

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
January 27-28 2014
Agenda Item 31(d)

Applicant: Lone Cabin Ditch and Reservoir Company

Water Activity Name: Lone Cabin Dam Rehabilitation Project

Water Activity Purpose: Agricultural/Implementation

County: Delta

River Basin: Gunnison

Water Source: Middle Fork and Lake Fork of Minnesota Creek

Amount Requested: \$83,150 from the Gunnison Basin Account, (increasing total Basin Account request from \$38,000 to \$121,150)

Matching Funds: The Gunnison Basin Account match is 72% of the total grant amount, while the Applicant's match is 100% of the total grant amount.

Staff Recommendation:
Staff recommends approval of up to \$83,150 from the Gunnison Basin Account (total request of \$121,150) for the project titled: Lone Cabin Ditch and Reservoir Company - Lone Cabin Dam Rehabilitation Project.

Water Activity Summary: WSRA funds would be used to pay for geotechnical investigation of existing structural conditions of the dam, soil testing, monitoring of water sources and content within the dam, technical assistance with preparation of a feasibility study, design of repair and rehabilitation activities and construction of the project as designed, including related costs for engineering oversight, inspection, materials and construction activities necessary to finalize and complete the project. A slump or slide in the dam of the reservoir was discovered in August, 2011, and the State Engineer's Office placed a storage restriction on the Lone Cabin reservoir at 20 feet below the crest of the dam. The slump repair project will repair a small slide, approx. 100 feet by 45 feet and 5 feet deep, in the downstream side of the dam by excavating the failed area, with suitable margins on all sides; installation of a chimney drain; covering the drain filter material with compacted on-site excavated backfill; and discharging of the effluent to the existing spillway drain system. These repairs are required in order for the State Engineer's Office to remove the storage restriction placed on the reservoir. The storage capacity of the reservoir provides the irrigation water for 18 farms on Lamborn Mesa, Paonia, CO, and allows for finishing crops at the end of the growing season.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Funding/Match Summary:

(Please reference the following *Discussion* section)

Discussion:

In September 2013 the CWCB approved a WSRA Gunnison Basin Account request of \$38,000, and a WSRA Statewide Account request of \$46,000 for this project. This current request for additional WSRA Gunnison Basin Account funds will increase the Gunnison Basin Account request by \$83,150, for a total of \$121,150. In September 2013 the CWCB also approved a CWCB Loan for this project in the amount of \$252,803, and CWCB's Finance Section estimated total project costs at \$334,300. Therefore, if final project costs are \$334,300, the applicant will have contributed \$167,150 (50% cash match of total project costs), the Gunnison Basin Account will have contributed \$121,150 (36% cash match of total project costs), and the remaining \$46,000 will have been provided from the Statewide Account (total WSRA Grant funding is \$167,150 from both the Gunnison Basin and Statewide Accounts). CWCB's Project Manager will distribute funds on a 50/50 basis (50% WSRA Grant/50% CWCB Loan), until \$334,300 is reached, at which point all WSRA approved grant funding (\$167,150) will have been exhausted. Subsequent to this amount, all remaining funding will be distributed from the CWCB Loan Program until the \$252,803 loan amount is reached.

The Gunnison Basin Account match is 72% of the total grant amount (\$121,150 Gunnison Basin Account Grant/\$167,150 Total Grant Amount), while the Applicant's match is 100% of the total grant amount (\$167,150 Applicant's Contribution/\$167,150 Total Grant Amount).

Issues/Additional Needs:

No additional issues or needs were identified.

Staff Recommendation:

Staff recommends approval of up to \$83,150 from the Gunnison Basin Account (total Basin Account request of \$121,150) for project titled: Lone Cabin Ditch and Reservoir Company - Lone Cabin Dam Rehabilitation Project.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting and Final Deliverable: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues. At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.

The Gunnison Basin Roundtable
501 Palmer Street
Delta, CO 81416

November 15, 2013

Mr. Craig Godbout
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203

Re: Revised Grant Request from the Water Supply Reserve Account
Lone Cabin Ditch & Reservoir Company
Lone Cabin Dam Repair and Rehabilitation Project

Dear Mr. Godbout:

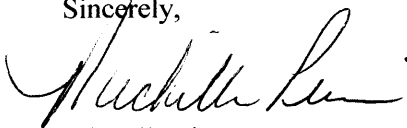
This letter is presented to advise you that the revised grant application submitted by the Lone Cabin Ditch & Reservoir Company for \$121,150 from Basin Account funds and \$46,000 in Statewide Account funds from the Water Supply Reserve Account for the Lone Cabin Dam Repair and Rehabilitation project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee and was approved by a majority vote of the Gunnison Basin Roundtable during our meeting on November 4, 2013.

