 2ft. diameter riprap is available onsite, then the CONTRACTOR must supply the shortage from an offsite location. **Please examine available onsite materials carefully.**

There will be no measurement for payment for Bid Item #5. Payment for this task will be reflected in a lump sum bid under Item #5 on the Bid Schedule. This lump sum bid will cover all costs for the above stated work.

**Bid Item #5    Modify Headwall at Trash Rack (See Figure 4.)**

An existing wooden wingwall structure directs water into a trash rack directly upstream of the Amethyst 5 portal. Due to the need to ensure that high flows are directed into the existing culvert and not over the waste pile, concrete wingwalls will be constructed. The new concrete walls will extend from the culvert entrance, along the upstream side of the existing wooden wingwalls to the cliff walls.

Prior to construction of the concrete wingwall, alluvial material shall be excavated from the area depicted in Figure 4. Alluvial material shall be removed to bedrock where practicable such that a new stream channel and sedimentation basin shall be created as noted in Figure 4. All removed alluvial material should be stockpiled for use as clean fill and riprap for other tasks. The small structure on the northside of the creek at the Amethyst 5 portal shall be moved to another onsite location as directed by the PROJECT MANAGER to facilitate access for sediment removal and wingwall construction. Stream diversion through the use of sand bags or other approved method may be necessary during wingwall construction.

Concrete wingwalls shall be a minimum width of 12in. Walls shall be founded on bedrock for their entire length. Walls should slope upward from culvert entrance to cliff walls at a 10h:1v slope. Approximately 60 lineal ft. of concrete wingwall will be required to be constructed.

The wingwalls shall be reinforced vertically with #5 bars on 12in. centers and horizontally with #5 bars on 16in. centers. Vertical reinforcement bars shall be doweled into bedrock a minimum of 8in. Horizontal reinforcing bars that extend to cliff walls shall be doweled into cliff walls a minimum of 8in. Anchor bars shall be anchored into competent rock with Moly Parabond epoxy capsule or equivalent, or with an interference fit in drilled holes. All reinforcing bars shall conform to ASTM A-615, grade 60 and be free of rust. All bars shall be tied in-place prior to concrete placement. All reinforcing bars shall have a minimum 3in. clearance within the wall. Reinforcing steel splices shall have a minimum lap distance of 30 bar diameters.

Concrete shall conform to ASTM C 150 for Type II Portland cement and ASTM C 33 for fine and coarse aggregate. Concrete may be mixed at the work site or delivered as “ready mix”, at the CONTRACTORS’S option. The concrete mix shall be designed to produce a minimum 4000 psi concrete at 28 days. The concrete shall be thoroughly dispersed into the forms by means of suitable mechanical vibrator.

**ADDITIVE ALTERNATES**

**Additive Alternate A            Excavator with Operator**

Up to 25 hours of excavator time (Caterpillar 325 w/ 22ft. reach, equivalent, or larger) will be used as directed by the PROJECT MANAGER for various reclamation activities onsite.

All equipment shall be of the type and equipped as specified above. Equipment must be in good operating condition and must be maintained in good operating condition by the CONTRACTOR

throughout the life of the contract. The PROJECT MANAGER shall be the sole judge of whether equipment is or is not in "good operating condition".

The number of hours indicated above and on the Bid Schedule are estimated. It is impossible to determine in advance the actual number of hours that the equipment will be required to be used, or to guarantee that any equipment time will be necessary.

The equipment shall be furnished complete with competent operating personnel. Operators shall be qualified to perform all work under this specification in a skillful and professional manner. The OWNER may, in writing, require the CONTRACTOR to remove from the work any employee the OWNER deems incompetent or careless. The OWNER will be the sole judge of the acceptability of any employee.

The CONTRACTOR shall be responsible for the supervision of all mechanical operations of the equipment including proper maintenance. Equipment maintenance, fueling and repairs shall be done so that spilling of lubricants and fuel is minimized.

All operations under this section will be under the direct supervision of the PROJECT MANAGER and work under this section shall be performed only as ordered and directed by the PROJECT MANAGER. The PROJECT MANAGER will designate the work to be performed and the order in which it is to be done, and WILL inspect all work. The PROJECT MANAGER will maintain documentation of the work.

