TOWN OF MANCOS
BOARD of TRUSTEES WORKSHOP
April 12, 2023 6:00 P.M.
Workshop – Mancos School Board
Town Hall Board Room

Monthly Board Workshops are for Board discussion purposes only. Decisions cannot be made during these sessions. These workshops are open to the public, however public comment will not be accepted.

BOARD of TRUSTEES MEETING
April 12, 2023 7:00 p.m.

AGENDA

A. Call to Order

B. Pledge of Allegiance and Moment of Silence

C. Roll Call

D. Approval of the Agenda

E. Approval of the Minutes of March 22, 2023

F. Audience Business

G. Announcements

H. Treasurer's Report: March Bills & Claims

I. Committee Reports
- Montezuma County Commissioner Update
- Montezuma County Planning Commission

J. Discussion and Action Items
1. Arbor Day Proclamation
2. Mancos Liquor Liquor License Renewal
3. Water Treatment Plant Easement Request
4. Wastewater Treatment Plant Phase 1 Engineer Recommendation
5. Comprehensive Plan Update Review Chapter 5 and 6
6. Town of Mancos Financial Policies Update
7. 2023 First Quarter Work Plan and Financial Update
8. Affordable Housing Trustee Liaison

K. *Items for April 26, 2023 Agenda*
- *Public Hearing: Mancos Commons Lot Consolidation*
- *Town of Mancos Source Water Protection Plan Adoption*
- *Comprehensive Plan Review Update Chapter 7*
- *Adopt Updated Five Year Capital Plan*

L. Adjournment

TOWN OF MANCOS
BOARD of TRUSTEES MEETING MINUTES
March 22, 2023
7:00 p.m.

A. CALL TO ORDER: Mayor Queenie Barz called the meeting to order at 7:00 p.m.

B. PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE

C. ROLL CALL: Present: Mayor Queenie Barz, Mayor pro tem Cindy Simpson, Trustee Janice Bryan, Trustee Nick Manning, Trustee Richard Tokar, and Trustee Ed Hallam.

Absent: Trustee Brent McWhirter

Staff Present: Town Administrator Heather Alvarez, Public Works Director Terry Jennings, Attorney David Liberman, and Town Clerk/Treasurer Jamie Higgins

D. APPROVAL OF THE AGENDA: Trustee Janice Bryan made the motion to approve the March 22, 2023 agenda. Trustee Nick Manning seconds the motion. Motion passed.

E. APPROVAL OF THE MINUTES: Trustee Richard Tokar made a motion to approve the minutes, as presented, from March 8, 2023. Trustee Janice Bryan seconds the motion. Motion Passed.

F. AUDIENCE BUSINESS:

- None

G. ANNOUNCEMENTS:

- There is a vacancy for an alternate on Planning and Zoning
- There is a vacancy on the Tree Board
- Heather will be out of the office from March 30-April 9. She will not have access to phone or email.

H. COMMITTEE REPORTS

- Montezuma County Commissioner Update – No Update
- Montezuma County Planning Commission Update – Nothing to update in Mancos area.
- Region 9 – Regions 9Economic Base Analysis, what brings money to the community. For Montezuma County the highest is Household – retirees and commuters.
- CDOT TPR – No Update
- Mancos Planning Commission – P&Z is reviewing the Comprehensive Plan. They will work on Chapters 7&8 next meeting.

I. DISCUSSION AND ACTION ITEMS:

1. The Board of Trustees discussed authorizing the Town Administrator to submit a letter of support to the Mancos Conservation District for their WaterSMART grant. The Board consensus was to authorize this.
2. The Board reviewed the draft source water protection plan update.
3. The Board discussed the Town's municipal code and that there is no "hardship" clause. They would like to discuss this further at a retreat.
4. Trustee Richard Tokar made a motion to approve Resolution 7 Series 2023 A Resolution Supporting the Grant Application for a Transportation Alternatives Program Grant and Completion of ADA Intersection Improvements and Sidewalk Construction along Grand Ave./Hwy 160D in Mancos, Colorado. Trustees Ed Hallam and Cindy Simpson seconds the motion. Motion passed with a unanimous vote.
5. The Board discussed Proposition 122 and would like to keep local control.
6. Comprehensive Plan Update Review Chapter 2-4, No Action.
7. Trustee Richard Tokar made a motion to authorize the Town Administrator to submit the grant application for the Mancos Marshal's Office and Satellite Emergency Operations Center to Department of Local Affairs Energy Impact program and authorize the Mayor to execute the grant contract upon award. Trustees Nick Manning and Janice Bryan seconds the motion. Motion passed with a unanimous vote.

J. Items for April 12, 2023 Agenda

- *Mancos School Board Joint Workshop*
- *Comprehensive Plan Update Review Chapters 5 - 6*
- *Town of Mancos Financial Policies Update*
- *Mancos Liquor Liquor License Renewal*
- *Arbor Day Proclamation*
- *Discussion Trustee Liaison for Affordable Housing*

K. ADJOURNMENT

Trustee Ed Hallam made the motion to adjourn the meeting at 8:23pm.

_____

Mayor Queenie Barz

_____

Town Clerk/Treasurer Jamie Higgins

I, Jamie Higgins, Clerk/Treasurer for the Town of Mancos, Colorado, do hereby certify the following to be a true and correct statement of bills and claims paid during the month of March 2023.

Date	Vendor	Description	Amount
03/08/2023	A T & T Mobility	Phone Services	$ 562.16
03/22/2023	AFLAC	Employee Benefits	$ 482.22
03/08/2023	Alvarez, Heather	Mileage Reimbursement	$ 165.06
03/22/2023	Amazon Capital Services	Printer Ink	$ 189.79
03/22/2023	Amazon Capital Services	Greese Trap	$ 425.60
03/22/2023	Amazon Capital Services	WWTP Supplies	$ 65.99
03/22/2023	Atmos Energy	Natural Gas	$ 901.85
03/22/2023	Atmos Energy	Natural Gas	$ 292.62
03/08/2023	Ballentine Communications	Publications	$ 28.14
03/08/2023	Barz, Queenie	Mayor Services February 2023	$ 300.00
03/08/2023	Brind'Amour, Peter	P&Z Services February 2023	$ 50.00
03/08/2023	Browns Hill Engineering & Controls	WTP Service Work	$ 356.40
03/22/2023	Browns Hill Engineering & Controls	WWTP Service Work	$ 457.85
03/08/2023	Bryan, Janice	Trustee Services February 2023	$ 200.00
03/08/2023	C&J Gravel Products Inc	Sand & Slicer	$ 904.05
03/08/2023	CEBT	Employee Benefits	$ 20,196.78
03/08/2023	CEBT	Employee Benefits	$ 1,747.60
03/08/2023	CNH Industrial Accounts	Debt Service Lease	$ 2,242.12
03/08/2023	Coker, Ann	P&Z Services February 2023	$ 50.00
03/22/2023	Coleman, Wesley	DOT Physical Riem	$ 100.00
03/22/2023	Community ReCode	DOLA Planning Grant	$ 2,050.00
03/22/2023	Constructive Form LLC	Mancos Commons Housing Project	$ 14,802.50
03/22/2023	Corporate Payment Systems	Meetings, Dues, Travel	$ 2,788.95
03/22/2023	Corporate Payment Systems	WTP Supplies	$ 160.00
03/22/2023	Cox Conoco	Fuel	$ 3,619.85
03/22/2023	Cox Conoco	Fuel	$ 248.88
03/22/2023	Cox Conoco	Fuel	$ 222.75
03/08/2023	DCP Industries	Chemicals	$ 2,233.38
03/22/2023	Dog Waste Depot	Dog Waste Bags	$ 399.98
03/22/2023	DPC Industries	WWTP Supplies Chemicals	$ 1,856.84
03/22/2023	Eaton Engineering LLC	WWTP Consulting	$ 262.50
03/22/2023	Empire Electric	Electric	$ 738.00
03/22/2023	Empire Electric	Electric	$ 4,847.26
03/08/2023	Employers Council Services, Inc.	Subscription	$ 46.30
03/08/2023	FastTrack Communications, Inc.	Internet	$ 112.50
03/08/2023	Four Corners Welding & Gas	PW Supplies	$ 113.32
03/22/2023	Fraley & Co	Propane	$ 473.79
03/08/2023	Front Range Winwater Works Co.	New Meters	$ 3,371.38
03/22/2023	Fun Center	PW Repairs	$ 19.98
03/08/2023	Green Analytical Lab	Sewer Tests	$ 289.00
03/22/2023	Green Analytical Lab	Sewer Tests	$ 411.00
03/08/2023	Hallam, Ed	Trustee Services February 2023	$ 200.00
03/08/2023	ImageNet Consulting LLC	Copier Lease	$ 278.34
03/22/2023	Le Pew Porta Johns	Porta John	$ 258.00
03/08/2023	Manning, Nicholas	Trustee Services February 2023	$ 200.00
03/08/2023	McWhirter, Brent	Trustee Services February 2023	$ 200.00
03/22/2023	NTT Cloud Communications US Inc	Cloud Comm	$ 27.22
03/22/2023	P & D Grocery	TH Supplies, Water, Food	$ 218.77
03/22/2023	P & D Grocery	WTP Supplies	$ 22.53
03/08/2023	Ray, Brad	Uniform Reimbursement	$ 215.75
03/08/2023	Safebuilt, LLC Lockbox #88135	Planning Consultation and Review	$ 533.75
03/08/2023	San Juan Basin Health/Lab Bill	Water Tests	$ 386.00
03/08/2023	Seibert, Catherine	P&Z Services February 2023	$ 50.00
03/08/2023	SGM	Development Review	$ 2,454.00
03/08/2023	SGM	Engineer on Call	$ 1,228.75
03/08/2023	SGM	WTP Improvements	$ 5,539.11
03/08/2023	Simpson, Cindy	Trustee Services February 2023	$ 200.00
03/08/2023	Slavens	PW Parts & Supplies	$ 406.99
03/22/2023	Southwest Ag	PW Plow	$ 10,500.00
03/08/2023	Stout, Carol	P&Z Services February 2023	$ 50.00
03/08/2023	Superior Auto Supply	PW Equipment Repairs	$ 404.82
03/08/2023	Superior Auto Supply	PW Equipment Repairs	$ 59.64
03/21/2023	TKF Contracting Inc.	Water Treatment Plant Impr.	$ 51,893.95
03/08/2023	Tokar, Richard	Trustee Services February 2023	$ 200.00
03/08/2023	Town of Mancos	Water & Sewer	$ 525.80
03/08/2023	Town of Mancos	WWTP Water & Sewer	$ 4,222.10
03/08/2023	UNCC	Member ID 49080	$ 7.74
03/01/2023	US Postmaster	utility bills	$ 281.49
03/22/2023	USA Blue Book	WTP Supplies	$ 428.43
03/22/2023	Vital Records Control Dept. 5874	Shredding	$ 170.21
03/08/2023	Wagner Equipment CO.	PW Parts for Equipment	$ 1,133.04
03/08/2023	Wanger, Michael	Municipal Judge Services March 2023	$ 250.00
03/22/2023	Waste Management of Colorado	Refuse	$ 116.20
03/22/2023	Waste Management of Colorado	Refuse	$ 58.13
	Total		**$ 151,507.15**
	Payroll		**$ 58,147.00**

Whereas, In 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees, and

Whereas, this holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska, and

Whereas, Arbor Day is now observed throughout the nation and the world, and

Whereas, trees can reduce the erosion of our precious topsoil by wind and water, cut heating and cooling costs, moderate the temperature, clean the air, produce life-giving oxygen, and provide habitat for wildlife, and

Whereas, trees are a renewable resource giving us paper, wood for our homes, fuel for our fires and countless other wood products, and

Whereas, trees in our town increase property values, enhance the economic vitality of business areas, and beautify our community, and

Whereas, trees, wherever they are planted, are a source of joy and spiritual renewal.

Now, Therefore, I, Queenie Barz , Mayor of the Town of Mancos, Colorado do hereby proclaim Friday, April 28, 2023 as

Arbor Day

In the Town of Mancos, Colorado, and I urge all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands, and

Further, I urge all citizens to plant trees to gladden the heart and promote the well-being of this and future generations.

Dated this April 12, 2023

Mayor _____

STAFF REPORT

To: Honorable Mayor and Trustees
From: Jamie Higgins, Town Clerk/Treasurer
Date: April 12, 2023
Re: Mancos Liquor LLC. Liquor License Renewal

Recommendation
Approve the renewal of the 2023 Mancos Liquor LLC. Liquor License and authorize the Town Clerk to send the application to the Department ofRevenue

Background/Discussion
The liquor license for Mancos Liquor will renew on May 29, 2023. Ryan McKie has submitted his renewal application to the Town for your review.

There have been no violations in the past twelve months. The Mancos Marshal's Office has no objections to this renewal.

Policy Implications
None

Resource Impact
$227.50 Renewal Fee to Town of Mancos

Attachments
Renewal Application

DR 8400 (03/10/22)
COLORADO DEPARTMENT OF REVENUE
Liquor Enforcement Division

Submit to Local Licensing Authority

MANCOS LIQUOR
160 E FRONTAGE RD
Mancos CO 81328

Fees Due	
Renewal Fee	277.50
Storage Permit $100 X _____	$
Sidewalk Service Area $75.00	$
Additional Optional Premise Hotel & Restaurant $100 X _____	$
Related Facility - Campus Liquor Complex $160.00 per facility	$
Amount Due/Paid	$ 227.50

Make check payable to: Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Retail Liquor or Fermented Malt Beverage License Renewal Application

Please verify & update all information below **Return to city or county licensing authority by due date**

Licensee Name MANCOS LIQUOR LLC		Doing Business As Name (DBA) MANCOS LIQUOR	
Liquor License # 07-87327-0000	License Type Liquor Store (city)		
Sales Tax License Number 007873270000	Expiration Date 05/29/2023	Due Date 04/14/2023	
Business Address 160 E FRONTAGE RD Mancos CO 81328			Phone Number 9705337370
Mailing Address 160 E FRONTAGE RD Mancos CO 81328		Email RRMCKIE@AOL.COM	
Operating Manager Ryan McKie	Date of Birth [redacted]	Home Address [redacted]	Phone Number [redacted]

1. Do you have legal possession of the premises at the street address above? ☑ Yes ☐ No
   Are the premises owned or rented? ☑ Owned ☐ Rented* *If rented, expiration date of lease_____

2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. ☐ Yes ☑ No

3a. Are you renewing a takeout and/or delivery permit? (Note: must hold a qualifying license type and be authorized for takeout and/or delivery license privileges) ☐ Yes ☑ No

3b. If so, which are you renewing? ☐ Delivery ☐ Takeout ☐ Both Takeout and Delivery

4a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? ☐ Yes ☑ No

4b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? ☐ Yes ☑ No

5. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions), officers, directors, managing members, or general partners are materially interested. ☐ Yes ☑ No

6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. ☐ Yes ☑ No

7. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☑ No

8. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☑ No

Affirmation & Consent
I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business	Title
Ryan S. McKee	Owner
Signature	**Date**
Ryan S McKee	3-8-2023

Report & Approval of City or County Licensing Authority
The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory, and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3, C.R.S., and Liquor Rules.
Therefore this application is approved.

Local Licensing Authority For		Date
Signature	Title	Attest

STAFF REPORT

To: Honorable Mayor & Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: Water Treatment Plant Property Easement Request

Recommendation
Deny the request from Tern Colyer for an easement on the water treatment plant property

Background/Discussion
We received the attached request from Mr. Colyer for an easement on the water treatment plant property owned by the Town of Mancos. Mr. Colyer has been notified of this meeting and invited to attend.

Staff is recommending denial of this request for the following reasons:

1. We should not grant easements or access on critical water supply infrastructure property as that would be an unacceptable burden to the Town.
2. If we need to modify the ponds or our intake in the future, we would be unable to do so without the current property owners permission.
3. There may be encroachments to Mancos Rural Water infrastructure as well. At this time, we are not certain of this, but it should be taken into consideration.

Staff did consult with the Town Attorney upon receiving this request.

Resource Impact
TBD

Attachments
Easement request from Tern Colyer

3/17/2023

To: The Town of Mancos

From: Tern Colyer, 9801 Road 42 Mancos

RE: Ogle Ditch Restoration

Introduction

The **RW Ogle** Ditch, located to the west of the Town reservoirs near Road 42, (see fig.1) it is a historic (1912) irrigation ditch used by 4 landowners and was originally fed from seepage and overflow from the Mancos Town Water Reservoirs. The water has been used to irrigate pasture and hay ground for three parcels of property along the ditch. The water source has mostly dried up in the last 10-15 years due to changes in water management systems and practices of the town water facilities.

I am investigating options to restore a water source to the Ogle ditch so that beneficial use of pasture/hay field irrigation can be restored to the land that historically made use of this ditch and water.

History

This ditch was established April 1, 1912 and legally adjudicated Dec 18, 1933.

According to the legally recorded decree (see attached) the water source for the RW Ogle Ditch was supplied by waste and seepage from the water reservoirs of the Town of Mancos. For approximately 75 years there was a reliable source of water from the reservoirs that was used by neighboring landowners to irrigate hay and pasture land. The most recent (1960's-present) landowners to use this water were Boyd & Terry Sanders, Debbie McGregor, John and Maurice Ritter (my grandparents) and the old Sophie Stevenson place.

In the 1990's changes were made at the Town water reservoirs which reduced and eventually eliminated the flow of water to the RW Ogle ditch.

Proposal

I have identified an alternate source of water that potentially could be diverted into the RW Ogle Ditch which would partially restore the lost water flow. There is an unnamed tributary to the Mancos river located approximately 100 yards to the east of the Town Reservoirs that has intermittent flow of run-off and waste water from the irrigated pastures above that could be redirected through a 350 yard pipeline that terminates into the head of the Ogle Ditch. This pipeline would be located on the Town of Mancos property. (see map below and blue line) The red line is the existing Ogle Ditch, the Blue line is the proposed pipe. The cost of the pipe and installation would be paid by the Ditch Owner(s) and or any available grants that assist with

water use and improvement projects. A Right of Way would be needed from the Town of Mancos land and access to install the pipe along with access to operate the headgate.

Administrative Research

The status of the Ogle Ditch has been checked and it is not currently on the abandonment list with the State of Colorado Division of Water Resources, so the ditch and water rights therein are still valid.

An inquiry has been made to the Colorado district 7 Water Commissioner into the wastewater availability in the unnamed tributary to the east of the Town Reservoirs, the water is available to be filed on according to the commissioner.

Pipe Installation Details

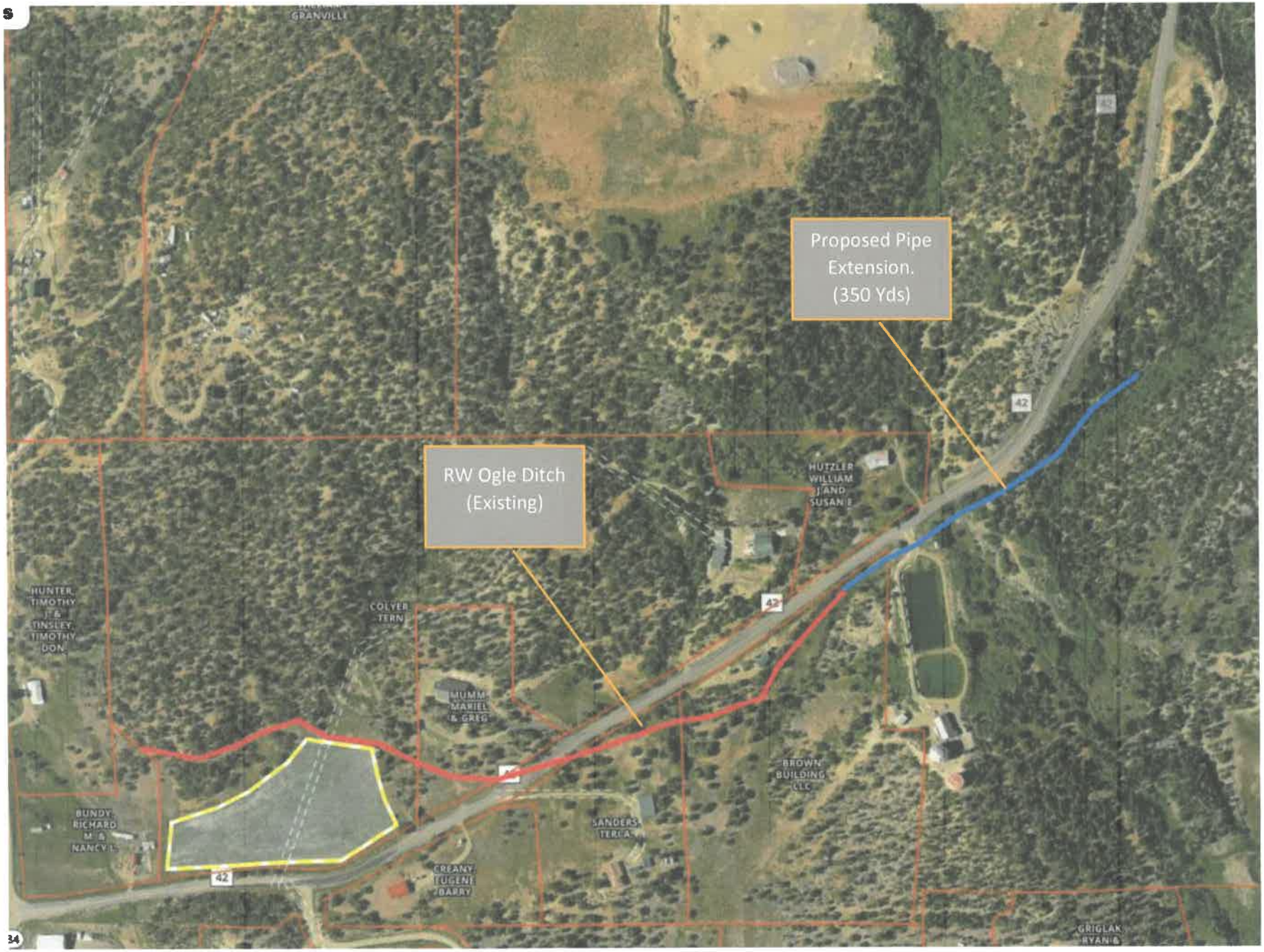
Should the Town be agreeable to considering this request, I propose that a survey of existing underground piping and infrastructure be conducted in order to determine the best route for this pipeline to avoid obstacles and the best method to install the pipe through any obstacles, for example pot-holing or boring, as well as a standard trench.

I am submitting this as a request to continue studying the options for a pipe across Town land and an eventual easement for the pipeline and access to maintain and operate the headgate after installed.

Sincerely,

Tern Colyer,
RW Ogle Ditch Restoration Project Manager and Landowner
9801 Road 42, Mancos, CO
81328
Ph-505.330.9934

Figure 1


Proposed Pipe Extension. (350 Yds)
RW Ogle Ditch (Existing)
HUTZLER WILLIAM J AND SUSAN E
HUNTER TIMOTHY J & TINSLEY TIMOTHY DON
COLYER TERN
HUMM MARIEL & GREG
BROWN BUILDING LLC
BUNDY RICHARD M & NANCY L
SANDERS TERI A
CREANY EUGENE BARRY
GRIGLAK RYAN &
42

DECREE

Ditch No. 30-Mancos. R B GOLE DITCH.

Priority No. 100.
(Also numbered and designated as Stream Priority, "Mancos-56."

Concerning this ditch the Court finds:-

1. That the name of said ditch is the R B GOLE DITCH; and that the claimant is The Colorado Title & Trust Company, a corporation.

2. That the headgate of said ditch is located at a point on an un-named water-course tributary to the Mancos River supplied by waste and seepage from reservoirs of the Town of Mancos, Colorado, whence the northeast-corner of Section 28, Township 36 North, Range 15 West, New Mexico Principal Meridian, bears south 7-degrees 15-minutes west, 640 feet, Montezuma County, Colorado, from which water-course it diverts its supply of water, and from which headgate it runs in a general westerly direction.

3. That the dimensions of said ditch as originally constructed were: 3 feet in width at the top; 1 foot in width at the bottom; depth 1 foot; grade 26/100 of one foot to 100 feet; length 3005 feet; and carrying capacity 2-5/10 cubic feet of water per second of time.

4. That the original construction of said ditch was commenced on the 1st day of April, 1912, from which time the appropriation of water therethrough by original construction should date. That said ditch was completed and water applied therethrough to beneficial use with reasonable diligence.

5. That through said ditch the owner thereof has appropriated and applied water to the direct irrigation of 60 acres of land lying under the same; that by reason of the character of the soil and the

conditions under which the same must be irrigated, the amount of water so used and reasonably necessary for the irrigation of said land is 1 cubic foot of water per second of time;

6. That said ditch should be numbered as "Ditch No. 38-Mancos."] and should be awarded Priority No. 100 in said Water District (also numbered and designated as Stream Priority, "Mancos-65.").

IT IS, THEREFORE, ORDERED, ADJUDGED and DECREED That said R E GOLF DITCH is hereby numbered as "Ditch No. 38-Mancos."; and for the direct irrigation of said 60 acres of land, by virtue of appropriation by original construction, for the benefit of the party or parties entitled to the enjoyment thereof, said ditch is awarded and decreed Priority No. 100 in said Water District No. 34 (also numbered and designated as Stream Priority, "Mancos-38."], dating from April 1, 1912, in and to the extent of of 1 cubic foot of water per second of time; subject to all of the general limitations in the above general decree expressed.

STAFF REPORT

To: Honorable Mayor and Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: Wastewater Treatment Plant Phase 1 Engineer Recommendations

Recommendation
Authorize the Town Administrator to enter into contract with SGM for Wastewater Treatment Facility Phase 1 Repairs in an amount not to exceed $202,000.

Background/Discussion
We issued an RFP for this project, and we received three responses. This is for design, testing, engineering, permitting and construction management of Phase 1.

Phase 1 includes:

- Installation of course screening
- Moving the grit classifier to the front of the headworks
- Construction of a building to house the course screening and grit classifier
- Review of the existing drum screens
- Installation of temporary port plugs in the MSABP system
- CBA and life-cycle analysis and comparison between the current MSABP system and an SBR system

Eaton Engineering is the contracted owner's rep for this project. Brad Eaton will be assisting staff with the oversight of the project. Public Works Director Terry Jennings, Plant Operator Kyle Rieck, Mr. Eaton and myself have reviewed the responses to the RFP.

Attached is a recommendation memo for your information. Staff and Mr. Eaton are in agreement, and we are recommending the Town enter into contract with SGM for this project.

Attachments
Recommendation Letter
Summary & Scoring of Proposals
Complete RFP with Addendums
Responses to RFP from three engineering firms

EATON ENGINEERING, LLC
Civil Engineering and Construction

461 Bobcat Dr.
Milliken, CO 80543
970-415-0300
EatonEngineering@msn.com

March 27, 2023

Heather Alvarez
Town of Mancos
117 North Main Street
Mancos, Colorado 81328

Subject: Eaton Engineering, LLC, Assessment Opinion of Proposals Submitted for the Mancos Wastewater Treatment Facility (WWTF) Phase 1 Repairs Project.

Dear Ms. Alvarez.

As you requested, Eaton Engineering, LLC (Eaton) has made a review of the proposals submitted by consultants in response to the Request for Proposals (RFP) for the Mancos Wastewater Treatment Facility (WWTF), Phase 1 Repairs Project, and offers the following subjective assessment and opinion.