The minority report from the one dissenting member is attached.

This water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines.

This activity furthers basin-wide consumptive needs for the Gunnison Basin by helping to reduce agricultural water shortages, by rehabilitating aging infrastructure and by protecting pre-1922 water rights.

Sincerely,



Michelle Pierce
Chair

cc: Tom Alvey (e-mail)

November 10, 2013

Colorado Water Conservation Board
Denver, CO 80202

RE: Lone Cabin Grant Request.

Dear CWCB:

Our GBRT rules provide that anyone casting a dissenting vote for a grant application must provide a written explanation of that dissent. This particular letter should be more correctly viewed as a concurring opinion on the grant application (I actually support it) and I am using this opportunity to express a concern that has clearly evolved in the state's grant criteria. The concern is shared by several on our Roundtable, I just get to put it in writing.

As an example, at our November meeting, we heard two grant proposals, one from the City of Gunnison/CPW, and the Lone Cabin request. The Gunnison request was largely non-consumptive, while the Lone Cabin request largely involved a consumptive use of water. Based on that difference, one of the things that came out in the meeting was that Lone Cabin was expected/required by state staff to get a loan for a significant portion of their project, yet the Gunnison request was not, even though it has several thousand potential rate payers and the Lone Cabin has relatively very few. This difference seemed to pivot around whether the proposed project is non-consumptive or consumptive. That policy position, if it in fact is the case, seems arbitrary and puts a potential decided advantage in the pursuit of grant funds to the NGO sector.

I have discussed this at length with John McClow, our CWCB Gunnison Director and he is aware of this policy concern.

Thank you for this opportunity to provide this input.

Very truly yours,

Ken Spann



WATER SUPPLY RESERVE ACCOUNT
 APPLICATION FORM

Lone Cabin dam repair and rehabilitation

Name of Water Activity/Project

Lone Cabin Ditch and Reservoir Company

Name of Applicant

Gunnison Basin
 Roundtable

Amount from Statewide Account:

\$46,000

Amount from Basin Account(s):

\$121,150

Total WSRA Funds Requested:

\$167,150

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

1. Program Information
2. Insurance Requirements
3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
4. W-9 Form (Required for All Projects Prior to Contracting)

Water Supply Reserve Account – Application Form

Revised December 2011

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCBC). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCBC staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCBC website at: <http://cwcbb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcbb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

If you have questions or need additional assistance, please contact Greg Johnson at: 303-866-3441 x3249 or gregory.johnson@state.co.us.

Water Supply Reserve Account – Application Form

Revised December 2011

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant Name(s):	Lone Cabin Ditch and Reservoir Company		
	Mailing address:	42384 Lamborn Mesa Road Paonia, CO 81428		
	Taxpayer ID#:	846038286		
	Primary Contact:	James R. (Jim) Briscoe	Position/Title:	President
	Email:	hotchlaw@aol.com		
	Phone Numbers:	Cell: 970-216-9556	Office:	970-872-3118
	Alternate Contact:	Judy Briscoe	Position/Title:	Secretary/Treasurer
	Email:	jbriscoe@tds.net		
	Phone Numbers:	Cell:	Office:	970-527-4431

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☐ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
- ☐ Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.
- ☒ Private Incorporated – mutual ditch companies, homeowners associations, corporations.
- ☐ Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
- ☐ Non-governmental organizations – broadly defined as any organization that is not part of the government.

Water Supply Reserve Account – Application Form

Revised December 2011

3. Provide a brief description of your organization

Lone Cabin Ditch and Reservoir Company was established as a non-profit mutual ditch company in 1935 and is in good standing with the Colorado Secretary of State. It is a stock company with 18 stockholders who own varying amounts of stock and varying sized agricultural parcels of real estate. The water stored in or passing through the reservoir provides irrigation water for approximately 1000 acres of agricultural properties, including about 500 acres owned by shareholders of the Lone Cabin Ditch and Reservoir Company, with the other 500 acres, more or less, being contiguous properties that benefit from irrigation of the properties of the shareholders.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

Not Applicable.

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒ The Applicant will be able to contract with the CWCB using the Standard Contract

☐ The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

Lone Cabin Ditch and Reservoir Company is not subject to the limitations of the Tax Payer Bill of Rights.

Water Supply Reserve Account – Application Form

Revised December 2011

Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

☐

Nonconsumptive (Environmental or Recreational)

☒

Agricultural

☐

Municipal/Industrial

☐

Needs Assessment

☐

Education

☐

Other

Explain:

2. If you feel this project addresses multiple purposes please explain.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

☐

Study

☒

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

Water Supply Reserve Account – Grant Application Form

Form Revised March 2009

3. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for.

