Appendix C – RFP Package

Delta Conservation District
INVITATION TO BID
Solicitation **NO. DCD2014-SD-R-001**

Delta Conservation District (DCD) is soliciting sealed bids to provide engineering services for the Somerset Diversion Preliminary Design for the Somerset water diversion, located on the North Fork of the Gunnison River in Gunnison County, Colorado. **Bids must be received at the DCD office at 690 Industrial Blvd; Delta, CO 81416 not later than 4:00 PM Thursday, May 2, 2014**, at which time the bid opportunity will close. Bids received after this time will not be considered.

On April 9, 2014 at 12:30 PM, there will be a bid meeting at the DCD office. A site visit will follow the meeting. Offerors are not required to attend the meeting to bid the project. Anyone wishing to join a teleconference of the meeting must email DCD at the email addresses given below by April 7, 2014. The teleconference numbers will be sent in a response to your email request.

All bids must be submitted in compliance with the instructions to the offerors and the enclosed Bid Forms. The preferred delivery for bid packages is electronic. Bid packages can be delivered electronically to David Cary at david.carey@co.nacdnet.net and Mike Drake at mldht1@live.com. Electronic submissions must arrive no later than the same closing time as non-electronic submissions. Non-electronic submissions can be printed material with original signature pages, or on CD or other electronic storage device. In all cases of submission, other than printed versions, original signature pages or scanned copies of the original signature pages must accompany the submission. Bid packages delivered though the mail, UPS/FEDX, or by hand should be placed in a sealed envelope addressed to DCD. Inside the outer envelope, a second envelope should be clearly labeled or marked "Somerset Diversion Preliminary Design" and bearing the name and address of the submitting entity. If DCD staff is unavailable for acceptance of hand delivered packages, the bid packages may be delivered in person to the NRCS Field Office at the above address.

Questions regarding this invitation to bid may be directed to Mike Drake, DCD Project Manager at Email mldht1@live.com; phone (970) 527-4535 or cell (801) 710-83762.

DCD reserves the right to accept or reject any and all bids, in whole or in part, in the best interest of the project.

Solicitation **NO. DCD2014-SD-R-001**

Somerset Diversion Preliminary Design
Instructions to the Offerors

I. Attachments

Information provided with these instructions includes:

- Statement of Work (SOW)
- Past Performance Information Sheet (PPIS) template
- Proposal preparation and evaluation process information
- Sample contract

II. Proposal Marking

The proposal package shall include completed forms, technical proposal, cost proposal, completed sample contract, and three completed PPISs. All documents in the proposal package shall be marked on each page with the following:

- Competition Sensitive
- The solicitation number
- The offeror's company Name

Proposal package shall be submitted in a sealed package clearly labeled with the words "Somerset Diversion Preliminary Design Competition Sensitive" on the front/outside of the package.

III. Signature Requirements:

Required signatures must be provided by company authorized agents and the signature must be witnessed.

IV. Contractor Requirements

The contractor shall provide all equipment, labor, materials and supplies necessary to complete the work.

V. Contract Award

Award of a contract shall be awarded at the earliest possible date with an executed contract with the winning bidder. DCD at its sole and absolute discretion will fairly evaluate all proposals submitted based on the evaluation criteria defined. DCD reserves the right to reject any and all bids found to not meet the minimum requirements defined. To receive an official debrief, losing bidders must request a debrief within three working days of notification.

VI. Required Information Upon Award

The contractor to whom award is made shall provide the following information to DCD prior to the award of the contract:

- Standard Accord Certificate(s) of Insurance. (Contractual Liability Type)
  1) Workers Compensation Insurance
  2) Public Liability and Property Damage Insurance with DCD, Somerset Domestic Waterworks District, Ox Bow – West Elk Mine added to the policy
  3) Automobile Bodily Injury and Property Damage Insurance
  4) Performance Bond (100% of the contract amount)

VII. Work Completion

The work shall be completed no later than 90 days from the award of the contract signified by the receipt of a Notice to Proceed delivered in writing to the bidders legal mailing address.

VIII. Payment Schedule

The winning bidder can bill DCD monthly for expenses incurred. Payment will be made within five days after DCD receives funds from the sponsoring agencies. CWCB states that they will pay DCD invoices within 45 days of receiving the invoice.

DCD will withhold 10% of the total bid until the final report is accepted and approved. The final payment shall be made to the contractor by DCD no later than five days after receiving final payment from the sponsors.

IX. Proposal Volume

The proposal will consist of three sections, which are:

- Section 1 – Technical
- Section 2 – Past Performance
- Section 3 – Cost

The Technical Section will address the technical proposal criteria and present resumes of key personnel to be used in the program.

The Past Performance Section will present relevant corporate experience to the proposal evaluation criteria for two past projects using the provided Past Performance Information Sheets (PPIS).

The Cost Section will present the bid price and back up data that supports that price. Cost data to be included are:

- An program labor breakout for labor hours and per hour fully loaded costs by labor category
- Travel costs, including number of trips, people per trip, length of trip, and reason for trip
- Itemization of other direct cost items and cost

X. Proposal Page limits

The Technical Section is limited to 15 pages. Identify up to five key personnel and their roles in the program. Include resumes for these key personnel in an appendix to the technical proposal. The resumes will not count against the total page count. The Past Performance Section is limited

to a two page company introduction and two Past Performance Information Sheets (PPISs). Each PPIS is limited to three pages. The offerors must use the PPIS form provided.

XI. Proposal Evaluation Criteria

Evaluation Factor 1 – Technical and Management Approach to Somerset Diversion Preliminary Design completion

A. Subfactor 1 – Overall technical approach
B. Subfactor 2 – Detailed technical approach to Tasks 3.2 and 3.3
C. Subfactor 3 – Overall program management approach
D. Subfactor 4 – Project management plan, including subcontractor management if required

Evaluation Factor 2 – Relevant past performance

A. Two past performance write ups.
B. Relevance evaluation based on scope, cost, and technical similarity and complexity of past performance as compared to this project.
C. Performance risk based on relevancy, success, and on-time/within budget performance.

Evaluation Factor 3 – Cost

XII. Proposal evaluation process

Evaluation factors 1 and 2 equally important, with factor 3 of less importance. The Delphi method will be used to rank the proposals. The subfactors for evaluation factors 1 and 2 will be scored between one and five. The weighted subfactor score will be calculated by multiplying the subfactor score by the weighing value assigned to that subfactor. The evaluation factors 1 and 2 scores will be the average of the weighted subfactor scores. The weighted score for evaluation factors 1 and 2 will be the evaluation score multiplied by the appropriate weighting factor. The weighted score for evaluation factor 3 will be the score for evaluation factor 3 multiplied by the appropriate weighting factor. Cost scoring will range from 5 for the lowest bid to 1 for the highest bid. The proposal cost also will be evaluated for reasonableness. The total proposal score will be the sum of the weight evaluation factor scores. All weighting factors are shown in Table below.

Evaluation Factor	Weight Factor
1 Technical	8
• SF 1	8
• SF2	8
• SF3	9
• SF4	7
2 Past Performance	10
• PP1	10
• PP2	10
3 Cost	4

Statement of Work (SOW)

For

Somerset Diversion Preliminary Design Project

February 10, 2014

Prepared by:

Delta Conservation District
690 Industrial Blvd.
Delta, Colorado 81416
(970) 874 5735 X

Table of Contents

ACRONYM LIST

CAD	Computer Aided Drawings
DAC	Days After Contract
DCD	Delta Conservation District
IPT	Integrated Project Team
NFR	North Fork River
OSHA	Occupational Safety and Health Administration
PDF	Adobe Data File
POP	Period of Performance
PR	Purchase Request
SDWD	Somerset Domestic Waterworks District
SOW	Statement of Work

INTRODUCTION

1.1 Purpose

The purpose of this effort is to complete a preliminary design for an operationally improved Somerset Diversion design including transport of the water from the river up to the raw water storage tank 200 feet above the river. Additional, the diversion design will incorporated improved boat and fish passage, and improved river and riparian habitat in the area of the diversion. The starting point for the preliminary design will be the current water diversion operations.

1.2 Scope

The Contractor shall provide all personnel necessary to perform project management, logistics, engineering, and technical drawings required for the completion of the preliminary design. Tasks shall include, but are not limited to: completing the preliminary design, participation on the Integrated Project Team (IPT) and related activities, briefing preparation and presentation, project planning and scheduling, project risk management, defining and analyzing problems, defining problem solutions, providing recommendations, and writing reports. The preliminary design effort will evaluate requirements for:

- Diversion structure requirements to insure full diversion of water rights at all flow levels
- Diversion structure requirement to insure fish and boater passage through/around the diversion
- River and riparian area requirements to improve wildlife habitat and improve bank and river channel stability
- Reduced sediment loading in diverted water before pumping
- Reduced long-term maintenance
- Survival of a 100 year flood on the designed structure
- Impact on the surrounding floodplain
- Optimum pumping operations to move the water from the diversion to the water treatment plant 200 feet above the river and approximately a half mile away.