Three qualified engineering consultants with wastewater treatment experience were invited to respond to the RFP titled: Town of Mancos Wastewater Treatment Facility, Phase 1 Repairs, dated January 9, 2023. Subsequently proposals were received from JVA Inc., Plummer Associates, Inc. and SGM.

Proposals were evaluated on four important categories, which were each assigned a maximum point value for each category based on relative project importance, totaling a maximum of 100 points for all categories combined. The categories and scoring limits used for the evaluation were as follows:

- Qualifications of the company and personnel assigned to the project – 30 points.
- Approach to the scope of work as identified in the RFP – 40 points.
- Project schedule – 10 points.
- Cost and personnel work hours for the scope of work as identified in the RFP – 20 points.

After review of all three proposals, along with using the scoring methodology noted above, it is Eaton's opinion that the appropriate choice for the Mancos Wastewater Treatment Facility, Phase 1 Repairs Project is SGM. A copy of the score tabulation for each proposal has been attached for reference.

Thank you for the opportunity to participate in this important project and provide the opinions herein.

Sincerely,
Eaton Engineering, LLC

Brad E. Eaton, P.E.

attachments

EATON ENGINEERING, LLC
Civil Engineering and Construction

461 Bobcat Dr.
Milliken, CO 80543
970-415-0300
EatonEngineering@msn.com

Mancos WWTF - Phase 1 Repairs
Proposal Assessment Opinion - CONFIDENTIAL

Evaluator: Eaton Engineering, LLC
Date: 3/16/2023

User Input
Calculated Value

Firm Name	Company & Personnel Qualifications - 30 pts. max.	Approach to Scope of Work - 40 pts. max.	Schedule - 10 pts. max.	Base Cost	Cost and Work Hours 20 pts. max.	Total pts.
JVA, Inc.	24	35	7	$ 293,000.00	10	76
SGM	28	32	8	$ 201,036.00	18	86
Plummer Associates, Inc.	22	28	7	$ 296,158.00	9	66

Request for Proposal:

Town of Mancos

Wastewater Treatment Facility

Phase 1 Repairs

For

Town of Mancos, Colorado

300 South Monte Street
Mancos, CO 81328

RFP Issued: January 9, 2023

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INVITATION - REQUEST FOR PROPOSALS

The Town of Mancos Colorado is soliciting proposals for Phase 1 of the Wastewater Treatment Facility Repair Project. Sealed proposals must be received at the Mancos Town Administration office located at 117 North Main Street, Mancos, Colorado 81328 up to the hour of 2:00 PM MST on Friday, February 17, 2023. Proposals may be submitted in printed form by postal or hand delivery. Proposals must be clearly marked "Proposal – Wastewater Treatment Facility Repair – Phase 1" and addressed to the attention of:

Heather Alvarez
Town Administrator

Town of Mancos
117 North Main Street
Mancos, Colorado 81328

No late, faxed or electronic proposals will be accepted.

Proposals submitted must include the information as outlined in the selection criteria section. This is the information the firm will be evaluated upon.

No proposals shall be withdrawn for a period of sixty (60) days after receipt of proposals.

The Town of Mancos retains the right to reject any and all proposals and to re-solicit if deemed to be in the best interest of the Town.

All project questions must be submitted in writing via email to Brad Eaton, PE at EatonEngineering@msn.com no later than 5:00 PM MST on Friday, January 20, 2023. Any resulting addenda will be issued via email no later than 5:00 PM MST on Friday, January 27, 2023. Please call Mr. Eaton at 970-415-0300 to verify receipt of your questions.

A short list of qualified consultants will be developed and interviews of short-listed consultants are anticipated to be scheduled in early March, 2023 with final consultant selection and project award expected by mid-March, 2023.

REQUEST FOR PROPOSALS (RFP)

Proposals must be received no later than: 2:00 PM on Thursday, January 19, 2023, local time.

Proposals received after this date and time will not be considered for award.

The Town of Mancos only accepts proposals in hard copy format and does NOT accept proposals submitted via fax or email. Proposals are to be submitted in a sealed package with the following on the outside of the envelope:

Company Name
Proposal – Wastewater Treatment Facility Repair – Phase 1
Due Date and Time: Friday, February 17, 2023, 2:00 PM local time

Package must include:

4 Hard Copies and One (1) complete copy of Proposal on a flash drive

Deliver proposals to:

Heather Alvarez
Town Administrator

Town of Mancos
117 North Main Street
Mancos, Colorado 81328

In addition, provide an electronic copy of the proposal via email to Brad Eaton at EatonEngineering@msn.com

Schedule of Events (subject to change)	**All times in local Mountain Daylight Time (MDT)**
RFP Issued	Monday, January 9, 2023
Question Deadline	Friday, January 20, 2023 - 5:00 PM
Final Addendum Issued	Friday, January 27, 2023 - 5:00 PM
Proposal Due Date and Time	Friday, February 17, 2023 - 2:00 PM
Interviews (tentative)	Early March, 2023
Notice of Award (tentative)	Mid March, 2023

1 BACKGROUND, OVERVIEW, AND GOALS

1.1 BACKGROUND

The Town of Mancos (the Town) is requesting written proposals from qualified firms to provide wastewater treatment facility design services for Phase 1 of the Wastewater Treatment Facility Repair Project.

The Town of Mancos, Colorado invites potential Proposers to submit a proposal according to the requirements set forth in this RFP. The Proposals will be reviewed and evaluated by the Town's selection committee using the evaluation criteria as detailed in this request.

This RFP is subject to revision after the date of issuance via written addenda. Any such addenda will be transmitted via email to the potential Proposers by the Town's representative; Brad E. Eaton, PE of Eaton Engineering, LLC (Eaton). It is each Proposer's responsibility to obtain all RFP addenda prior to submitting its Proposal.

The capitalized terms in this RFP have the meanings as first used in the text of this RFP. In no event will the Town or Eaton be liable for any costs incurred by any Proposer or any other party in developing or submitting a Proposal.

1.2 OVERVIEW

In general, this project (Phase 1) begins the overall Repair Phase of the Town's Wastewater Treatment Facility (WWTF) Upgrade Project that was initially commissioned in 2012.

The select consultants invited to respond to this RFP have been provided key documents to review which describe various issues leading to the required WWTF Repair Phase, along with the Concept of Repair to be followed moving forward. The key documents provided for review include:

1) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020

2) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Supplement to Engineering Opinion Report, Dated July 5, 2020*, Prepared by Eaton Engineering, LLC, February 23, 2021

3) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Amended Supplement to Engineering Opinion Report, Dated July 5, 2020*, Prepared by Eaton Engineering, LLC, March 10, 2021

4) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Second Supplement to Engineering Opinion Report of July 5, 2020, Current Report Dated October 25, 2021*, Prepared by Eaton Engineering, LLC, October 25, 2021

Additional documents provided for review include various rebuttals to the Eaton reports noted above, along with Eaton's response.

1.3 GOALS & OBJECTIVES

The overall goal of the Repair Phase of the Town's WWTF Upgrade Project is to achieve reliable, long term plant operations that meet the effluent requirements of the Town's discharge permit, without the use of the original lagoon system for additional treatment.

As noted in the Eaton reports, overall repair of the WWTF may include replacing the Multi-Stage Activated Biological Process (MSABP) with a conventional Sequencing Batch Reactor (SBR). Replacing the MSABP with an SBR will be determined through a benefit cost analysis performed by the consultant as part of this RFP. Interim repair phases will focus on ancillary treatment processes that are required regardless of the secondary treatment method utilized.

Funding to achieve the overall goal is limited, therefore WWTF repairs will be prioritized and accomplished in phases as project funding becomes available. The focus of this RFP is to provide permitting, engineering, design, construction administration and construction observation services to accomplish Phase 1 of the repairs as further outlined herein.

For available funding to be utilized, the repairs must follow the Concept of Repair outlined in Eaton's initial report titled: *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020.

By responding to this RFP, the consultant acknowledges and agrees; 1) The consultant has thoroughly reviewed the key documents previously provided and 2) The consultant agrees to follow the general intent of the Concept of Repair as outlined in the Eaton report referenced above.

1.4 WWTF – PHASE 1 REPAIR PROJECT

Please reference the Eaton report noted above for the overall Concept of Repair and associated details. Phase 1 Repairs and the focus of this RFP will include the following:

1.4.1 PRELIMINARY TREATMENT

1.4.1.1 COARSE SCREENING & GRIT REMOVAL ADDITIONAL

Preliminary Treatment in the form of automated, self-cleaning, coarse screening and grit removal is to be added to the WWTF at the headworks as part of the Phase 1 Repair Project. Preliminary Treatment equipment is to be housed in an economical post frame or steel structure or protection. The consultant shall be responsible for the permitting, design, construction administration and construction observation of the coarse screening and grit removal addition at the plant headworks.

1.4.2 PRIMARY TREATMENT

1.4.2.1 EXISTING DRUM SCREEN UPGRADES, 2 MM SCREENS

As recommended by Eaton in the Concept of Repair, the original 1 mm drum screens have been replaced with 2 mm screens, which to date, have eliminated flooding events that had been routinely occurring at the headworks building.

The role of the consultant in the Phase 1 Repair Project, relative to the screens upgrade to 2 mm, is to analyze the sampling results obtained by Mancos staff, along with the data presented by Eaton in the

Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Second Supplement to Engineering Opinion Report of July 5, 2020, Current Report Dated October 25, 2021, Prepared by Eaton Engineering, LLC, October 25, 2021.

The consultant shall evaluate the change in solids and BOD_5 loading at the influent to the Multi-Stage Activated Biological Process (MSABP) resulting from the screen upgrade to 2 mm and present the findings in a letter report to the Town.

1.4.2.2 FLOW EQUALIZATION TANK, ASSOCIATED EQUIP. & LIFT STATION VFD PROGRAMMING

The addition of flow equalization and lift station VFD programming will be deferred to a subsequent repair phase of the WWTF if the MSABP secondary treatment technology is retained.

1.4.3 SECONDARY TREATMENT

1.4.3.1 MSABP SHORT CIRUITING REPAIR

As noted in the Eaton Reports, it is Eaton's opinion that the MSABP exhibits short circuiting issues within each treatment train. A comprehensive concept of repair was presented by Eaton to eliminate short circuiting within each treatment train as well as within each treatment cell. This comprehensive repair will be deferred to a subsequent repair phase should the MSABP treatment technology is retained.

Interim short-circuiting repair within each treatment train can be accomplished with the installation of port plugs in the appropriate locations at the top and bottom of each treatment cell. Town staff would like to evaluate the cost of installing port plugs as interim resolution to the existing short circuiting.

Therefore, as part of this Phase 1 Repair Project, the Consultant will be required to develop a detailed cost estimate for the installation of port plugs as an interim resolution to the existing MSABP short circuiting. The cost estimate must include permitting (if required), material procurement, installation and oversight by the consultant.

1.4.3.2 MSABP COLD WEATHER EXPOSURE MITIGATION

The addition of MSABP cold weather exposure mitigation will be deferred to a subsequent repair phase of the WWTF if the MSABP secondary treatment technology is retained.

1.4.3.3 MSABP REPAIR OF AUTO AERATION SYSTEM

As part of this Phase 1 Repair Project the consultant will be required to perform a detailed evaluation of the existing MSABP aeration system and produce a report with the results of the evaluation. The evaluation must include the estimated costs to bring the aeration system into a state of proper operation.

1.4.4 TERTIARY TREATMENT

1.4.4.1 MSABP EFFLUENT CLARIFIER ADDITION

The addition of MSABP effluent clarifier will be deferred to a subsequent repair phase of the WWTF if the MSABP secondary treatment technology is retained.

1.4.5 MSABP VS SBR BENEFIT COST ANALYSIS

As previously noted, the overall repair of the WWTF may include replacing the Multi-Stage Activated Biological Process (MSABP) with a conventional Sequencing Batch Reactor (SBR). Replacing the MSABP with an SBR will be determined through a benefit cost analysis performed by the consultant as part of this Phase 1 Repair Project.

The Consultant will be required to develop a comprehensive budget level cost estimate to replace the existing MSABP treatment technology with conventional SBR treatment technology having a capacity equivalent to that of the Wastewater Treatment Facility (WWTF) Upgrade Project that was initially commissioned in 2012.

As noted in the Eaton report, *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Amended Supplement to Engineering Opinion Report, Dated July 5, 2020*, Prepared by Eaton Engineering, LLC, March 10, 2021, it is Eaton's opinion that the existing MSABP is significantly undersized and does not have the capacity for the intended service life of the original WWTF Upgrade Project.

Therefore, the benefit cost analysis must include construction of the additional MSABP treatment trains to achieve the intended design capacity of the WWTF Upgrade Project initially commissioned in 2012.

The benefit cost analysis shall also include a 20-year net present worth evaluation of the total cost of ownership of both the MSABP and SBR technologies.

1.5 WWTF - PHASE 1 REPAIR PROJECT SUMMARY

1. Provide permitting, engineering, design, construction admin. & construction observation services for the addition of coarse screening and grit removal at the headworks of the WWTF, upstream of the existing lift station.

2. Analyze the performance of the newly installed 2 mm drum screens regarding additional solids and BOD_5 loading to the influent of the MSABP. Summarize the findings in a report to the Town.

3. Evaluate the performance of the MSABP aeration system and recommend modifications and/or repairs with associated costs. Provide the results of the evaluation and the associated costs in the form of a report to the Town.

4. Develop a detailed cost estimate for the installation of port plugs as an interim resolution to the existing MSABP short circuiting. The cost estimate must include permitting (if required), material procurement, installation and installation oversight by the Consultant.

5. Develop a comprehensive budget level cost estimate to replace the existing MSABP treatment technology with conventional SBR treatment technology, having a capacity equivalent to that of the Wastewater Treatment Facility (WWTF) Upgrade Project that was initially commissioned in 2012. Using the results of the SBR cost estimate outlined above, provide a benefit cost analysis for the use of SBR treatment technology vs the use of MSABP technology. This analysis must include upgrades to the existing MSABP technology to achieve the treatment capacity originally intended for the WWTF Upgrade Project initially commissioned in 2012.

2 STATEMENT OF WORK

2.1 SCOPE OF SERVICES

A suggested list of work tasks primarily applicable to the addition of coarse screening and grit removal, is shown below in no particular order. From this list and other necessary information, the proposals shall specifically identify the project tasks required to fulfill the overall objective. A sufficiently detailed work plan, schedule and cost shall be formulated and submitted in the proposal. Each individual work task shall be presented sequentially in project schedule format. It is anticipated that project meetings may be held twice monthly to collect and verify data, and to provide briefings on the Consultant's progress.

In general, the selected Consultant shall develop the most cost-effective design to include, but not be limited to, the tasks identified below. The Consultant shall in their proposal expand and elaborate in sufficient detail and define other tasks necessary to adequately address all design issues involved in the completion of this project.

Eaton Engineering, LLC will function as the Town's representative on an "as needed" basis and will be available to answer project questions, assist with review of proposals, review design drawings and reports, along with providing general guidance on the WWTF Concept of Repair.

2.2 PRELIMINARY DESIGN PHASE SERVICES

2.2.1 CONDUCT PROJECT MEETINGS

The Consultant shall conduct a project kick-off meeting to review the project goals, obtain Town staff and Eaton Engineering's input, exchange information and discuss overall project administration. The Consultant shall also conduct biweekly project status meetings. Meeting agenda and minutes, as well as action item logs, will be prepared by the Consultant and distributed to the attendees in a timely manner.

2.2.2 SITE SURVEY

The Consultant shall obtain survey of the WWTF site to assist in the design of the coarse screening and grit removal addition to the headworks of the WWTF upstream of the existing lift station. The site survey must also include areas around the facility suitable to accommodate the installation of an SBR or the additional MSABP treatment trains.

The survey shall include the proper identification of property lines, easements, underground utilities, ground elevations and topography, structures, fences, and other structures that may be impacted by the plant repairs. The survey shall also include locations of delineated wetlands and geotechnical investigations.

2.2.3 GEOTECHNICAL INVESTIGATION

The Consultant will provide a standard geotechnical investigation and report for the design of the coarse screening and grit removal addition to the headworks of the WWTF upstream of the existing lift station. The geotechnical investigation must also include areas around the facility suitable to accommodate the installation of an SBR or the additional MSABP treatment trains.

The geotechnical investigation is to include soil stability, groundwater and bedrock elevations. Assume a total of 6 bores drilled to a minimum depth of 25 feet for budgeting purposes and response to this RFP. Soil samples shall be collected and tested in accordance with standard practices. Include unit costs for boring so fee can be adjusted for actual number of bores needed.

2.2.4 PROJECT PERMITTING

The Consultant shall coordinate and provide all required project permitting including permitting with the Colorado Department of Public Health and Environment (CDPHE) for modification / repairs to the WWTF. All permitting fees will be the responsibility of the Town, payment of which is to be coordinated by the Consultant.

2.2.5 PRELIMINARY DESIGN CONSIDERATIONS

The Consultant will work with the Town to determine the operational and maintenance preferences for the completion of the coarse screening and grit removal design. This shall include but not be limited to:

- Equipment functionality
- Material type, coatings, and linings selections
- Design and specify valve types, sizes, and locations
- Design utility crossing plans
- Determine and illustrate access, construction limits and staging areas
- Determine a work plan to include bypass piping during construction
- Make final adjustments as needed
- Specify surface restoration requirements
- Other considerations as necessary for proper constructible design

2.2.6 YARD PIPING & UTILITY LOCATING

The Consultant shall obtain actual pothole depths of all yard piping and utilities within the construction area in accordance with SUE Quality Level A. This shall include physically located horizontal and vertical control with survey data to be placed on the plan set. For budgeting purposes, the proposer shall assume that there will be 10 potholes located within the construction areas. Include unit costs so fee can be adjusted on actual number of potholes needed.

2.2.7 PRELIMINARY CONSTRUCTION DRAWINGS

The Consultant shall prepare drawings for a 30% design phase that includes plan sheets which identify the general location of the facility additions, the associated piping and necessary utilities. The 30% design phase shall also include a bypass piping plan for the construction of the coarse screening and grit removal system. An erosion and sediment control plan shall be included in the construction drawings.

2.2.8 PREPARE PRELIMINARY ENGINEER'S ESTIMATE OF CONSTRUCTION COSTS

The Consultant shall prepare an opinion of probable construction costs for the 30% design which shall be submitted upon completion of this phase.

2.3 FINAL DESIGN PHASE SERVICES

2.3.1 PREPARE FINAL DESIGN DRAWINGS

The Consultant will prepare drawings for this project to include plan and profile sheets at 1-inch equals 20-feet horizontal and 1-inch equals 5 feet vertical. Format shall be in general conformance with industry standards for a project of this type.

Final design plans shall be in strict conformance with the CDPHE requirements and shall be stamped by a Colorado registered engineer.

The Consultant will provide quality control and a constructability review as needed. Assume that there will be 3 reviews by the Town and Eaton.

2.3.2 PREPARE SPECIFICATIONS

The Consultant will prepare technical specifications and bid tab form for this project. The technical specifications will be prepared in the 16 Division CSI format in general conformance with specifications for a project type. The Town of Mancos will provide the contract general conditions and “front-end” documents. The Town of Mancos will advertise and distribute plans and specifications to the prospective contractors.

2.3.3 PREPARE AN ENGINEER’S ESTIMATE OF CONSTRUCTION COSTS

The Consultant shall prepare an opinion of probable construction costs for the final design which shall be submitted upon completion of this phase.

2.3.4 VALUE ENGINEERING

The Consultant shall provide value engineering to the Town to optimize the project value, while minimizing project costs where possible.

2.3.5 AGENCY REVIEWS

The Consultant will facilitate the reviews by the CDPHE and obtain necessary permits for construction and implementation. Any cost for the permit will be borne by the Town of Mancos. The Town will participate in these meetings as necessary. The following agencies are anticipated for review of plans.

The Consultant shall identify all other needs for engineering services as appropriate for this project.

2.4 PROJECT BIDDING SERVICES

2.4.1 PRE-BID CONFERENCE AND SITE MEETING SUPPORT

The Consultant will facilitate a pre-bid meeting to provide project overview and answer questions from qualified bidders. Agenda and meeting notes will be prepared to document the meeting. A site visit will follow this meeting to review field conditions.

2.4.2 RESPOND TO QUESTIONS AND ISSUE ADDENDUM

Questions received from Contractors will be addressed and compiled by the Consultant to form an addendum to be issued by the Consultant during the bidding period.

2.5 CONSTRUCTION OBSERVATION SERVICES

The Consultant shall provide construction observation services for the addition of coarse screening and grit removal. The Consultant shall conduct a pre-construction meeting prior to the start of the project. Otherwise, once construction has begun, the Consultant shall perform construction observation at key project milestones to ensure conformance to the plans and specifications for the project. For the purpose of budgeting and response to this RFP, assume that a total six site visits in addition to the pre-construction meeting, will be required during the construction of the coarse screening and grit removal.

2.6 OBSERVATION OF COMMISSIONING SERVICES

The Contractor will be responsible for coordinating the commissioning services of the equipment representatives for the select equipment used in the addition of the coarse screening and grit removal system. The Consultant shall plan to attend the commissioning and prepare a report documenting the activities and results of the commissioning. For the purpose of budgeting and response to this RFP, assume a two day site visit to observe the commissioning of the coarse screening and grit removal system.

2.7 ADDITIONAL TASKS TO BE ADDED AT THE TOWN'S DISCRETION

The Consultant may propose additional tasks that could provide added value and enhance the project for the Town or provide project cost savings. Any additional tasks identified by Consultant shall not, however, be included in the base cost of the response to this RFP.

2.8 PERIOD OF AWARD

The Town recognizes permitting with CDPHE is the critical path for construction of the coarse screening and grit removal system (item 1.5.1 above), which is expected to require submittal of plans and specifications for review by CDPHE. With that constraint in mind, the target completion date for providing final design and specifications for the coarse screening and grit removal system is no later than August 1, 2023. Pre-Bid and Construction Services for the coarse screening and grit removal system will immediately follow CDPHE permit approval.

The target completion date for the remaining tasks under section 1.5 is no later than October 31, 2023.

Should the Consultant have concerns with either of these target completion dates, the Consultant shall propose alternative dates with justification, for consideration by the Town.

All awards, extensions, and additional services are subject to annual appropriation of funds. The provisions of the foregoing paragraphs with respect to extensions and additional services of the terms of the contract shall be null and void if the contract has been terminated or revoked during the initial term or any extension thereof. All decisions to extend or to provide additional services are at the sole option of the Town.

2.9 MINIMUM MANDATORY QUALIFICATIONS OF OFFEROR

The Consultant shall provide one or multiple project managers who are Licensed Professional Engineers in the State of Colorado with at least ten years' experience with wastewater treatment design. The Consultant key personal (project manager and lead project engineers) shall have at least three total wastewater treatment design projects in the last ten years of similar scope and scale.

3 ADMINISTRATIVE INFORMATION

Issuing Office:

The Town's contact and the Town's representative listed herein are the points of contact concerning this RFP. Offerors shall not directly contact other personnel regarding matters concerning this RFP or to arrange meetings related to such.

Official Means of Communication:

All official communication from the Town or the Town's representative to offerors will be via email. The Town's representative will post notices that will include, but not be limited to, proposal document, addenda, award announcement, etc. It is incumbent upon offerors to carefully and regularly monitor their email for any such postings.

Inquiries:

Prospective offerors may make written inquiries via email to the Town's representative concerning this RFP to obtain clarification of requirements. All questions and the associated response will be provided to all Offerors as an addendum in accordance with the schedule noted above. No inquiries will be accepted after the deadline. Offerors cannot rely on any other statements that clarify or alter any specification or other term or condition of the RFP.

Should any interested Offeror, sales representative, or manufacturer find any part of the listed specifications, terms and conditions to be discrepant, incomplete, or otherwise questionable in any respect, it shall be the responsibility of the concerned party to notify the Town's representative of such matters immediately upon discovery.

Insurance:

The successful Proposer will be required to provide a Certificate of Insurance or other proof of insurance naming the Town of Mancos as "additional insured". Coverage must include COMMERCIAL GENERAL LIABILITY coverage with minimum limits of $2,000,000, and WORKER'S COMPENSATION coverage with limits in accordance with State of Colorado requirements.

COMPREHENSIVE AUTOMOBILE LIABILITY with minimum limits for bodily injury and property damage coverage of at least $1,000,000, plus an additional amount adequate to pay related attorneys' fees and defense costs, for each of Consultant's owned, hired or non-owned vehicles assigned to or used in performance of this Agreement.

The Town of Mancos shall be named as additional Insured for General and Auto Liability Insurance.

Awarded offeror must present the Town of Mancos with proof of PROFESSIONAL LIABILITY COVERAGE with a minimum limit of $1,000,000.00 or equal to not less than the compensation received by the awarded Offeror for this project, whichever is greater.

Modification or Withdrawal of Proposals:

Proposals may be modified or withdrawn by the Offeror prior to the established due date and time.

Minor Informalities:

Minor informalities are matters of form rather than substance evident from the response or insignificant mistakes that can be waived or corrected without prejudice to other vendors. The Town's representative may waive such informalities or allow the vendor to correct them depending on which is in the best interest of the Town.

Responsibility Determination:

The Town of Mancos will make awards only to responsible vendors. The Town reserves the right to assess offeror responsibility at any time in this RFP process and may not make a responsibility determination for every Offeror.

Acceptance of RFP Terms:

A proposal submitted in response to this RFP shall constitute a binding offer. The autographic signature of a person who is legally authorized to execute contractual obligations on behalf of the offeror shall indicate acknowledgment of this condition. A submission in response to this RFP acknowledges acceptance by the offeror of all terms and conditions as set forth herein. An offeror shall identify clearly and thoroughly any variations between its proposal and the RFP in the cover letter. Failure to do so shall be deemed a waiver of any rights to subsequently modify the terms of performance, except as outlined or specified in the RFP.

Protested Solicitations and Awards:

Right to protest: Any actual or prospective bidder, offeror or contractor who is aggrieved in connection with the solicitation or award of a contract must protest in writing to the Town as a prerequisite to seeking judicial relief. Protestors are urged to seek informal resolution of their complaints initially with the Town's representative. A protest shall be submitted within ten (10) calendar days after such aggrieved person knows or should have known of the facts giving rise thereto. A protest with respect to an invitation for bids or request for proposals shall be submitted in writing prior to the opening of bids or the closing date of proposals, unless the aggrieved person did not know and should not have known of the facts giving rise to such protests prior to bid opening or the closing date for proposals.

Stay of procurement during protests: In the event of a timely protest under this Section, the Town shall not proceed further with the solicitation or award of the contract until all administrative and judicial remedies have been exhausted or until the Town makes a written determination on the record that the award of a contract without delay is necessary to protect substantial interest of the Town.

Confidential/Proprietary Information:

All proposals will be confidential until a contract is awarded and fully executed. At that time, all proposals and documents pertaining to the proposals will be open for public inspection, except for the material that is proprietary or confidential. However, requests for confidentiality can be submitted to the Town provided that the submission is in accordance with the following procedures. This remains the sole responsibility of the offeror. The Town will make no attempt to cure any information that is found to be at a variance with this procedure. The offeror may not be given an opportunity to cure any variances after proposal opening. Neither a proposal in its entirety, nor proposal price information will

be considered confidential/proprietary. Questions regarding the application of this procedure must be directed to the Town's contact listed in this RFP.

Acceptance of Proposal Content:

The contents of the proposal (including persons specified to implement the project) of the successful contractor shall become contractual obligations into the contract award. Failure of the successful offeror to perform in accordance with these obligations may result in cancellation of the award and such offeror may be removed from future solicitations.