WSRA funds would be used to pay for geotechnical investigation of existing structural conditions of the dam, soil testing, monitoring of water sources and content within the dam, technical assistance with preparation of a feasibility study, design of repair and rehabilitation activities and construction of the project as designed, including related costs for engineering oversight, inspection, materials and construction activities necessary to finalize and complete the project. Buckhorn Geotech, an engineering firm in Montrose, Colorado, estimates the project will cost ~~\$96,900~~ for engineering and technical assistance and ~~\$284,437.50~~ construction costs.

Lone Cabin Ditch and Reservoir Company owns water decrees for diversion of approximately 20 c.f.s. of irrigation water from the Middle Fork and Lake Fork of Minnesota Creek, tributary to the North Fork of the Gunnison River and the Colorado River, located in Gunnison County and Delta County, with storage decrees for 90 acre feet and 235.9 acre feet in the Lone Cabin reservoir located in Delta County, Colorado. Water from Lake Fork Creek is diverted until around July 1st and from Middle Fork Creek until around August 15th, depending on availability and priorities, filling the reservoir and passing water through the reservoir for irrigating the agricultural parcels of the shareholders. The water stored in the reservoir is then diverted, around August 15th of each year, with delivery for irrigation usually ending between the 1st and the 15th of September of each year.

A slump or slide in the dam of the reservoir was discovered in August, 2011, and the State Engineer's Office placed a storage restriction on the Lone Cabin reservoir at 20 feet below the crest of the dam. Buckhorn Geotech, a drilling company, soils testing and minor construction work were hired, at the approximate expense of \$47,090 to perform testing, evaluation of the conditions existing at the dam and to provide a geotechnical engineering study for Lone Cabin Ditch and Reservoir Company to decide how the slump would be repaired. Based on that study it was decided the repairs should be accomplished by removal of the area that slid and replace that area of the dam with appropriate compacted materials. Buckhorn Geotech prepared a conceptual design and engineer's estimate for slump repair that is the basis for this request of Lone Cabin Ditch and Reservoir Company for grant funds to assist with the cost of the project to accomplish the selected repair. Such repair estimate includes an additional \$46,000 for engineering services for the final design phase, through completion of the project, and up to \$270,687.50 for the costs to complete the repairs construction.

Lone Cabin Ditch and Reservoir Company owns a 3/16th interest in the Beaver Reservoir Company, with

Water Supply Reserve Account – Grant Application Form

Form Revised March 2009

a large loan from the CWCB, on which Lone Cabin pays \$12,507 annually, for 30 years. Lone Cabin has an existing loan with CWCB with a current balance of approximately \$61,000 that requires a \$4094.48 annual payment. The annual assessment for 2012 was set at \$3.25 per share to generate approximately \$27,000 annually for the loan payments and operating expenses of Lone Cabin Ditch and Reservoir Company. If a loan had to be acquired to pay the total cost of the project, it is estimated that the assessment would likely double to generate sufficient funds to pay the annual loan payment for that size of loan. In that event, the cost of irrigation water from Lone Cabin Ditch and Reservoir Company would become so expensive that using it for growing certain agricultural products would become economically questionable.

Water Supply Reserve Account – Grant Application Form

Form Revised March 2009

Part C. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹ Repair of the dam of the reservoir of Lone Cabin Ditch and Reservoir Company will result in the removal of the storage restriction that the State Engineer's Office has imposed, allowing the Company to again store sufficient water in the reservoir to provide irrigation water to its users through approximately August of each year. This past year the Company was unable to deliver irrigation water beyond late June, partly because of the drought situation but exacerbated by the storage limitation that precluded storing enough water to last more than one week. The year 2013 is not looking to be much better for precipitation and the storage capability becomes even more critical. The irrigation water from Lone Cabin Ditch and Reservoir Company is the only substantial source of water for irrigating approximately 500 acres of agricultural real property located at the upper half of Lamborn Mesa, Southeast of the Town of Paonia, County of Delta, State of Colorado. Without that source of irrigation water the acreages now irrigated with such water could become dry land acreages and more prone to sprawl and minor subdivisions, causing further harm to the agricultural community in Colorado.

b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRT's evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

Water Supply Reserve Account – Application Form

Revised December 2011

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.
- d) Matching Requirement: For requests from the Statewide Fund, the applicants is required to demonstrate a **20 percent** (or greater) match of the request from the Statewide Account. Statewide requests must also include a minimum match of **5 percent** of the total grant amount from Basin Funds. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the application was submitted to the CWCB. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

Lone Cabin Ditch and Reservoir Company has expended or incurred the following amounts to investigate the cause of the slump or slide in the dam, prepare a feasibility report and prepare the plans and specifications for the repair, which have been submitted to the State Engineer's Office for approval:

September 2011	JN Engineering	\$ 756.30
October 2011	By-Pass Ditch	1,574.56
October 2011	Scott Drilling (test holes)	3,349.43
October 2011	Buckhorn Geotech	979.80
March 2012	Advanced Terra Testing	4,349.00
August 2012	Buckhorn Geotech	23,380.77
December 2012	Buckhorn Geotech	2,800.00

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

Water Supply Reserve Account – Application Form

Revised December 2011

December 2012	Buckhorn Geotech	3,931.25
August 2013	Buckhorn Geotech	21,878.00
	Total	\$70,947.37

Gunnison Basin Roundtable has approved \$38,000 and the State Fund has approved \$46,000 in grant funds.