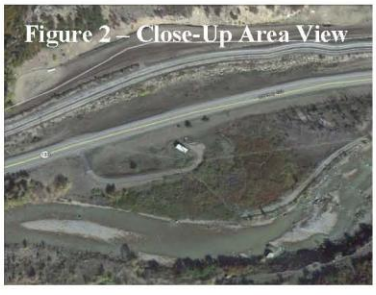
The contractor should propose any additional requirements that are deemed necessary to successfully achieve the purpose of this project. The preliminary design process will incorporate the latest analysis technologies that have been proven successful in the design and evaluation of boat and fish passage dam modifications.

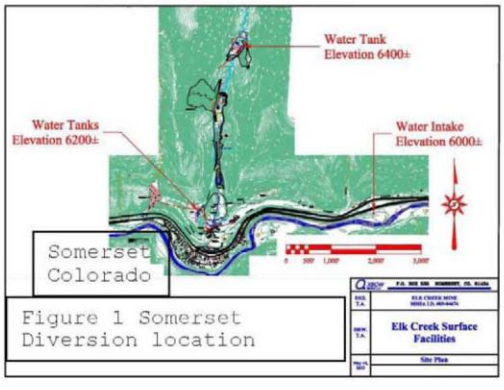
Figure 1 – Area View

1.3 The Somerset Diversion Preliminary Design Project Background

The location of the current Somerset water diversion operations is shown large scale in Figure 1 and close up in Figure 2. The Somerset diversion currently is owned and operated by Oxbow Mining LLC – Elk Creek Mine. See Figure 3. However, the ownership and operation is in the process of being transferred to the Somerset Domestic Waterworks District (SDWD).

This diversion provides industrial water for the mine and provides the municipal water for the town of Somerset via the Somerset Domestic Waterworks District. There is no direct diversion of water from the river to the gallery. The old system was to collect subsurface water in the gallery. That system eventually didn't supply sufficient water. At that point a direct pump from the river to the gallery was implemented. Currently, to insure sufficient water for mine operations, a second pump is used to pump water to the gallery or directly to the pump house to supplement the water being pumped to the raw water storage tank. There has always been difficulty diverting the required water during low flow periods and the sediment filtration problems are significant. The water is currently pumped directly out of the river and into the water system. Due to the elevation of the raw water tank, water must be pumped from the river level 200 feet up in elevation to the water processing facility and the first storage tank.





The total water decree is for 1.8 CFS from the North Fork of the Gunnison River.

This stretch of the North Fork River (NFR) has a variable boating season of 1-9 weeks of higher flows (1000+ cfs) and benefits from extended flows down to the 256 cfs that are delivered to the Fire Mountain Canal below Somerset, Colorado. These lower flows last through the irrigation season typically into September or even October. Fishing on the NFR is limited by access; however, is considered excellent for trout.

DCD has established partnerships and an IPT with the key stakeholders in this project, who are given in Attachment I. The key stakeholders have supported the planning and development of the project because of the project's multiple benefits.

In 2012, DCD began meeting with the key stakeholders to develop an agreed-upon set of project requirements. These meetings resulted in the definition of the critical requirements/objectives that the diversion will have to meet. Obtaining this agreement on the modification requirements resulted in solid support for the project from the key stakeholders.

This contractual statement of work addresses the preliminary design project.

REFERENCE DOCUMENTS

All reference documents are contained in Attachment II. These documents include photos of the diversion area, the diversion degrees, operations and maintenance manuals for the transfer

system. Note that the focus of the design effort is to improve the water delivery system from the river to the raw water storage.

CONTRACTOR TASKING / REQUIREMENTS

The contractor shall provide engineering/technical services required to complete the following tasks, and interact with DCD and IPT members involved in the support of the Somerset Diversion project.

3.1 Kick-off Meeting

The purpose of the Kick-off meeting is to insure that the contractor and all the key stakeholders agree and understand the requirements.

The Contractor shall support the Preliminary Design Kick-off meeting. Beyond participation, this task shall include supporting DCD in the development of the agenda, reviewing preliminary design criteria and suggesting modifications and additions, completing meeting minutes, detailing action items, and finalizing design criteria developed during the meeting. The Kick-off meeting shall be completed within two weeks of the award of the contract.

3.2 Site Inspection and Survey

The contractor shall complete a site inspection and survey to acquire all necessary site data required for the completion of the preliminary design. The field survey should cover the length of project and to include floodplain elevations beyond the river banks, particularly in areas where increased flood elevations could impact adjacent properties.

3.3 Develop Draft Preliminary Design

The contractor shall complete the draft preliminary design for the Somerset Diversion. The contractor shall consider all design criteria and information, and address all issues resulting from the Kick-off meeting and site inspection. The design shall consider requirements for diversion, fish and boat passage, river and riparian habitat improvement, long-term maintenance, flood plain, and 100 year flood survival. The preliminary design process will incorporate the latest analysis technologies that have been proven successful in designs of similar diversions.

3.4 Draft Preliminary Design Review

The contractor shall present the detailed results of the draft preliminary design efforts at the Preliminary Design Review. This review will be held at the DCD office in Delta, Colorado. The contractor shall provide the presentation and supporting detailed information to DCD five business days prior to the scheduled review meeting. Immediately upon receiving the review information, DCD will submit the information to the IPT so that the information can be evaluated prior to the review meeting. The IPT will provide feedback and recommendations at the review meeting on needed changes and improvements to be addressed before the final preliminary design is complete.

3.5 Preliminary Design Iteration

The contractor shall evaluate and develop a solution for all issues/problems defined during the draft final design review and complete the preliminary design.

The contractor shall produce drawings and specifications required. The preliminary design report will be part of the final design bid package. DCD will be responsible for the final design bid process.

3.6 Preliminary Design and Report Review

The contractor shall present the final design and final report at a review meeting held at the DCD office in Delta, Colorado. The contractor shall provide the presentation and supporting detailed information and the draft final report to DCD one week prior to the scheduled review meeting. Immediately upon receiving the review information, DCD will submit the information to the IPT so that the information can be evaluated prior to the review meeting. The IPT will provide feedback and recommendations at the review meeting on needed minor changes/improvements to be addressed before final submission.

DELIVERY SCHEDULE AND PERIOD OF PERFORMANCE

4.1 Period of Performance (POP)

The POP for this task shall be twelve weeks following contract award.

4.2 Delivery Schedule

The following deliverables are required for this project:

1. Kick-off Meeting Minutes and Action Items – due one week after the Kick-off meeting
2. Presentation Materials (Section 3.4 – Draft Final Design Review, Section 3.6 – Final Design and Report Review) – due five business days before meeting
3. Monthly Status Reports – due monthly ten business days after the end date of the reporting period
4. Final Report – due two weeks after the final design and report review meeting.

Documentation deliverables shall be delivered in electronic format. Both Microsoft Office and PDF format are acceptable. CAD data must be submitted in both the format for the specific CAD system used to develop the data and a universal format accepted by commercially available CAD systems. The contractor must get approval from the DCD Program Manager for any variant in deliverable formatting.

4.2.1 Kick-off Meeting Minutes and Action Items

The contractor shall work with DCD to compile and complete the minutes from the Kick-off meeting that will include the listing of action items and assigned responsibilities.

4.2.2 Monthly Status Report

The Contractor shall submit monthly status reports no later than the 10^{th} business day after the end of the reporting period. The Monthly Status Reports shall be on company letterhead and accompanied by the month's invoice. The Monthly Status Report shall include, but is not limited to, the following information:

a) Contract Number
b) Narrative review of work accomplished during the reporting period
c) Description of any major issues/problems identified and proposed solutions
d) Description of any travel
e) Detailed accounting of expenditures

f) Anticipated work activity for the next reporting period

4.2.3 Draft Final Design Review, and Final Design and Report Review
The contractor shall develop presentation materials for both review meetings using Microsoft PowerPoint. The presentation material will cover all topics to be covered in the meeting and will be provided to DCD no less than five business days before the meeting date.

4.2.4 Final Report
The Final Report shall completely document all the work completed and data generated, including design drawings and specifications, in the development of the preliminary design of the Improved Somerset Diversion. The Draft Final Report shall be submitted with the presentation materials for the Preliminary Design and Report Review meeting no less than five business days before the meeting date.

4.3 DCD Inspection and Acceptance of Deliverables
The DCD Program Manager will have the right to accept, or reject and require correction of any deficiencies found in deliverables.

For monthly deliverables, the Contractor shall be notified in writing through email by the DCD Program Manager of the acceptance or rejection, including if necessary, specific reasons why the deliverable was rejected, within five business days of receipt of the deliverable. The Contractor shall have five business days to correct the rejected deliverable and resubmit for re-inspection.

For the Final Report, the contractor shall receive comments on the draft final report during the Final Preliminary Design and Report Review meeting. DCD will notify the contractor within one week of receipt of the Final Report of acceptance or rejection. If rejection notice is sent, the notice will include precise details on the cause of rejection. The contractor shall have ten business days from receipt of the rejection notice to correct and resubmit the Final Report.