RFP Cancellation:

The Town reserves the right to cancel this RFP at any time, without penalty.

Negotiation of Award:

In the event only one (1) responsive proposal is received by the Town, the Town reserves the right to negotiate the award for the services with the offeror submitting the proposal in lieu of accepting the proposal as is.

Contract:

A sample copy of the contract award the Town will use to contract for the services specified in this RFP is included as an Exhibit for your review. The attached contract is only a sample and is not to be completed at this time.

RFP Response/Material Ownership:

All material submitted regarding this RFP becomes the property of the Town of Mancos, unless otherwise noted in the RFP.

Incurring Costs:

The Town is not liable for any cost incurred prior to issuance of a legally executed contract and/or a purchase order.

Non-Discrimination:

The offeror shall comply with all applicable state and federal laws, rules and regulations involving non-discrimination on the basis of race, color, religion, national origin, age or sex.

News Releases:

Neither the Town, nor the offeror, shall make news releases pertaining to this RFP prior to execution of the contract without prior written approval of the other party.

Certification of Independent Price Determination:

1. By submission of this proposal each offeror certifies, and in the case of a joint proposal each party, thereto certifies as to its own organization, that in connection with this procurement:

a. The prices in this proposal have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other offeror or with any competitor;
b. Unless otherwise required by law, the prices which have been quoted in this proposal have not been knowingly disclosed by the offeror and will not knowingly be disclosed by the offeror prior to opening, directly or indirectly to any other offeror or to any competitor; and
c. No attempt has been made or will be made by the offeror to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition.

2. Each person signing the Request for Proposal form of this proposal certifies that:
    a. He/she is the person in the offeror's organization responsible within that organization for the decision as to the prices being offered herein and that he/she has not participated, and will not participate, in any action contrary to the applicable sections above; or
    b. He/she is not the person in the offeror's organization responsible within that organization for the decision as to the prices being offered herein but that he/she has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to applicable sections above, and as their agent does hereby so certify; and he/she has not participated, and will not participate, in any action contrary to the applicable sections above.

3. A proposal will not be considered for award where applicable sections above have been deleted or modified. Where (1.b) above has been deleted or modified, the proposal will not be considered for award unless the offeror furnishes with the proposal a signed statement which sets forth in detail the circumstances of the disclosure and the Town, or designee, determines that such disclosure was not made for the purpose of restricting competition.

4. The Contract Documents may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same document. The Contract Documents, including all component parts set forth above, may be executed and delivered by electronic signature by any of the parties and all parties consent to the use of electronic signatures.

Taxes:

The Town of Mancos is exempt from all federal excise taxes and all Colorado State and local government sales and use taxes. Where applicable, contractor will be responsible for payment of use taxes.

Assignment and Delegation:

Neither party to any resulting contract may assign or delegate any portion of the agreement without the prior written consent of the other party.

Availability of Funds:

Financial obligations of the Town of Mancos payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted and otherwise made available. In the event funds are not appropriated, any resulting contract will become null and void without penalty to the Town.

Standard of Conduct:

The successful firm shall be responsible for maintaining satisfactory standards of employees' competency, conduct, courtesy, appearance, honesty, and integrity, and shall be responsible for taking such disciplinary action with respect to any employee as may be necessary.

The Town may request the successful firm to immediately remove from this assignment any employee found unfit to perform duties due to one or more of the following reasons:

Neglect of duty:

Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words or actions or fighting.

Theft, vandalism, immoral conduct or any other criminal action.

Selling, consuming, possessing, or being under the influence of intoxicants, including alcohol, or illegal substances while on assignment for the Town.

Agents and employees of Contractor or Consultant working in Town facilities shall present a clean and neat appearance. Prior to performing any work for the Town, the Contractor or Consultant shall require each of their employees to possess company identification and present such identification to Town staff.

Damages for Breach of Contract:

In addition to any other legal or equitable remedy the Town may be entitled to for a breach of this Contract, if the Town terminates this Contract, in whole or in part, due to Contractor's breach of any provision of this Contract, Contractor shall be liable for actual and consequential damages to the Town.

Other Statutes:

The signatory hereto avers that he/she is familiar with Colorado Revised Statutes, 18-8-301, et seq. (Bribery and Corrupt Influence) and 18-8-401, et seq. (Abuse of Public Office) as amended, and that no violation such provisions is present.

The signatory hereto avers that to his/her knowledge, no Town of Mancos employee has any personal or beneficial interest whatsoever in the service or property described herein. See CRS 24-18-201 and CRS 24-50-507.

Illegal Alien Statement

The Consultant must be prepared to certify compliance with the provisions of C.R.S. 8-17.5-101 & 102. The Consultant shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to the Consultant that the

subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

The Consultant represents, warrants, and agrees that it has verified that is does not employ any illegal aliens, through participation in a program approved under C.R.S 8-17.5-102.

If the Consultant elects to participate in the State of Colorado Department program pursuant to C.R.S. 8-17.5-102, the Consultant must provide the Town a copy of their completed Notice of Participation Form.

If the Consultant hires a new employee who performs work under this public contract, the Consultant must provide the Town affirmation as required by C.R.S. 8-17.5-102(5)(c)(II).

The Consultant shall comply with all reasonable requests made in the course of an investigation by the Colorado Department of Labor and Employment. If the Consultant fails to comply with any requirement of this provision or C.R.S. 8-17.5-101&102, the Town may terminate this Contract for breach of contract, and the Consultant shall be liable for actual and consequential damages to the Town.

The Consultant shall not use the programs approved under C.R.S. 8-17.5-102 to undertake pre-employment screening of job applicants while this Contract is being performed.

If the Consultant obtains actual knowledge that a subcontractor performing work under this contract knowingly employs or contracts with an illegal alien, the Consultant shall:

Notify the subcontractor and the Town within three days that the Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to sub-paragraph “A” above, the subcontractor does not stop employing or contracting with the illegal alien, unless the subcontractor provides information to establish the subcontractor has not knowingly employed or contracted with an illegal alien.

4 PROPOSAL SUBMISSION

Following are the response requirements for this RFP. All specific response items represent the minimum information to be submitted. Deletions or incomplete responses in terms of content or aberrations in form may, at the Town's discretion, render the proposal non-responsive.

Offerors shall submit in a sealed package:

4 Hard Copies and One (1) complete copy of Proposal on a flash drive

Proposals are to be delivered to:

Heather Alvarez
Town Administrator

Town of Mancos
117 North Main Street
Mancos, Colorado 81328

In addition, provide an electronic copy of the proposal via email to Brad Eaton at EatonEngineering@msn.com

To facilitate the evaluation, offeror shall submit and organize all responses in the same order as listed in Section 5 below. Proposals that are determined to be at a variance with this requirement may not be accepted. The Town only accepts proposals in hard copy format and does not accept proposals submitted via fax or email. Submittals shall be limited to no more than 30 single sided sheets not including resumes and representative project sheets.

Late proposals will not be accepted. It is the responsibility of the offeror to ensure that the proposal is received at the Town Administration Offices on or before the proposal due date and time.

The outside of the package will include the following information:

Company Name
RFP Title
Due Date and Time

5 RESPONSE FORMAT

The following items are to be included in your proposal, in the order listed. Deviation from this may render your proposal non-responsive. The Proposal must not exceed 30 total pages (with the front counting as one page, most or all 8½ x 11 inch with 1-inch or greater margins), excluding the transmittal letter, index or table of contents, front and back covers, title pages/separation tabs, and appendices. A maximum of 5 of the total pages may be 11 x 17-inch tri-fold format. Eleven-point font or larger must be used in Proposal. All proposed project costs, representative projects (maximum of five), and resumes (two pages max) shall be included in the appendices.

Cover Letter

Include a cover letter introducing your company, summarizing your qualifications, and detailing any exceptions to this RFP (please note that significant exceptions may make your proposal non-responsive). This letter should also provide principal contact information for this RFP, including address, telephone number, fax number, e-mail, and website (if applicable).

Company Information

Provide the following information as listed: Company Name, Address, Phone Number, and Names of Principals.

Identify the year in which your company was established and began providing consulting services.

Describe any pending plans to sell or merge your company.

Provide a comprehensive listing of all the services you provide.

Use of Subcontractors/Partners

There may be areas for use of subcontractors or partners in this project. If you are utilizing this approach, your proposal must list the subcontractors/partners, services to be provided, and include all other applicable information herein requested for each subcontractor/partner. Please keep in mind that the Town will contract solely with your company, therefore subcontractors/partners remain your sole responsibility.

Minimum Mandatory Qualifications

Include an itemized description of how your company meets each of the minimum mandatory qualifications outlined in Section 2. Failure to meet these requirements may disqualify your response.

Evaluation Criterion

<u>#1 – Company and Personnel Experience</u>

Describe your customer service philosophy and how this project will be managed to get the best value product for the Town.

Demonstration of the necessary experience, organization, and technical qualifications for the proposed work.

List key personnel that will be committed to this project, their resumes, describe their role and title, and availability for contract duration (include in appendices).

List similar projects that have been completed by proposed key personnel.

Provide completed representative projects of similar nature as required in the Minimum Qualifications (Section 2). Include Owner contact information, key personnel assigned, pertinent project information, timeliness of completion, costs control (include in appendices). The Town reserves the right to contact the references provided in your proposal as well as other references without prior notification to you.

Propose how the consultant will manage this project to meet project goals and objectives. How does the consultant propose to structure the organizational chart to ensure that project goals and objectives are met.

Propose the methods and timeline of communication your firm will use with the Town's project managers and other Town staff.

#2 – Project Approach/Scope of Work

Explain your understanding of the project objectives and desired results for this project.

Define how you plan to obtain and share information with Town staff.

Describe specific project challenges you anticipate and how you propose to resolve these challenges.

Describe any project approaches or ideas that you would apply that you feel would enhance the quality of your services.

How will the project team manage quality control throughout the completion of the project?

Describe other scope items you would suggest to enhance the project.

#3 - Schedule

Provide a specific timeline showing milestones and completion dates. The consultant will be evaluated on their ability identify concerns necessary to complete their scope of work within the proposed dates.

#4 – Cost and Work Hours

Provide a fee to complete the work broken down into groupings of tasks or scope of work items with proposed number of hours and rates for each personnel category; e.g. project manager, senior engineer, engineering technician, etc. Include subcontract work and incidentals necessary in the performance of the work tasks as separate items. These rates will be considered valid throughout the project.

Evaluations will consider the extent to which the work hours presented are reasonable for the effort required in each grouping and total cost.

Provide fee of additional tasks recommended in Criteria #2 above. This fee shall be broken out independently from the fee to complete the identified project scope.

6 EVALUATION AND AWARD

Proposal Evaluation

All proposals submitted in response to this RFP will be evaluated by a committee in accordance with the criteria described below. Total scores will be tabulated and committee member's scores will be normalized to complete the ranking portion of the evaluation. The highest ranking firms will be requested for presentation or directly enter into negotiations.

If the Town requests presentations by short-listed offerors, committee members may revise their initial scores based upon additional information and clarification received in this phase. Please note that presentations have been tentatively scheduled per the Schedule of Events on the first page of this RFP.

In preparing responses, offerors should describe in detail how they propose to meet the items identified in the previous sections. Specific factors will be applied to proposal information to assist the Town in selecting the most qualified offeror for this contract. Following is the evaluation criteria that will be used. Criteria will be assigned a points value.

Company and Personnel Qualifications - 30 Points
Approach to Scope of Work - 30 Points
Schedule - 20 points
Cost and Work Hours - 20 Points

A presentation and/or demonstration may be requested by short-listed offerors prior to award. However, a presentation/demonstration may not be required, and therefore, complete information should be submitted with your proposal.

Determination of Responsibility of the Offeror

The Town of Mancos awards contracts to responsible vendors only. The Town reserves the right to make its offeror responsibility determination at any time in this RFP process and may not make a responsibility determination for every offeror.

The Town defines a "Responsible Offeror" as one who has "the capability in all respects to perform fully the contract requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good-faith performance." The Town reserves the right to request information as it deems necessary to determine an offeror's responsibility. If the offeror fails to supply the requested information, the Town shall base the determination of responsibility upon any available information or may find the offeror non-responsible if such failure is unreasonable.

7 APPENDICES

7.1 SAMPLE CONTRACT

ADDENDUM #1

Town of Mancos
Wastewater Treatment Facility
Phase 1 Repairs

This Addendum #1 is being issued January 26, 2023, for the Town of Mancos Wastewater Treatment Facility Phase 1 Repairs, Request for Proposals (RFP), issued January 9, 2023.

This addendum amends the Request for Proposals for the above referenced project and is hereby incorporated into the contract documents as part thereof.

GENERAL – RESPONSE TO QUESTIONS

The following is the response to questions received up to and including the question deadline of January 20, 2023. Questions are provided in italics, with the response immediately following.

1. *Confirm the attached 4 documents are the correct and complete references.*

   The question above refers to the four reports referenced in "Section 1.2 Overview" of the RFP as follows:

   1) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020

   2) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Supplement to Engineering Opinion Report, Dated July 5, 2020*, Prepared by Eaton Engineering, LLC, February 23, 2021

   3) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Amended Supplement to Engineering Opinion Report, Dated July 5, 2020*, Prepared by Eaton Engineering, LLC, March 10, 2021

   4) *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Second Supplement to Engineering Opinion Report of July 5, 2020, Current Report Dated October 25, 2021*, Prepared by Eaton Engineering, LLC, October 25, 2021

The reports noted above, along with other pertinent project documents were provided for consultant review prior to issuance of the subject RFP. These same reports were used in legal proceedings and were marked as various exhibits as part of those proceedings.

For clarification, the four reports referenced above have been provided in the attached compressed zip file marked: Mancos WWTF Phase 1 Repairs RFP, Section 1.2 Reference Documents.

2. *The RFP lists 30% and final design submittals, followed by mention of 3 planned reviews by the Town and Eaton. Is a 60% design submittal desired?*

   Yes, for response to this RFP, assume that a 60% design submittal will be required.

3. *The RFP references CSI 16 Division specification formatting. Would use of the newer 50 Division format be acceptable?*

   Either format is acceptable to Mancos, however, the consultant will be responsible for determining the format required by CDPHE for any submittals to the State Water Quality Control Division.

4. *There is an overflow manhole adjacent to the grinder and suggested headworks location. Is the overflow to the lagoon to be maintained?*

   Yes, the functionality of the existing 10-inch overflow pipeline to the lagoon is to be maintained and must be included in the design of the course screen and grit removal system. The existing configuration, however, utilizing the existing 4-foot diameter manhole, can be altered as necessary to accommodate the addition of the course screen and grit removal system.

ADDENDUM #2

Town of Mancos
Wastewater Treatment Facility
Phase 1 Repairs

This Addendum #2 is being issued January 30, 2023, for the Town of Mancos Wastewater Treatment Facility Phase 1 Repairs, Request for Proposals (RFP), issued January 9, 2023.

This addendum amends the Request for Proposals for the above referenced project and is hereby incorporated into the contract documents as part thereof.

GENERAL – TIME EXTENSION

In consideration of the significant project history and associated documentation leading to the repair phase of the WWTF, along with the desire to provide sufficient time for interested parties to prepare comprehensive proposals, the Town of Mancos has elected to extend the proposal submittal deadline by an additional three weeks, to Friday, March 10, 2023, at 2:00 pm.

This time extension is intended to allow the interested respondents the opportunity to make an additional site visit if desired, along with the opportunity to ask additional questions that may arise through the proposal preparation process. The revised schedule of events is as follows:

Revised Schedule of Events	**All times in local Mountain Daylight Time (MDT)**
RFP Issued	Monday, January 9, 2023
Revised Question Deadline	Friday, February 17, 2023 - 5:00 PM
Revised Final Addendum Issued	Friday, February 24, 2023 - 5:00 PM
Revised Proposal Due Date and Time	Friday, March 10, 2023 - 2:00 PM
Revised Interviews Timing (tentative)	Late March, 2023
Revised Notice of Award (tentative)	Early April, 2023

If you wish to make an additional site visit, please coordinate directly with Town Administrator Heather Alvarez, using the following contact information:

Heather Alvarez
Town Administrator
(970) 533-7725 Phone
halvarez@mancoscolorado.com

Additionally, key deadlines listed under Section 2.8 of the RFP have been amended with the same three-week time extension as highlighted below.

FROM SECTION 2.8 PERIOD OF AWARD

The Town recognizes permitting with CDPHE is the critical path for construction of the coarse screening and grit removal system (item 1.5.1 of the RFP), which is expected to require submittal of plans and specifications for review by CDPHE. With that constraint in mind, the target completion date for providing final design and specifications for the coarse screening and grit removal system is no later than August 22, 2023. Pre-Bid and Construction Services for the coarse screening and grit removal system will immediately follow CDPHE permit approval.

The target completion date for the remaining tasks under section 1.5 is no later than November 21, 2023.

Should the Consultant have concerns with either of these target completion dates, the Consultant shall propose alternative dates with justification, for consideration by the Town.

All awards, extensions, and additional services are subject to annual appropriation of funds. The provisions of the foregoing paragraphs with respect to extensions and additional services of the terms of the contract shall be null and void if the contract has been terminated or revoked during the initial term or any extension thereof. All decisions to extend or to provide additional services are at the sole option of the Town.

ADDENDUM #3

Town of Mancos
Wastewater Treatment Facility
Phase 1 Repairs

This Addendum #3 is being issued February 20, 2023, for the Town of Mancos Wastewater Treatment Facility Phase 1 Repairs, Request for Proposals (RFP), issued January 9, 2023.

This addendum amends the Request for Proposals for the above referenced project and is hereby incorporated into the contract documents as part thereof.

GENERAL – RESPONSE TO QUESTIONS

The following is the response to questions received up to and including the amended question deadline of February 17, 2023. Questions are provided in italics, with the response immediately following.

1. *Are existing ACAD files of site and plant available?*

   No, there are no CAD files available for the site and plant. An electronic version of the Upgrade Project record drawings in PDF format is, however, available.

2. *Have engineering and construction budgets been established?*

   Specific engineering and construction budgets have not been established, however, conceptual level estimates for items identified in the Concept of Repair can be found in Appendix A of the report titled *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020.

3. *Will the Town be responsible for collection and laboratory analysis of TSS and BOD samples to be used for the requested process loading evaluation, as outlined in 1.4.2.1?*

   Town staff is available to collect the necessary samples, deliver the samples to the laboratory (Green Analytical) and to pay for the sample analysis.

   For this to occur, the consultant must provide Town staff with the specific sampling protocol required to satisfy the objective under 1.4.2.1 of the RFP and must also coordinate the sampling event with Green Analytical Laboratories in Durango, Colorado (970) 247-4220 to have the appropriate sample kit sent to the Town.

4. *Is there tracer wire on existing yard piping to aid SUE efforts?*

   Mancos staff has never found evidence of tracer wire and it is unknown if tracer wire exists.

MANCOS COLORADO

PROPOSAL

Wastewater Treatment Facility Phase 1 Repairs

March 10, 2023

SGM

March 10, 2023

Town of Mancos
Attn: Heather Alvarez, *Town Administrator*
117 North Main Street
Mancos, CO 81328

RE: PROPOSAL – WASTEWATER TREATMENT FACILITY – PHASE 1 REPAIRS

We sincerely appreciate the time Town Operation staff gave us to re-visit the wastewater treatment facility and discuss past and present operations. We enjoy working with staff and want to continue supporting the Town through this critical project. The attached statement of qualifications outlines our credentials and approach to providing design and construction engineering services for this improvement project.

Client focus is a hallmark of SGM - our number one goal is to make you and the project successful! Listening and collaboration are the cornerstones of our project delivery approach. We know the best results occur when we are an extension of your staff. We believe SGM has demonstrated this through our previous engagements with the Town, including our current role as Town Engineer. While we have presented ideas in the attached statement of qualifications to jump-start discussions, we do not want to leap to solutions without thorough analyses and close collaboration with your staff. The final decision on treatment strategy must be a pragmatic balance of cost and performance as it pertains to the Mancos community. We look forward to working with you and your staff to strike that appropriate balance.

We have assembled an experienced team of professionals to provide the expertise, knowledge, and time required to meet your objectives. Our project manager, Brandyn Bair, and I are very experienced in wastewater facility planning, design, construction, and operations – from large to small. Together we have been responsible for the design and construction oversight of over $150M in wastewater projects over the last 10 years, with an average of less than 2% change orders! Our wastewater program management and design expertise will be essential in managing costs, schedules, and project quality.

Our commitment to delivering quality, customized solutions for rural Colorado communities separates SGM as trusted advisers - our longevity and success in western Colorado are proof. We look forward to serving your community on this project and hope you find that the SGM team will best help the Town implement treatment improvements.

SGM acknowledges the receipt of Addendum 1, 2, and 3. Brandyn Bair and I are the primary contacts for this project and are fully authorized to represent SGM. If you have any questions, please get in touch with me at 970.379.9923 or chadp@sgm-inc.com, or Brandyn at 970.379.8460 or brandynb@sgm-inc.com.

Sincerely,
SGM

Chad Paulson, PE, CWP
Owner, Public Sector Leader, PIC

Brandyn Bair, PE, CWP
Owner, Wastewater Team Leader, Project Manager

Firm Details

Firm Name: Schmueser Gordon Meyer, Inc. DBA **SGM**

Year Established: 1986 **Years in business:** 37

Headquarters: 118 W. Sixth Street, Suite 200, Glenwood Springs, CO 81601 / 970.945.1004

Branch Offices: Durango, Salida, Aspen, Gunnison, Meeker, and Grand Junction

SGM Ownership: SGM is proud to be 100% employee owned. Our dedicated owner-employees are:

Brandyn Bair, PE, CWP	Shawn Binion, PLS	Dan Cokley, PE, PTOE
Bob Brandeberry, PLS	Jerry Burgess, PE	Tim Barnett, PLS
Troy Feese, CFO	Mike Fowler, PE	Tyler Harpel, PE
Dave Kotz, PE, CFM	Chris Lehrman, PE	Angie Fowler, PE
Chad Paulson, PE, CWP	Jeff Simonson, PE, CFM	Jordan Dimick, PE
Matt Webster, COO	John Boulden, PE	Eric Krch, PE
Erik Bjornstad, PLS	Warren Swanson, PE, President	

Total Personnel of the Firm: SGM has 123 employees

Describe any pending plans to sell or merge your company: NONE

SGM is a multidisciplinary engineering, surveying, and consulting firm founded in 1986. For over 37 years, SGM employees have lived and raised families in the Colorado mountain communities they have helped build. SGM's services are delivered with unparalleled authenticity and pride, with attention to quality and detail. As we've grown, SGM has also become more diversified with expertise in the following areas:

- *Civil Engineering*
- *Wastewater Treatment and Conveyance*
- *Municipal Water Supply, Treatment, Conveyance, and Storage*
- *Mechanical, Electrical & Plumbing Engineering*
- *Municipal Public Works, including Streets, Trails, Parks, Highways, and Bridges*
- *Structural and Architectural Engineering*
- *Transportation and Traffic (PTOE on staff)*
- *GIS Mapping*
- *Water Resource Engineering & Planning*
- *Environmental Consulting*
- *Municipal Stormwater and Drainage*
- *Land Surveying, including Drone Data Acquisition and Imagery*
- *Subsurface Utility Engineering (SUE)*
- *Construction Inspection and Administration*

SGM is rooted in western Colorado – we understand the nuances of engineering and construction in mountain communities.

Qualifications

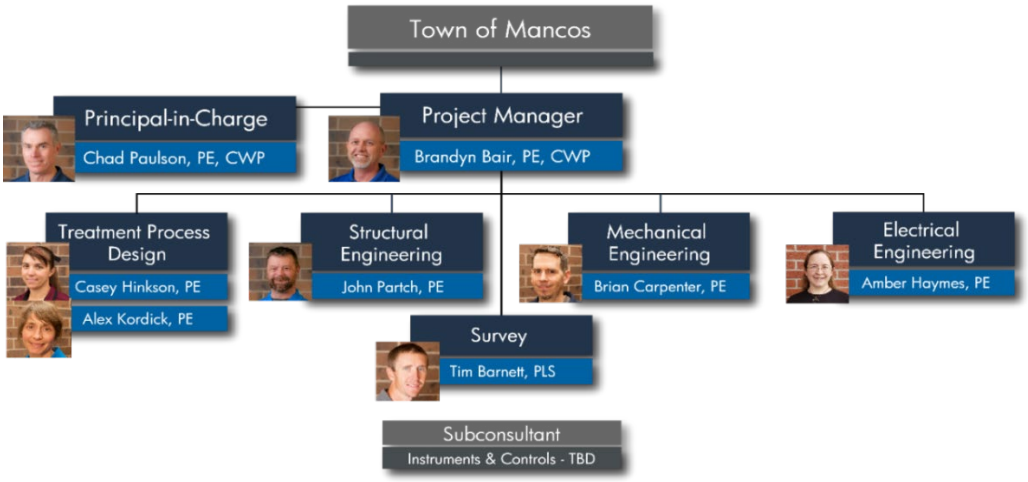
Company and Personnel Experience

SGM is well-suited for this project. We have over three decades of specialized experience providing wastewater solutions to rural Colorado communities, many quite similar to the Town of Mancos. Our expertise is infused throughout the project to create a better project for the community. A valuable lesson we have learned is that a successful project requires much more than just sound engineering – it requires us to design a project that suits the community. This is accomplished by building trust and understanding between our organizations so that we communicate freely and truly act as an extension of your organization. We start this process by listening to you, and we always keep your best interest at the forefront.

Our proposed team will be with the project from start to finish. This continuity is a standard process for SGM - and is a hallmark of our success. The project team will be led by **Brandyn Bair, PE, CWP**, SGM Wastewater Leader, who will serve as the **Project Manager**. Brandyn has been the Engineer-of-Record for many complex, multi-disciplinary treatment projects, most recently completing $4.7M in nutrient removal upgrades at the Roaring Fork Water and Sanitation District Wastewater Treatment Facility (WWTF). He is a seasoned and respected project manager, well-versed in wastewater treatment system design and construction. Brandyn is adept at planning and coordinating resources and has the authority to bring in additional resources when necessary.

Chad Paulson, PE, CWP, will serve in the critical role of **Principal-in-Charge (PIC)** and **QA/QC Officer,** and will play a central role in process evaluation and project execution. Chad is an SGM owner and leads SGM's Public Sector, which contains our Water, Wastewater, and Municipal Teams. Chad's background with large, complex treatment projects will be called upon regularly throughout the project.

Design efforts will be supported by SGM process engineers like **Casey Hinkson, PE,** and **Alex Kordick, PE**. Beyond this core, the project will be supported by numerous other in-house experts, from survey to structural to electrical, with leads shown in the provided org chart below. *Biosketches for key personnel are located below; full resumes are available on request.*



Meet The Team

SGM performs all civil, process, survey, structural, mechanical, and electrical engineering services with in-house staff. Our experts are well-versed in industry-standard design tools, such as AutoCAD, Plant3D, aerial survey photography, and GIS utility data. We are also adept with BIM systems, such as Revit. Our integrated design approach results in well-vetted, well-designed, well-detailed project plans and specifications.