The Colorado Water Conservation Board, at its September, 2013, meeting approved a loan for Lone Cabin Ditch and Reservoir Company for \$250,300 with interest at 1.75% payable over 30 years. Such loan amount was determined as being 75% of the total project costs of \$334,300 submitted in the application. That figure for total project costs did not include the additional \$21,878.00 incurred in August 2013 for engineering expenses to revise the project plans to satisfy the requirements of the State Engineer's Office to gain approval of the project.

Lone Cabin Ditch and Reservoir Company already is required to make loan payments exceeding \$14,000 per year towards loans from the Colorado Water Conservation Board, one made directly to the Company and one made to Beaver Reservoir Company, of which the Lone Cabin Ditch and Reservoir Company is a 3/16ths owner. The new loan for \$250,300 from the Colorado Water Conservation Board would require the Lone Cabin Ditch and Reservoir Company to pay an additional loan payment exceeding \$10,000 per year, bringing the Company's total loan payment obligations to over \$24,000 per year. Currently, the annual budget is approximately \$27,000 per year and is paid by stockholder assessments of \$3.00 to \$3.25 per share. The new loan would require the assessments to increase to approximately \$4.45 per share, raising the cost to the stockholders of the Lone Cabin Ditch and Reservoir Company for irrigation water by more than one-third (1/3).

Lone Cabin Ditch and Reservoir Company is requesting an additional grant from the Gunnison Basin Roundtable for \$83,150 to bring the total grant from the Roundtable to \$121,150 and, with the \$46,000 grant from the State Fund, the total WSRA grant to \$167,150 and equal to 50% of the total estimated project costs set forth in the application considered by the Colorado Water Conservation Board at its September 2013 meeting. Lone Cabin Ditch and Reservoir Company has not included the \$21,878.00 engineering expenses incurred in August 2013 because such costs were not included or considered when the Colorado Water Conservation Board made its decision in September 2013. If those costs were considered as part of the request for additional grant funding from the Gunnison Basin Roundtable, the grant would need to increase by 50% of those engineering expenses.

Water Supply Reserve Account – Grant Application Form

Form Revised March 2009

2. For Applications that include a request for funds from the Statewide Account, describe how the water activity meets the **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

Tier 1: The water activity is a repair project that will help implement projects and processes that will help meet Colorado's future water needs, ie. irrigation of agricultural properties that have, are and will maintain the agrarian nature of rural Colorado, particularly on Lamborn Mesa, Delta County, Colorado.

Tier 2: Funding from the WSRA account will reduce the uncertainty that the needed repair project will be implemented. Receiving the requested grant will make the cost of the project more affordable to the shareholders of Lone Cabin Ditch and Reservoir Company, which is currently making annual payments of \$16,601 on existing loans, by reducing the amount of additional debt the Lone Cabin will need to incur to complete the repair project. An application for a loan for CWCB has been or will be filed and pursued for the additional funds necessary to successfully complete the project as described in the conceptual design and engineer's estimate for slump repair prepared by Buckhorn Geotech.

Tier 3: The water activity helps sustain agriculture and open space. The water activity involves decreed water tributary to the Colorado River. The water activity is complimentary to and assists in the implementation of the CWCB loans that exist to Lone Cabin Ditch and Reservoir Company and the Beaver Reservoir Company, of which Lone Cabin is part owner.

Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

2. Please provide a brief narrative of any related studies or permitting issues.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

Part D. – Required Supporting Material

1. Water Rights, Availability, and Sustainability

This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights and the name/location of water bodies affected by the water activity.

ID Number	Administration Number	Adjudication Date	Decreed Amount
1012	21263.13284.0	06/23/1914	15 cfs
1012	21263.20371.0	06/23/1914	10 cfs

Plus 3/16ths interest in decrees of Beaver Reservoir Company:

2389	29260.21275	05/28/1937	1.5 cfs
2389	29260.2175	05/28/1937	1.5 cfs
2389	29260.2175	05/28/1937	7.5 cfs

Storage decrees for the reservoir of Lone Cabin Ditch and Reservoir Company:

996	21263.20371 0	06/23/1914	90.0 A Ft
1837	29260.23550 0	05/28/1937	235.9 A Ft

2. Please provide a brief narrative of any related or relevant previous studies.

There are no other related or relevant previous studies, as far as the representatives of Lone Cabin Ditch and Reservoir Company are aware.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.