SPECIAL CONSIDERATIONS

5.1 Access to Facilities and Property
Access to the land around the Somerset Diversion is limited. The Contractor shall provide an estimated plan of required access/usage dates and times for the complete preliminary design effort as part of the proposal to DCD. That plan will be finalized and presented at the Kick-off meeting. If access is required before the Kick-Off meeting, then access will be approved at the award of the contract. Revisions to this plan must be submitted to DCD at least ten business days prior to any deviation from the submitted plan.

5.2 DCD Program and Contract Management
The DCD Program Manager will provide DCD's Program and Contract Manager for this contract.

The Program Manager will provide the contractor access to all technical data required to perform the project. Only the Program Manager has authority to review and approve contract deliverables.

Responsibility for contracting activities rests solely with DCD's Program Manager, as the contracting officer. No conversation, recommendations, or direction, whether given directly by, or implied by any DCD personnel, that will affect the scope, schedule, or price of the program covered by this SOW, shall be acted upon by the contractor unless specifically approved in writing by the DCD Contracting Officer.

5.3 Safety and Liability Requirements

5.3.1 General Safety Requirements

The contractor shall comply with all safety provisions, e.g., technical specifications, technical publications, Federal Occupational Safety and Health Standards (Title 29 CFR. Part 1910). If there is no applicable Occupational Safety and Health Administration (OSHA) standard, use other applicable nationally recognized sources of safety, health, and fire prevention standards in the completion of the work requirements of this contract.

5.3.2 Liability Requirements

The contractor shall add DCD, Somerset Domestic Waterworks District, Ox Bow – West Elk Mine to the coverage list on their liability insurance.

TRAVEL REQUIREMENTS:

The contractor may be required to travel to support the objectives of this contract. The contractor shall obtain written approval from the DCD Program Manager three (3) business days in advance of traveling. At a minimum, requests for travel shall include the travel dates, expected duration, origin and destination, purpose, travel cost estimates, and the names of the personnel traveling. The contractor is responsible for making all necessary travel arrangements.

ATTACHMENT I – Project Lead and Partners

DCD is the lead organization for the proposed project. DCD has established partnerships and an Integrated Project Team (IPT) with the key project stakeholders to participate and support the project. The following list includes the project stakeholders who have been involved in the planning to date:

- Oxbow LLC – Elk Creek Mine,
- Somerset Domestic Waterworks District,
- Gunnison Basin Roundtable,
- Colorado River Water Conservation District,
- Colorado Division of Parks and Wildlife,
- Trout Unlimited,
- Gunnison County,
- Delta Conservation District,
- The Western Slope Conservation District

These key stakeholders have been involved in the planning and development of the project and are supportive of this project because of the multiple benefits the project affords.

ATTACHMENT II – Reference Documents

- Water supply operational summary
- Somerset Water Treatment Improvement Project
- Fish Requirements
- Boating Requirements
- Water Rights
- Water agreements with SDWD and Mine

dfgsfdg

Water Supply Summary

Oxbow Mining, LLC. Elk Creek Mine Water Supply Summary

1. Oxbow holds two 0.9 cfs water rights for a total of 1.8 cfs or 808 gpm.

2. The # 1 flood pump supplies 200 gpm water via 4" flex line 100 feet from the river to the infiltration gallery. (~6,035' elevation)

3. The #2 flood pump supplies 200 gpm water via 4" flex line 100 feet direct to pond/gallery and with optional 2" flex line direct to pumphouse wet well.

4. Wet well consists of a 6-foot diameter x 20-foot long vertical corrugated metal pipe (CMP).

5. Wet well is connected to a 4-foot diameter x 100-foot long, perforated horizontal CMP buried at a depth of approximately 15 feet. The 12 guage pipe is perforated with 3/8 inch diameter holes on 4-inch centers.

6. Two, 4-foot diameter, 40-foot long perforated sections of pipe were added to the end of the original 100-foot section, perpendicular to the eastern trend, spaced approximately 10 feet apart.

7. Excavations around the gallery pipes were backfilled with washed gravel material.

8. Twin Vertical Turbine pumps are installed in the wet well.

9. When one pump runs, capacity is approximatey 300 gpm

10 When two pumps operate, capacity is approximately 370 gpm

11. Raw water pumped water flows through a 6" cast iron pipe north under the Colorado Highway 133 and Union Pacific RxR tracks and turns west at the mine secondary back entrance road.

12. Raw water then flows west approximately ¾ mile through a 6" HDPE water line and terminates at the 200,000 gallon raw water storage tank (~6,235' elevation).

13. Raw water pumps will further transfer water to additional mine storage (@ 600 gpm) or water will gravity feed to the nearby potable water treatment building where it is filtered, chlorinated for the mine and Town of Somerset potable water needs. (PWSID #CO 0126718).

14. Two Culligan MT-60 Water Filtration systems are available in the water treatment building and will filter up to 85 gpm of finished water. During high, raw water turbidity, flows are slowed to <50 gpm.

15. Finished, chlorinated, potable water is stored in the 144,000 gallon storage tank located next to the filtration building.