Principal-in-Charge & QA/QC Officer

Education
BS Civil Engineering, Colorado State University, 1992

Registrations
CO Class D Wastewater Operator

Chad Paulson, PE, CWP
Professional Experience: 30 years / 22 years with SGM
Professional License: CO PE 33326
Contact: 970.384.9036 / chadp@sgm-inc.com / **Location:** Glenwood Springs

Chad will serve as the **Principal-in-Charge** and the **Quality Assurance/Quality Control Officer**, ensuring overall quality control and client satisfaction for the project. He will provide senior oversight, review, and quality assurance for all project work. Chad is the leader of SGM's Public Services Sector, which encompasses the Wastewater, Water, and Municipal teams. He has extensive experience in municipal engineering, water storage and transmission, water and wastewater treatment design, project management, and construction engineering, including multiple infrastructure replacements, system master plans, and funding efforts. *Chad has been responsible for the management, design, construction, and startup for the Snowmass WSD WWTF, Rifle Regional WWRF, New Castle WWTF, Glenwood Springs Regional WWTF, and Salida WWTF Expansion.*

Project Manager

Education
BS Civil Engineering Colorado School of Mines, 2003

Certifications
CO Class D Waste- water Operator

Brandyn Bair, PE, CWP
Professional Experience: 19 years / 19 years with SGM
Professional License: CO PE 42640
Contact: 970.384.9024 / brandynb@sgm-inc.com / **Location:** Glenwood Springs

Brandyn will serve as the **Project Manager**. Brandyn has 19 years of experience in the design and construction of water and wastewater treatment facilities, water/wastewater pump stations, water storage tanks, water and sewer lines, road reconstruction, and drainage projects. *Brandyn's experience includes design engineering support, permitting, and funding for the Snowmass Water & Sanitation District, City of Glenwood Springs, Town of Silt, Spring Valley, City of Salida, and Town of New Castle wastewater treatment facility upgrades.* In addition, Brandyn serves as the Town Engineer and/or District Engineer for the Roaring Fork Water and Sanitation District, Spring Valley Sanitation District, and Durango West Metro District No. 2.

Process Design Engineer

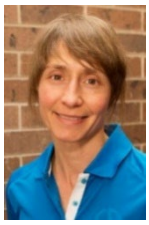
Education
MSBA, Webster University, St. Louis, MO, 2015

Casey Hinkson, PE
Professional Experience: 7 years / all with SGM
Professional License: CO PE 55807
Contact: 970.384.9096 / caseyh@sgm-inc.com / **Location:** Glenwood Springs

Casey will serve as the **Process Design Engineer**. She brings seven years of experience in water and wastewater engineering, including treatment facility design and construction management. *Casey's projects include a conceptual and detailed*

design for the Snowmass Water and Sanitation District Nutrient Upgrades, Round Mountain Water and Sanitation Wastewater Treatment Plant, Roaring Fork Water and Sanitation District Wastewater Treatment Plant Expansion, Town of Silverton Water Treatment Plant Upgrades, El Jebel Mobile Home Park Filter Building, and Gateway Water Treatment Plant.

Process Design Engineer



Alex Kordick, PE
Professional Experience: 15 years / 4 years with SGM
Professional License: CO PE 55170
Contact: 970.384.9065 / alexk@sgm-inc.com / **Location:** Glenwood Springs

Education
MS Civil Engineering, & Water Resources, University of Colorado, 2007

Alex has 15 years of engineering experience in water and wastewater engineering, including the design and construction of water and wastewater treatment facilities, water/wastewater pump stations, and water storage tanks. *She has worked extensively with the Colorado Department of Health and Environment (CDPHE) permitting processes for water and wastewater treatment plants and obtaining funding for projects through the State Revolving Fund (SRF) and other sources. Alex has worked with many smaller entities and HOAs to develop new water and groundwater sources and to permit them with the State. In addition, she has worked on treatment pilot testing in both water and wastewater facilities.*

Structural Engineering Lead

John Partch, PE
Professional Experience: 32 years / 11 years with SGM
Professional License: CO PE 033878
Contact: 970.384.9035 / johnp@sgm-inc.com / **Location:** Glenwood Springs

Education
BS Civil Engineering University of Colorado, Boulder 1992

John will serve as the **Lead Structural Engineer**. He has extensive experience in the structural design and construction of commercial buildings, industrial structures, treatment facilities and basins, bridges, and retaining walls. His hands-on construction experience gives him a unique understanding of design for constructability. John has experience throughout the West and is familiar with analyzing wind and seismic requirements. He is skilled in the design of wood, steel, concrete, and masonry structures, as well as less common materials such as aluminum, fiberglass, log, and timber framing. *John's most recent structural design experience includes Pasquale Springs Pump Station, Salida; Snowmass Wastewater Treatment Plant, Snowmass Village; Rio Blanco County Justice Center; Rio Blanco County Courthouse; and several residential and commercial buildings in Western Colorado.*

Mechanical Team Lead

Brian Carpenter, PE
Professional Experience: 23 years / 6 years with SGM
Professional License: CO PE 0045312
Contact: 970.384.9072 / brianc@sgm-inc.com / **Location:** Glenwood Springs

Education
BS Mechanical Engineering, University of Colorado at Denver, 2004

Brian will serve as the **Mechanical Team Lead**. Brian has over 23 years of commercial and industrial HVAC experience, including municipal, tenant finish, high rise, health care, biomedical, pharmaceutical, and manufacturing projects. Brian has worked in the consulting and construction sectors and has an eye for implementing constructability into a project's design. In addition, Brian has significant experience in project management, 3D BIM modeling, clash detection, production of shop drawings and spools for fabrication, Computational Fluid

Dynamics (CFD) modeling of areas with sensitive air flows, and performance verification and testing of systems. *Brian's most recent experience includes the mechanical designs for the Gunnison Valley Regional Transportation vehicle storage facility and the Town of Mt. Crested Butte Maintenance Facility.*

Electrical Lead

Amber Haymes, PE (CO, NM), LC
Professional Experience: 12 years / 3 years with SGM
Professional License: CO 0051258
Contact: 970.384.9086 / amberh@sgm-inc.com / **Location:** Grand Junction

Education
BS Architectural Engineering (lighting emphasis), CU Boulder, 2004

Amber will serve as the **Electrical Lead**. Amber is a registered Professional Engineer in the state of Colorado since 2016 and a Certified Lighting Designer (LC). She has 10 years of electrical engineering and lighting design experience, including municipal, educational, health care, parks and trails, and industrial projects. In addition, Amber has worked on numerous green building projects (certified to LEED and other standards), including the design of solar photovoltaic arrays. She is very knowledgeable about modern lighting technologies and methods for improving nighttime visibility while reducing the impact of exterior lights on communities and the environment. *Amber's recent relevant experience includes electrical and lighting design for the Glenwood Springs Electric Operations Center; the La Plata County Historic Courthouse, ACT Building, and Sheriff's Office renovations; and the Montezuma County Courthouse.*

Survey Manager

Tim Barnett, PLS
Professional Experience: 22 years / 10 years with SGM
Professional License: CO PLS 38404 / FAA Certified sUAS Pilot
Contact: 970.385.2340 / timb@sgm-inc.com / **Location:** Durango

Tim will serve as the **Survey Team Lead**. Tim is a Professional Land Surveyor (PLS) with over 20 years of experience. His projects include performing the field work and map preparation of boundary, design, and rights-of-ways surveys for the Colorado Department of Transportation, numerous counties and municipalities, and within the Public Lands Survey System. Tim has produced ALTA Surveys, Subdivisions Plats, topographic mapping, monitoring surveys, GPS control networks, and construction surveys. *Tim's most recent experience includes design surveys for Water and Wastewater Treatment Facilities for numerous local municipalities, including, Mancos, Durango, Cortez, Bayfield, Pagosa Springs, Silverton, and Dolores. Construction Layout for the new Mancos Main Street Bridge, Design Survey and Construction Layout for the Root and Ratliff Pipeline Project, Design Survey for City of Durango Animas River Trail Improvements.*

Subconsultant

Instrumentation and Controls (I/C) Design

We have long-standing relationships with several integrators in the state, and when the time comes, we will work with the Town to bring one onto the team. Two companies that we frequently partner with are Browns Hill Engineering and Controls and Mountain Peak. Both companies can testify to our successful partnering/projects.

Geotechnical Services

Geotechnical services will be contracted out to Trautner Geotech. SGM has worked with Jon Butler of Trautner for many years across the southwest area. Jon's knowledge of local conditions in Mancos is invaluable. Trautner will be responsible for soil evaluation and foundation design recommendations.

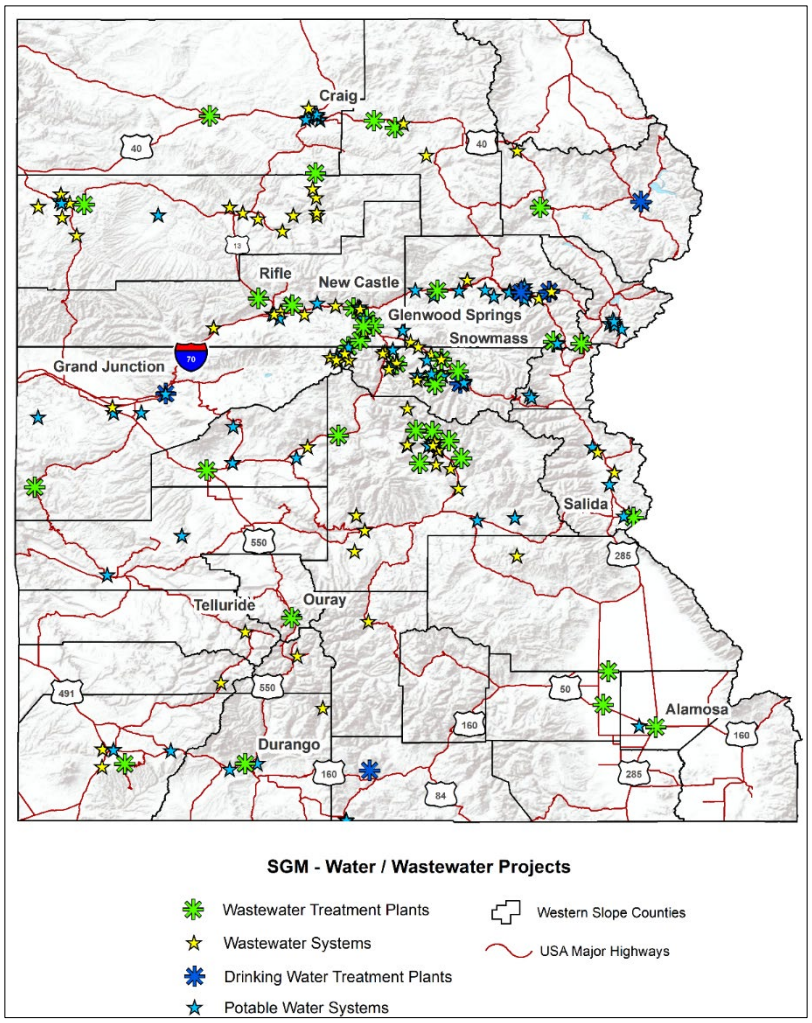
SGM's Depth of Experience in Colorado

SGM has provided professional water and wastewater services to communities across Colorado for decades. The following table highlights some of the clients we've provided similar services to those requested by the Town of Mancos. Many of those listed below have been clients for decades. **Needless to say, SGM understands the Colorado Department of Public Health and Environment (CDPHE) water quality regulations and design standards, and we know what is required to receive design approval.**

SGM is the full-time Engineer-of-Record for the following communities:		
• Snowmass Village 1978* • Basalt 1981* • Granby 1986* • New Castle 1990 • Town of Mt. Crested Butte 2010 • Town of Mountain Village 2022	• Crestone 2012 • Craig 2013 • Silverton 2016 • Saguache 2016 • Aguilar 2017	• Fairplay 2018 • Garfield County 2018 • Bayfield 2020 • Cortez 2020 • Mancos 2022
**As an out-growth of their work with the starred City/Districts, Louis Meyer & Dean Gordon founded SGM in 1986.*		
We have long-standing relationships with communities that have in-house engineers where we provide design and/or consulting services for special projects, including:		
• Rangely 1977* • Vail • Durango • Aspen • Mesa County • Salida • Crested Butte • Glenwood Springs	• Ouray • Eagle • Rio Blanco County • Rifle • Town of Mtn Village • Breckenridge • Battlement Mesa • Pitkin County	• Lake City • Gunnison • Ignacio • Moffat County • Fruita • Norwood • Victor
SGM acts as the District Engineer for special districts, including:		
• Mid Valley Metropolitan District 1982 • Spring Valley San District 1990 • Starwood Metropolitan District 1990	• Roaring Fork Water & San District 1994 • Snowmass Water & San District 2013	
SGM provides ongoing engineering services to the following special districts:		
• Eagle River Water & Sanitation District • Cortez Sanitation District • Mt. Crested Butte Water & San District • Ute Water District • Grand Valley Drainage District • Lake Durango Water Authority	• La Plata Water Conservancy District • Upper Eagle Regional Water Authority • Skyland Metropolitan District • Grand Valley Water Users Association • Round Mountain Water and Sanitation District	

Water / Wastewater Facility Design Expertise

The map to the right highlights Colorado communities where SGM has designed and built water and wastewater treatment facilities. Our full-spectrum design approach begins with process evaluation and always involves permitting. SGM has designed many specialized wastewater treatment process types, including advanced nutrient removal facilities. Some of the process types we have been responsible for include lagoons, conventional activated sludge, extended aeration, Integrated Fixed Film (IFAS), Sequencing Batch Reactor (SBR), Aeromod, A2O, 5-stage Bardenpho, along with tertiary nutrient and metal reduction processes of conventional sand filters, automatic backwash disk filters, and reactive filtration.



Headworks are an essential part of all wastewater facilities, and the application of each of the processes noted above has different requirements. We consequently are quite familiar with the various options and their unique application and design requirements.

Project Approach/Scope of Work

SGM approaches every project with an open mind. Every project is unique, and each community has a solution that is right for them. Our experience certainly leads us in certain directions but, as professionals, it is inappropriate to jump to conclusions about what's best for the community before we know their situation. We subsequently start by listening to you. There are certainly factors we do not know before really digging in: What are the overarching goals and constraints for the project? What is the financial situation? What are the process and operation preferences of staff? With an eye to the future, what will future operations look like? This conversation starts at the kickoff meeting and continues throughout the design phase. We want to get it right, for the community, the first time.

It is a tenant of our company to build trusting, lasting relationships. We have been doing this with the Town of Mancos for the last seven years, which resulted in us being named as the Town's on-call engineer in 2022. We will continue to build trust on this project. We will work closely with your staff to deliver a product that they want, and that will serve the community well for many years to come. We value staff input.

We brainstorm many treatment scenarios and distill them down to the three or four most appropriate for further discussion with Town staff. This is done with input from equipment manufacturers for this specific application. The final recommendation will be based on input from staff. Other firms may give you their template – we'll give you the professional engineering your community deserves. SGM does not give you a canned solution or sales pitch – we give you our senior engineers who will be involved in the project.

There are really two basic parts to this project. The first is centered on headworks improvements for screening and grit removal. The second is evaluating the existing process for both interim repair and suitability for long-term operations.

The following narrative depicts our approach and comprehensive scope of work to successfully deliver the project, demonstrating our ability to meet the minimum requirements outlined in Section 2 of the RFP.

The RFP outlined five primary tasks for the project. Our understanding of the tasks is presented below.

TASK #1

Design, permitting, bid and construction of screening and grit removal improvements to address shortcomings in preliminary treatment at the existing facility. The primary problems being addressed with this project are the removal of rags/wipes that cause frequent fouling and grit removal to alleviate excessive pump wear. The specific scope of services for this task as outlined in the RFP includes:

a) Project Meetings, per RFP. Kickoff and Bi-weekly project status meetings with agenda, minutes, and action log. These can be a combination of in-person and virtual meetings.
b) Site Survey. We presume the intent is to get a complete, accurate base map of the entire site for use now as well as in the future. Full site survey will include:

i) Building corners, finished floor, property lines, easements, topography, and other expressed surface improvements such as fences and manholes, lagoon water surface, outfall, and both the normal creek level and the apparent high-water mark.
ii) Wetlands were delineated by SGM back in 2020 as part of the outfall project. We will include that delineation in the base map. While not anticipated, SGM can re-delineate if deemed necessary for the construction permitting of this project.

c) Geotech. Geotechnical services will be contracted to a third party, Trautner Geotech. Per the RFP, (6) bores to 25 ft. min. will be advanced around the site.
d) CDPHE Permitting.
   i) We are very familiar with CDPHE staff, water quality regulations, and the design approval process. We use our relationships to facilitate the review process, which can be lengthy. We routinely work with these agencies and know their expectations.
   ii) This project will require a Site Application Amendment. This is an abbreviated process, with just Site Application and Design Approval. It is understood that the Town will pay all CDPHE fees directly.
e) Preliminary Design Considerations for Screening and Grit Removal.
   i) This is an iterative process through which equipment is selected, and the basis for detailed design is established. We combine what we hear at the kickoff meeting with what we learn from the developed base map. We consult with several manufacturers to develop equipment and layout options. Viable options are brought forward to the Town for thorough discussion and vetting. The effort culminates in a Basis of Design Memo that identifies selected equipment, materials, valve type and location, utility crossing, access and maintenance considerations, limits of construction and staging area, and the work plan for implementation. This design memo sets the stage for the final design.
   ii) Utility and Yard Pipe Locating. SGM has in-house SUE experts that will develop SUE Quality Level A base maps. For this project we will utilize third-party hydrovac services to physically locate critical buried pipes and crossings, as requested - assume (10) holes per RFP.
   iii) 30% Design and Opinion of Cost. Preliminary layout drawings of the preferred option will be included in the Basis of Design package. The design will be sufficiently advanced to prove feasibility and provide a general understanding of how improvements will be integrated on the site. This typically consists of a simple site plan, equipment layout, and any relevant building elevations. An Engineer's Opinion of Cost (EOPC) will be developed based on the 30% drawings.
f) Final Design. The final design will comply with CDPHE design requirements and will be stamped by a professional engineer (PE) licensed in Colorado. The general outline for plan production includes:
   i) 1:20 horizontal and 1:5 vertical
   ii) Strict compliance with CDPHE design requirements
   iii) Stamped by PE
   iv) Review sets to be presented to Town and Brad Eaton at 60, 90, 100%.
g) Project Specifications.
   i) CSI Master Format (6-digit) will be used. This format is acceptable to CDPHE.

h) EOPC.
   i) SGM will provide an Engineers Opinion of Probable Construction Cost at 60%, 90% and 100% milestones.

i) Value Engineering. We consider value engineering to be a continual effort. Design constantly evolves as information is gathered, ideas are vetted, and as budget constraints dictate. We are always open to ideas that better a project. Some initial thoughts are:
   i) The RFP indicated a preference for a conventional headworks with equipment inside a building. This is the standard - and definitely the preferred arrangement - but it does cost more to design and build. Depending on Town finances and current construction costs, the Town may need to consider alternate configurations that still achieve project goals. The need to pursue alternatives typically becomes evident early in the preliminary design process as equipment costs are gathered. A few generalized alternate concepts are packaged headworks equipment inside the building, or most economically, eliminate the building, thus saving building, HVAC, and engineering costs. Less complex solutions could result in 10-20% total project savings.
   ii) The scope stated in the RFP requires a high level of review and meetings for this size and complexity of project. Input from staff is indeed necessary throughout, and Town review is extremely valuable at strategic points. A good amount of time and effort will be spent accommodating the stated expectations. Our experience suggests that perhaps we can refine these requirements as the project progresses, with an initial suggestion that perhaps only 60% and final reviews are needed if the Preliminary Evaluation is done properly. Progress meetings could perhaps also be reduced to perhaps only once per month if effective communications are proven.
   iii) The Town should consider adding scope to consider and prepare for the anticipated future EQ and lift station modifications. This does not need to be a large effort at this time, but planning now could significantly ease future implementation. Initial considerations that come to mind are siting, layout, electrical service provision, and pipe connections. A little effort now could save money later.
   iv) We do not know how much the Town has considered future regulations for this RFP, specifically regarding effluent nutrients and Arsenic. There could be synergies for the long term if a larger facility planning effort is performed now. This could significantly alter facility planning, and particularly process decisions, for the long term. This may or may not involve the currently identified biological processes and may or may not create other retrofit options. These future considerations could skew the best long-term plan and cost for the community. As a trusted advisor, SGM recommends that at minimum we have an in-depth discussion about future nutrients and the overarching goals of the town. It is always in the Town's best interests to be out in front and plan for the future. We do not want to be presumptuous about where the Town is presently at with these considerations, but we do want to ensure the Town is heading in the best, most informed direction.
   v) The RFP only requested limited services during construction for bidding, (6) site visits and (2) days of startup observation. In our experience, projects and clients are

much better served with a more extensive list of construction-related services from the engineer. A recommended, more complete set of services would be like those SGM provided on the recent Mancos WTP and Water Tank projects. A few of the additional services recommended include conducting regular construction meetings, reviewing shop drawings; answering contractor requests for information, evaluating change order requests, and field services tailored to provide the "right" amount of field inspection for the project. This requires the involvement of all engineering disciplines.

vi) SGM recommends what we term as post-construction services. The Town should consider adding services for project closeout, preparing record drawings, compiling equipment O&M's, and dealing with warranty claims.

j) Agency Review. This project requires a Site Application Amendment and Plan Approval through CDPHE.

k) Construction Bidding. SGM anticipates providing our usual suite of services for construction bidding. This includes leading a pre-bid conference with a site visit, answering contractor questions, issuing addenda, assisting in bid opening, and evaluating bids with an award recommendation.

l) Construction Engineering. SGM will provide the construction services and limited onsite inspection as requested. Requested services consist of a pre-construction meeting, six (6) site visits at key milestones to evaluate conformance to the project documents, and two (2) day site visits to document the commissioning of screening and grit removal equipment. Site visits at key milestones will be conducted by our staff based in Durango. Commissioning will be observed by one of the project design engineers.

TASK #2

Summary report on TSS and BOD loading to MASBP from the existing 2mm drum screens. Data provided by the Town will be used as the basis for this evaluation.

TASK #3

Summary report of MSABP aerations system evaluation with improvement recommendations and EOPC. The existing facility is permitted for influent hydraulic loading of 0.20 MGD with organic loading of 584 pounds per day. The most notable effluent limit is Ammonia, which varies monthly with the lowest prescribed limit of 3.1 ppm. This signifies the plant must nitrify influent ammonia. Based on EPA records, the plant currently treats about 0.11 MGD during the peak month, and ammonia is typically below 2.0 ppm. This data indicates the plant is adequately handling the current loading…but this performance is at only about 55% of permitted capacity and may not be indicative of performance at full capacity. Several factors affect BOD removal and ammonia conversion, primary among them are the aeration system, detention time, and water temperature. The process lacks thermal protection, i.e., insulation, which is concerning. It is also understood that the current setup lacks aeration control, which can diminish performance and cause excess energy use. SGM will use the existing loadings collected in Task 2 to evaluate the performance potential for the existing MSABP process. If the process is found viable for long-term operation, SGM will make recommendations on improvements necessary to ensure performance over the long run.

TASK #4

EOPC for installation of port plugs as an interim solution to short-circuiting problems. Short-circuiting is a documented concern at the facility. SGM will review remedial options previously identified and make recommendations, with an opinion of cost, for improvements. A challenge with vertical plug flow routing, which is most conducive given the existing basin configuration, is scum trapping. Scum trapping is presently observed in the influent splitter box of the MSABP.

TASK #5

Comprehensive budget-level EOPC to replace existing process with SBR treatment process of the equivalent design capacity of 0.2 MGD. The SBR process was previously identified as a preferred technology by the Town. We agree, it typically is a good, viable option for smaller communities. The final report will include the cost to retrofit to an SBR system, cost to upgrade the MSABP process, and the life-cycle costs for both options.

Schedule

A. The RFP identifies the following project milestones:

a. Final design of Coarse Screening and Grit Removal = August 1. 2023 (for CDPHE review)
b. Pre-bid to follow CDPHE approval. Likely bid for construction start in Mar 2024
c. Remaining tasks under 1.5 = October 31, 2023
   - Summary performance report on 2mm drum screen effluent loading to MSABP
   - Performance evaluation of MSABP and recommendations for improvements with EOPC (must be to get up to “intended 2012 design capacity”). (air system, number of tanks, etc.)
   - EOPC for installation of port plugs for an interim solution to short-circuiting
   - Comprehensive budget-level EOPC to replace the existing process with SBR of equivalent capacity. Include life-cycle cost comparison of SBR and upgraded MSABP.

B. Schedule Concerns

a. The defined timeline generally seems reasonable for the tasks and scope identified. Our experience tells us, however, that projects rarely go according to schedule. Projects often evolve as information is gathered and there are outside influences beyond our control. We will endeavor to work through the unknowns as they arise to maintain the schedule. We will continuously communicate with Town staff, so they are always aware of the project status.

C. Workflow

a. The keys to keeping a project on schedule are knowing the design process, critical points, and effectively managing resources. Getting information early is crucial to meeting the prescribed schedule. To this end, the following efforts will commence immediately upon authorization:
   - Schedule kickoff meeting: this may be a “Zoom” type videoconference to expedite and facilitate all schedules
   - Schedule SUE investigation

- Schedule field survey crew
- Have Town staff start collecting TSS and BOD data after the drum screen and at MSABP outlet
- Schedule Geotechnical investigation
- Begin work with vendors to develop screening and grit options
- Begin work with vendors for process and cost information for both the MSABP and SBR treatment options
- Develop base maps of the project area for layout and tie-in planning. Realistically, a finished base map is a minimum of 6-8 weeks out, and this is the best case because most of this work is done by in-house staff, but there is reliance on third party contractors for potholing

b. Quality Assurance/Quality Control

- Quality Assurance/Quality Control (QA/QC) will play a significant role in providing a final product that will meet the Town's expectations. SGM's QA/QC process ensures all our projects are cost-effective, constructible, and manageable and are completed within budget and on schedule. SGM does not believe it is the Town's responsibility to perform this task and we strive to ensure the final documents we put out are technically correct and error-free. Chad Paulson, the Principal-in-Charge, will ensure that team members maintain responsibility for their assignments throughout the duration of the project.
- Prior to the start of work, an internal project planning conference is held, which includes the key personnel on the project. As the project nears completion there will be two separate reviews. An engineering-specific review will be performed on the design plans by an engineer that has not been involved in the design. This review provides a fresh perspective on the design. The second review will verify that all the different design elements will mesh. This is important to ensure that all the special information on the plans is tied together. The documents are reviewed in detail, and experience is shared on any anticipated "obstacles" that may require special attention or expertise within SGM. This is one of the principal reasons for the diverse backgrounds of staff assigned to this team. The QA/QC effort will also include the review of existing information, as well as any other Town requirements that may apply to this project. In addition, SGM will also review final plans with our subconsultants to review project requirements and ensure a high level of coordination between disciplines.
- SGM's Principal-in-Charge, Chad Paulson, will lead the QA/QC team and will provide input throughout the length of the project. He will provide a complete project review of the final project documents.

Cost and Work Hours

SGM has prepared fee estimates based on the tasks and services requested in the RFP. An itemized breakdown by tasks in included in the Appendix. The level of effort estimated for the project is based on our experience with similar projects. Design effort assumes individual influent screening and grit removal processes located inside a metal building, with appropriate

HVAC, lighting, and electrical provisions. If fewer complex alternatives are pursued, fees will be adjusted accordingly.

The fees presented in our proposal were prepared assuming payment on a time and materials basis. We understand that projects evolve as design and budgets progress, and this contract arrangement is the most equitable for both parties. The fee can be modified if a different contract arrangement is desired.