Please provide a detailed statement of work using the following template. Additional sections or modifications may be included as necessary. Please define all acronyms. If a grant is awarded an independent statement of work document will be required with correct page numbers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

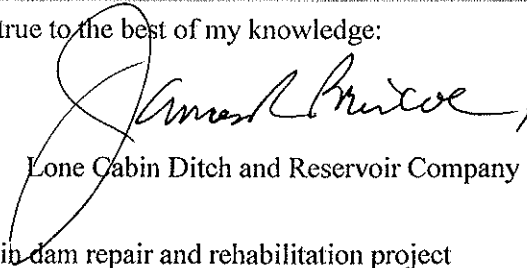
PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Water Supply Reserve Account – Application Form
Revised December 2011

The above statements are true to the best of my knowledge:

Signature of Applicant:

 **President**

Print Applicant's Name: Lone Cabin Ditch and Reservoir Company

Project Title: Lone Cabin dam repair and rehabilitation project

Return an electronic version (hardcopy may also be submitted) of this application to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

Statement of Work

WATER ACTIVITY NAME - Lone Cabin Dam Repair and Rehabilitation

GRANT RECIPIENT – Lone Cabin Ditch and Reservoir Company

FUNDING SOURCE - Water Supply Reserve Account; Gunnison Basin Round Table

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to no more than 200 words; this will be used to inform reviewers and the public about your proposal)

A slump area on the downstream side of the dam of the Lone Cabin reservoir, measuring about 100 feet by 45 feet, with an estimated depth of failure averaging about 5 feet, with a vertical height of slump of about 20 feet, will be repaired as follows:

1. excavate the failed area, plus suitable margins on all sides,
2. install a chimney drain,
3. cover the drain filter material with compacted on-site excavated backfill, and
4. discharge the effluent to the existing spillway drain system.

OBJECTIVES

List the objectives of the project

Remove and replace soils from an area of failed compaction on the downstream side of the dam. The installed chimney drain expected to capture, transfer from the dam and discharge to the spillway effluent from the interior of the dam. Adequate compaction of replaced backfill to avoid further failure of that area of the dam. Upon satisfactory completion of the project the removal of the storage restriction on the Lone Cabin reservoir by the State Engineer's Office will allow for full implementation of the storage decrees and maximum source of supply of irrigation water to the shareholders of the Lone Cabin Ditch and Reservoir Company.

TASKS --- CONCEPTUAL DRAWING ATTACHED

Provide a detailed description of each task using the following format

TASK 1 – Description of Task:

Excavate the failed area, plus suitable margins on all sides.

Method/Procedure

Excavate the slumped area to firm material.

Deliverable

On or before November 1, 2013, estimated completion of project.

TASK 2 – Description of Task:

Install a chimney drain.

Method/Procedure

Placement of a graded filter material that is hydraulically connected to a toe drain.

Deliverable

On or before November 1, 2013, estimated completion of project.

TASK 3 – Description of Task:

Cover the drain filter material with compacted on-site excavated backfill.

Method/Procedure

The drain material to be benched into the face of the expose firm subgrade and covered by compacted on-site excavated backfill.

Deliverable

On or before November 1, 2013, estimated completion of project.

TASK 4 – Discharge the effluent to the existing drain system.

Deliverable

On or before November 1, 2013, estimated completion of project.

BUDGET

Engineering Expenses:		
Geotechnical Report	\$ 5,000	
Design Report	5,000	
Plans and Specs, Bid docs	14,000	
CDWR Design Revisions	3,500	
Resident Project Field Rep	16,000	
Engineer Site Observations	6,000	
As-Builts and Final Consult Report	4,000	
Total Design and Construction Engineering Costs		\$ 53,500
Construction Expenses:		
Site Preparation	\$ 5,000	
Excavate/stockpile failed area	34,000	
Filter Material/Installation	70,000	
Backfill Slump Area	40,500	
Revegetation	5,000	
Solid Toe Drain Pipe	1,350	
Slotted Toe Drain Pipe	2,900	
Sanitary Facilities	1,000	
Mobilization	25,000	
Total Construction Expenses:		\$184,750
25% Contingency		\$ 46,187.50
Total Project Budget		\$284,437.50

