

August 28, 2017

Timberline HOA
c/o Mr. Grant Benton
Crested Butte Lodging & Property Management
P.O. Box 5013
Mt. Crested Butte, CO 81225

Subject: Proposed Retaining Wall Rehabilitation Subsurface Data Report and
Design Consultation
Timberline HOA
32 Hunter Hill Road
Mt. Crested Butte, Colorado
Proposal No. S160705A

Dear Mr. Benton:

Cesare, Inc. (Cesare) is pleased to submit this proposal for design services to rehabilitate the existing single to two tier timber crib retaining wall system located on the Timberline HOA (HOA) property in Mt. Crested Butte, Colorado. The existing timber crib walls vary in height from about 6 feet to 16 feet and exist east of the entrance road to the condominium complex. The walls are over 30 years in age and display warping and sagging that indicate they are near their useful life expectancy. The nature of the original wall construction is unknown, however, most timber crib walls consist of baskets constructed with square timbers (cribs) that are filled with rock. These rock filled cribs provide weight to resist the slope above it and the cribs provide slope reinforcement. Over time, the timber will rot, reducing the effectiveness of the baskets to retain the soil behind the wall.

Replacement of the wall system will require special attention to the stability of the slope above the wall, both long term and during construction, due to a residence that exists above the northern extent of the existing wall. This will preclude certain type of repair options, such as complete removal of the wall system, without prior reinforcement of the slope behind the wall. Options for keeping the wall in place and building a sister wall, reinforcing the existing wall in place with tensioned cables or staged construction, are all viable alternatives. Cesare will work in conjunction with SGM, Inc. to develop two design alternatives for consideration of the HOA. Part of our scope will include a slope stability analysis of the design alternatives.

TASK 1 - SUBSURFACE STUDY

In order to design the timber crib wall rehabilitation and conduct a stability analysis, Cesare will need knowledge of subsurface conditions behind and in front of the wall. A previous geotechnical study was completed for additions to the residence above the wall. This study indicates that the subsurface conditions below the residence consists of about 45 feet of a sandy gravel in a clayey matrix over shale bedrock. This study provides valuable information, but was not conducted with consideration of repairing the wall. Cesare will need to conduct additional studies specific to this scope. As such,

we propose the following program:

1. Cesare will contact the Utility Notification Center of Colorado (811) prior to drilling. Locating any private utilities will be the responsibility of the property owner.
2. Cesare will drill two borings at the base of the wall. Borings will be drilled to depths of at least 10 feet into bedrock, which we assume will be about 20 to 40 feet below the existing ground surface. We assume the site is accessible for a rubber tire mounted drill rig and that auger and continuous core will be required to advance the borings. If bedrock is close to the surface, additional data will be required of the overburden materials. If this is the case, we will drill one additional boring above the wall on the adjoining property. Cesare will coordinate with the owner of this property for access.
3. Groundwater levels in our borings will be checked at the time of drilling. Cesare will backfill all the borings with cuttings upon completion of our study.
4. Cesare will conduct laboratory testing to define pertinent engineering properties. At this time, we anticipate the testing to consist of grain size distribution, Atterberg limits, unconfined compressive strength, and direct shear testing.
5. Cesare will provide a data report summarizing the drilling and laboratory testing.

TASK 2 - SLOPE STABILITY AND WALL DESIGN CONSULTATION

Cesare will consult with SGM, Inc. to develop up to two design alternatives for the rehabilitation of the existing timber crib wall. Part of this consultation will be to conduct stability analysis of the slope retained by the wall system. The slope stability analysis will be provided in a letter, signed by a professional engineer in the State of Colorado.

ESTIMATED FEES

TASK 1 - SUBSURFACE STUDY

Cesare estimates our fees to provide the above services to be \$10,500 if we are able to mobilize the drilling subconsultant while they are in the area. If they need to mobilize to the area, additional fees of up to \$2,500 should be anticipated. Should the scope of work be revised from that outlined in this proposal, cost estimates provided in this proposal will be revised accordingly to reflect our actual costs to complete the project.

TASK 2 - SLOPE STABILITY AND WALL DESIGN CONSULTATION

Cesare estimates our fees to perform the services indicated in Task 2 to be \$10,000. Our fees do not include permitting costs or services during construction.

GENERAL CONDITIONS

Cesare warrants that services are performed in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the locality of the project. No other warranty or representation, either expressed or implied, is included or intended in our proposals, contracts or reports.