As requested, the attached SGM rates and fee schedule will be held for the duration of the project.

Fees for potential additional scope items have not been included in our proposal. Costs for additional items are dependent on Town input and preferences. A healthy discussion with Town staff is necessary to clearly define the appropriate scope and fee. SGM will gladly prepare fee estimates for requested tasks after concurrence of scope.

PROJECT DESCRIPTIONS

Representative Projects

The following pages provide a representative sampling of work we have performed, primarily over the past ten years. At one point or another, all of these projects required headworks improvements that the SGM was responsible for. Our collective knowledge will be used to develop a cost-effective solution for the Town of Mancos Wastewater Treatment Facility (WWTF) improvements project. We welcome you to contact our references to hear for yourself the level of professionalism and quality we deliver.

The representative projects presented on the following page were completed by the project team, from project initiation to plant startup. Our proposed leads, Chad Paulson and Brandyn Bair, have been in responsible charge of over $150M in construction with less than 2% change orders. Please do call our references.

SGM's Relevant Wastewater Experience

Wastewater Treatment Facility
2.46 MGD WWTF Nutrient Improvements
Snowmass, CO

After the State of Colorado passed water quality Regulation 85, Nutrient Management Control in 2012, SGM helped Snowmass Water & Sanitation District (SWSD) apply for and receive a planning grant to study the District's treatment facility and develop a facility plan. In 2015 the District received a compliance schedule to meet Reg 85 effluent limits for nitrogen and phosphorus. SGM was subsequently tasked with designing and gaining CDPHE approval for the District's preferred treatment option, an A2O enhanced biological nutrient removal process. Final design included retrofit of existing structures and new construction. The newly configured SWSD WWTF has load equalization, influent pumping, anaerobic reactors, anoxic reactors, aerated nitrification basins, tertiary filtration and UV disinfection. Because of treatment challenges related to load variations in the ski resort community, backup treatment aides such as supplemental carbon feed and alum dosing were included. Construction on this $27M facility began summer 2017, and final completetion of this state-of-the-art facility was achieved in 2020. SGM's design incorporated several innovative solutions that include:

- Re-use of structures, "neighbor friendly" green roofs, carbon based odor control, state-of-the-art facility SCADA for EBNR to maximize biological treatment while minimizing long-term O&M costs
- Construction sequencing to allow staff to self-perform significant portions of construction
- Retrofit of the digestion process to control sidestream return loads

Owner: *Snowmass Water & Sanitation District*
Contact: *Kit Hamby, WWTP Manager, 970.923.2056, khamby@swsd.org*
Estimated Construction Cost: *$23M*
Bid Construction Cost: *$24.8M*
Final Construction Cost: *$23M*

Roaring Fork Water & Sanitation District
Garfield County, CO

SGM has served the RFWSD since 1994. SGM planned and designed the District's first WWTF which was constructed in 1996. SGM has continued to update the District's water and wastewater master plans as appropriate. SGM has designed a .107 MGD expansion of the WWTF that included nutrient removal for Total Inorganic Nitrogen, bringing the capacity of the facility up to .214 MGD. The project included new pre-anoxic basin, aeration basin, post anoxic and re-aeration basins, new clarifier and new digester. Prior to design, an alternatives analysis was completed to vet multiple nutrient removal processes.

Challenges:

- Project Management - it was imperative to keep the existing plant online and treating wastewater
- Site constraints - to ensure the expansion stayed within the existing site boundary
- Flood Plain Issues - existing plant is adjacent to the Roaring Fork River

Benefits:

- Biological nutrient removal facility
- Reuse of existing structures

Owner: *Roaring Fork Water & Sanitation District*
Contact: *Tonya Uren, District Administrator, 970.945.2144, info@rfwsd.com*
Final Construction Cost: *$4.7M*

Wastewater Treatment Facility
New Castle, CO

SGM provided the engineering, surveying and operational expertise for an expansion to the Town of New Castle's existing activated sludge wastewater treatment facility. The new plant improvements are located within the existing facility property and were customized to be constructed without interruption of service.

SGM provided the following tasks:

- Treatment evaluations, permitting, design and construction management of a new 0.6 MGD wastewater treatment facility expansion
- New reactor basins utilizing Kruger's IFAS™ (Integrated Fixed Film Activated Sludge) Process
- New 50'Ø secondary clarifier
- New covered (block CMU with twin tee roof) two stage aerobic digester
- Removing the Town's existing chlorine disinfection equipment and replacing it with UV disinfection units within the existing chlorine contact chamber
- New RAS/WAS pump station building, and associated yard piping
- Start-up and operational consulting services for the new facility

Owner: *Town of New Castle*
Contact: *John Wenzel, Public Works Director, 970.984.0669, jwenzel@newcastlecolorado.org*
Estimated Construction Cost: *$8,948,000*
Bid Construction Cost: *$6,583,000*
Final Construction Cost: *$6,699,300*

Mid Valley Metro District
Basalt, CO

SGM has served Mid-Valley Metropolitan District (MVMD) since working with various stakeholders on its formation in 1986 to provide water and wastewater service to a large swath of the middle Roaring Fork Valley between the towns of Basalt and Carbondale, Colorado. SGM has been intimately involved in all planning, design, and construction efforts since District formation. SGM is the Engineer-of-Record for all District infrastructure, design, and construction. Projects include water (well) source development, finished water storage, water and wastewater treatment, and both the distribution and collection systems. Other SGM services over the years include water system studies, water rate studies, and sewer rate studies. Recent services include distribution system hydraulic modeling and engineering design and construction of improvements for a new, strategically located production well to meet growing demands and solve a hydraulic imbalance in the system.
WWTF Highlights include:

- 0.99 AeroMod Watewater Treatment Facility with Sequox Plus for Ammonia and TIN removal
- Includes (2) trains of the following
- selector tank
- (2) primary aeration tanks
- (2) secondary aeration tanks
- (2) rectangular clarifiers
- (2) Aerobic Digesters
- Dewatering Facitlities includes screw press to produce Class B sludge
- UV Disinfection System (Trojan system)

Owner: *Mid Valley Metropolitan District*
Contact: *Bill Reynolds, Executive Director, 970.927.4077, breynolds@sopris.net*

Wastewater Treatment Facility Expansion
Salida, CO

SGM provided engineering, surveying, construction management, and start-up and operational consulting services for the expansion of the City of Salida's wastewater treatment facility. The expansion replaced the existing Trickling Filter and Rotating Biological Contactor treatment processes. The project included feasibility and rate studies, treatment evaluations, permitting, design, and construction management of new 2.7 MGD wastewater treatment facility.
SGM provided the following tasks:

- Project reused/repurposed several structures
- New treatment processes constructed without interrupting existing plant treatment
- Headworks modifications including new screenings washer-compactor and odor control system
- New reactor basins utilizing Kruger's IFAS™ (Integrated Fixed Film Activated Sludge) Process
- New process building for process pumping, new high-speed turbo blowers, and rotary drum thickener
- Retrofit the existing chlorine contact chamber with UV disinfection and seasonal effluent pump station
- Reuse of existing anaerobic digestion and centrifuge dewatering operations
- Facility master planned for future phosphorus removal

This project was funded through USDA.

Owner: *City of Salida*
Contact: *Dan Poole, WWTP Manager, 719.539.2448, dan.poole@cityofsalida.com*
Estimated Construction Cost: *$12,296,500*
Bid Construction Cost: *$11,368,900*
Final Construction Cost: *$12,406,922**
**includes $270,000 of owner additions*

FEES

Proposal for Town of Mancos

HW Impr RFP

HEADWORKS DESIGN, PERMITTING AND CONSTRUCTION ENGINEERING - Task1

Professional Services Estimate

28-Feb-23

TASK #	TASK & DESCRIPTION	Task Manhours	TOTAL COST BY TASK
1.00	**Project Management**		
1.01	Perform monthly budget/schedule/invoice reviews for project duration	6	$1,158
1.02	Provide project status email updates to client for project duration	8	$1,596
1.03	Client Meetings (kickoff,30,60,90,final)	144	$26,400
1.04	Communication (email, memos, etc) during design	20	$3,440
1.05	Misc. internal project coordination	18	$3,332
	TOTAL MH		**196**
	TOTAL COST PER POSITION		**$35,926**
2.00	**Headworks Design**		
Site Survey			
2.01	Field survey for basemap	20	$4,354
2.02	Survey basemap (office work)	22	$3,388
2.03	SUE (office and field)	152	$24,296
2.04	locates		$2,500
2.05	Potholing		$7,800
2.06	SUE survey	17	$2,904
Preliminary Design (Site Application Phase/30% Design)			
2.03	Civil design (site layout, grading, yard piping)	2	$386
2.04	Process Design	8	$1,544
2.05	CDPHE Reports/Coordination	8	$1,544
2.06	Structural Design	16	$2,864
2.07	Architectural Design	8	$1,320
2.08	Electrical/Mechanical Design	20	$3,580
2.09	QA/QC	12	$2,394
Intermediate Design (Basis of Design Report Phase/60% Design)			
2.10	Civil design (site layout, grading, yard piping)	102	$13,886
2.11	Process Design	40	$6,376
2.12	CDPHE Reports/Coordination	54	$8,630
2.13	Structural Design	20	$3,580
2.14	Architectural Design	12	$1,980
2.15	Electrical/Mechanical Design	24	$4,296
2.16	SCADA/Controls Design	20	$3,580
2.17	Technical specifications	40	$6,992
2.18	QA/QC	8	$1,596
Final Design (Design Review Phase)			
2.19	Civil design (site layout, grading, yard piping)	22	$3,406
2.20	Process Design	48	$7,920
2.21	Structural Design	32	$5,728
2.22	Architectural Design	16	$2,640
2.23	Electrical/Mechanical Design	36	$6,276
2.24	SCADA/Controls Design	24	$4,240
2.25	Technical specifications	42	$7,098
2.26	QA/QC	24	$4,680
Subconsultants			
	Geotechnical Engineering		$15,600
	I/C Controls design		$6,600

	TOTAL MH		**849**
	TOTAL COST PER POSITION		**$141,478**
3.00	**Construction Engineering**		
Bidding			
3.01	Project Management	3	$551
3.02	Pre-bid meeting w site visit	30	$5,640
3.03	Answer contractor questions	28	$5,012
3.04	evaluate bids w/ recommendation	5	$894
Constructiion Services (assume 6 months)			
3.11	Progect Management	9	$1,735
3.12	Project meetings (conf. call)		excl.
3.13	Submittal Review		excl.
3.14	Contstruction Engineering and Coordination		excl.
3.15	Project meeting		excl.
3.16	site visits		
	- Constr. Obs (6 site visits)	36	$5,940
	- Substatnial Completion		excl.
	- Final Completion		excl.
3.17	Startup services (2 days)	20	$3,860
3.18	Project Closeout		excl.
Post-Construction			
3.21	Project Management		excl.
3.22	As-built documentation		excl.
3.23	O&M Manuals		excl.
3.24	Warranty work		excl.
	TOTAL MH		**131**
	TOTAL COST PER POSITION		**$23,632**
	TOTAL MANHOURS		**1176**
	TOTAL MANHOUR COST BY POSITION		**$201,036**
	REIMBURSIBLES (milage, printing, postage, etc.)		
	PROJECT TOTAL		**$201,036**
Notes			
1 - includes civil, process, structural, electrical, HVAC, control, survey and SUE design.			
2 - includes SUE, locates, pothole and survey.			
3 - includes Bidding and limited Construction Engineering services (per RFP)			
4 - includes subconsultants for Geotech, potholing and I/C design			
5 - Assume T&M basis			
6 - Assume metal building with individual screen and grit process			

Proposal for Town of Mancos

HW Impr RFP - MSABP loading evaluation - Task 2

Professional Services Estimate

28-Feb-23

TASK #	TASK & DESCRIPTION	Task Manhours	TOTAL COST BY TASK
1.00	**Project Management**		
1.01	Perform monthly budget/schedule/invoice reviews for project duration	2	$386
1.02	Provide project status email updates to client for project duration	1	$130
1.03	Client Meetings	6	$1,058
1.04	Communication (email, memos, etc) during design	1	$193
1.05	Misc. internal project coordination	1	$193
	TOTAL MH		**11**
	TOTAL COST PER POSITION		**$1,960**
2.00	**MSABP loading evaluation**		
Preliminary Design			
2.01	Coordinate lab and data collection	2	$323
2.02	Review data	5	$776
2.03	Summary Findings Report	11	$1,632
2.04	QA/QC	1	$206
	TOTAL MH		**19**
	TOTAL COST PER POSITION		**$2,937**
	TOTAL MH		**0**
	TOTAL COST PER POSITION		**$0**
	TOTAL MANHOURS		**30**
	TOTAL MANHOUR COST BY POSITION		**$4,897**
	REIMBURSIBLES (milage, printing, postage, etc.)		**$0**
	PROJECT TOTAL		**$4,897**

Proposal for Town of Mancos

HW Impr RFP - MSABP performance evaluation - Task 3

Professional Services Estimate

28-Feb-23

TASK #	TASK & DESCRIPTION	Task Manhours	TOTAL COST BY TASK
1.00	**Project Management**		
1.01	Perform monthly budget/schedule/invoice reviews for project duration	2	$386
1.02	Provide project status email updates to client for project duration	1	$130
1.03	Client Meetings	6	$1,058
1.04	Communication (email, memos, etc) during design	1	$193
1.05	Misc. internal project coordination	1	$193
	TOTAL MH		**11**
	TOTAL COST PER POSITION		**$1,960**
2.00	**MSABP performance evaluation**		
	(biological performance, aeration system review, covers)		
Preliminary Design			
2.01	Process Evaluation	30	$5,156
2.02	Gather and Review data	11	$1,969
2.03	Summary Findings Report	31	$4,958
2.04	QA/QC	1	$206
	TOTAL MH		**73**
	TOTAL COST PER POSITION		**$12,289**
	TOTAL MH		**0**
	TOTAL COST PER POSITION		**$0**
	TOTAL MANHOURS		**84**
	TOTAL MANHOUR COST BY POSITION		**$14,249**
	REIMBURSIBLES (milage, printing, postage, etc.)		**$0**
	PROJECT TOTAL		**$14,249**

Proposal for Town of Mancos

HW Impr RFP - EOPC for MSABP port short circuiting - Task 4

Professional Services Estimate

28-Feb-23

TASK #	TASK & DESCRIPTION	Task Manhours	TOTAL COST BY TASK
1.00	**Project Management**		
1.01	Perform monthly budget/schedule/invoice reviews for project duration	1	$193
1.02	Provide project status email updates to client for project duration	1	$130
1.03	Client Meetings	3	$529
1.04	Communication (email, memos, etc) during design	1	$193
1.05	Misc. internal project coordination	1	$193
	TOTAL MH		**7**
	TOTAL COST PER POSITION		**$1,238**
2.00	**EOPC to resolve basin short cuircuiting**		
	(biological performance, aeration system review, covers)		
Preliminary Design			
2.01	Option Evaluation	18	$2,870
2.02	coordinate with manufacturers	6	$906
2.03	Summary Findings Report and EOPC	13	$2,018
2.04	QA/QC	1	$206
	TOTAL MH		**38**
	TOTAL COST PER POSITION		**$6,000**
	TOTAL MH		**0**
	TOTAL COST PER POSITION		**$0**
	TOTAL MANHOURS		**45**
	TOTAL MANHOUR COST BY POSITION		**$7,238**
	REIMBURSIBLES (milage, printing, postage, etc.)		**$0**
	PROJECT TOTAL		**$7,238**

Proposal for Town of Mancos

HW Impr RFP - EOPC for Options to increase plant capacity - Task 5
(MSABP expansion and SBR conversion options)

Professional Services Estimate

28-Feb-23

TASK #	TASK & DESCRIPTION	Task Manhours	TOTAL COST BY TASK
1.00	**Project Management**		
1.01	Perform monthly budget/schedule/invoice reviews for project duration	4	$798
1.02	Provide project status email updates to client for project duration	1	$130
1.03	Client Meetings	5	$928
1.04	Communication (email, memos, etc) during design	1	$193
1.05	Misc. internal project coordination	0	$0
	TOTAL MH		**11**
	TOTAL COST PER POSITION		**$2,049**
2.00	**EOPC for capacity expansion options**		
	(biological performance, aeration system review, covers)		
Preliminary Design			
2.01	MSABP expansion requirements	26	$4,120
2.02	SBR conversion requirements	26	$4,120
2.03	coordinate with equipment vendors	9	$1,442
2.04	Summary Findings Report and EOPC	30	$4,640
2.05	QA/QC	10	$1,844
	TOTAL MH		**101**
	TOTAL COST PER POSITION		**$16,166**
	TOTAL MH		**0**
	TOTAL COST PER POSITION		**$0**
	TOTAL MANHOURS		**112**
	TOTAL MANHOUR COST BY POSITION		**$18,215**
	REIMBURSIBLES (milage, printing, postage, etc.)		**$0**
	PROJECT TOTAL		**$18,215**

Fee Schedule January 2023

Hourly Rate

PRINCIPAL ENGINEER	$224.00
SENIOR ENGINEER III	$206.00
SENIOR ENGINEER II	$193.00
SENIOR ENGINEER I	$180.00
ENGINEER IV	$165.00
ENGINEER III	$151.00
ENGINEER II	$130.00
ENGINEER I	$112.00
SENIOR PROJECT MANAGER	$164.00
PROJECT MANAGER	$152.00
PRINCIPAL CONSULTANT	$224.00
SENIOR CONSULTANT II	$186.00
SENIOR CONSULTANT I	$158.00
CONSULTANT III	$136.00
CONSULTANT II	$119.00
CONSULTANT I	$107.00
TECHNICIAN III	$92.00
TECHNICIAN II	$78.00
TECHNICIAN I	$66.00
CLERICAL	$84.00
SENIOR CADD/GIS	$152.00
CADD/GIS III	$131.00
CADD/GIS II	$119.00
CADD/GIS I	$97.00
CONSTRUCTION MANAGER	$144.00
CONSTRUCTION TECHNICIAN II	$131.00
CONSTRUCTION TEHCNICIAN I	$119.00
SURVEY MANAGER	$180.00
LAND SURVEYOR	$151.00
SURVEY PROJECT MANAGER	$130.00
SURVEY TECHNICIAN	$108.00
FIELD SURVEY (1-Man Crew)	$172.00
FIELD SURVEY (2-Man Crew)	$229.00
SUE FIELD PROJECT MANAGER	$198.00
SUE FIELD TECHNICIAN	$137.00
EXPERT TESTIMONY	$365.00

REIMBURSABLES

Equipment	Rate
Vehicle Mileage	Current IRS Standard Mileage Rate
ATV / Snowmobile	$125.00/day
UTV	$250.00/day
Flow Tote	$125.00/day

Reproduction

Black & White Plots	$ 5.50/sheet
Mylar Plots	$19.00/sheet
Color Plots	$30.00/sheet
Photocopies	$ 0.25/page

Miscellaneous

10% will be added to all direct expenses, including FedEx, special delivery and courier charges, special consultants, subcontractors, laboratory tests, airfare, lodging, meals, car rental, telephone, outside printing expense, etc. **Interest of 1.5% per month will be charged for invoices past 30 days.**

SGM

We provide innovative, practical solutions
to make our clients successful while ensuring
the health, safety and welfare of our neighbors.
We develop and maintain lasting client
relationships and are
committed to our local communities.

GLENWOOD SPRINGS
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004

CONSULTING ENGINEERS

PROPOSAL

Town of Mancos
Wastewater Treatment Facility Phase 1 Repairs

March 10, 2023

PREPARED FOR: Mancos Colorado

Contents

JVA, Incorporated
817 Colorado Avenue
Suite 301
Glenwood Springs,
CO 81601
970.404.3100
info@jvajva.com

www.jvajva.com

March 10, 2023

Ms. Heather Alvarez, Town Administrator
Town of Mancos
117 North Main Street
Mancos, CO 81328

RE: Town of Mancos Wastewater Treatment Facility Phase 1 Repairs Proposal

Dear Heather and Selection Committee Members:

JVA, Inc. (JVA) is pleased to submit our proposal for the Town of Mancos (Town) Wastewater Treatment Facility (WWTF) Phase 1 Repairs. We have reviewed the Request for Proposal (RFP) and Addenda 1, 2 and 3. JVA visited the site on August 9, 2022 and met you and the operations staff, Terry and Kyle. Our team has thoroughly reviewed the RFP reference documents and I have spoken to Brad Eaton on numerous occasions prior to the release of the RFP. We have a good understanding of what the Town needs to make this project a success.

Why should the Town choose JVA? In addition to technical aptitude and enthusiasm, you can trust JVA to complete the project with the Town's best interests at heart. This repair and evaluation is crucial to the future of wastewater treatment in the Town. We will draw on our vast knowledge of influent pump stations, headworks, and secondary wastewater treatment processes to design the most cost effective, operator friendly, and reliable long-term solution. JVA has provided wastewater treatment plant design services for municipalities throughout Colorado for over 20 years. Recent work with similar communities includes City of Montrose, City of Ouray, Town of Cedaredge, and City of Leadville. We have managed numerous multi-disciplined teams and developed comprehensive construction documents, often with difficult schedules and phased construction, all of which have served our clients well.

JVA assembled an excellent team of engineers that are uniquely qualified to complete the WWTF repairs. Our team has successfully completed numerous headworks projects and two Aquarius Nebula treatment plants similar to Mancos. We are partnering with Swiftwater Solutions, LLC to assist with the secondary treatment evaluations due to their wastewater operations expertise and close proximity in Ridgway, Colorado.

We understand the Town's needs and goals for this project and take no exceptions to the RFP. Please contact me directly to further discuss this proposal. On behalf of JVA, we are excited to work with the Town of Mancos and develop a long-term working relationship. I can be reached at jmcgibbon@jvajva.com or 303.763.0251.

Sincerely,
JVA, INCORPORATED

By: _____
Josh J. McGibbon, P.E.
Vice President

JVA, Incorporated (JVA) thanks the Town of Mancos (Town) for the opportunity to present our team and qualifications for Phase 1 of the Wastewater Treatment Facility Repair Project. These qualifications are based on the requirements outlined in the Request for Proposals (RFP) issued January 9, 2023 and Addenda 1, 2 and 3. JVA looks forward to working with the Town on this important project.

Company Information

Lead Engineering Firm Information

JVA, Incorporated is a consulting engineering firm headquartered in Boulder with offices in Glenwood Springs, Winter Park, Fort Collins, and Denver, Colorado. Established in 1956, JVA celebrates our 67th anniversary of engineering excellence, serving municipalities, towns, special districts, and owners throughout Colorado and nationwide. Our Structural, Civil, and Environmental engineering departments offer highly skilled services which allow us to fully meet your design and construction needs. Our current staff size consists of 140 engineers, designers, and administrative staff. Our staff are licensed here in Colorado and all 50 states.

Company Name	JVA, Incorporated	
Address	817 Colorado Ave. Suite 301 Glenwood Springs, CO 81601	
Phone Number	303.444.1951	
Names of Principals	Kevin Tone, Josh McGibbon, Cindy Ward, Kevin Vecchiarelli, Jeannette Torrents, Derek Pedersen, John McGee, Michael Katalinich, Cody Gratny, Howard McHenry, John Brunner, Paul Hause, Steve Carpenter, Tom Soell, Ian Glaser	
Year Established	1956	
Year Began Consulting Services	1956	
Pending Plans	JVA has no pending plans to sell or merge with another firm. JVA has been 100% employee owned since 1956.	
Comprehensive Listing of Services	Environmental Engineering	For the Mancos project, JVA will provide headworks design and permitting. Additional environmental engineering services JVA provides include booster pump stations, collection system modeling and design, water/wastewater treatment, raw water intakes/diversions/ pumping, distribution system design/upgrades, disinfection systems, cross connection control, buried/elevated storage tanks, storage/mixing improvements, financial assistance applications, construction support services, start-up services, and hydraulic modeling.

	Civil Engineering	JVA provides civil engineering services including asset management, bank/channel stabilization, site grading/planning, stormwater quality control, hydrologic/hydraulic modeling, development review, erosion/sediment control, green infrastructure, GIS mapping and data analysis, floodplain and wetland permitting, utility network modeling, sanitary sewer main and pipe rehab, site planning, track and sports field design, and roadway/ intersection/parking design.
	Structural Engineering	JVA provides structural services including K-12/higher education, government/municipal buildings, healthcare/medical facilities, resort facilities, parks/recreation/camp facilities, historic preservation and forensic engineering, commercial/industrial buildings, residential/senior/multi-family housing, new construction, renovations, adaptive reuse, retrofits, and additions.

Use of Subcontractors/Partners

JVA will utilize the services of subconsultants for the Wastewater Treatment Facility Phase 1 Repairs project. We have a long working relationship with our subconsultants and together we have delivered numerous successful projects. Their applicable information follows. JVA understands the Town will contract solely with JVA.

Engineering Subconsultant Company Information

Swiftwater Solutions
Small Systems Engineering & Operations

Company Name	Swiftwater Solutions, LLC
Address	Ridgeway Office. Mailing Address PO Box 1687,Buena Vista, CO, 81211
Phone Number	719-966-9975
Names of Principals	Al Smith, Paul Young, Joyce Huang
Year Established	2020
Comprehensive Listing of Services	Swiftwater Solutions provides engineering and operations optimization, research and pro-bono work, and governmental operations and finance services. Services include drinking water systems, sanitation infrastructure development, and training/ community development. Swiftwater will provide most of the report work for this project, with assistance from JVA as necessary. Swiftwater will also attend onsite meetings and construction management.

Survey Subconsultant Company Information

GOFF
ENGINEERING + SURVEYING INC

Company Name	Goff Engineering and Surveying, Inc.
Address	126 Rock Point Dr. Suite A, Durango, CO 81301

Phone Number	970.247.1705 x01
Names of Principals	Rob Trudeaux, Rob Harries, Bill Hickam, Brian Boniface, Tom Engel
Year Established	1978
Comprehensive Listing of Services	Goff Engineering and Surveying, Inc. is a civil engineering, structural engineering, and surveying firm located in Durango, Colorado. Goff will provide the project team with personalized, efficient, and quality consulting services to complete the project from concept design through construction completion.

Mechanical Subconsultant Company Information

Company Name	Bighorn Engineering
Address	386 Indian Road, Grand Junction, CO 81501
Phone Number	970.241.8709
Names of Principals	Blaine Buck, Shawn Brill, Mark Harrington
Year Established	2003
Comprehensive Listing of Services	Bighorn Consulting Engineers is a mechanical and electrical engineering firm dedicated to high quality engineering services for commercial, educational, institutional, and residential building clients. Bighorn focuses on minimizing energy use and maintaining sustainability efficiency in all projects.

Geotechnical Engineering Subconsultant Company Information

Company Name	Terracon
Address	1213A N Hwy 491, Gallup, NM 87301
Phone Number	505.722.5711
Names of Principals	Michael Anderson
Year Established	1980
Comprehensive Listing of Services	Terracon has previously conducted multiple geological explorations at the site and has gained familiarity with the expected subsurface soil and bedrock conditions.

Electrical Engineering Subconsultant Company Information

Company Name	Browns Hill Engineering and Controls
Address	P.O. Box 53, Hesperus, CO 81326
Phone Number	970.903.0783
Names of Principals	Ted Wille, Matt Ballard, John Walker, Josh Johnson, Charles Page
Year Established	2000

Comprehensive Listing of Services	Electrical Engineering consulting firm and Controls System Integrator headquartered in Littleton with branches serving southwest Colorado and I-70 corridor. Browns Hill has an office in Durango and that team presently does controls work for the Town of Mancos.