Date: March 19, 2014

Western Water & Land, Inc.
743 Horizon Court Suite 365
Grand Junction, CO 81506

SHEET _____ OF _____
JOB NO. _____
DATE _____
COMPUTED BY _____
CHECKED BY _____

PROJECT _____
SUBJECT _____

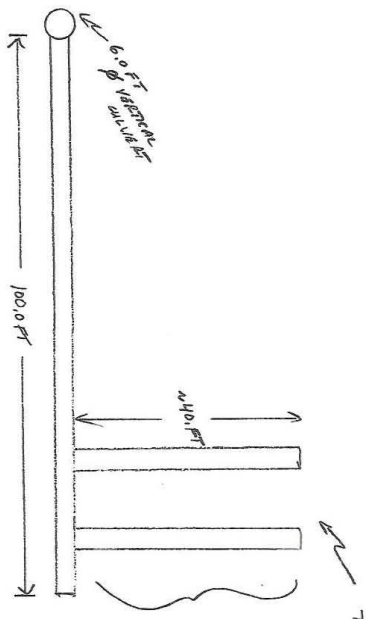


FIGURE 2: PLAN VIEW
GENERAL EXISTING INFILTRATION GALLERY

1/3

Western Water & Land, Inc.
743 Horizon Court Suite 365
Grand Junction, CO 81506

SHEET _____ OF _____
JOB NO. _____
DATE _____
PROJECT _____ COMPUTED BY _____
SUBJECT _____ CHECKED BY _____

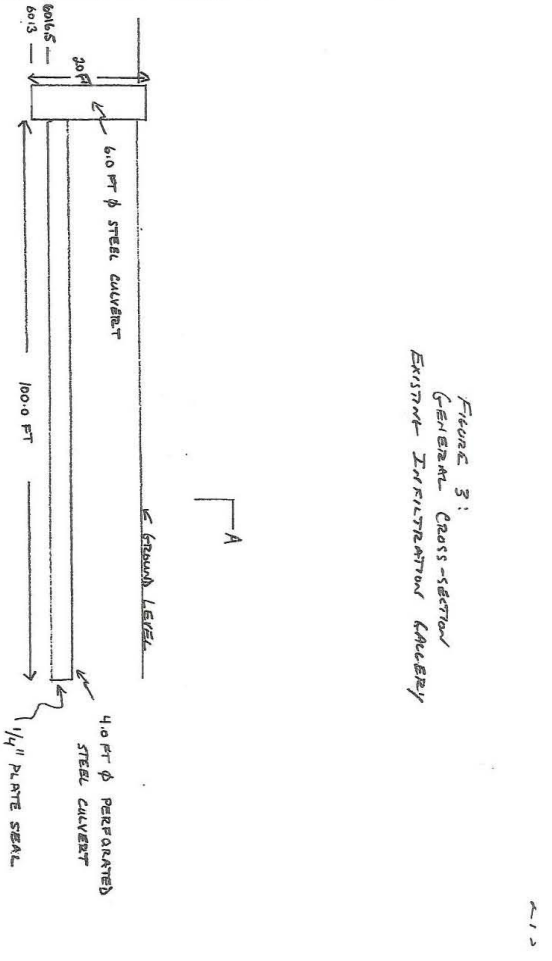


FIGURE 3:
GENERAL CROSS-SECTION
EXISTING INFILTRATION GALLERY

Western Water & Land, Inc.
743 Horizon Court Suite 365
Grand Junction, CO 81506

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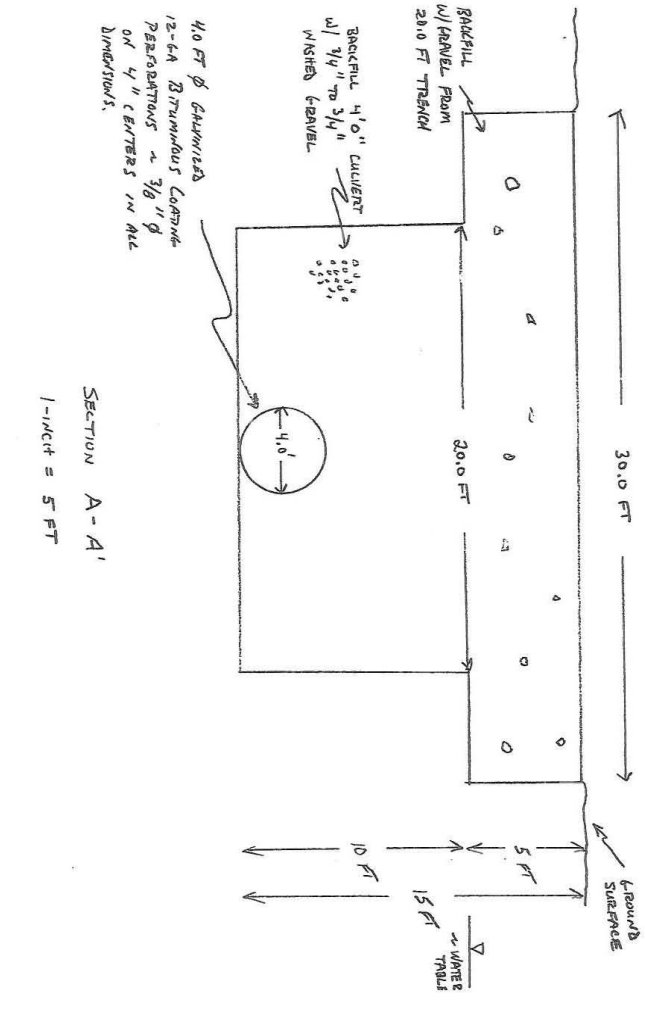
JOB NO. _____
DATE _____
COMPUTED BY _____
CHECKED BY _____

PROJECT _____
SUBJECT _____



SECTION A-A'
1-INCH = 5 FT

Figure 4: GENERAL CROSS-SECTION EXISTING INFILTRATION GALLERY (TO BE DEMOLISHED)

5/13

OXBOW - SURFACE WATER

Water Pumped from the North Fork of the Gunnison River

Date	Meter Reading Gallons	Pumped To Raw Tank Gallons	Town Meter Reading Gallons	Used by Town Gallons	Used by Mine Gallons
1-Nov-08	600,507,000	8,170,600		221,900	7,948,700
1-Dec-08	607,013,400	6,506,400		175,650	6,330,750
1-Jan-09	613,698,700	6,685,300		190,050	6,495,250
1-Feb-09	622,004,400	8,305,700		189,750	8,115,950
1-Mar-09	631,719,200	9,714,800		152,200	9,562,600
1-Apr-09	640,043,200	8,324,000		159,650	8,164,350
4-May-09	647,040,000	6,996,800		188,800	6,808,000
5-Jun-09	652,234,000	5,194,000		300,100	4,893,900
1-Jul-09	657,223,400	4,989,400		410,950	4,578,450
1-Aug-09	669,245,888	12,022,488		449,165	11,573,323
4-Sep-09	680,606,900	11,361,012		445,250	10,915,762
2-Oct-09	690,611,000	10,004,100		318,870	9,685,230
29-Oct-09	694,842,100	4,231,100		269,730	3,961,370
3-Dec-09	704,330,900	9,488,800		140,000	9,348,800
1-Jan-10	711,550,800	7,219,900		100,000	7,119,900
1-Feb-10	720,184,500	8,633,700		100,000	8,533,700
3-Mar-10	727,020,500	6,836,000		100,000	6,736,000
1-Apr-10	735,837,200	8,816,700		100,000	8,716,700
3-May-10	746,259,000	10,421,800		195,330	10,226,470
1-Jun-10	756,997,400	10,738,400		285,020	10,453,380
1-Jul-10	763,649,700	6,652,300		302,050	6,350,250
1-Aug-10	771,535,200	7,885,500		451,000	7,434,500
1-Sep-10	780,798,500	9,263,300		462,800	8,800,500
1-Oct-10	791,355,900	10,557,400		337,350	10,220,050
1-Nov-10	803,073,100	11,717,200		307,900	11,409,300
1-Dec-10	814,726,500	11,653,400		189,900	11,463,500
1-Jan-11	828,408,600	13,682,100		144,000	13,538,100
1-Feb-11	838,880,000	10,471,400		156,300	10,315,100
1-Mar-11	848,235,750	9,355,750		154,700	9,201,050
1-Apr-11	857,617,500	9,381,750		146,900	9,234,850
1-May-11	870,248,300	12,630,800		205,150	12,425,650
1-Jun-11	880,300,000	10,051,700		387,600	9,664,100
1-Jul-11	893,400,000	13,100,000		452,250	12,647,750
1-Aug-11	907,576,700	14,176,700		243,650	13,933,050
1-Sep-11	920,717,500	13,140,800		346,200	12,794,600
1-Oct-11	934,493,200	13,775,700		365,500	13,410,200
1-Nov-11	945,408,000	10,914,800		334,250	10,580,550
1-Dec-11	953,509,000	8,101,000		145,650	7,955,350
1-Jan-12	960,879,200	7,370,200		96,500	7,273,700
1-Feb-12				89,800	
1-Mar-12				116,200	
1-Apr-12	985,318,600	24,439,400		107,400	24,126,000
1-May-12	999,697,000	14,378,400		136,750	14,241,650
1-Jun-12	1,011,158,500	11,461,500		391,450	11,070,050
1-Jul-12	1,023,736,800	12,578,300		594,900	11,983,400
1-Aug-12	1,034,980,900	11,244,100		455,500	10,788,600
1-Sep-12	1,047,761,000	12,780,100		485,000	12,295,100
1-Oct-12	1,056,409,200	8,648,200		315,200	8,333,000
1-Nov-12	1,070,347,800	13,938,600		104,050	13,834,550
01-Dec-12	1,086,730,000	16,382,200		109,542	16,272,658
01-Jan-13	1,095,371,500	8,641,500		115,242	8,526,258
01-Feb-13	1,099,045,100	3,673,600		276,945	3,396,655
01-Mar-13	1,101,767,700	2,722,600		101,685	2,620,915
01-Apr-13	1,106,087,900	4,320,200		176,871	4,143,329
01-May-13	1,106,087,900	No reading			
5-Jun-13	1,117,223,300	11,135,400		142,760	10,992,640
8-Jul-13	1,123,951,900	6,728,600		253,850	6,474,750
5-Aug-13	1,128,530,300	4,578,400		303,419	4,274,981
1-Sep-13	1,130,461,400	1,931,100		232,195	1,698,905
1-Oct-13	1,132,492,000	2,030,600		155,700	1,874,900
1-Nov-13	1,139,330,100	6,838,100		155,700	6,682,400
1-Dec-13	1,144,503,500	5,173,400		71,700	5,101,700
1-Jan-14	1,145,804,000	1,300,500		76,155	1,224,345
1-Feb-14	1,146,654,250	850,250		185,920	664,330
1-Mar-14	1,147,615,200	960,950			960,950

ENGINEERING DESIGN AND CAPACITY REPORT: SOMERSET WATER DISTRICT WATER TREATMENT IMPROVEMENT PROJECT

Prepared for

Oxbow Mining, LLC
P.O. Box 535
Somerset, CO 81434

WWL Project No: 10602.01

December 19, 2002

Western Water & Land, Inc.
743 Horizon Court, Suite 330
Grand Junction, CO 81506

1.0 Introduction

This design capacity engineering report, as required by Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD), addresses the scope of water treatment improvements as proposed by Oxbow Mining, L.L.C. (OMLLC) for the Somerset Water District (Public Water System ID No. 126718), located in Somerset, Colorado. OMLLC holds both domestic and industrial-use water rights on the North Fork of the Gunnison River and serves as the pubic water supplier for the unincorporated town of Somerset. Somerset is located approximately 8 miles east of the town of Paonia on Colorado Highway 133 (Figure 1).

1.1 Project Purpose

The purpose of the water treatment improvement project is to continue to supply potable water to the residents of Somerset and employees of OMLLC per Colorado Primary Drinking Water Regulations (C.R.S. 25-1-107). The following section describes the background and subsequent need for the water treatment improvement project.

1.2 Report Organization

This report presents the documentation requirements for demonstrating capacity as outlined in the "New Water System Capacity Planning Manual" (Capacity Manual) prepared and made available by the WQCD. The Capacity Manual outlines technical, managerial, and financial elements required for an application for construction approval for a new or improvement of a public water treatment system.

The report presents a compilation of the technical, managerial, and financial elements of the project. Technical information, including the engineering design report and associated drawings, is presented in the following sections. These narrative sections are modeled after the outline provided in the Capacity Manual. The narrative report summarizes the purpose, need, alternatives considered, and a description of the proposed treatment process.

The documentation requirements for demonstrating capacity include several forms provided by the WQCD. These forms include County and Local Health Approval, Flood Plain Certificate, Inventory Form, and Chemical Analysis. The financial and managerial information, and the

state-required forms, with exception of the chemical analysis forms, are presented in Appendix A. The chemical analysis forms and additional water quality data are presented in Appendix G.