"Operation" means that time spent in performing work as well as time necessary for moving equipment around the work site when directed by the PROJECT MANAGER. However, "operation" does not include that time spent in transporting the equipment to the initial work site, removing the equipment when all work has been completed, transporting the equipment away from and returning it to the work site in the event of a temporary or seasonal suspension of operation, maintenance of the equipment, any time during which the equipment is "bogged down" or otherwise not working, nor for any periods when operations are suspended by the PROJECT MANAGER.

The number of hours each piece and type of equipment used as directed by the PROJECT MANAGER under this specification will be counted to the nearest one-half hour. Payment will be made at the unit price established by the Invitation and Bid Sheet and in the purchase order contract for supplemental earthwork for each piece and type of equipment. Such payment shall include the cost of all materials, accessories, labor, maintenance, operating supplies, salaries of operators, and any other expenses incidental to the operation of the equipment in the performance of work in accordance with this specification and bid item(s). No extra payment will be made for the use of the same equipment while performing work on other bid items on the Invitation and Bid Sheet, Bid Schedules or Purchase Order Contract. No additional payment will be made for hauling equipment to or away from the work site except as may be proper under Mobilization/Demobilization.

**Additive Alternate B            Loader with Operator**

Up to 20 hours of loader time (Caterpillar 950 w/ 3 yd. bucket, equivalent, or larger) will be used as directed by the PROJECT MANAGER for various reclamation activities onsite.

All equipment shall be of the type and equipped as specified above. Equipment must be in good operating condition and must be maintained in good operating condition by the CONTRACTOR throughout the life of the contract. The PROJECT MANAGER shall be the sole judge of whether equipment is or is not in "good operating condition".

The number of hours indicated above and on the Bid Schedule are estimated. It is impossible to determine in advance the actual number of hours that the equipment will be required to be used, or to guarantee that any equipment time will be necessary.

The equipment shall be furnished complete with competent operating personnel. Operators shall be qualified to perform all work under this specification in a skillful and professional manner. The OWNER may, in writing, require the CONTRACTOR to remove from the work any employee the OWNER deems incompetent or careless. The OWNER will be the sole judge of the acceptability of any employee.

The CONTRACTOR shall be responsible for the supervision of all mechanical operations of the equipment including proper maintenance. Equipment maintenance, fueling and repairs shall be done so that spilling of lubricants and fuel is minimized.

All operations under this section will be under the direct supervision of the PROJECT MANAGER and work under this section shall be performed only as ordered and directed by the PROJECT MANAGER. The PROJECT MANAGER will designate the work to be performed and the order in which it is to be done, and WILL inspect all work. The PROJECT MANAGER will maintain documentation of the work.

"Operation" means that time spent in performing work as well as time necessary for moving equipment around the work site when directed by the PROJECT MANAGER. However, "operation" does not include that time spent in transporting the equipment to the initial work site, removing the equipment when all work has been completed, transporting the equipment away from and returning it to the work site in the event of a temporary or seasonal suspension of operation, maintenance of the equipment, any time during which the equipment is "bogged down" or otherwise not working, nor for any periods when operations are suspended by the PROJECT MANAGER.

The number of hours each piece and type of equipment used as directed by the PROJECT MANAGER under this specification will be counted to the nearest one-half hour. Payment will be made at the unit price established by the Invitation and Bid Sheet and in the purchase order contract for supplemental earthwork for each piece and type of equipment. Such payment shall include the cost of all materials, accessories, labor, maintenance, operating supplies, salaries of operators, and any other expenses incidental to the operation of the equipment in the performance of work in accordance with this specification and bid item(s). No extra payment will be made for the use of the same equipment while performing work on other bid items on the Invitation and Bid Sheet, Bid Schedules or Purchase Order Contract. No additional payment will be made for hauling equipment to or away from the work site except as may be proper under Mobilization/Demobilization.