Minimum Mandatory Qualifications

JVA is providing project manager Adam Racette, PE, principal Josh McGibbon, PE, and technical lead John McGee, PE who are all Licensed Professional Engineers in the State of Colorado each having more than ten years' experience with wastewater treatment design.

These team members, both individually and combined, have successfully completed well over three wastewater treatment design projects each over the last ten years of similar scope and scale and are supported by project engineers with similar experience. We encourage the Town to look over resumes for each team member provided in the Appendix of this document for information regarding specific projects.

Evaluation Criterion

#1 Company and Personnel Experience

Customer Service Philosophy

We are committed to excellence in our service to all clients. As engineers we are dedicated to superior design, and understand the need to communicate effectively, work as a team, and complete projects on time. JVA provides our clients with creative thinking, design sensitivity, and cost-effective engineering. Maximizing resources, meeting deadlines, and being sensitive to your needs are our goals. Our project manager, Adam Racette, is located in Glenwood Springs and our team will be supported by subconsultant Swiftwater Solutions, who all will be available for site visits at a moments notice. A detailed description of how the project will be managed is included in the following sections.

Experience, Organization and Technical Qualifications

JVA's expertise with wastewater infrastructure projects include:

- Headworks including screening and grit removal
- Influent Pump Stations
- Conventional and extended air activated sludge
- Biological nutrient removal (BNR) (Reg. 85 and 31)
- Nebula™ MultiStage Biofilm System (MSABP)
- Sequencing batch reactors (SBR)
- Membrane bioreactors (MBR)
- Moving bed bioreactors (MBBR)
- Activated Granular Sludge (AGS)
- Integrated Fixed Film Activated Sludge (IFAS)
- Lagoon systems
- Constructed wetlands

- Biosolids stabilization, thickening, dewatering
- BioWin modeling
- Odor control
- Tertiary treatment
- Disinfection processes
- Process automation

We have successfully completed wastewater treatment facility expansions and new facilities for communities including the Town of Cedaredge SBR, Crested Butte South Metro District IFAS, Idaho Springs WWTP AGS, West Jefferson Metro District WWTF BNR Expansion, City of Ouray MBBR BNR WWTP, Mountain View Villages SBR, Roundup River Ranch MSABP System, and the C Lazy U Ranch MSABP System.

Our wastewater expertise encompasses:

- Facility evaluations
- Growth and flow projections
- Master plans and CIP development
- Treatment alternatives analysis and selection
- Engineering reports to support site applications
- NFRWQPA Utility Plan preparation
- Discharge permitting assistance
- Preliminary through final design document preparation
- CMAR Design Evaluation to establish GMP
- Bidding and construction services
- Funding assistance

Key Personnel

JVA has assembled a team of highly skilled and well-regarded engineers to best serve the Town. Our project success is a result of close coordination and communication with the Town. JVA's environmental engineering team has a deep bench with 45 team members who can all assist if and when needed. Bios for each key team member follow. An organization chart can be found following the bios and resumes for each team member can be found in the Appendix.

Josh McGibbon, PE Principal-in-Charge

Josh McGibbon will be the Principal-in-Charge for the project. He will act as primary management liaison for contracts between JVA and the Town. Josh's primary responsibility is to review the project schedule and budget, attend reviews and workshops with the Town, commit project resources, and provide technical oversight to the design team. Josh will head the JVA team based on his strong background in wastewater treatment as well as his environmental manager role. Josh has gained significant engineering planning and design experience with a special expertise in project financing in his 20-year consulting career. He has been the Engineer of Record for the planning and design of numerous new wastewater treatment plants, expansions and retrofit projects. Josh will be fully available for the contract duration.

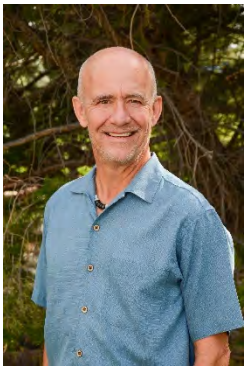
Adam Racette, PE Senior Project Manager

Adam will be the project manager for this project. Adam has a diverse background in planning, permitting, engineering design and construction management. His projects include lift stations, water distribution systems, collection system design, rehabilitation projects, pump stations,

water treatment systems and wastewater treatment plants. He excels at problem solving and providing innovative designs for unique engineering challenges. Based in Glenwood Springs, Adam has experience as a consultant and city engineer which provides him with a well-rounded perspective. Adam will be fully available for the contract duration.

Anna Moderski, PE
Senior Engineer

Anna will be the senior engineer for this project, providing technical support. Anna has spent her entire career in the field of industrial and municipal water treatment and management. Anna has experience in hydraulic modelling of water distribution and collection systems, process modelling of water and wastewater treatment systems, retrofit of water and wastewater systems, specifications, permitting and regulatory negotiations for feasibility studies, conceptual design, detailed design, construction and operations and maintenance of systems in the water and wastewater industry. Anna will be fully available for the contract duration.



John McGee, PE
Technical Lead

John McGee has over 34 years of experience with planning, design, construction, evaluation and operations of water and wastewater treatment plants. For this project John will work with the project team to provide technical support in evaluating and determining feasible repairs for the WWTF and to assist with planning and budgeting. Prior to JVA, John was the water treatment manager and project manager for the City of Loveland where he supervised operation and lab personnel and managed over $24 million of capital and O&M projects. He will be a valuable technical resource in evaluating treatment technologies and strategies. John will be fully available for the contract duration.

Chelsea Fagan
Project Engineer

Chelsea is an environmental engineer with six years of experience in the water and wastewater industry where she has worked on a variety of projects of primarily focusing on water distribution and wastewater collection system, treatment process design, and construction administration. She has worked closely with clients through all phases of projects including planning and funding, design, and construction. Her project work includes water treatment plant upgrade design for the Town of Crested Butte, construction administration for several Town of Crested Butte utility projects and many on-call tasks. Tasks included, but are not limited to, funding and compliance verification, construction services, design tasks and evaluations. Chelsea is based in Glenwood Springs and will be fully available for the contract duration.

James Cochran, PE
Senior Project Engineer

James will be the senior project engineer for the Mancos project. James has eight years of experience in wastewater design, permitting, and construction administration. He specializes in

onsite and decentralized wastewater treatment systems. James is excited to work with the Town and to help provide a sustainable wastewater solution for repairs. James will be fully available for the contract duration.

John Podeyn
Construction Services Manager

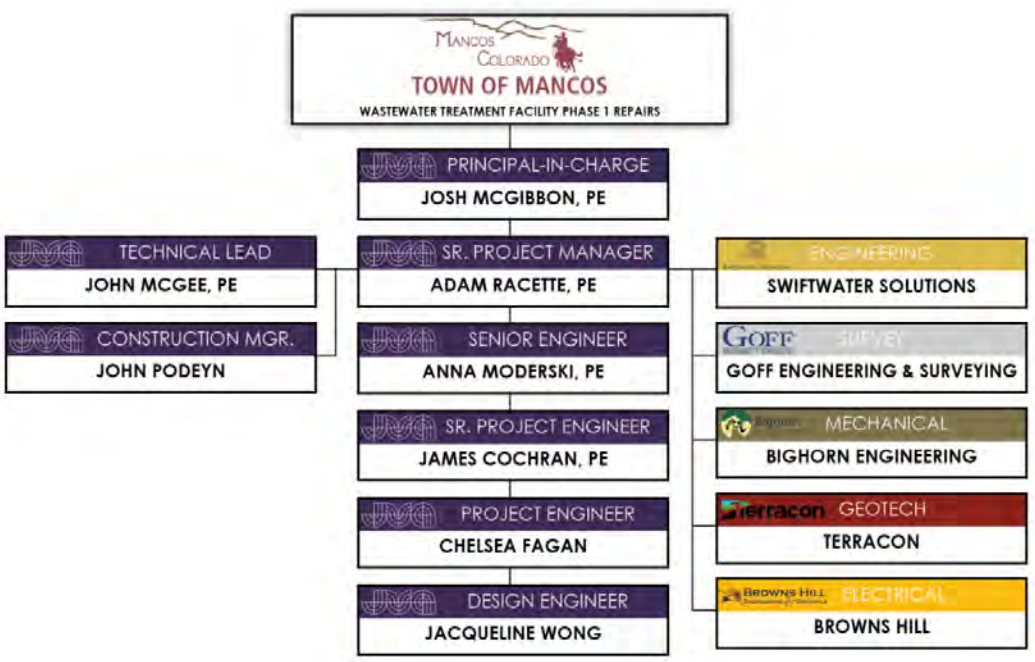
John will provide feasibility, constructability and cost estimating services as well as oversee the construction management for this project. He is based in Glenwood Springs and brings over 25 years of experience in the industry, with extensive knowledge of working with CMAR contracts, CPM scheduling, cost estimating and control and construction oversight. John has worked on numerous water and wastewater related projects across the state including a rebuild of the Dillon Valley District's Water Plant, Copper Mountain Water Storage Tank and the City of Gunnison's RV Dump Station. He is a skilled construction manager, developing alternatives and solutions to project challenges and issues and meeting quality and timeline goals and objectives.

Representative/Similar Projects

Please find representative projects of similar nature as required in the Minimum Qualifications section in the appendix of this project. Projects include:

- C Lazy U Ranch Water and Wastewater Treatment Facilities
- Roundup River Ranch Water and Wastewater Treatment Systems
- Town of Cedaredge Wastewater Treatment Facility
- Leadville Wastewater Treatment Plant
- Montrose Wastewater Treatment Facility/Headworks
- Ouray Wastewater Master Plan and Wastewater Treatment Facility Expansion

Organization Chart



Project Management, Communication Methods, and Timeline

Managing the design and engineering process starts with the development of a detailed Work Plan. The Work Plan identifies the goals of the project, the team, roles, communication, deadlines, deliverables and all other aspects of the project. The Work Plan will be shared with Town Staff and updated throughout the project. The Work Plan will also include a detailed workload breakdown including hours for each task and a schedule developed using Microsoft Project. In order to manage cost, JVA incorporates BillQuick cost reporting software into our project management, which allows us to monitor the project design budgets on a weekly basis or even daily if needed.

JVA achieves effective project management to ensure projects are completed within budget and on-time by utilizing several tools including:

- A Project Work Plan
- CPM project schedules
- Weekly project meetings with agendas, action items and minutes
- Monthly face-to-face client meetings to review all current and future projects
- QA/QC checklists and internal reviews
- Frequent communication including emails, phone calls and texts
- Superior customer service and responsiveness

JVA is very proactive in our approach to project management throughout the project, JVA's project manager will regularly report and hold work sessions with the Town's project manager. This will include a minimum weekly telephone contact and regular progress reports. JVA's project manager will also act as the client manager and perform the following roles:

- Manage the interface between JVA and the Town to ensure the product is of a consistent and high quality
- Ensure effective lines of communication are established and maintained
- Plan and program JVA inputs to ensure efficient and effective delivery of any project
- Provide regular reports in a format agreed with the Town's Project Manager
- Remain fully aware of the status of all works so that changes to scope, budget or schedule can be addressed and, if necessary, brought to the attention of the Town
- Ensure all documents issued by JVA have been verified in accordance with the Project Quality Plan
- Ensure all invoices have sufficient detail to demonstrate that accepted staff have worked on projects in the proportions as offered
- Ensure contract issues are resolved in a timely and efficient manner

We believe the key to maintaining project status is to meet with the Town on a regular basis. We often propose bi-weekly progress meetings as a productive and effective time to solicit input from the and review the documents during key decision points in the process. During all projects where schedule is an issue, JVA will always look for ways to reduce the schedule's critical path by simultaneously performing tasks that do not rely on one another. We believe the key to good cost and schedule tracking is communication and will meet frequently as a project team to coordinate as the project progresses.

#2 Project Approach/Scope of Work

Project Understanding

JVA understands the Town of Mancos (Town) is requesting written proposals from qualified firms to provide wastewater treatment facility design services for Phase 1 of the Wastewater Treatment Facility Repair Project. In general, this project (Phase 1) begins the overall Repair Phase of the Town's Wastewater Treatment Facility (WWTF) Upgrade Project that was initially commissioned in 2012.

JVA has reviewed the RFP and addenda for the Phase 1 and have provided a detailed and concise project understanding and approach to complete this project efficiently and effectively.

JVA has also reviewed the following reports that were included with the RFP to familiarize ourselves with the current WWTF operational and maintenance issues. The key documents we reviewed include:

1. *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020
2. *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Supplement to Engineering Opinion Report, Dated July 5, 2020,* Prepared by Eaton Engineering, LLC, February 23, 2021
3. *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Amended Supplement to Engineering Opinion Report, Dated July 5, 2020,* Prepared by Eaton Engineering, LLC, March 10, 2021
4. *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Second Supplement to Engineering Opinion Report of July 5, 2020, Current Report Dated October 25, 2021,* Prepared by Eaton Engineering, LLC, October 25, 2021

In addition to these documents, JVA also reviewed various rebuttals to the Eaton reports noted above, along with Eaton's response.

Project Goal and Objectives

JVA understands the overall goal of the repair project is to achieve reliable, long term plant operations that meet the effluent requirements of the Town's discharge permit, without the use of the original lagoon system for additional treatment.

JVA also understands funding to achieve the overall goal is limited, so the WWTF repairs will be prioritized in phases as project funding becomes available. The focus of this proposal is the permitting, engineering, design, construction administration and construction observation services for Phase 1 of the work, which is outlined below.

We understand the repair work must follow the Concept of Repair outlined in Eaton's initial report titled: *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report* Prepared by Eaton Engineering, LLC, July 5, 2020.

JVA acknowledges and agrees that we have thoroughly reviewed the key documents previously provided and the consultant agrees to follow the general intent of the Concept of Repair as outlined in the Eaton report referenced above unless otherwise directed by the Town of Mancos.

As noted in the Eaton reports, overall repair of the WWTF may include replacing the Multi-

Stage Activated Biological Process (MSABP) with a conventional Sequencing Batch Reactor (SBR). Replacing the MSABP with an SBR will be determined through a benefit cost analysis performed as part of this proposal. Interim repair phases will focus on ancillary treatment processes that are required regardless of the secondary treatment method utilized.

The Phase 1 repair work will include the following scope of work:

Preliminary Treatment - Coarse screening and grit removal addition

Permit, design, construction administration, and construction observation of new coarse screening and grit removal equipment in a new Headworks Building. The new Headworks building will be located upstream of the existing lift station and should be housed in a post frame or steel structure for protection. Both the coarse screen and grit removal equipment will be automated and self-cleaning.

Primary Treatment – Existing Drum Screen Upgrades

The Town replaced the original 1 mm drum screen with a 2 mm screen, which helped eliminate the flooding events that had been routinely occurring at the headworks building. This repair was recommended by Eaton in the *Concept of Repair* document.

JVA and their subconsultants will analyze the sampling results obtained by Mancos staff to determine the change in solids and BOD5 loading at the influent to the MSABP as a result of the 1 mm to 2 mm screen replacement/upgrade. We will also analyze the data presented by Eaton in the *Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Second Supplement to Engineering Opinion Report of July 5, 2020, Current Report Dated October 25, 2021,* Prepared by Eaton Engineering, LLC, October 25, 2021.

The results of the evaluation will be presented in a letter report to the Town.

Secondary Treatment – MSABP Short Circuiting Repair

Based on review of the Eaton Reports, JVA understands it is Eaton's opinion that the MSABP exhibits short circuiting issues within each treatment train. The report also included a repair concept developed by Eaton to eliminate short circuiting within each treatment train as well as within each treatment cell. We understand this repair work will be deferred to a subsequent repair phase should the MSABP treatment technology be retained.

It appears an interim short-circuiting repair could be accomplished within each treatment train with the installation of port plugs in the appropriate locations at the top and bottom of each treatment cell. JVA and its subconsultants

will evaluate the cost of installing port plugs as an interim resolution to the existing short circuiting. The cost estimate will include permitting (if required), material procurement, installation, and oversight by the consultant.

Secondary Treatment – MSABP Repair of Auto Aeration System

As part of the Phase 1 work, JVA and its subconsultant will perform a detailed evaluation of the existing MSABP aeration system. The evaluation will include the estimated costs to bring the aeration system into a state of proper operation. The results of the evaluation will be provided in a letter report to the Town.

Secondary Treatment – MSABP VS SBR Benefit Cost Analysis

Based on review of the Eaton report, Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Amended Supplement to Engineering Opinion Report, Dated July 5, 2020, prepared by Eaton Engineering, LLC, March 10, 2021, we understand it is Eaton's opinion the existing MSABP is significantly undersized and does not have the capacity for the intended service life of the original WWTF Upgrade Project.

Therefore, the overall repair of the WWTF may include replacing the MSABP with a conventional Sequencing Batch Reactor (SBR) having a capacity equivalent to that of the existing WWTF commissioned in 2012.

The benefit cost analysis will include the construction costs for the additional MSABP treatment trains that would be required to achieve the intended design capacity of the existing WWTF commissioned in 2012. It will also include a 20-year net present worth evaluation of the total cost of ownership of both the MSABP and SBR technologies.

Tasks that will not be completed with the Phase 1 scope of work:

- Flow equalization tank, associated equipment and lift station VFD programming
- MSABP cold weather exposure mitigation
- MSABP effluent clarifier addition

Scope of Services

JVA has provided a list of work tasks for the addition of coarse screening and grit removal along with tasks required to fulfill the overall objectives. More information on the project schedule, including a comprehensive work breakdown structure (WBS) with cost details, is available in a separate section of the proposal and we encourage the Town to look over conceptual figures provided in the Appendix of this document.

JVA understands Eaton Engineering, LLC will function as the Town's representative on an "as needed" basis and will be available to answer project questions, assist with review of proposals, review design drawings and reports, along with providing general guidance on the WWTF Concept of Repair.

Project Meetings

JVA will conduct a project kick-off meeting to review the project goals, obtain Town staff and Eaton Engineering's input, gather information and discuss overall project objectives. JVA plans to conduct biweekly project status meetings with Town staff to gather and verify data during the design stage in order to limit review times at major milestones. Meeting agenda and minutes, as well as action item logs, will be prepared by the JVA team and distributed to attendees.

Site Survey

JVA's subconsultant will survey the WWTF site where the new Headworks Building is proposed in order to assist in the design of the coarse screening and grit removal addition. The site survey will also include areas around the facility suitable to accommodate the installation of an SBR or the additional MSABP treatment trains.

The survey will identify property lines, easements, underground utilities, ground elevations and topography, structures, fences, and other structures that may be impacted by the plant repairs. The survey will also include locations of geotechnical borings and potholes.

Geotechnical Investigation

JVA's subconsultant will provide a standard geotechnical investigation and report for the design of the new Headworks Building that will house the new coarse screening and grit removal equipment. The geotechnical investigation will also review two additional locations that will be determined with Eaton and the Town's input that could be suitable to accommodate the installation of an SBR or the additional MSABP treatment trains.

The geotechnical investigation will include soil stability, groundwater, and bedrock elevations. JVA and their subconsultant have assumed a total of 6 borings drilled to a minimum depth of 25 feet. Soil samples will be collected and tested in accordance with standard practices. A unit cost for borings and additional mobilization if two trips are required have been provided with the WBS.

Project Permitting

JVA will coordinate and provide all required project permitting through the Colorado Department of Public Health and Environment (CDPHE) for the new Headworks Building. JVA has assumed the new Headworks Building will require a Site Application Amendment, Process Design Report (PDR), and Final Plans and Specifications permitting through CDPHE. All permitting fees will be coordinated by JVA but paid for directly by the Town.

Preliminary Design Considerations

JVA will work with the Town to determine the operational and maintenance preferences regarding the coarse screening and grit removal design. This will include:

- Equipment functionality
- Material type, coatings, and linings selections
- Valve types, sizes, locations, and design
- Utility crossing design plans
- Access, construction limits, and staging areas
- A work plan to include bypass piping during construction
- Surface restoration requirements

Yard Piping and Utility Locating

JVA's subcontractor will pothole yard piping and utilities crossing using Hydrovac excavation equipment that will be affected by the new Headworks addition in accordance with SUE Quality Level A as requested by the Town. This shall include physically locating the potholes via survey data to be placed on the plan set. JVA has assumed a total of 10 potholes. The WBS provides a unit cost per pothole, enabling the adjustment of costs based on the actual number of potholes required

Preliminary Construction Drawings and Engineer's Estimate of Construction Costs

JVA will prepare 30-percent design drawings that include plan sheets which identify the general location of the facility additions, the associated piping, and necessary utilities. JVA

will also include a preliminary bypass piping plan for the construction of the new Headworks addition and an erosion and sediment control plan.

JVA will prepare a Class 3 Cost Estimate as part of the 30-percent design package. The Class 3 Cost Estimate has an accuracy of -15% / +20% and is defined by the AACE as follows. Class 3 estimates are generally prepared to form the basis for budget authorization, appropriation, and/or funding. As such, they typically form the initial control estimate against which all actual costs and resources will be monitored.

The design package will be submitted to the Town and Eaton for review. JVA will attend a workshop with the Town to review their comments.

Prepare 60-Percent Construction Drawings and Engineer's Estimate of Construction Costs

JVA will prepare a 60-percent design package that includes updated drawings and a Class 3 Cost Estimate based on the 30-percent review comments and input from the Town and Eaton. The design package will be submitted to the Town for review. JVA will attend a workshop with the Town to review their comments.

Prepare Final Design Drawings and Engineer's Estimate of Construction Costs

JVA will prepare a 95-percent design package that includes updated drawings and a Class 3 Cost Estimate based on the 60-percent review comments and input from the Town and Eaton. The design package will be submitted to the Town for review. JVA will attend a virtual meeting with the Town to review their comments and incorporate them into the final bid package.

Prepare Specifications

JVA will prepare technical specifications and a bid tab form for this project. The technical specifications will be prepared in the 16 Division CSI format. We understand the Town will provide the contract general conditions and front-end documents as well as advertise and distribute plans and specifications to the prospective contractors.

Value Engineering

Throughout the project JVA will look for ways to minimize project costs and optimize the project value. JVA will work with our in-house construction services manager, John Podeyn, to provide a value engineering and constructability review based on his 20 years of wastewater construction experience.

Agency Reviews

We will facilitate the reviews by CDPHE and obtain necessary permits for construction and implementation. The anticipated permitting steps include a Site Application Amendment, Process Design Report, and Final Plans and Specifications submittal for the new Headworks addition. All permitting costs will be the responsibility of the Town. Permits will be submitted to the Town for review prior to submission. Virtual meetings will be held to review Town comments.

Pre-Bid Conference and Site Meeting Support

JVA will facilitate a pre-bid meeting to provide project overview and answer questions from qualified bidders. An agenda and meeting notes will be prepared to document the meeting. A site visit will follow the meeting, so bidders can review field conditions. JVA will assist the Town with issuing Addendum(s) prior to the bid deadline.

Construction Observation Services

Construction observation services will be provided by JVA for the new Headworks addition. The work will include weekly construction progress meetings during active construction. JVA has assumed 16 weekly construction meetings and six total site visits that will occur during major project milestones.

JVA will also review equipment and material submittals, RFIs, and change orders as part of the construction services scope.

We will use the Contractor's as-built plans to update the original design drawings and provide record drawings to the Town.

Observation of Commissioning Services

JVA plans to attend the equipment commissioning and will prepare a report documenting the activities and results of the commissioning. We have assumed a two-day site visit to observe the commissioning of the coarse screening and grit removal system.

Influent Evaluation for Drum Screen Improvements

The Town of Mancos was experiencing flooding events in their headworks following the installation of 1- mm micro-screens as part of the original MSABP project. Based on the recommendation from the Town of Mancos, Colorado, Wastewater Treatment Facility Upgrade Project, Engineering Opinion Report (Eaton Report) Prepared by Eaton Engineering, LLC, on July 5, 2020, the Town upgraded their existing 1-mm drum screens with 2-mm drum screens. The larger screen size has, to date, eliminated the flooding issues within the facility.

To better understand changes to the water quality of the influent from to the larger screen size, Town has collected influent samples and tested for solids and BOD5. A review and analysis of historical sample results collected by Town Staff will be performed. Additionally, data from the appropriate Eaton Reports will be included in this analysis. Based on the available data, JVA and our subconsultant will provide a letter report summarizing the changes in influent loading (TSS and BOD) due to the installation of the 2-mm drum screens and provide updated flow and loads that will need to be treated by either the MSABP or SBR.

Since the specifics of the influent data has not been provided by the Town, additional sampling may be needed. Based on permit effluent limits, current and future, it is recommended to have a good understanding of your influent BOD, TSS, FOG, and ammonia concentrations.

Our project approach for this task includes evaluation of all existing data. Based on the informational goals desired by the Town, JVA

and our subconsultant will provide a list of additional data needs and present them to the Town. If the collection of additional information is agreed upon, it is assumed that Town staff would collect the samples and send them to the lab for analysis. If no additional information is needed, then we can proceed with the existing data evaluation and summarize the influent loading characteristics that would need to be treated by the MSABP. It should be noted that the installation of course screening and/or an equalization basin would impact the results of this report

MSABP Repair of Auto Aeration System

Based on the summary provided in the Eaton Report, the existing fine bubble air diffuser system has not worked reliably since Project commissioning. The system is currently operated in manual mode with full air delivery provided to each treatment cell.

The diffusers are supplied by blowers that provide varying volumes of air based on the DO sensors and VFD control loop integrated into the system. If working properly, varying DO concentrations would be targeted to the different treatment cells/stages since the population of diverse microorganisms have preferences for different DO concentrations. A properly operating system would allow for reduced aeration energy consumption which would decrease annual O&M costs. Also, targeting ideal DO and pH ranges in different stages of the treatment process can promote the growth of certain microbial populations in the sequential treatment stages that are advantageous to the over treatment performance of the MSABP.

Although the issue causing the system malfunction has not been identified, it has been hypothesized that the automated aeration system is not working properly due to biofouling of the DO probes. The goal of this task is to identify the reason behind the system malfunction and identify how to fix the system so it can work as intended.

Our project approach will include operator interviews and a site visit(s) to visually inspect the DO probes and associated equipment for the aeration system. JVA and our subconsultant will also evaluate historic DO data (if available) to compare the aeration system and DO concentrations for when the aeration system was operating properly versus when the system was operating in manual mode. A review of the equipment installed and their specifications, the automation loop, and recommended DO concentrations for each stage, along with any other design documents provided by the initial engineering team and vendor, will also be reviewed to better understand the system. We will provide a report summarizing our findings, recommendations for system optimization, and a cost estimate for bringing the system into a state of proper operation. The cost estimate will include vendor quotes and references to clients using their equipment for wastewater treatment to ensure a more robust DO probe is recommended.

Potential challenges with this task arise if biofouling is not the issue and the faults are electrical, SCADA, or coding related and may require specialty teams to diagnose the issue.

Short Circuiting Repair: Port Plug Installation and Cost Estimate

The Town's MSABP secondary treatment system has experienced short-circuiting, resulting in substandard hydraulic retention times (HRTs) and poor wastewater treatment. The Eaton Report describes possible remedies to the short-circuiting, including installing headers to distribute flow more evenly and eliminate short-circuiting. A review of the Eaton Report and the associated design drawings indicates that

24”x24” ports were installed at the top and bottom of each treatment cell within the MSABP. Having open ports at the top and bottom of each treatment cell allows the wastewater to preferentially travel along either the surface or along the bottom of the treatment cells, bypassing the attached growth media and resulting treatment.