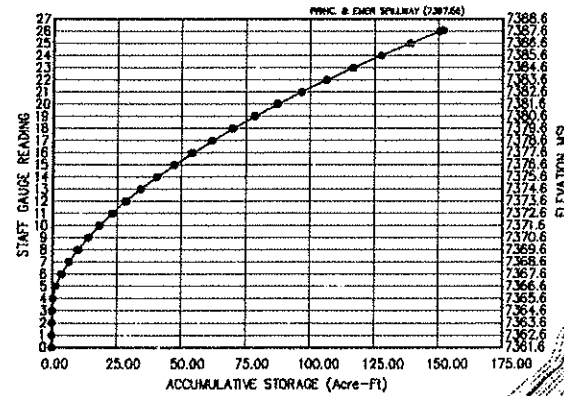
SCHEDULE

Finalize Project Financing	Spring 2014
Contractor Consultations	Spring 2014
Project Bidding	May 2014
Pre-Construction Meeting	June 2014
Construction Commencement	July 2014
Construction Complete	October 2014

STORAGE VOLUME COMPUTATIONS LONE CABIN RESERVOIR

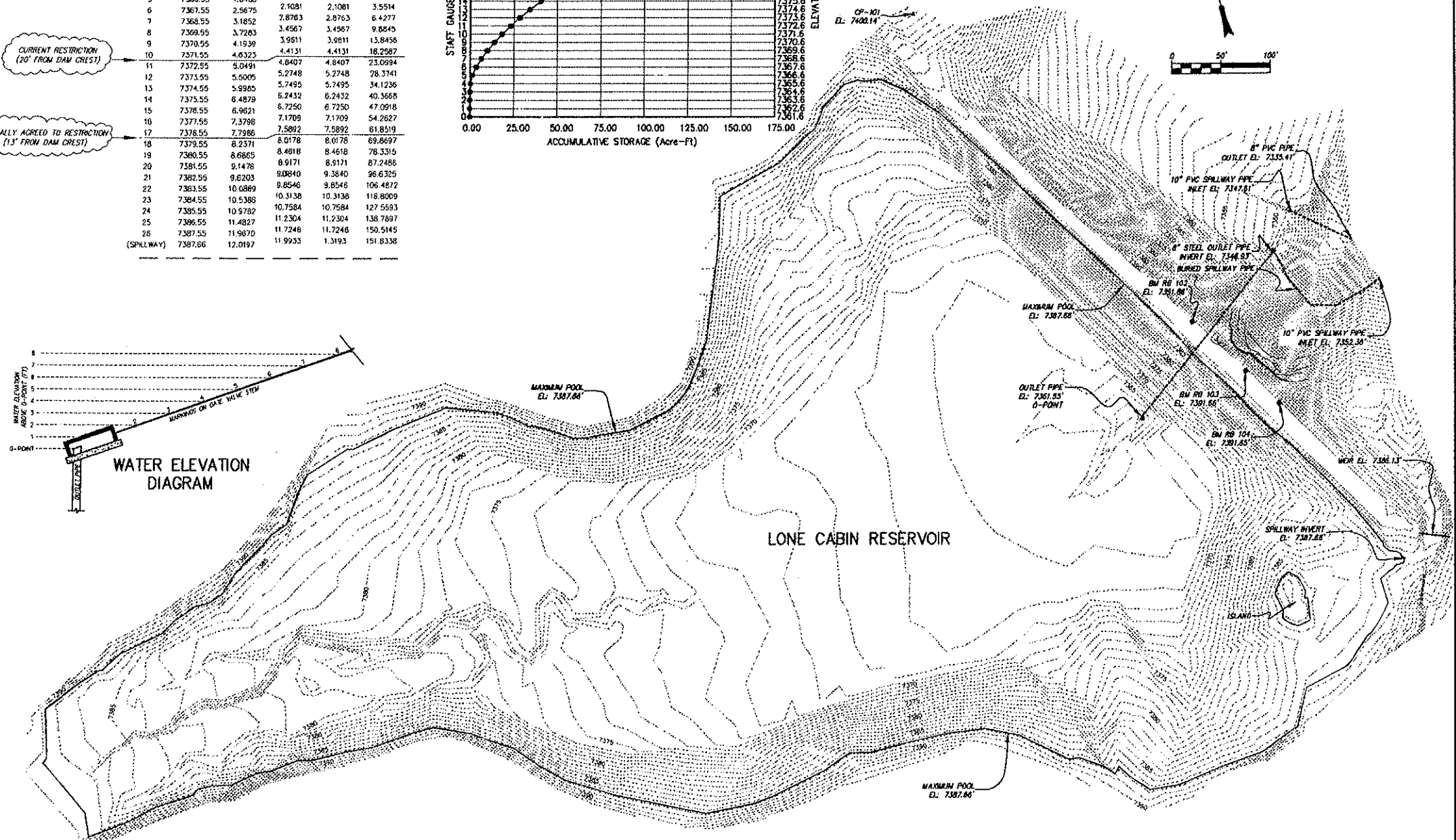
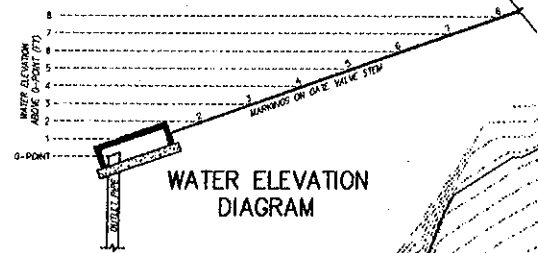
STAFF GAUGE	ELEV. (ft)	AREA (ac)	AVG. AREA (ac)	STORAGE (ac-ft)	ACC. STORAGE (ac-ft)
0-POINT	7361.55	0.0000	0.0011	0.0011	0.0011
1	7362.55	0.0022	0.0141	0.0141	0.0152
2	7363.55	0.0260	0.0559	0.0559	0.0710
3	7364.55	0.0558	0.2954	0.2954	0.3684
4	7365.55	0.5049	1.0769	1.0769	1.4433
5	7366.55	1.6488	2.1081	2.1081	3.5514
6	7367.55	2.5675	2.8763	2.8763	6.4277
7	7368.55	3.1852	3.4567	3.4567	9.8845
8	7369.55	3.7283	3.9811	3.9811	13.8458
9	7370.55	4.1939	4.4131	4.4131	18.2587
10	7371.55	4.6323	4.8407	4.8407	23.0994
11	7372.55	5.0491	5.2748	5.2748	28.3741
12	7373.55	5.5005	5.7495	5.7495	34.1236
13	7374.55	5.9965	6.2432	6.2432	40.3668
14	7375.55	6.4879	6.7250	6.7250	47.0918
15	7376.55	6.9621	7.1709	7.1709	54.2627
16	7377.55	7.3798	7.5892	7.5892	61.8519
17	7378.55	7.7986	8.0178	8.0178	69.8697
18	7379.55	8.2371	8.4618	8.4618	78.3315
19	7380.55	8.6865	8.9171	8.9171	87.2486
20	7381.55	9.1476	9.3840	9.3840	96.6325
21	7382.55	9.6203	9.8546	9.8546	106.4872
22	7383.55	10.0889	10.3138	10.3138	116.8009
23	7384.55	10.5386	10.7584	10.7584	127.5593
24	7385.55	11.0702	11.2304	11.2304	138.7897
25	7386.55	11.4827	11.7246	11.7246	150.5145
26	7387.55	11.9670	12.0197	12.0197	162.5338
(SPILLWAY)	7387.66	12.0197	12.0197	12.0197	162.5338