1.3 Background

Historically, the original and subsequent operators of the underground coal mine (Somerset Mine) located near the small community of Somerset, Colorado have provided treated domestic water to residents of the Somerset community. Water was originally supplied directly from the North Fork of the Gunnison River (North Fork) and was later supplied from an infiltration gallery located on the alluvial terrace adjacent to the North Fork. OMLLC purchased and began operation of the mine in 1991. Mining operations over the last 3 years have focused on longwall mining in the Sanborn Creek Mine. The Sanborn Creek Mine is scheduled to close in the first quarter of 2003 when longwall mining operations shift to the new Elk Creek Mine that adjoins the existing surface facilities.

As part of a state (CDPHE -WQCD) water treatment inspection on August 8, 2000, the state requested that a microscopic particulate analysis (MPA) be conducted for the water being pumped from the infiltration gallery. The results of the MPA test, conducted in November 2000, indicated influence of surface water. This resulted in notification from the state (letter of December 20, 2000) to improve the water treatment process such that the threat from influence of surface-water pathogens (bacteria, viruses, and protozoans) is adequately mitigated.

2.0 Engineering Report Submittals

2.1 Service Area

The water supply service area includes the unincorporated town of Somerset and adjoining OMLLC coal mine facility (Figure 1). Somerset has 54 water taps and approximately 100 residents, whereas the mine employs 240 people. The estimated per capita consumption rate for town residents is 210 gallons during the winter and 480 gallons during the summer. Use of water by the mine in 2002 was estimated to be between 117,000 and 200,000 gallons per day (winter and summer). OMLLC uses water for domestic (showers, etc.), mining (coal mining and processing), and industrial (dust suppression) purposes.

The town of Somerset is not expected to grow in population due to limited open space in the narrow mountain valley, lack of utility infrastructure, and the local socio-economic conditions. Even though OMLLC is in the process of moving the longwall coal mining activities to the new mine in the Elk

Creek drainage, mine management does not expect a significant increase in the number of employees at the facility. However, the longwall mining process in the Elk Creek Mine is estimated to require significant amounts of water during short periods of time. OMLLC estimates that 200 to 600 gallons per minute (gpm) may be needed over periods of several hours. In anticipation of this water requirement, OMLLC constructed a new 200,000 gallon mine-water storage tank near the Elk Creek mine ventilation shafts in 2002.

The water supply and distribution system for OMLLC and Somerset is not connected to any other water treatment plant or distribution systems in the area. The closest water supply and distribution systems are the West Elk Mine system located approximately two miles east of Somerset, and the town of Paonia system, located approximately 8 miles west of Somerset.

2.2 Analysis of Existing Treatment Facilities

The early mining companies that originally developed the coal mining operations on this property acquired water rights from the North Fork to support mining operations and also to support potable uses for the mine and the town of Somerset (originally part of the mine property). As the town property changed ownership over the years, it has been the responsibility of the mining operator to continue the practice of supplying potable water to residents of Somerset.

In the 1960's, an infiltration gallery was constructed to provide a more high-yielding and reliable groundwater supply source. The gallery was constructed on a small alluvial plain adjacent to the North Fork approximately 0.6 mile upstream (east) of the main mine site. The gallery is located approximately 200 feet from the north bank of the North Fork. It consists of a 6-foot diameter, 20-foot long vertical corrugated metal pipe (CMP) connected to a 4-foot diameter, 100-foot long, perforated horizontal CMP at a depth of approximately 15 feet. Several years later, two 4-foot diameter, 40-foot long, perforated sections of pipe were added to the original 100-foot long section perpendicular to its eastern trend. The excavation around the gallery pipes was backfilled with washed gravel aggregate.

Water collected in the gallery is pumped from the infiltration gallery pump house to a 200,000-gallon water storage tank through a 6-inch diameter pipeline which also serves as the water supply pipeline to the Sanborn Creek Mine. The original 200,000-gallon water storage tank (separate from the new Elk Creek mine tank) is located near the main mine surface buildings above the town at an elevation of approximately 6,200 feet (approximately 170 feet above the

infiltration gallery and pump house). Domestic water is supplied to Somerset by way of a pipeline from the water storage tank. The storage tank also supplies water to underground mining operations when the gallery pump is not operating. The gallery pump operates depending on the water levels in the storage tank and within the gallery sump.

The gallery successfully supplied alluvial groundwater to the mine and the town of Somerset for a number of years; however, yield of the gallery began to decrease with time. The decreasing yield was probably related to several factors including a decrease in river stage due to upstream regulation from dam construction, stream incising, and/or gradual collapse and failure of the gallery piping. As a result, direct surface recharge of the gallery alluvium was initiated in approximately 1995 by pumping water from the North Fork and allowing it to recharge the gallery through the surficial gravel fill materials.

Under normal conditions, a submersible river pump constantly supplies surficial recharge water from the North Fork, and the gallery pump cycles on and off depending on water levels in the storage tank. Water levels in the gallery sump rarely influence the pump's operation because water levels do not drop to the automatic shut-off level. Water treatment consists of injection of chlorine gas into the gallery sump for disinfection purposes.

As mentioned in Section 2.1, OMLLC recently constructed an additional 200,000 gallon storage tank in the Elk Creek Mine area to be used exclusively for industrial mine water storage. The Elk Creek Mine water tank is plumbed to the original primary 200,000 gallon water tank. Therefore, the primary tank will supply water to the new mine water tank.

In August 2001, it was noted that treated water was turbid after a major storm event. An examination of the infiltration gallery surface revealed at least one location that indicated the occurrence of "preferential or pipe flow" of the surface recharge water through the infiltration media. As documented in a notice from the state, the results of the state-required MPA test indicated the influence of surface water, which is likely attributed to such preferential flow.

2.3 Analysis of Source Selection

Although OMLLC maintains water rights from the North Fork, both surface water and groundwater were considered as potential sources of water supply for the project.

The potential groundwater sources considered were groundwater within the alluvial deposits underlying and surrounding the infiltration gallery facility, and potential groundwater in colluvial deposits in the Elk Creek drainage. Groundwater sources in the Elk Creek drainage were considered inadequate and the option was rejected. A "test well" installed by OMLLC in the early stages of supply assessment indicated a static depth to water of 6 feet below ground surface. The well was shown to yield a sustained production rate of 50 gpm based on continuous pumping for 8 ½ hours (see Appendix F). However, the river pump was supplying at least 100 gpm over the gallery during the informal pumping test. Because the test well was within approximately 100 feet of the infiltration gallery, the test was not considered representative of actual aquifer water levels or yield. Follow-up monitoring of water levels in the gallery pumping sump (vertical pipe) while pumping the gallery and shutting off the river pump, indicated that a more probable groundwater level was approximately 11 to 13 feet below ground surface.

A 2-D groundwater flow model was constructed and several simulations were conducted to investigate the feasibility of groundwater production by way of a well field on the alluvial plain deposits. Hydraulic parameters were estimated based on general physical characteristics of alluvial material and descriptions of alluvial materials from the test well bore log. Details of this work are presented in the "Water Supply and Treatment Alternatives Evaluation" report (Appendix D). With a hydraulic conductivity of 28.3 feet/day ($1x10^{-2}$ centimeters/second), the simulations showed that a well field of 6 pumping wells would only yield 130 gpm. In the case of a hydraulic conductivity of 283.5 feet/day ($1x10^{-1}$ centimeters/second), the well field would produce a total of 300 gpm. Other preliminary groundwater options are discussed in the Water Supply and Treatment Alternatives Evaluation report (Appendix D). However, the uncertainty associated with natural groundwater levels, heterogeneity of alluvial material type (e.g. percentages of silt, sand, gravel, etc.), alluvial material thickness, suitable hydraulic parameters, and the inability (wells and testing would interfere with the current gallery pumping schedule) and expense to acquire these data negated the option for an alluvial well field groundwater source.

Because of OMLLC's decreed water rights, the only viable surface water source considered was the North Fork. OMLLC holds two 0.9 cubic feet per second (cfs) surface water rights on the North Fork for municipal and mining use. This is equivalent to approximately 808 gpm. This surface water source has been used as the main water supply source for at least 5 years in supplementing water to the infiltration gallery. Barring severe drought situations, the North Fork

water right is OMLLC's most reliable water source in the long term. In addition, OMLLC has purchased augmentation water from the Fire Mountain Water District. This water provides a right to 2.83 acre-feet stored in East Beckwith Reservoir No. 1 to be used when a call on the river is in effect. The water rights certification information, a water rights summary and copies of OMLLC's water rights decrees are presented in Appendix B.

2.4 Analysis of Treatment Alternatives

In early January 2002, OMLLC completed the planned tasks through the water supply and treatment alternatives analysis. The study indicated a number of possible water supply and treatment alternatives. The estimated cost of conventional treatment systems for a 90 gallon per minute (gpm) flow rate ranged from $471,000 to $606,000. After preparation of the Water Supply and Treatment Alternatives Evaluation report, an additional alternative was researched and defined and is presented in Addendum 1 to the report (Appendix D). It was also recommended that continued use of the gallery as the water supply structure would require refurbishment of the upper infiltration media to reduce the occurrence of preferential flow paths.