**Additive Alternate C            Add Limestone to Terraces (See Figure 2.)**

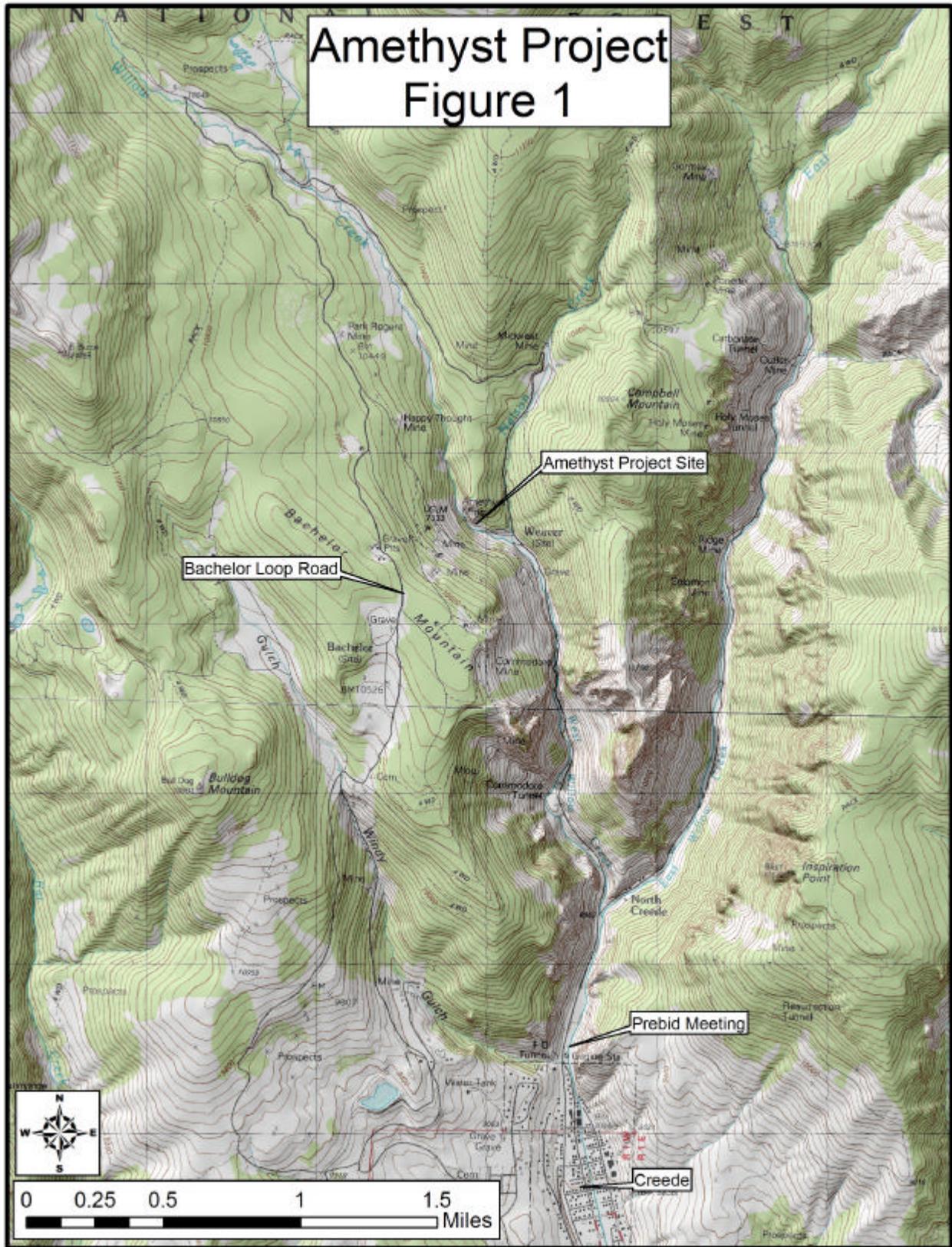
Due to the potential for leaching of metals from the waste piles by snowmelt, a limestone section will be added to the terraces to reduce that potential. The CONTRACTOR shall furnish minus 10 mesh limestone with a minimum of 90% CaCO<sub>3</sub> equivalent. The limestone will be placed as a layer extending from stream elevation to the top of the terrace with a minimum width of 6in. at the top. The limestone will replace the equivalent volume of terrace material, therefore maintaining the terrace width specified in Bid Item #5. Limestone will be placed prior to terrace construction. The estimated quantity of limestone required is 225 cubic yards.

There will be no measurement for payment. Payment for this task will be reflected in a lump sum bid under Item #7 on the Bid Schedule. This lump sum bid will cover all costs for purchase, delivery and placement of limestone within the terraces. This bid item is not guaranteed.