STAGE STORAGE CURVE LONE CABIN RESERVOIR



CURRENT RESTRICTION
(20' FROM DAM CREST)

VERBALLY AGREED TO RESTRICTION
(13' FROM DAM CREST)



BUCKHORN GEOTECH

Civil, Structural & Geotechnical Engineers

222 So. First Ave. Meriden, Conn. 06450

203-237-1111

www.buckhorngeotech.com

DATE

REVISIONS

CLIENT NAME

LONE CABIN RESERVOIR

STAGE STORAGE CAPACITY

DESIGNED

NJA, P.E.

DRAWN

PJB

DATE

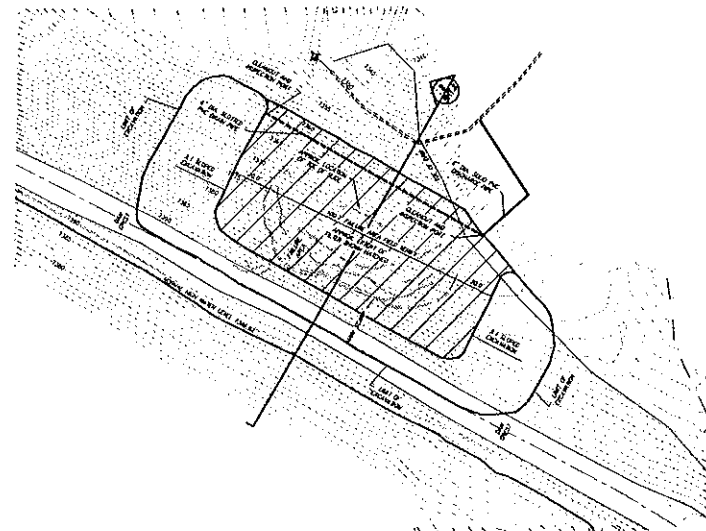
10-23-12

PROJECT NO.