The original conceptual plan for construction of a water treatment improvement system called for installation of the equipment adjacent to the existing infiltration gallery and pump house, located on the alluvial plain of the North Fork of the Gunnison River. As part of the engineering design report, OMLLC conducted a thorough flood plain analysis of the alluvial plain area. The "Report on 100-Year Flood Limit Study", presented in Appendix C, indicates that the 100-year flood event will inundate the ground surface up to base of the foundation of the pump house.

To minimize risk to the water treatment system, OMLLC proposes to install the water treatment improvement system on the north side of Highway 133 at the interface of the mountain slope and the main access road to the Sanborn Creek Mine portal. The proposed plan is presented in Figure 2. Construction of the water treatment improvement system in this area also has the advantages of an existing and permitted discharge basin, ease of access, and better facility security. However, construction in this area is not possible until mining in the Sanborn Creek Mine is completed in the first quarter of 2003.

An analysis of treatment alternatives is provided in the Water Supply and Treatment Alternatives Evaluation report and Addendum 1 of the same report in Appendix D.

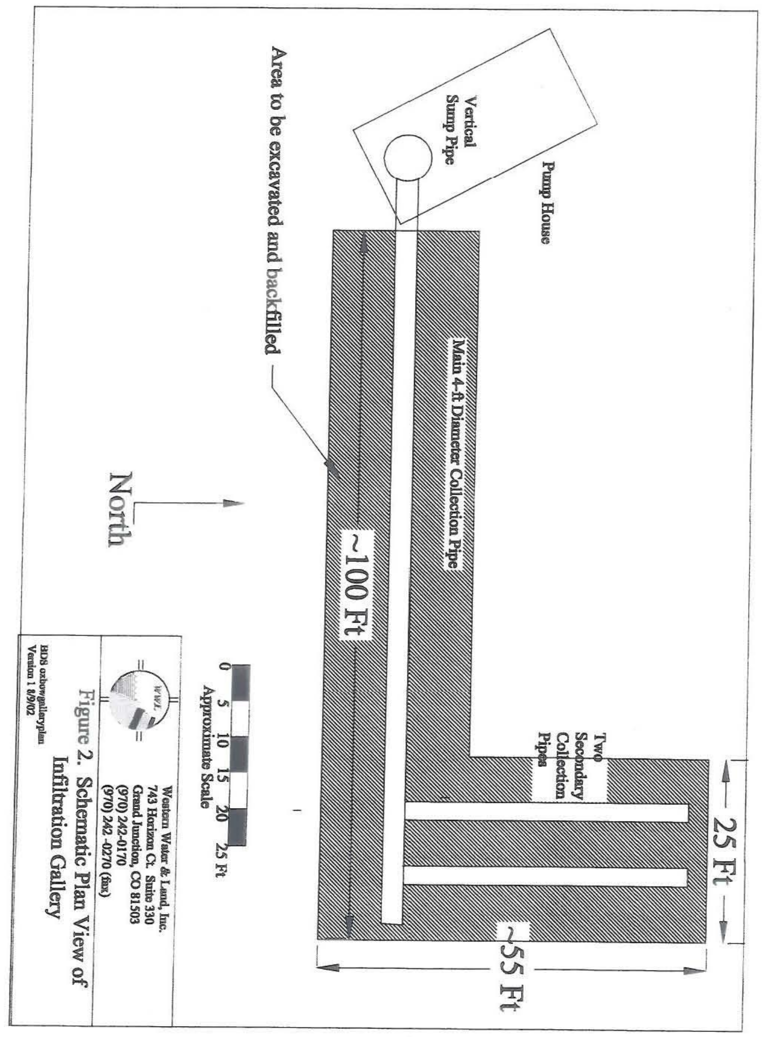
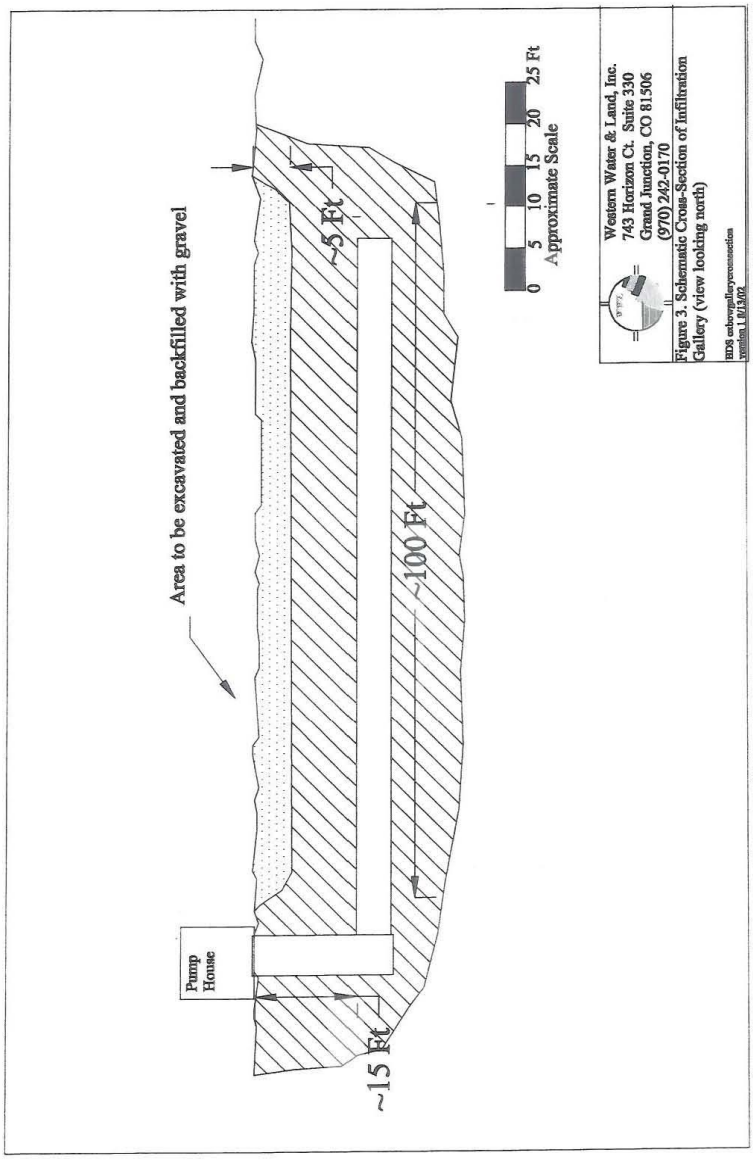


Figure 2. Schematic Plan View of Infiltration Gallery

Page 25 of 44


Area to be excavated and backfilled with gravel
~5 Ft
~100 Ft
~15 Ft
Pump House
0 5 10 15 20 25 Ft
Approximate Scale
Western Water & Land, Inc.
743 Horizon Ct. Suite 330
Grand Junction, CO 81506
(970) 242-0170
Figure 3. Schematic Cross-Section of Infiltration Gallery (view looking north)

Fish Considerations

The fish of concern are a variety of trout species found in the North Fork of the Gunnison River. The fish barrier, passage and entrainment guidelines are applicable.

Boating Considerations

The present pump diversion appears to be about 200ft (+ or -) downstream from an older diversion point at a very deteriorated drop structure. One thought might be to move the diversion upstream above the old drop structure to enable gravity diversion into a short ditch at the foot of Hwy 133 leading directly to the existing infiltration gallery. The rule of thumb is within 200ft of the decreed location is allowed without a change of point of diversion application which is also not much of a headache.

As a boating/fishing component, the series of older broken down drop structures could be rebuilt/replaced with new ones that span the river making nice waves for surfing at higher water and channelize the low flows (Fire Mountain decree from the Paonia reservoir of approximately 250 cfs) into a single low flow channel that ensures the decreed diversion and meanders back and forth about the right or north channel making good aeration and eddy lines for both boating and fishing. An alternate consideration could be a separate more challenging boating channel and a fish ladder. With a 250 cfs low flow, kayakers could float around Somerset and take out above the Fire Mountain diversion.

Water Rights

WATER RIGHTS

All water and water rights, ditch and ditch rights, wells and well rights, reservoir and reservoir rights, well permits, augmentation plans, water agreements and leases, and other rights in or to the use of water of whatever kind or nature owned by Somerset Mining Company, including but not limited to the following:

A. Somerset Mine Well. Permit No. 23700-F under Water Decree No. 79CW86 dated July 26, 1979, appropriating 200 G.P.M., of water for industrial purposes, from the following point of diversion:

Township 13 South. Range 90 West, 6th P.M.

Section 8: SW1/4 SE1/4

B. Somerset Water Supply System.

1. Municipal Priority No. J-91 under Water Decree dated August 16, 1936, as amended by Amended Ruling of Water Referee dated November 13, 1973, in the name of United States Steel Corporation, appropriating an amount not to exceed .90 c.f.s. of water from the North Fork of the Gunnison River for municipal and mining purposes, from the following point of diversion:

Township 13 South, Range 90 West 6th P.M.