The Client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys, or explorations are made by Cesare and that the data, interpretations and recommendations of Cesare are based solely on the information available and obtained by Cesare.

Cesare will be responsible for those data, interpretations and recommendations as indicated above, but shall not be responsible for the interpretations by others of the information developed. Cesare is not responsible for knowledge of previous studies on the subject property unless they are made available to Cesare and their review made part of this Agreement.

In the event the client presents a claim against Cesare at law or otherwise, for any alleged error, omission or other act arising out of the performance of our professional services; and the client fails to prove such claim upon final adjudication, then the client shall pay all costs incurred by Cesare in defending itself against the claim, including but not limited to personnel-related costs, attorney's fees, court costs and other claim-related expenses.

INVOICES

Invoices will be submitted monthly and on completion of work and are payable on receipt unless other arrangements have been made. A LATE PAYMENT SERVICE CHARGE OF 1.5% PER MONTH WILL BE APPLIED TO UNPAID BALANCES COMMENCING THIRTY (30) DAYS FROM THE DATE OF INVOICE. Attorney's fees or other costs incurred in collecting delinquent amounts shall be paid by the client.

Failure to honor an invoice within thirty (30) days may result in temporary delays in project work due to commitments to paying clients. Cesare reserves the right to cease work on any continuing project where invoices are more than sixty (60) days past due. In no event will a report be issued for projects with invoices more than sixty (60) days past due.

PROPOSALS

Written technical proposals and consulting fee estimates are provided on request. Technical proposals and fee estimates are valid sixty (60) days from the date of the proposal. Acceptance of a proposal after sixty (60) days may result in changes in the scope of services provided and/or consulting fees charged.

RIGHT-OF-ENTRY

Client will provide for right-of-entry of Cesare and all necessary equipment in order to complete the work.

UTILITIES

Cesare will contact 811 prior to conducting investigations on site. Client shall be responsible for designating the location of all other on-site utilities not located by 811 prior to the commencement of work. We will not be liable for damage to subterranean structures (telephone wires, pipes, tanks, etc.) whose locations are not marked in the field prior to our arrival.

SAMPLES

Cesare will retain all remaining soil and rock samples for thirty (30) days after submitting the report on those samples. Further storage or transfer of samples can be made at client's expense upon written request. If we are not notified to retain samples, they will be disposed of.

JOBSITE SAFETY

Neither the professional activities of Cesare, nor the presence of Cesare or its employees and subconsultants at the project site, shall relieve the Owner or Owner's representatives of its obligations, duties, and responsibilities with any health or safety precautions required by any regulatory agencies. Cesare and its personnel have no authority to exercise any control over any other contractor, consultant or their employees in connection with their work or any health or safety programs or procedures. The Client agrees that other contractors or consultants shall be solely responsible for jobsite safety, and warrants that this intent shall be carried out in the Client's contract with other contractors or consultants.

OWNERSHIP OF DOCUMENTS

Cesare will retain pertinent records relating to the services performed for a period of three years following completion of services hereunder, during which period the records will be made available to the client at all reasonable times.

The documents developed by Cesare are for the sole use of the Client. Neither party may assign and/or transfer, directly or indirectly, in whole or in part, documents developed during Cesare scope of work under this Agreement.

INDEMNIFICATION

The Client expressly agrees to indemnify and save harmless Cesare, its officers, agents, employees, successors, and assigns against any suits, claims, demands, or actions, which are brought against Cesare, its officers, agents, employees, successors and assigns for or as the result of any injuries or damages received or sustained by any person, firm or corporation; or persons, firms or corporations, resulting from the client's negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the Client is legally liable, and arising from the project that is subject to this Agreement. Cesare is not obligated to indemnify the Client in any manner for the Client's own negligence.

Cesare's services in connection with this contract shall in no way subject the Consultant's individual employees, officers or directors to any personal legal exposure for the work associated with this project.

MEDIATION

In an effort to resolve any conflicts that arise from the services of this contract, the Client and Cesare agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise.

INSURANCE

Cesare represents that Cesare has such coverage under public liability, property damage and professional liability insurance policies as Cesare deems to be adequate. Certificates for all such policies of insurance shall be provided to client upon written request.

The client agrees that under no circumstances shall the total aggregate liability for any and all claims,

losses, costs, damages of any nature whatsoever exceed the limits of Cesare's applicable insurance in force at that time.