Plugging of selected ports is recommended to reduce the amount of short circuiting within the MSABP treatment trains. It is proposed that every other port within each MSABP treatment train be plugged to allow wastewater to pass through the treatment cells and over the attached growth media in an over/under and serpentine manner. It is also proposed that since the impact of these repairs is currently unknown, although suspected to be beneficial, a temporary, low-cost solution should be installed in lieu of a more permanent repair. For example, nylon or pvc sheets could be bolted over the holes and sealed in a manner that prevents wastewater from flowing through the ports. Town operations staff will be consulted to determine if the proposed interim solution is compatible with the MSABP treatment trains and/or if it is a project that can be implemented by Town operations staff vs. hiring a contractor to install the proposed port plugs.

A detailed, Class 3 cost estimate for this repair will be prepared in accordance with Association for the Advancement of Cost Estimating (AACE) and submitted for review by Town staff. Considerations in the cost estimate will include the location and number of port plugs to be installed, the types of plug materials and anchoring systems recommended, and the installation requirements of the proposed repair. Costs will also be evaluated for the work to be either self-performed by Town staff or performed by a contractor. Self-performed work will be based on the preference of the Town staff and their capacity to perform the work.

Cost Benefit Analysis of Upgraded / Expanded MSABP vs. Replacement with Equivalently Sized SBR

The Town would like to understand the cost to benefit of repairing and expanding their existing MSABP versus replacing the process with a SBR. As noted in the reports and supplemental documentation provided by Eaton, the MSABP has experienced numerous challenges since its commissioning, including, but not limited to:

- Lack of preliminary treatment including coarse screening and grit removal
- Influent lift station fouling
- Lack of proper flow equalization
- Improperly applied primary treatment including micro-screening and grit classification
- Short-circuiting in the secondary treatment trains
- MSABP is undersized to meet the design flow of 200,000 gal/day and does not provide hydraulic retention times (HRT) adequate for the design flows/loadings
- Malfunctioning aeration system
- Overloaded tertiary disk filter and/or lack of additional tertiary treatment including clarifiers
- Failing UV disinfection system
- Lack of proper cold-weather protection around the MSABP units

Although the RFP explicitly states that several of these deficiencies will be evaluated at a later date, budget-level cost analysis will be provided for all items listed in the RFP as they are considered necessary for the long-term success of the WWTF should the MSABP be retained or replaced by an SBR. The following assumptions are made for both MSABP and SBR technologies:

- Both MSABP upgrades/expansion and a new SBR technology will be capable of treating an average design flow of 200,000 gallons per day. An organic loading rate of 584 lbs/day at an assumed BOD influent concentration of 350 mg/L, and a TSS loading rate of 375 lbs/day at an assumed influent concentration of 225 mg/L was used for the initial design. However, based on the Eaton Report, these values may not be representative of the WWTF influent.
- Design organic and TSS loading rates will be re-evaluated for both MSABP and SBR technologies
- The new preliminary treatment and headworks will be constructed and utilized regardless of whether the MSABP is retained or replaced by an SBR.
- Both MSABP and SBR technologies will meet CDPHE Design Criteria for Domestic Wastewater Treatment Works, most current version.
- A desktop analysis for flow equalization will be included for both the MSABP and the SBR technologies.
- Existing primary treatment including the newly installed 2-mm drum screen and grit classifier will remain for both the MSABP and SBR analysis.
- Solids separation will be included only for the MSABP.
- SBR treatment typically has a clarification/decant step as one of the final sequences of the process.
- The existing tertiary disk filter and UV system will remain for both the MSABP and SBR technologies.
- Dewatering and solid handling / disposal will be required for both MSABP and SBR technologies.

A Class 5 cost estimate in accordance with the AACE for each of the proposed technologies will be provided. A Class 5 cost estimate generally has an accuracy of –30%/+50%. Additionally, a 20-year net present worth evaluation of the total cost of ownership of each project will be provided. This evaluation will include such considerations as capital cost, operations and maintenance, and annual inflation. Information provided by Town staff, equipment manufacturers, contractors, and information contained in the Eaton Report will be incorporated into this cost benefit analysis.

Potential challenges for this analysis lie in the comparison of two separate secondary treatment technologies. The MSABP is a continuous flow, attached growth technology; whereas the SBR is a batch- style, activated sludge process. Each type of facility has its own administrative, operation, and maintenance requirements in addition to different facility classification requirements as outlined by the Water Quality Control Division's (WQCD) Regulation 100 - Water and Wastewater Facility Operators Certification Requirements. To mitigate these challenges, it is proposed that a non-monetary comparison of the two alternatives be included in this analysis.

The findings of this analysis will be provided to Town staff for review in the form of a draft report. Once the report has been reviewed by Town staff, a final report will be prepared and submitted.

Town Communication

To maintain schedule, an open line of communication will be maintained with biweekly meetings (virtual and in-person) to provide the Town with an updated status on the project progress. Key workshops will also be coordinated to ensure design concepts are understood and the Town has ample opportunity to provide input.

JVA will create a Microsoft OneDrive file sharing site to upload documents for review by the Town and allow the Town to download requested data.

Challenges/Resolutions and Additional Ideas/Approaches

JVA understands funding to achieve the Town of Manco's goal is limited and the WWTF repairs are being prioritized in phases as project funding becomes available. This appears to be one of the biggest challenges to completing the necessary repairs that are required so the WWTF can meet its discharge permit. JVA can help the Town explore funding options, such as dollar for dollar matching, using its extensive knowledge and funding experience.

Funding

JVA has a strong reputation for being creative when it comes to project funds. Often smaller communities do not have limitless, or even adequate, financial resources. JVA is well-versed in the available State and Federal funding opportunities for infrastructure projects, and we will assist the Town in pursing grant and/or loans to fund the necessary infrastructure improvements. We understand the importance of funding when working with small communities and do our best to even seek financing for the engineering services that we provide. The vast majority of our environmental projects involve State or Federal funding assistance. JVA generally takes the lead on the application process and meeting the conditions of the grant/loan after the award. Listed below are some funding sources that JVA and our staff have assisted our municipal and Special District clients in obtaining for water infrastructure projects:

- DOLA Energy and Mineral Impact: The Town may qualify for the Energy and Mineral Impact Assistance Fund. This fund provides financial assistance for water treatment projects. The assistance includes loans and/or grants for planning, design and construction. There are matching grants for projects between $200,000 and $2,000,000. Loans are also available, but other sources provide lower interest rates and have better terms. We have developed excellent relationships with DOLA staff.

- CDPHE Planning Grants: JVA has recently been successful in assisting some communities in receiving planning grants for under $50,000. These grants are obtained by writing a letter of request, and do not have a lengthy application process. The planning grants can be used for planning and preliminary design of infrastructure improvements.

- CDPHE State Revolving Fund: JVA has extensive experience assisting communities in obtaining State Revolving Fund (SRF) grants and loans. This funding source can be used for infrastructure planning, engineering and construction. Direct loans are available to the Town for up to $2,500,000 and leveraged loans for larger amounts. Direct loans have an interest rate of 0.0 to 2.0 percent based on your MHI and a term of 20 years. JVA has worked extensively with CDPHE and the Colorado Water and Power Development Authority and will assist the Town with the application and loan processing.

- USDA Rural Development Grants and Loans

Quality Control Management

JVA performs internal peer reviews and quality control meetings with every stage of project. The process involves senior staff that are not involved in the project and utilizes extensive mathematical and drawing checks. The QA/QC process involves the principal and CAD manager in all major milestones in the project and helps to assure that the wisdom of our most senior staff is imparted into all stages of design.

Quality in JVA projects is also maintained by several important factors:

- Our similar work on past projects of similar scope promotes efficiency
- Work is reviewed internally for quality, possible value engineering benefits, and engineering excellence
- JVA has instituted in-house Project Management training that includes workshops, implementation of quality control tools and outside speakers
- Our firm excels in evaluations, state and local regulatory relationships, and public outreach
- Our team approach in effective communication is unparalleled

Additional Scope Enhancements

Based on Eaton's reports that were provided and reviewed by JVA, it appears fats, oil, and greases (FOG) are a current issue and causing some of the performance issues with the existing fine screens. JVA thinks it would be beneficial to discuss these FOG issues with the Town and determine if any proposed improvements could aid with this issue. The scope and cost of this work would need to be determined after award of the project.

#3 - Schedule

The schedule on the following page shows proposed milestones and completion dates broken out by phase and tasks.

Town of Mancos WWTF

PROPOSED PROJECT SCHEDULE

	DESCRIPTION OF SERVICES	Start Date	Task Days	Finish Date
■	Notice of Award	4/5/2023	-	4/5/2023
Phase 1	Project Kick-off Meeting and Site Investigation Phase			
■	Project kick-off and WWTF Site Visit	4/5/2023	14	4/19/2023
■	Headworks Location Selection	4/5/2023	14	4/19/2023
■	Geotech Investigation for New Headworks	4/5/2023	28	5/3/2023
■	Site Application Amendment Preparation	4/5/2023	28	5/3/2023
■	Site Survey and SUE level A	4/7/2023	28	5/5/2023
Phase 2	30-Percent Design Phase			
■	Headworks Equipment Selection	4/19/2023	14	5/3/2023
■	30% Design Drawings and OPC	4/19/2023	30	5/19/2023
■	Preliminary Design Report (PDR)	5/19/2023	14	6/2/2023
■	Review 30% Drawings and PDR with the Town (Virtual)	6/2/2023	7	6/9/2023
■	Update Drawings and PDR with Town Comments	6/9/2023	7	6/16/2023
■	Respond to CDPHE Comments	8/16/2023	10	8/26/2023
Phase 3	60-Percent Design Phase			
■	60% Design Documents and OPC	6/16/2023	20	7/6/2023
■	Review 60% Drawings with the Town (Virtual)	7/6/2023	7	7/13/2023
■	Update Drawings with Town Comments	7/13/2023	7	7/20/2023
Phase 4	95% Design Phase			
■	95% Design Documents and OPC	7/20/2023	20	8/9/2023
■	Review 95% Documents with the Town (Virtual)	8/9/2023	5	8/14/2023
■	Update 95% Documents with Town Comments	8/14/2023	7	8/21/2023
■	Final Design Submittal to CDPHE and Approval Process	8/21/2023	1	8/22/2023
Phase 5	Influent Evaluation for Drum Screen Improvements			
■	Evaluation of Existing Data	6/2/2023	14	6/16/2023
■	Influent Loading Summary Report	6/16/2023	14	6/30/2023
Phase 6	MSABP Aeration Study			
■	Operator Interviews and Site Visit	6/30/2023	6	7/6/2023
■	DO Data Evaluation	7/6/2023	13	7/19/2023
■	Review of all Design Documents and Existing Information	7/19/2023	7	7/26/2023
■	Vendor Quotes and Reference Interviews	7/26/2023	14	8/9/2023
■	Aeration System Report and OPC	8/9/2023	18	8/27/2023
Phase 7	Short Circuiting Repair: Port Plug Installation			
■	Evaluation of Interim Solutions	8/27/2023	17	9/13/2023
■	Meeting with Town Regarding Potential Solutions	9/13/2023	10	9/23/2023
■	Tech Memo and OPC for Selected Interim Solution	9/23/2023	7	9/30/2023
Phase 8	Cost Benefit Analysis of MSABP vs SBR			
■	Identify Upgrades Needed for MSABP	9/30/2023	11	10/11/2023
■	Identify Modifications Needed to Transition to SBR Facility	10/11/2023	8	10/19/2023
■	Draft Letter Report of Findings	10/19/2023	12	10/31/2023
■	Final Report with OPC	10/31/2023	21	11/21/2023
Phase 9	Bidding Services			
■	Pre-Bid Services	Immediately Following CDPHE Permit Approval		
Phase 10	Construction Services			
■	Construction Services	Immediately Following Contract Award		

#4 – Cost and Work Hours

The Work Breakdown Structure (WBS) on the following page provides JVA's fee broken down by scope of work for each proposed team member. This fee includes subcontract work and incidentals as necessary.

JVA is proposing to complete the above scope of work for $293,000, which is broken out as follows:

- Headworks design and permitting: $132,550
- Headworks bidding and construction administration: $78,200
- Geotechnical investigation and site survey: $32,450
- Studies and Evaluations: $49,800

Town of Mancos WWTF

PROPOSED FEE SCHEDULE

DESCRIPTION OF SERVICES	PRINCIPAL Josh McGibbon $220/hour		SENIOR PROJECT MGR Adam Racette $184/hour		SENIOR PROJECT ENG Anna Moderski $164/hour		PROJECT ENG James Cochran $148/hour		STRUCTURAL LEAD Kate Benton $156/hour		STRUCTURAL DESIGN ENG Emily Bobrick $124/hour		DRAFTING LEAD Jon Driggers $152/hour		SWIFTWATER $135/hour		SUBTOTAL LABOR COSTS		EXPENSES				TOTAL COSTS (Rounded to Nearest 100)	
	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	SUBTOTAL	HRS	$	PRINT	REIMBURSIBLES	SUB-CONSULTANTS	EXPENSE SUBTOTAL	LINE ITEM	
Phase 1 Project Kick-off Meeting and Site Investigation Phase																								
■ Project kick-off and WWTF Site Visit	8	$1,760	8	$1,472	4	$656	4	$592							4	$800	28	$5,280		$1,250		$1,250	$6,530	
■ Headworks Location Selection	2	$440	2	$368	4	$656											8	$1,464					$1,464	
■ Geotech Investigation for New Headworks			2	$368	4	$656											6	$1,024			$14,500	$15,950	$16,974	
■ Site Application Amendment Preparation	2	$440	4	$736	8	$1,312	16	$2,368									30	$4,856	$50			$50	$4,906	
■ Respond to CDPHE Comments	1	$220	2	$368	4	$656											7	$1,244					$1,244	
■ Site Survey and SUE level A																					$15,000	$16,500	$16,500	
TASK 1 SUBTOTAL	**13**	**$2,860**	**18**	**$3,312**	**24**	**$3,936**	**20**	**$2,960**							**4**	**$800**	**79**	**$13,868**	**$50**	**$1,250**	**$29,500**	**$33,750**		**$47,600**
Phase 2 30-Percent Design Phase																								
■ Headworks Equipment Selection	2	$440	4	$736	8	$1,312											14	$2,488					$2,488	
■ 30% Design Drawings and OPC	4	$880	10	$1,840	18	$2,952	4	$592	6	$744	6	$744	50	$7,600			98	$15,352			$3,200	$3,520	$18,872	
■ Preliminary Design Report (PDR)	2	$440	8	$1,472	10	$1,640	30	$4,440									50	$7,992	$100			$100	$8,092	
■ Review 30% Drawings and PDR with the Town (Virtual)	3	$660	3	$552	3	$492											9	$1,704					$1,704	
■ Update Drawings and PDR with Town Comments			2	$368	4	$656			1	$124	2	$248	8	$1,216			17	$2,612					$2,612	
■ Respond to CDPHE Comments	1	$220	2	$368	4	$656											7	$1,244					$1,244	
■ Bi-Weekly Progress Meetings and Notes (4)	2	$440	4	$736	6	$984	4	$592	2						4	$800	22	$3,552					$3,552	
TASK 2 SUBTOTAL	**14**	**$3,080**	**33**	**$6,072**	**53**	**$8,692**	**38**	**$5,624**	**9**	**$868**	**8**	**$992**	**8**	**$8,816**	**4**	**$800**	**217**	**$34,944**			**$3,200**	**$3,620**		**$38,600**
Phase 3 60-Percent Design Phase																								
■ 60% Design Documents and OPC	4	$880	12	$2,208	15	$2,460	15	$2,220	36	$4,464	24	$2,976	40	$6,080			146	$21,288			$5,650	$6,215	$27,503	
■ Review 60% Drawings with the Town (Virtual)	3	$660	3	$552	3	$492			3	$372							12	$2,076					$2,076	
■ Update Drawings with Town Comments			2	$368	4	$656			3	$372	6	$744	6	$912			21	$3,052					$3,052	
■ Bi-Weekly Progress Meetings and Notes (4)	2	$440	4	$736	6	$984	4	$592	2	$248					4	$800	22	$3,800					$3,800	
TASK 3 SUBTOTAL	**9**	**$1,980**	**21**	**$3,864**	**28**	**$4,592**	**19**	**$2,812**	**44**	**$5,456**	**30**	**$3,720**	**46**	**$6,992**	**4**	**$800**	**201**	**$30,216**			**$5,650**	**$6,215**		**$36,400**
Phase 4 95% Design Phase																								
■ 95% Design Documents and OPC	4	$880	16	$2,944	20	$3,280	20	$2,960	28	$3,472	24	$2,976	40	$6,080			152	$22,592			$7,250	$7,975	$30,567	
■ Review 95% Documents with the Town (Virtual)	3	$660	3	$552	3	$492			3	$372	3	$372					15	$2,448					$2,448	
■ Update 95% Documents with Town Comments			2	$368	4	$656	2	$296	4	$496	4	$496	4	$608			20	$2,920			$1,000	$1,100	$4,020	
■ Bi-Weekly Progress Meetings and Notes (4)	2	$440	4	$736	6	$984	4	$592	2	$248					4	$800	22	$3,800					$3,800	
■ Final Design Submittal to CDPHE and Approval Process	2	$440	2	$368	4	$656											8	$1,464	$100			$100	$1,564	
TASK 4 SUBTOTAL	**11**	**$2,420**	**27**	**$4,968**	**37**	**$6,068**	**26**	**$3,848**	**37**	**$4,588**	**31**	**$3,844**	**44**	**$6,688**	**4**	**$800**	**217**	**$33,224**	**$100**		**$8,250**	**$9,175**		**$42,400**
Phase 5 Influent Evaluation for Drum Screen Improvements																								
■ Evaluation of Existing Data	1	$220			1	$164									24	$3,240	26	$3,624					$3,624	
■ Influent Loading Summary Report	1	$220			1	$164									20	$2,700	22	$3,084					$3,084	
TASK 5 SUBTOTAL	**2**	**$440**			**2**	**$328**									**44**	**$5,940**	**48**	**$6,708**						**$6,700**
Phase 6 MSABP Aeration Study																								
■ Operator Interviews and Site Visit															16	$2,160	16	$2,160		$600		$600	$2,760	
■ DO Data Evaluation															10	$1,350	10	$1,350					$1,350	
■ Review of all Design Documents and Existing Information															12	$1,620	12	$1,620					$1,620	
■ Vendor Quotes and Reference Interviews															12	$1,620	12	$1,620					$1,620	
■ Aeration System Report and OPC	1	$220			2	$328	2	$296							22	$2,970	27	$3,814					$3,814	
TASK 6 SUBTOTAL	**1**	**$220**			**2**	**$328**	**2**	**$296**							**72**	**$9,720**	**77**	**$10,564**		**$600**		**$600**		**$11,200**
Phase 7 Short Circuiting Repair: Port Plug Installation																								
■ Evaluation of Interim Solutions	1	$220			2	$328			2	$248	2	$248			24	$3,240	31	$4,284					$4,284	
■ Meeting with Town Regarding Potential Solutions					2	$328									8	$1,080	10	$1,408		$600		$600	$2,008	
■ Tech Memo and OPC for Selected Interim Solution	1	$220			1	$164	2	$296	2	$248	2	$248			20	$2,700	28	$3,876					$3,876	
TASK 7 SUBTOTAL	**2**	**$440**			**5**	**$820**	**2**	**$296**	**4**	**$496**	**4**	**$496**			**52**	**$7,020**	**69**	**$9,568**		**$600**		**$600**		**$10,200**
Phase 8 Cost Benefit Analysis of MSABP vs SBR																								
■ Identify Upgrades Needed for MSABP	1	$220			12	$2,400									39	$5,265	52	$7,885		$200		$200	$8,085	
■ Identify Modifications Needed to Transition to SBR Facility	1	$220			4	$656									31	$4,185	36	$5,061					$5,061	
■ Draft Letter Report of Findings	2	$440													24	$3,240	26	$3,680					$3,680	
■ Final Report with OPC	1	$220			2	$328									32	$4,320	35	$4,868					$4,868	
TASK 8 SUBTOTAL	**5**	**$1,100**			**18**	**$3,384**									**126**	**$17,010**	**149**	**$21,494**		**$200**		**$200**		**$21,700**
Phase 9 Bidding Services																								
■ Preparation of Bidding Documents	2	$440	2	$368	4	$656			4	$496	6	$744	4	$608			22	$3,312			$1,000	$1,100	$4,412	
■ Attend Pre-bid Conference and Minutes			16	$2,944														$2,944		$350		$350	$3,294	
■ Repsond to questions and submit addenda			2	$368	6	$984			4	$496	4	$496	4	$608				$2,952			$2,350	$2,585	$5,537	
■ Assist with Contract Award	1	$220	2	$368	4	$656												$1,244					$1,244	
TASK 9 SUBTOTAL	**3**	**$660**	**22**	**$4,048**	**14**	**$2,296**			**8**	**$992**	**10**	**$1,240**	**8**	**$1,216**			**22**	**$10,452**		**$350**	**$3,350**	**$4,035**		**$13,200**
Phase 10 Construction Services																								
■ Pre-Construction Meeting	2	$440	12	$2,208	4	$656			2	$248							20	$3,552		$350	$600	$1,010	$4,562	
■ Weekly Construction Meetings (Virtual - assumes 20)	4	$880	24	$4,416	32	$5,248			12	$1,488					20	$2,700	92	$14,732					$14,732	
■ Site Visits (assume 6)							72	$10,656									72	$10,656		$2,500	$3,100	$5,910	$16,566	
■ Respond to RFIs and Change Orders	2	$440	10	$1,840	24	$3,936			8	$992	8	$992			6	$810	58	$9,010			$1,375	$1,513	$10,523	
■ Submittal Review	2	$440	6	$1,104			24	$3,552	6	$744	8	$992					46	$6,832			$1,375	$1,513	$8,345	
■ Equipment Start-Up			16	$2,944	16	$2,624														$2,000	$2,000	$4,200	$4,200	
■ Close Out Documents & Record Drawings	2	$440	4	$736	8	$1,312			4	$496	8	$992	14	$2,128			40	$6,104					$6,104	
TASK 10 SUBTOTAL	**12**	**$2,640**	**72**	**$13,248**	**84**	**$13,776**	**96**	**$14,208**	**32**	**$3,968**	**24**	**$2,976**	**14**	**$2,128**	**26**	**$3,510**	**328**	**$50,886**		**$4,850**	**$8,450**	**$14,145**		**$65,000**
SUBTOTAL ALL TASKS	**72**	**$14,740**	**193**	**$35,512**	**267**	**$40,836**	**203**	**$30,044**	**134**	**$16,368**	**107**	**$13,268**	**120**	**$25,840**	**336**	**$46,400**	**1407**	**TOTAL LUMP SUM ENGINEERING FEE**						**$293,000**

Notes

Unit Cost per each geotechnical boring is $1,250; additional mobilization if required is $3,800. Proposed fee assumes all borings would be completed during the same site visit.

Cost per Hydrovac pothole is based on a ten hour day at a rate of $4285.36. Anything past 10 hours will be a per hour rate of $295.00. The rate will be increased to $330 per hour if large rock is encountered. Typically two potholes can be completed in a ten hour day.

Appendix: Representative Projects

Detailed below are examples of JVA-led wastewater projects. These projects highlight our experience in representing communities of all sizes with water and wastewater facilities and construction. We encourage you to call our references, as we believe you will find positive feedback from every project the JVA design team has been involved in.

C Lazy U Ranch Wastewater Treatment Facility
Grand County, CO

Owner Contact:
Paul Klees
Assistant General Manager
970.887.3344

Key Personnel: Josh McGibbon, James Cochran, Browns Hill

JVA completed the design, permitting, and construction administration for the C Lazy U Ranch wastewater treatment facility. This project included the Nebula™ MultiStage Biofilm System to meet stringent ammonia and total inorganic nitrogen (TIN) effluent limits at low temperatures (5o C). The design included an influent pump station, automatic fine screening, secondary process, and UV disinfection. Permitting for the project included 1041 approval from the county and CDPHE Site Application, Process Design Report, and Construction Approval.

Roundup River Ranch Water and Wastewater Treatment Systems
Eagle County, CO

Owner Contact:
Paul St. Ruth
Facilities Manager
970.926.2448

Key Personnel: Josh McGibbon, Anna Moderski, James Cochran

This project involves development of both water treatment and wastewater treatment systems for a camp for children with serious illnesses. JVA provided design and technical assistance to the planning and engineering team, focusing on the design and permitting of the 15,000 gpd water and wastewater systems

for the facility. The advanced water system included PWSID permits for surface water treatment with ultrafiltration membranes and manganese removal treatment system, along with UV disinfection prior to chlorination to minimize disinfection byproducts. Upon completion of the PER and site application, the wastewater system incorporated a New Technology Review that resulted in a full scale demonstration pilot of the innovative Nebula™ MultiStage Biofilm System, which is the first installation of its kind in Colorado. Throughout the project, JVA has successfully coordinated with a team of planners, architects, and another civil site engineer for the camp, including water system modeling and fire pump station design.

design and permitting of a 0.027 MGD Nebula™ MultiStage Biofilm System to meet ammonia limits for surface water discharge. This project involved new screening in preliminary treatment tanks, expansion of the existing Nebula™ MultiStage Biofilm System in existing basin footprints to meet current CDPHE alternative technology requirements, upgrades to existing blowers, new clarification settling tanks equipped with effluent filters, relocation of an existing cloth media rotating drum filter, and capacity evaluation on an existing UV disinfection system.

Town of Cedaredge Wastewater Treatment Facility
Cedaredge, CO

Owner Contact:
Dave Smith
Public Works Director
970.201.6952
David.smith@tds.net

Key Personnel: Josh McGibbon

The Town of Cedaredge owns and operates a 160,000 gal/day (average flow) municipal wastewater treatment facility (WWTF) and collection system. In order to comply with CDPHE regulations, meet future discharge permit limits, and increasing flows and loads, the Town needed to replace their existing wastewater treatment facility or complete a major upgrade to the existing facility. The recommended treatment alternative was a $4.6M, 375,000 gal/day (average flow) plant with a new headworks, sequencing batch reactor (SBR), chlorine contact and equalization basin, disinfection, effluent pumping, and control building with electrical room, lab, blowers, and chemical equipment. The facility was constructed on the existing WWTF property, and also included conversion/re-lining of the existing lagoons to aerobic digesters.