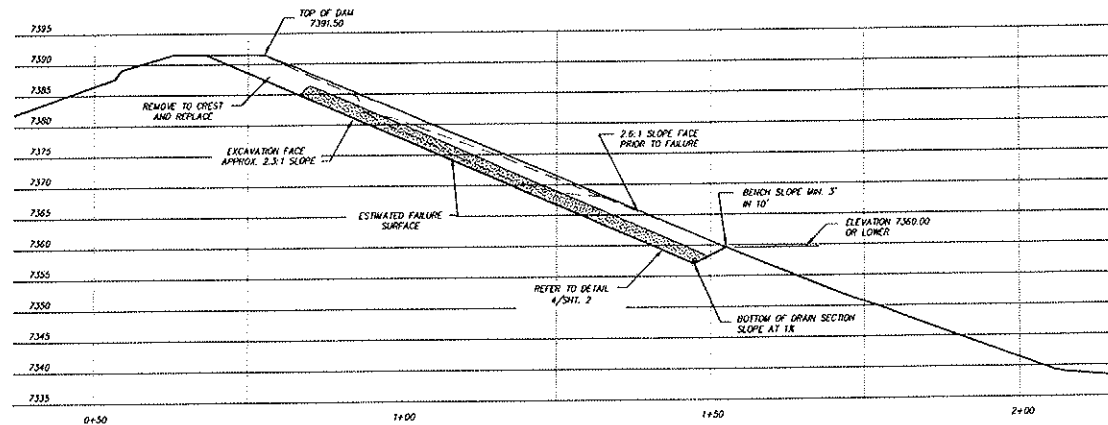
2012-262

DRAWING NUMBER

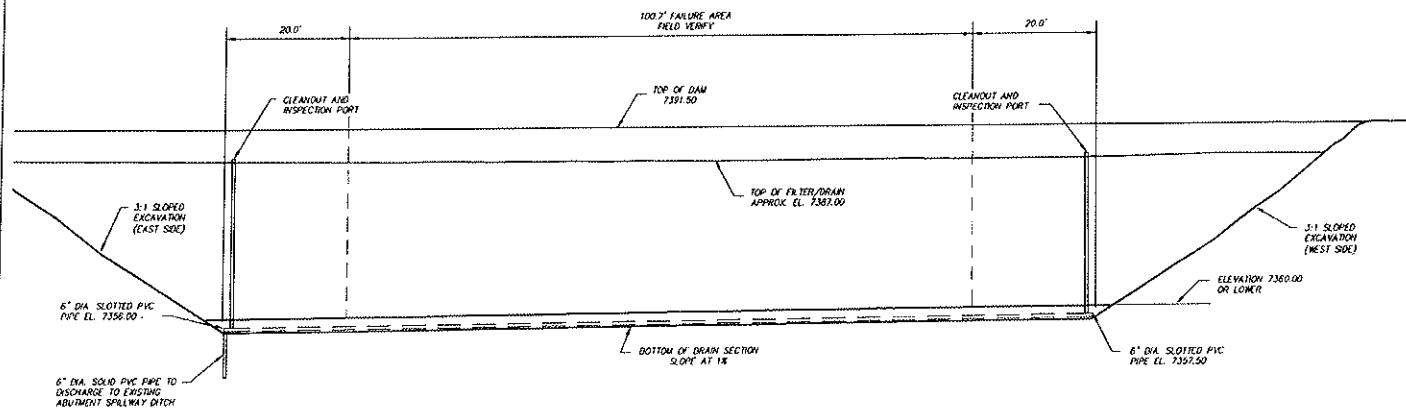
C-1



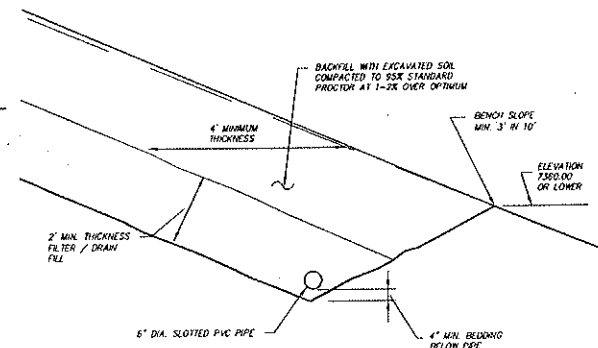
1
SHT. 2
PLAN



2
SHT. 2
PROFILE



3
SHT. 2
ELEVATION



4
SHT. 2
TYPICAL DETAIL
NOT TO SCALE

CONCEPTUAL
NOT FOR CONSTRUCTION

BUCKHORN GEOTECH

LONE CABIN DAM
LONE CABIN DITCH & RESERVOIR CO.
PAONIA, COLORADO

DESIGNED
W.P.
DRAWN
J.C.
DATE 7/13/2012
PROJECT NO. 11-222-GE0
DRAWING NUMBER