Section 9: A point on the North bank of the North Fork of the Gunnison River whence the SW1/4 corner of Section 9 bears South 65 degrees 20' West, 1820 feet.

2. Municipal and Mine Priority No. J-329 under Water Decree dated December 16, 1948, as amended by Amended Ruling of Water Referee dated November 13, 1973, in the name of United States Steel Corporation, appropriating an amount not to exceed .90 c.f.s. of water from the North Fork of the Gunnison River for municipal and mining purposes, from the following point of diversion:

Township 13 South. Range 90 West, 6th P.M.

Section 9: A point on the North bank of the North Fork of the Gunnison River whence the SW1/4 corner of Section 9 bears South 65 degrees 20' West, 1820 feet.

3. All rights in, to and under the Finding, Ruling and Decree of the District Court for Water Division No, 4 entered in Case No 93CW97 on December 8, 1994.

11112808

SDWD and Mine Agreement

5/29/62

THIS AGREEMENT made and entered into as of the 1st day of January, 1962, by and between COLUMBIA-GENEVA STEEL DIVISION, UNITED STATES STEEL CORPORATION, hereinafter called "Columbia", and the SOMERSET DOMESTIC WATERWORKS DISTRICT, hereinafter called the "District",

WITNESSETH:

WHEREAS Columbia owns and operates Somerset Mine in the vicinity of Somerset, Colorado; and

WHEREAS Columbia is the owner of a water supply needed for the operation of said Mine, having its source in the Gunnison River, and of a water system in and near the Village of Somerset; and

WHEREAS the District is in need of a supply of water in Order that it may furnish water for domestic purposes to the inhabitants of Somerset, and would like to purchase the same from Columbia's Gunnison River supply, and to have conveyed to it that portion of the distribution system lying within the Village of Somerset; and

WHEREAS Columbia is willing to sell water to the District for resale to the residents of the Somerset area, and to quitclaim to the District its interest in and to that portion of the distribution system lying within the Village limits;

NOW, THEREFORE, in consideration of the mutual promises hereinafter contained, the parties hereto agree as follows:

1. Columbia agrees promptly to convey, transfer and quit-claim to the District its interest in and to, all water pipes and pipelines, distribution lines, service llnes, hydrants, connections, and all other waterhandling faoilities and accessories located within the platted townsite of Somerset, as shown in red color on drawing AR8-16 dated 10-13-61 which is attached hereto marked "A" and made a part hereof, Columbia further agrees promptly to assign and transfer to the District the right to enter upon the property of

-1-

the residents of the area served by the District for the purpose of operating, inspecting, maintaining, repairing, removing, relocating and replacing pipes and other water facilities, all as reserved to Columbia by deeds heretofore delivered to the residents. The transfers provided for in this paragraph shall be accomplished by Columbia's execution and delivery of instruments in the form of Exhibits B and C, attached hereto and made a part hereof, which the parties have initialed for identification.

2. Columbia agrees to sell and deliver to the District, and the District agrees to take, use and pay for, such quantity of water as the District may require to meet the domestic needs of the residents of Somerset area; provided, however, that Columbia will not be required to supply water in excess of a total of 75 gallons per minute. In case of emergencies, such as fire, Columbia will try to supply all the water possible. The water to be sold and delivered to the District hereunder shall be of substantially the same quality as that used by Columbia for its own operations and purposes.

3. Delivery of water by Columbia to the District hereunder shall, subject to paragraph 11 hereof, be made at the point of interconnection of facilities to be retained by Columbia and of facilities to be conveyed to the District, the point being located on the main water line Just north of the Denver & Rio Grande Western Railroad Company right of way and being designated "Proposed Meter and Valve Box" on drawing AR8-16. Columbia shall install and maintain a meter at this point on the water line. Columbia, at its own expense, shall maintain the pipeline and pump, tank and other facilities necessary to deliver the water to this point. The District shall maintain the water distribution system to be conveyed to it beyond this point, and, at its expense, shall procure, furnish, install, operate and maintain all facilities, rights of way and easements required to receive, apply, and utilize the water delivered hereunder. Any responsibility for improvement in the quality of the water over and above the standard of quality hereinabove provided for shall be the District's and not Columbia's.

4. It is recognized by the parties that the meter referred to in paragraph 3 will not have been installed on the water line by January 1, 1962, the effective date of this agreement. Pending installation of said meter, Columbia will furnish such quantity of water as the District may require to meet the domestic needs of the residents of the Somerset area at the monthly rate of $256.00. Beginning with the first complete month following installation of said meter, water shall be sold to the District hereunder at the rate of twenty-six cents (26¢) per 1,000 gallons of water furnished. If owners of other kinds of establishments of a sort not listed above and not presently found in the District as now constituted should request the District to furnish them with water, a charge proportionate to their consumption shall be made,

5. Bills for water delivered shall be rendered by Columbia to the District monthly and shall be due and payable on receipt thereof by the District.

6. In case the Consumer Price Index, as published by the Bureau of Labor Statistics, United States Department of Labor. During the term of this Agreement, shall rise to a point higher than the Consumer Price Index as of January, *1962,* the charge to the District for water sold hereunder may be increased proportionately. Increases in the cost of water permitted under this paragraph shall not be made more frequently than once a year and shall be prospective only in their application.

7. Columbia shall exercise reasonable care and diligence to furnish such water to the District as provided for herein, but the parties recognize that Columbia cannot guarantee the sufficiency of its source of supply, and Columbia shall not be required to acquire additional water rights or other sources of supply 1n order to meet its obligations hereunder. Columbia shall not be liable for any failure, interruption or shortage of water, or any loss or damage resulting therefrom occasioned in whole or 1n part by causes beyond the reasonable control of Columbia.

8. Columbia shall furnish, inspect, test and repair, and keep in repair, all meters and other instruments which may be required to measure the water delivered to the District hereunder. The District shall have the right at any time to test and Inspect any such meters and instruments.

9. The District shall not assign any interest herein to any party without the written consent of Columbia first had and obtained.

10. The term of this agreement shall be for seven years from and after the effective date hereof, and shall continue thereafter from year to year unless terminated by either party hereto upon 6 months' written notice. The charges provided for herein and all other matters relating to the furnishing of water to the District shall be renegotiated between Columbia and the District at any time after December 31, 1968, upon 60 days' advance notice by either party.

11. It is recognized that five residences each located outside the Village of Somerset and remote from the District's distribution system will require water. The residences are readily accessible from Columbia's main water line, however, and Columbia agrees to install water meters for these residences and to deliver water to the District, for ultimate use of the occupants, to points on its water line where 5 separate meters shall be installed. The charge for water furnished these residences shall be as outlined In paragraph 4. Installation of these meters shall be at Columbia's expense. The occupants' consumption shall be measured by Columbia, and the quantity of water consumed shall be taken into consideration in determining the maximum amount of water required to be furnished by Columbia.

12. The parties recognize that Columbia acquired coal lands near Somerset to insure itself of coking coal for its steelmaking operations in Utah; that the coal found in the vicinity of Somerset is particularly adaptable for this purpose; and that Columbia intends to continue to conduct mining operations at Somerset for the foreseeable future, subject; only to interruptions which are characteristic

of all such operations, as for example, inclement weather, lack of demand and labor disturbances, none of which appear to be imminent. Notwithstanding paragraph 10, the parties recognize that if for any reason or any time Columbia decides to terminate its operations and abandon the mining area adjacent to the Village of Somerset, Columbia will be relieved of its obligations hereunder. In such event, Columbia agrees that the water supply will be handled as follows;

(a) Columbia will give the settling pond, pumps, filters, chlorinating system, tanks and pipelines to the District at no charge.

(b) Columbia will make available to the District, at no charge to the District, such water from its Gunnison River supply as necessary to meet the reasonable domestic needs of the District; provided, however, the parties recognize that Columbia cannot guarantee the sufficiency of its source of supply, and Columbia shall not be required to acquire additional water rights or other sources of supply to meet thj.8 obligation. In the event Columbia sells, assigns or transfers Somerset Mine to some other operator, or enters into an operating agreement with another whereby the latter operates said Somerset Mine with Columbia remaining as owner, Columbia shall assign this agreement to such new operator who shall be entitled to its benefits and bound by its obligations.

13. Any notice which is provided or permitted to be given to either party hereunder shall be deemed to have been given or made 48 hours after such notice has been deposited in the United States mail postage prepaid and addressed to Columbia at 120 Montgomery Street, San Francisco, California, or to the District at Somerset, Colorado, as the situation may require. Said addresses may be changed by either party by notice in writing given to the other party.

14. Columbia 1s not a public utility or service company and by entering into this Agreement is not holding itself out or undertaking to furnish water to the public or to the individual

residents or inhabitants of the Village of Somerset or its vicinity and nothing in this agreement shall in any way be construed to place Columbia under the duties, rights, or obligations of a public service company. Should the Public Utility Commission or any similar body assert any jurisdiction over Columbia, Columbia shall have the option of performing under this Agreement or not performing, in whole or in part, as it shall deem best, without any liability on account of any action taken in the premises.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the first day of January, 1962.