LIMITATION OF LIABILITY

To the maximum extent permitted by law, the Client agrees to limit Cesare's liability for the Client's damages to the sum of \$50,000 or Cesare's fee, whichever is less. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

TERMINATION

In the event of termination of this Agreement by either party, the Client shall within fifteen (15) calendar days of termination pay Cesare for all services rendered and all reimbursable costs incurred by Cesare up to the date of termination, in accordance with the payment provisions of this Agreement. The Client may terminate this Agreement for the Client's convenience and without cause upon giving Cesare not less than seven (7) calendar days' written notice. Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days' written notice for any of the following reasons:

- Substantial failure by the other party to perform in accordance with the terms of this Agreement and through no fault of the terminating party;
- Assignment of this Agreement or transfer of the project by either party to any other entity without the prior written consent of the other party;
- Suspension of the project or Cesare's services by the Client for more than ninety (90) calendar days, consecutive or in the aggregate;
- Material changes in the conditions under which this Agreement was entered into, the scope of services or the nature of the project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

In the event of any termination that is not the fault of Cesare, the Client shall pay Cesare, in addition to payment for services rendered and reimbursable costs incurred, for all expenses reasonably incurred by Cesare in connection with the orderly termination of this Agreement, including but not limited to demobilization, reassignment of personnel, associated overhead costs, and all other expenses directly resulting from the termination.

ASSIGNMENT AND TRANSFER

Neither party may assign and/or transfer, directly or indirectly, all or part of its rights or obligations under this Agreement.

THIRD PARTY BENEFICIARIES

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or Cesare. Cesare's professional services under this Agreement are being performed solely for the client's benefit, and no other entity shall have any claim against Cesare because of this Agreement or the performance or nonperformance of services hereunder.

HAZARDOUS MATERIALS

Cesare agrees to notify the client when unanticipated hazardous materials or suspected hazardous materials are encountered by Cesare.

APPLICABLE LAW

The law of the State of Colorado shall govern the validity of the Agreement, including these general conditions, and its interpretation and performance.

ENTIRE AGREEMENT

This document shall be the entire Agreement and shall supersede any other Agreement between client and Cesare relating to the subject matter thereof. In case of a conflict or inconsistency between these general conditions and any other contract documents, these general conditions shall control.

If this proposal meets with your approval, please sign one copy and return it to this office. Thank you for considering our firm for this study.

Sincerely,
CESARE, INC.



Darin R. Duran, P.E.
Principal, Geotechnical Engineering Manager

DRD/ksm

Attachment: Schedule of Fees

Agreed to this _____ day of _____, 20_____

By: _____

Representing _____

Legal Property Description _____

Invoicing email address _____



SCHEDULE OF FEES ⁽¹⁾

Senior Principal	\$185/hour
Principal	\$157/hour
Civil Engineer Consultant	\$147/hour
Senior Geotechnical Consultant	\$130/hour
Quality Manager	\$130/hour
Senior Level Engineer, Project Manager, Scientist, or Geologist	\$125/hour
Staff Level Engineer, Project Manager, Scientist, or Geologist	\$99/hour
Field Engineer or Special Inspector	\$78/hour
Senior Technician or Construction Observer	\$68/hour
Field or Laboratory Technician	\$57/hour
Technical Support	\$52/hour
Computerized Drafting.....	\$78/hour
MIT-SCAN2 (Dowel and Tie Bar) Scanning	Quoted upon request
Foundation Construction Inspections (Excavation/Open Hole, Footing, Reinforcing Steel, Perimeter Drain/Void/Waterproofing)	Quoted upon request
Concrete Maturity Data Loggers	\$66/each
Coring Operations	\$92/hour
Expenses and Outside Services	At cost +13%
Mileage.....	At current Federal rate
Equipment Rental.....	Quoted upon request
Overtime Premium ⁽²⁾	1.3 x rate
Cesare Holiday Rate ⁽³⁾	2.0 x rate
Night Shift Premium (6 PM to 6 AM)	Rate + \$5/hour

⁽¹⁾ Payment is due within 30 days of receipt of our invoice. A late payment service charge of 1.5% per month will be applied to unpaid balances commencing thirty (30) days from date of invoice.
⁽²⁾ Overtime Premium applies to Field Engineer, Special Inspector, Construction Observer, and Technician hours exceeding 8 hours per day or 40 hours per week charged to a single project, and any hours worked on weekends.
⁽³⁾ Cesare holidays are New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day.

The above fees are for 2017.