**PROJECT OBSERVATION**

The PROJECT MANAGER will be at the project site periodically to monitor construction activities and ensure that each work item is completed and constructed to design specifications. The PROJECT MANAGER will be available during regular business hours (8:00 A.M. to 5:00 P.M.) on weekdays. Inspections will not be scheduled on weekend days or holidays without prior approval of the PROJECT MANAGER. It is the CONTRACTOR's responsibility to schedule inspections with the PROJECT MANAGER so as not to delay the work. The following items must be observed and approved by the PROJECT MANAGER before proceeding with additional work:

1. Configuration and slopes of excavated wastes along streambanks prior to beginning terrace construction.
2. Placement of limestone in stream terraces, if used.
3. Depth and location of anchor holes in concrete wingwall foundations.
4. Placement of reinforcing steel in concrete wingwalls.
5. Final configuration of riprap along stream channel prior to demobilization.

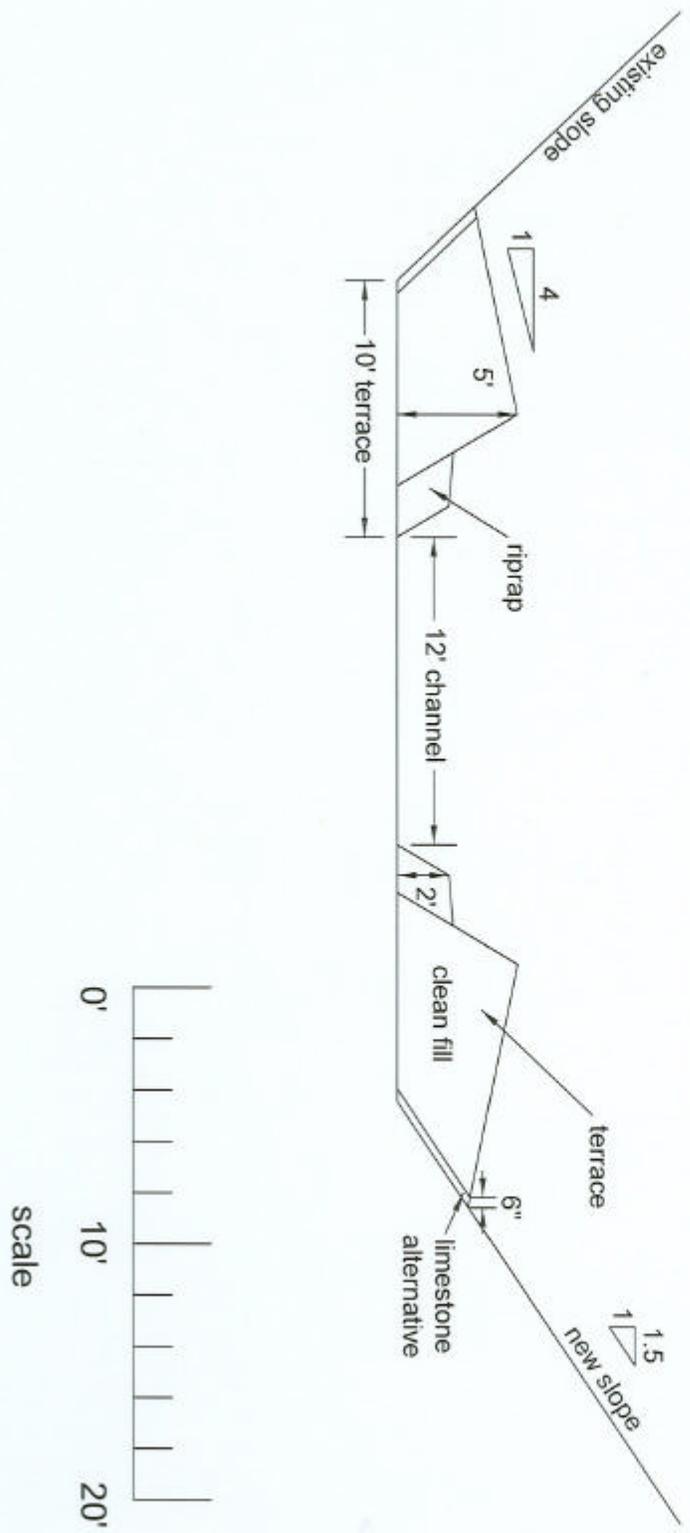


**Figure 2**  
**Amethyst Site**  
**Plan View**



# Figure 3

## Terrace Cross-Section



# Figure 4

## Upper Grizzly

### Plan View