UNITED STATES STEEL CORPORATION

By /S/ D.E. Rice
Vice President
Columbia-Geneva Steel Division

SOMERSET DOMESTIC WATERWORKS DISTRICT

By /S/ Pete Tullio
President

ATTACHMENT III – Pictures

Pump House Pictures

View from Pumps

Pump House control panels

Picture of a pipe feeding water directly to pump house cistern from river to provide the additional needed water during peak mining operations that can't the galley system currently can't provide.

Pond feeding water to the galley system. Note the pipe bringing water from the river to the pond. See diagrams on pages 41 and 42 to get a detailed view of the pump house cistern and the gallery.

Picture of white pipe bring water from the river to the pond and the red pipe bring water directly to the pump house cistern. Picture is from the pond looking toward the river.

Picture of the pipes to the pond and pump house from the river side.

Picture of the two pipes coming from the two pumps in the river.

Picture of pump house from the location of the current river pumps.

Picture of starting at the most upstream position progressing downstream to current pump location.


Note arrow points to pump in river. See next picture for detailed view

Arrow points to pump.

Looking up stream from pump house. Road is on the left side of picture. Arrow points to the most upstream picture shown on page 48.

Arrow points to pump house.

PAST PERFORMANCE INFORMATION SHEET
Instructions

This Instruction Sheet describes the information to be provided when submitting contracts for your Past Performance Volume. You will provide the information requested in this form for each contract/program being described. Comments shall be frank and concise regarding your performance on the contracts you identify. Provide a separate completed form for each contract/program submitted. There is no need to reformat the Submittal Sheets; they should be submitted as is and without changes. You do not need to submit this Instruction Sheet with your Submittal Sheets. You only need to submit the information found on the Submittal page 3 for each submitted contract. The limit of past efforts submitted is three. The length of each submission is limited to three pages. The Submittal Sheet currently has one page, but as information is entered, the pages can expand to the three page limit. Past performance submissions will be evaluated for relevancy based on how similar work on the prior contract coincides with the requirements of this acquisition as outlined in the instructions to offerors.

The following are instructions related to the sections found on page 3:

A. Offeror: Provide information for your company. For large, multi-functional companies, limit the references to work done by the division, group or unit that plans to perform the proposed work.

B. Program Title: Title used to describe the contract/effort.

C. Contract Specifics:
1. *Contracting Agency or Customer*: The party who awarded the contract.
2. *Contract Number:* If information is provided relevant to task order type contracts, offerors must provide specific task order numbers, in addition to the basic contract number.
3. *Contract Role* refers to your role on the contract (i.e. Prime Contractor or Subcontractor) and any comments you feel are necessary to clarify your role.
4. *Contract type* refers to the different pricing arrangements including Firm Fixed Price, Time & Materials, etc.
5. *Original Contract $ Value* is the original amount awarded.
6. *Current Contract $ Value* is the current or final amount.
7. *Reasons for Contract Value changes*: If the amounts in 5 and 6 above are different, provide a brief description of the reasons behind the changes.
8. *Period of Performance* should include the original period of performance, options, and any extensions.
9. *Original Completion Date* is the date associated with the original period of performance.
10. *Current schedule* refers to the current estimated completion date – any changes in the original period of performance (e.g. exercise of options, increases in scope, delays, etc.).

11. *How Many Times Changes* refers to the number of modifications were made to the original contract that increased the schedule.
12. *Primary Causes of Change*: Describe any changes in the Period of Performance.

D. Primary Customer Points of Contact: (For Government contracts provide current information on all three individuals. For commercial contracts provide points of contact fulfilling these same roles.) It is the contractor's responsibility to ensure all data is current and accurate. Provide the following for each Point of Contact: Name, Address, Telephone, e-mail (if available)

E. Unique considerations: Address any technical (or other) area about this contract/program considered unique that should be considered when evaluating the past performance.

F. Key Personnel: Specify, by name, any key individual(s) from your company who participated in the work outlined in this Past Performance Information Sheet and are proposed to support this acquisition.

G: Brief Program Description: Describe briefly the work performed. Keep in mind the relevancy of the work performed on the submitted contract to this acquisition.

H. Relevancy to Subfactors: For each of the applicable proposal evaluation factors and subfactors, illustrate how your performance on this program applies to those Subfactors/Factors. Relevancy of the submitted contract to these Subfactors/Factors are a major part of your past performance evaluation.

PAST PERFORMANCE INFORMATION Sheet

A. Offeror: Name (Company/Division): _____
CAGE Code: _____ DUNS Number: _____
B. Program Title: _____
C. Contract Specifics:
1. Contracting Agency or Customer_____
2. Contract Number_____
3. Contract Role and Comments: ___ Prime or ___ Subcontractor

4. Contract Type:_____
5. Original Contract $ Value _____
6. Current Contract $ Value _____
7. Reasons for Contract Value changes:

8. Period of Performance_____
9. Original Completion Date:_____10. Current Schedule:_____
11. How Many Times Changed:_____
12. Primary Causes of Change:

D. Primary Customer Points of Contact:

	Program Manager/Technical POC	Administrative POC	Contracting Officer
Name			
Office			
Address			
Telephone			
e-mail			

E. Unique considerations:

F. Key Personnel:

G. Brief Program Description:

H. Relevancy to Subfactors:
1. Subfactor One and Two: Technical Approach

2. Subfactor Three and Four: Program Management Approach

Somerset Diversion Preliminary Design

Solicitation **NO. DCD2014-SD-R-001**

Sample Contract

In compliance with the DCD RFP package, the undersigned proposes to complete the Preliminary Design for the Somerset Diversion at the cost of $_____.

This contract document, and therefore the contractual requirements, includes the following RFP package documents:

- Statement of Work (SOW),
- CWCB contract clauses
- Instructions to offerors

The undersigned agrees to all requirements stipulated in this contract.

Bidder's Firm Name and Address: _____

_____

_____

_____ _____

Witness Signature Title

Contractor Federal Identification Number: _____

DCD Contract award approved by:

_____

Signature Title Date

Appendix D – Somerset Diversion River Flow Measurements

SDSP = Gage placed just downstream of the pumps; GPS location N 38° 55.691’ W 107° 27.341

SDSD = Gage placed about 10 yards upstream of the downstream river model point; GPS location N 38° 55.692’ W 107° 27.362

SDSU = Gage placed downstream of the upstream river model point; GPS location N 38° 55.763’ W 107° 27.184

Measurements = distance in inches from the top mark on the stake to the water level

Date	Location	Time	Measurement
5/3/14	SDSP	1:04 PM	41 5/8
5/3/14	SDSD	1:18 PM	37 1/8
5/3/14	SDSU	1:40 PM	34 7/8
5/6/14	SDSP	7:59 AM	29 1/2
5/6/14	SDSD	7:55 AM	25 5/8
5/6/14	SDSU	8:11 AM	20
5/13/14	SDSP	3:19 PM	37 1/2
5/13/14	SDSD	3:21 PM	33 3/4
5/13/14	SDSU	3:27 PM	32 1/10
5/19/14	SDSP	8:55 AM	35
5/19/14	SDSD	8:58 AM	30 7/10
5/19/14	SDSU	9:06 AM	27 1/4
5/25/14	SDSP	9:46 AM	30
5/25/14	SDSD	9:48 AM	27 1/2
5/25/14	Rock	9:53 AM	Periodic topping
5/25/14	SDSU	9:56 AM	22 2/10
5/28/14	SDSP	3:53 PM	29 2/10
5/28/14	SDSD	3:55 PM	25 4/10
5/28/14	Rock	3:59 PM	Topped
5/28/14	SDSU	4:02 PM	20 9/10
5/30/14	SDSP	10:15 AM	23
5/30/14	SDSD	10:18 AM	20 8/10
5/30/14	Rock	10:23 AM	topped
5/30/14	SDSU	10:27 AM	14 1/2
6/3/14	SDSP	9:04 AM	15 3/4
6/3/14	SDSD	9:06 AM	17 2/5
6/3/14	Rock	9:09 AM	
6/3/14	SDSU	9:14 AM	9 3/4
6/8/14	SDSP	11:32 AM	?
6/8/14	SDSD	11:35 AM	24 1/2
6/8/14	Rock	11:41 AM	
6/8/14	SDSU	11:45 AM	18 3/4
6/19/14	SDSP	10:30 AM	?
6/19/14	SDSD	10:32 AM	35 1/2
6/19/14	Rock	10:35 AM	

6/19/14	SDSU	10:39 AM	31 2/5
6/25/14	SDSP	10:47 AM	?
6/25/14	SDSD	10:50 AM	?
6/25/14	Rock	10:54 AM	
6/25/14	SDSU	10:57 AM	33
7/2/14	SDSP	2:29 PM	2.2 inches from water line on gage to bottom of river
7/2/14	SDSD	2:29 PM	7.4 WL to bottom
7/2/14	Rock	2:29 PM	
7/2/14	SDSU	2:29 PM	35. 8; or 8 wl to b