JVA worked closely with the Town through the planning phase, evaluation of existing facilities, development of near and long-term capital improvement plans, preparation of a preliminary engineering report (PER) and site application in accordance with CDPHE Site Application requirements, final design,

bidding, and construction. JVA worked collaboratively with the Town to obtain approximately $320,000 in DOLA and WQIF grant funds to support the design development, as well as $3.4M in secured grants and loan forgiveness from DOLA and CDPHE for construction. Our funding assistance resulted in over 70% of the total project costs offset by grants which helped to make an otherwise impossible project a reality for the Town. JVA helped Town obtain grant funds and grants and loan forgiveness from DOLA, WQIF, and CDPHE. Funding assistance resulted in 70%of project cost offset by grants

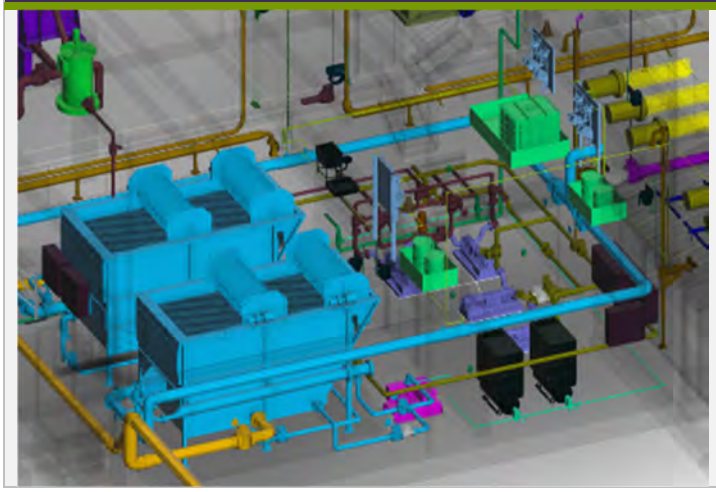
Montrose Wastewater Treatment Facility/Headworks
Montrose, CO

Owner Contact:
Mike Martinez, ORC
City of Montrose
970.497.8596

Key Personnel: Josh McGibbon, John McGee

JVA was selected by the City of Montrose to perform a Comprehensive Performance Evaluation (CPE) and Regulation 85 Study on their 4.3 MGD oxidation ditch WWTP. The CPE focused on the condition and capacity of each major process including headworks, influent pump station, oxidation ditches, clarifiers, and biosolids handling facilities. JVA assisted in a detailed 14 day wastewater characterization. This data was used to complete a Biowin model of the existing facility and it's ability to meet Regulation 85 effluent limits. The CPE resulted in the identification and prioritization of near-term and long-term process improvements. A detailed evaluation was completed on the headworks which was identified as the top priority and most limiting process. JVA recently completed design and construction for a new headworks screen, washer compactor and replacement of their grit pumps and shafts. JVA also assisted Montrose with the replacement of the brush aerators and mixers in the oxidation ditches.

Ouray Wastewater Master Plan and Wastewater Treatment Facility Expansion
Ouray, CO



Owner Contact:
Katie Sickles
City Manager
970.325.7060

Key Personnel: Josh McGibbon, John McGee, Chelsea Fagan

JVA completed a Wastewater Treatment Master Plan (MP) for the City of Ouray in December 2018. Preparation of the MP was a critical step in planning a sustainable future for the City. There have been minimal improvements to the wastewater treatment facility (WWTF) over the past ten years and the existing infrastructure continues to age as the City simultaneously experiences growth and increased tourism. The plan considered the current and projected wastewater flows from the service area, condition of the existing infrastructure, and ultimately recommended a new mechanical wastewater treatment facility to meet the current and future needs of the community. The evaluated technologies were a sequencing batch reactor (SBR), moving bed biofilm reactor (MBBR), and Aeromod's Sequox technology. Conceptual and detailed design of the new 0.47 MGD mechanical wastewater facility to replace the existing lagoons began in late 2020. The project involves design and equipment selection for headworks screening, grit removal, moving bed biofilm reactor for secondary treatment (MBBR), dissolved air flotation for secondary clarification (DAF), UV disinfection, aerobic digestion, and mechanical dewatering. JVA also applied for a new discharge permit for the new facility and has been actively involved in the review and adjustment of that permit. This project is currently in the 90 percent design stage and is being delivered using CMAR. Also, the City has a recently constructed treatment facility for the Hot Springs pool which is contributing significant flows to the WWTF. The plan considers the current condition and operation of the WWTF. The master plan will also analyze the impacts of demand or flow and loading increases due to increased demand as well as flow contributions from the Hot Springs Pool.

Appendix: Resumes

Josh McGibbon, PE

Vice President, Principal, Environmental Engineering

Education
B.S. Montana State University, Civil Engineering, 2000

Registration
Professional Engineer: Colorado 2006

LEED Accredited Professional

Professional Organizations
Water Environmental Federation

Rocky Mountain Water Environmental Association – Executive Committee

American Water Works Association

Town of Cedaredge WWTF, Cedaredge, CO. Principal-in-Charge for the design, permitting and construction administration of a 0.375 MGD wastewater treatment facility for the Town of Cedaredge. The project need centered on a TMDL for phosphorus to the discharging stream segment. The WWTF consists of a Sequencing Batch Reactor (SBR), influent screening, grit removal, disinfection, aerobic digestion, and plant effluent water straining. The Town faced stringent future effluent limits from an EPA mandated Total Maximum Daily Load assessment for their discharge waterbody, Fruitgrowers Reservoir. Worked closely with the Town through the planning phase, evaluation of existing facilities, development of near and long-term capital improvement plans, preparation of a Preliminary Engineering Report (PER), Site Application, Process Design Report and final design. Funding assistance was also provided for DOLA grants and an SRF loan.

C Lazy U Ranch WWTP, Granby, CO. Principal-in-Charge for the design, permitting, and construction administration of an Aquarius Nebula Moving Bed Bioreactor (MBBR) to meet stringent ammonia and total inorganic nitrogen (TIN) effluent limits at low temperatures (5o C). Design includes an influent pump station, automatic fine screening, secondary process, and UV disinfection. A GAC odor control system mitigated odors from the primary processes, enabling the WWTP to be sited in the center of the ranch. Permitting included 1041 approval from the county and CDPHE Site Application, PDR and Construction Approval.

Town of Lochbuie WWTP Improvements, Lochbuie, CO. Principal-in-Charge for the design, permitting of an influent pump station, grit removal and classification, and biosolids dewatering. The influent pump station consists of three 2,200 gpm dry pit submersible pumps and the grit removal consists of two 7.0 MGD grit chambers and duty/standby grit pumps and a grit classifier for grit dewatering. After the secondary process, improvements include a rotary fan press for biosolids dewatering. The fan press is sized for 1,250 lbs/hr and a 17% cake discharge. The project also included a cake pump and distributor for convenient solids hauling.

City of Louisville Wastewater Treatment Plant Improvements, Louisville, CO. Principal-in-Charge for the solids stabilization and handling assessment for the 2.53 MGD Biological Nutrient Removal WWTF. The assessment sludge thickening, aerobic digestion, polymer feed systems, solids pumping, sludge dewatering and cake loading for land application.

City of Montrose Wastewater Treatment CPE, Montrose CO. Principal-in-Charge for comprehensive performance evaluation (CPE) and Preliminary Engineer Report (PER) for the 4.32 MGD Montrose WWTF. The project also involved evaluating existing performance and modeling operational adjustments to the oxidation ditch system along with recommending minor capital improvements for meeting Regulation 85 effluent nutrient criteria. The most prioritized project was upgrading the fine screening and grit removal systems. The improvements included a new mechanical step screen along with aerated grit chamber and pumping improvements.

City of Idaho Springs Wastewater Treatment Facility Expansion, Idaho Springs, CO. Principal-in-Charge for permitting, detailed design, and construction of an expansion of the existing wastewater plant. Project involves a detailed evaluation of various treatment technologies to meet increased flows, loads, and regulatory discharge requirements and design of upgrades for a 1.0 MGD WWTF expansion. This expansion includes new headworks with mechanical screen, grit removal and flow monitoring, influent equalization, conversion of the sequencing batch reactors to aerobic granular sludge (AGS), effluent equalization, new digesters, and relocation of the dewatering facility.

Pueblo West Metro District WWTF, Pueblo West, CO. Engineer of Record for the design of a 2.0 MGD WWTF expansion project. The project involved new biosolids treatment and dewatering facility for improved solids processing, and headworks upgrades with grit classification and disposal. These new facilities will assist the District in providing more cost effective wastewater treatment and limit hauling costs. The project consists of new aerobic digesters and belt filter press dewatering to meet Class B biosolids requirements. The permitting involved site application, process design and construction approval from CDPHE. Provided administration of $5.4M SRF leveraged loan and construction. Following expansion, a Wastewater Treatment Master Plan and Nutrient Study was performed for the District.

Adam M. Racette, PE

Senior Project Manager

Education
B.S. Michigan State University, Civil Engineering, 2002

Registration
Professional Engineer: Colorado, 2009

Professional Organizations
Rocky Mountain Water Environment Association

American Water Works Association

Project Experience

City of Montrose WWTF Headworks Improvement Project, Montrose, CO. Project Engineer for improvements to the existing Headworks building at the Montrose WWTF. The project includes engineering, construction management, and start-up. The improvements include replacing their existing Headworks screen and washer compactor, grit pumps, adding VFDs to the existing blowers, controls, and replacing existing HVAC equipment.

City of Glenwood Springs WWTF and Lift Station, Glenwood Springs, CO. Design engineer for a new 8,000 gpm lift station and 2.0 MGD WWTF. The $28.5 million capital improvement project to relocate the Rotating Biological Contactor wastewater treatment facility constructed in 1978 from central Glenwood Springs to a new parcel near West Glenwood along I-70 and the Colorado River. The project included feasibility studies, treatment evaluations and site selection for the construction of a new Lift Station, Force Main, Headworks, biological treatment process, clarifiers, RAS/WAS pumping facilities, covered aerobic digesters (block CMU with twin tee roof), UV disinfection, biosolids dewatering and disposal facilities. Advanced odor control was incorporated at all facilities.

City of Delta WWTF Improvements, Delta, CO. Project manager and engineer for aerobic digester improvements including a new aeration system, mixing system, controls and covering the basins. Services included planning, permitting, design, cost estimating, bidding and construction administration.

Town of Carbondale WWTF Improvements, Carbondale, CO. Project manager for a major improvement project at the WWTF. The existing facility needed to stay operational throughout the course of the project which added to its complexity. The improvements were organized into three categories which were safety, process performance, and operator flexibility. By performing the improvements the Town was able to extend the service life of the plant infrastructure and improve its performance. The project included flood plain analysis, odor control investigation, mechanical and electrical upgrades as well as piping modifications. The plant improvements included: an aeration evaluation for the plant using the existing centrifugal blowers to provide energy efficiency recommendations, a new course bubble diffused aeration system to provide more efficient mixing in the secondary aerobic digester thereby reducing odors, retrofitting the Headworks building with a new mechanical bar screen.

City of Salida WWTF Expansion Project, Salida, CO. Design engineer for expansion of the WWTF to 2.7 MGD capacity. The project included engineering, surveying, construction management, and start-up and operational consulting services. The expansion replaced the outdated Trickling Filter and Rotating Biological Contactor treatment processes. The project included feasibility and rate studies, treatment evaluations, permitting, design, and construction management of new 2.7 MGD WWTF for BNR of nitrogen. Provided the following tasks: Project reused/repurposed several structures, New treatment processes constructed without interrupting existing plan treatment, Headworks modifications including new screenings washer-compactor and odor control system, New Kruger's IFAS™ (Integrated Fixed Film Activated Sludge) treatment process, New process building for process pumping, new high speed turbo blowers, and rotary drum thickener, New tertiary disc filter, Retrofit the existing chlorine contact chamber with UV disinfection and new seasonal effluent pump station, and Reuse of existing anaerobic digestion and centrifuge dewatering operations. USDA funded and the facility was master planned for future phosphorus removal.

City of Rifle Regional WWTF, Rifle, CO. Design engineer for the relocation, consolidation and upgrade of the existing wastewater treatment lagoon systems. The project included master planning, feasibility and rate studies, treatment evaluations and site selection alternatives for the construction of a new 27-inch gravity interceptor, Headworks with influent lift station, septage receiving facilities, 2.0 MGD biological treatment process (Siemens Orbal™ Oxidation Ditch), clarifiers, aerobic digesters, Cannibal™ Solids Reduction Process, UV disinfection, Biosolids dewatering and disposal. Advanced odor control was incorporated at all facilities.

City of Aspen Development Review Engineer, Aspen, CO. Provide development review services for City of Aspen Engineering Department. Review both major and minor development permits to ensure they meet all applicable City of Aspen codes and the Urban Runoff Management Plans (stormwater) requirements. Responsibilities also include attending meetings to review development comments and permits with the City.

Town of Hayden Development Review Services, Hayden, CO. Review development permit applications for engineering compliance to the Town of Hayden's standards. This includes design compliance with all utility, storm water, transportation and all applicable state and federal requirements.

John P. McGee, PE

Principal, Environmental Engineering

Education

M.S., Civil/Environmental Engineering, West Virginia University, 1988

B.S., Civil Engineering, West Virginia University, 1986

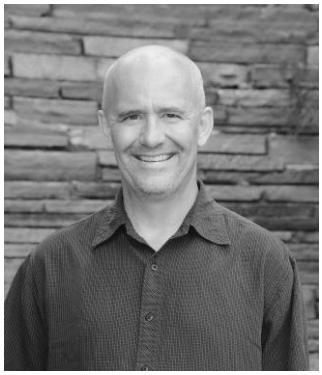
Registration

Professional Engineer: Maryland, Indiana, Colorado

Professional Organizations

Water Environment Federation (WEF)

American Water Works Association (AWWA)



Instructor/Trainer

Colorado State University – Part Time Instructor for teaching the Spring Semester, 3 credit hour class CIVE 437 – Wastewater Treatment Process Design and Fall Semester CIVE 439, 3 credit hour class – Environmental Engineering Concepts.

Intergovernmental Agreement between City of Loveland and Colorado State University – Assists with graduate level research and water quality testing for developing technologies. Research includes BioWin modeling of the Loveland WWTF, Big Thompson River, Green Ridge Glade Reservoir and Loveland WTP water quality testing, biosolids and digester gas analyses for siloxanes, Volatile Fatty Acid (VFAs) analyses and wastewater characterization work for Biological Nutrient Removal.

Wastewater Projects: Project Manager, Technical Lead or Engineer of Record for the following Projects:

Leadville Sanitation District, Leadville, CO Technical lead on a complex 1.15 MGD wastewater treatment facility rehabilitation and improvements. The WWTF was originally constructed in 1970 and upgraded in 1982. The plant has not had any major improvements or rehabilitation over the last 40 years and is in serious need to upgrade to maintain effluent permit compliance and future water quality regulations. JVA is currently assisting the District with funding (State Revolving Fund program and Department of Local Affairs) and preliminary design of WWTF improvements which will consist of headworks grit system and septage receiving rehabilitation, re-purposed aeration basins, clarifier rehabilitation and new covers, solids stabilization and handling upgrades, and electrical and controls replacement. Project will be delivered using the Construction Manager at Risk (CMAR) method beginning July 2023.

Mountain View Villages Water & Sanitation District, Leadville, CO Technical lead for upgrading the 0.1 MGD sequencing batch reactor (SBR) process to include a new Headworks and FOG treatment, conversion of an anaerobic tanks to aerobic digesters, chemical addition for metals removal, effluent filtration and process control enhancements for meeting more stringent effluent nutrient concentrations. The project also includes funding through the State Revolving Fund program and other associated grant programs for financing the design and construction. Project design began March 2023.

Mountain Valley Estates Mobile Home Community, Leadville, CO Project Manager for preparing a treatment evaluation for the Mountain Valley Estates WWTF which was required based on a Notice of Violation issued by CDPHE. JVA completed the evaluation in October 2022 and is currently working with the community to implement improvements to the WWTF to consistently meet effluent requirements

City of Louisville, CO Technical lead for the solids stabilization and handling assessment for the 2.53 MGD Biological Nutrient Removal WWTF. The assessment was kicked off in April 2021 and includes a detailed assessment of the sludge thickening, aerobic digestion, polymer feed systems, solids pumping, sludge dewatering and cake loading for land application

City of Ouray, CO Technical lead for the design of a 0.465 MGD Moving Bed Bioreactor (MBBR) WWTF. The project includes replacing an aged and out of compliance aerated lagoon system with a new MBBR WWTF constructed adjacent to the lagoon site. The $15 million WWTF will be funded with combination of low interest loans (SRF) and grants (DOLA) and will be delivered using CMAR. The facility will include a new pretreatment building, flow equalization, MBBR process, Dissolved Air Floatation, UV disinfection, aerobic digestion and solids dewatering. The new WWTF began construction Fall of 2022.

Crested Butte South Metro District, CO Technical lead for the design of a 0.3 MGD Integrated Fixed Film Activated Sludge (IFAS) WWTF Expansion project. The project includes rehabilitation / conversion of an existing extended aeration train to IFAS and clarifier and UV expansion. The expansion will provide adequate capacity for the District growth for the next 20 years. The project will be funded by a low interest loan (SRF) and delivered using the CMAR process. The construction NTP was July 2022 with an anticipated construction completion date of late Fall 2023.

West Jefferson Metro District, Evergreen, CO Technical Lead for the WJMD WWTF expansion from 0.7 to 0.95 MGD. The project includes the design of a new 3-stage biological nutrient reactor, internal recycle, new WAS pumps, addition of inDense ® technology, relocation of chemical feed for TP removal, new hybrid blowers, instrumentation, and RAS pumping improvements. The project began construction October 2020 and is being delivered using the Construction Manager at Risk (CMAR)

Town of Windsor, CO Technical Lead for the 2019 Windsor Biosolids Evaluation and Project Manager. Project included a detailed comprehensive evaluation of the existing biosolids processes and identification of performance limiting factors. Biosolids stabilization and handling alternatives were presented and evaluated to determine the most feasible and cost-effective approach to meet the current and future needs for the Town. The Town is spending over $300,000 per year to haul liquid biosolids and projections for hauling could exceed $1 million per year within a 12-years. The biosolids study presented recommendations for improved biosolids stabilization and higher volatile solids destruction as well as solids thickening and dewatering.

Town of Berthoud, CO. Project Manager for the 2.0 MGD Berthoud WWTP Regulation 85 nutrient evaluation. The project included a detailed wastewater characterization sampling and analysis plan for calibrating a mathematical model to simulate the treatment performance of the WWTP. Following calibration, the model was used to simulate biological and chemical nutrient removal performance with the addition of operational modifications and addition of unit process treatment systems at existing and future flow and loading conditions. The results of the evaluation were summarized in a report along with a detailed phased capital improvement program and budgets for WWTP operational modifications and improvements to meet Regulation 85 nutrient requirements.

Town of Lyons, CO Technical Lead for the Lyons WWTP capacity re-rating evaluation. Project included a detailed treatment capacity evaluation and mathematical modeling based on influent wastewater characterization to meet effluent discharge requirements. Project also involved the request of Preliminary Effluent Limits (PELs) and working with CDPHE to determine selected effluent discharge locations that allowed for less stringent effluent concentrations for nutrients.

Town of Lochbuie, CO Project Manager for a 2.0 MGD WWTF Headworks improvements including fine screening, grit removal and influent pump station. The project also included aerobically digested sludge dewatering using a rotary fan press and dewatered sludge conveyance to a roll off container. The project was delivered using the Construction Manager at Risk (CMAR) method and was completed in June 2019.

City of Grand Junction, CO Project Manager for the 12.5 MGD Persigo Wastewater Treatment Facility Master Plan (WWTF MP). JVA teamed with Carollo to prepare a wastewater treatment and collection system masterplan. JVA's specific role for the WWTF MP was to evaluate biosolids handling and markets for either Class A or Class B beneficial reuse and updating their GIS to include the hydraulic modeling and condition assessments of the collection system. JVA was tasked with evaluating the lift stations and collection system based on the modeling and condition assessments and preparing prioritized capital improvements plans. The project was kicked-off in April 2020 and was completed in April 2021.

Town of Mead, CO Project Manager for replacing a failing grit pump and controls and replacement of the mixing and aeration system for the aerobic digester. The Mead WWTF is rated for a capacity of 0.5 MGD. The design was completed in February 2021 with construction beginning April 2021. The new grit pump will improve grit removal from the vortex grit chamber and classification and washing of the grit. The new mixing and aeration system for the aerobic digester will improve volatile solids reduction resulting in less biosolids production as well as a more stabilized Class B biosolid and less odors. The project was completed by June 2021.

Town of Berthoud, CO. Technical lead engineer for the design of the 2.0 MGD Berthoud WWTF grit removal / classifier rehabilitation, UV system replacement, aerobic digestion expansion, secondary clarifier launder cover addition, and effluent flow metering improvements project. These improvements were initiated due to aged equipment and processes and rehabilitated with new equipment to improve treatment performance and maintain the life expectancy of the plant. The project is in the process of being delivered using CMAR and began construction May 2019.

City of Loveland, CO Project Manager (with the City of Loveland) for a 10 MGD headworks improvements consisting of the addition of a fine screen, conveyor and washer / compactor and replacement of the aerated grit chamber with a vortex type grit chamber with grit pumping. The project also consisted of a new bio filter and chemical scrubbing system for odor control for the gravity influent junction box and headworks. In addition, project included replacement of the primary sludge pumps with new screw centrifugal pumps along with flow metering and piping to the digester.

Anna Moderski, PE

Senior Engineer, Environmental Engineering

Education
B.S., Bioresource Engineering, Rutgers State University, New Jersey, 2005

Registration
Professional Engineer: Colorado

Professional Organizations
American Water Works Association

Society of Women Engineers

Project Experience

Roundup River Ranch Water and Wastewater Treatment Systems, Eagle County, CO – Senior engineer for a design of a 25 gpm membrane filtration water treatment system, including upgrades to the water treatment facility, raw water source improvements and related projects. The project included Preliminary Engineering Reports for Colorado Department of Public Health and Environment and permitting approval. The wastewater project involves moving a 8,000 gpd alternative wastewater technology from the demonstration test to full permit certification. The WWTF consisted of a Multi-Stage Activated Biological Process treatment system with discharge to the Colorado River with engineering deviations. Permitting included 1041 approval from the county and CDPHE Site Location Application Approval.

Town of Buena Vista Water Treatment Plant Expansion, Buena Vista, CO – Senior project engineer designing an expansion for the Town of Buena Vista Water Treatment Plant to meet growing demand. Responsible for various design calculations, including system hydraulics, chemical dosing and storage calculations, CT calculations, and pump duty point calculations. Developed the Basis of Design Report to obtain construction approval.

Confidential Client, Ridgway, CO – Senior Engineer for the design of a new water treatment system for a private ranch designed to meet a specific finished water quality profile. Responsible for process design, defining design criteria, equipment selection, project manual development, and drafting coordination. Also assisted in the construction administration of the project, including facilitating the bidding process, coordinating with the contractor and equipment supplier, observing construction progress, and reviewing submittals.

Town of Berthoud, CO – Project engineer for calibration and BioWin modeling of the Berthoud Regional WWTF. The modeling consisted of calibration using influent data from an existing package facility which is to be consolidated with the new regional WWTF. The new regional WWTF is sized for an initial capacity of 0.125 MGD expandable to 2.5 MGD and is designed to meet Regulation 85 for new discharge locations (i.e. TIN < 7 mg/l, TP < 0.7 mg/l). Following calibration the model was used to simulate the treatment process for meeting the Regulation 85 effluent limits. The new regional WWTF will go on-line in spring 2016.

Arapahoe Race Track, Arapahoe County, CO – Project Engineer for evaluating wastewater treatment processes for meeting new ammonia –nitrogen discharge limits for the race track. The evaluation included a qualitative and quantitative evaluation of three treatment alternatives; consolidation with City of Aurora, moving bed bio-reactor (MBBR) and effluent spray irrigation. The MBBR was recommended based on the evaluation criteria.

Battery Park City Water Reuse, NY - Project Engineer for the design of a LEED membrane filtration wastewater recycling facility for the City of Battery Park, NY. Key elements of the project included flow equalization, anoxic digestion, aeration, ultra filtration, UV and ozone sterilization of water to reuse as flush water. Responsible for all aspects of project from process modeling, conceptual design through detailed design and construction.

Devil's Thumb Tank, City of Boulder, CO – Project Manager and Engineer for the City of Boulder to improve the water quality monitoring program at the Devil's Thumb Tank location. The City aspires to collect water quality data through an on-line water distribution monitoring panel to analyze for free chlorine, turbidity, pH, conductivity, pressure and temperature in a reagent-less system. In addition, existing mechanical equipment, located in a subsurface vault, was relocated to the new water distribution control building.

Galambs Manufactured Housing Park, Watkins, CO – Project Engineer for an advanced treatment design for a manufactured housing park that was in non-compliance with their existing treatment system. The project consisted of a primary treatment system followed by an attached growth media for recirculating primary effluent onto the media with effluent return back to the primary treatment system for de-nitrification. The treated effluent is disinfected using UV prior to surface water discharge.

Greenland Ranch Water Pipeline, CO – Project Engineer for 30% construction documents for a proposed 24 inch 10,000 gpm raw water 30 mile transmission pipeline. The project included pressure and gravity flow with pressure relief stations.

James Cochran, PE

Senior Project Engineer, Environmental Engineering

Education

M.S. Colorado School of Mines, Civil and Environmental Engineering, 2014

B.S. Colorado School of Mines, Engineering – Environmental Specialty, 2013

Registration

Professional Engineer: Colorado

Professional Organizations

Colorado Professionals in Onsite Wastewater

American Water Works Association

Water Environment Federation

Project Experience

C Lazy U Ranch WWTP, Granby, CO – Project Engineer for the design, permitting, and construction administration of a Nebula™ MultiStage Biofilm System to meet stringent total inorganic nitrogen (TIN) effluent limits at low temperatures (5° C). Design includes evaluation of existing preliminary treatment tanks, new duplex influent pump station, 2mm automatic fine screening equipped with automatic bypass and a conveyor/washer/compactor, Nebula™ secondary process, clarifier with chain and flight mechanism, and UV disinfection. Permitting included 1041 approval from the county and CDPHE Site Application, Process Design Report, and Construction Approval.

Roundup River Ranch WWTP, Gypsum, CO – Senior Project Engineer for design and permitting of a 0.027 MGD Nebula™ MultiStage Biofilm System to meet stringent ammonia limits for surface water discharge. This project involved new screening in preliminary treatment tanks, expansion of the existing Nebula™ MultiStage Biofilm System in existing basin footprints to meet current CDPHE alternative technology requirements, design of new baffle walls for the Nebula™ secondary treatment, upgrades to existing blowers, new clarification settling tanks equipped with effluent filters, relocation of an existing cloth media rotating drum filter, and capacity evaluation and re-permitting on an existing UV disinfection system.

Camp IdRaHaJe Preliminary Engineer Report and WWTP, Bailey, CO – Senior Project Engineer for the evaluation of the existing utilities and helped prepare a Preliminary Engineering Report to communicate recommendations for wastewater treatment system improvements. The improvements were intended to address past CDPHE compliance excursions and more stringent impending permit limitations. Responsible for assessing potential treatment processes associated with CDPHE groundwater discharge permits to be recommended as alternatives for meeting compliance limitations. The proposed wastewater solution included design and permitting of a 0.02 MGD CDPHE permitted WWTP. This project involved a new collection system to a centralized treatment system. The system will consist of a headworks with mechanical fine screening, grit removal, and pre-equalization, secondary treatment with AlgaeWheel® treatment process, WaveTex denitrification, and secondary clarification, and disinfection with UV. Treated effluent will be discharged to groundwater by way of an infiltration gallery.

Berthoud Wastewater Plant Improvements, Berthoud, CO – As part of ongoing on-call wastewater projects for the Town of Berthoud, project included the design of a new aeration system for an existing aerobic digester, updates to the grit removal system, and in-kind replacement of an antiquated UV disinfection system. Project Engineer for design and permitting of the aerobic digester, and retrofitting the existing UV basins to accommodate a new UV disinfection system.

City of Idaho Springs Dewatering Facility and Digester, Idaho Springs, CO. Design Engineer for permitting and detailed design of a dewatering facility and aerobic digester. Project includes design of a screw press solids dewatering system, polymer chemicals feed system, progressive cavity cake pump, and solids load out facility. Also involved in design and permitting of an in-series aerobic digester equipped with a coarse bubble aeration system and submersible mixers.

Heron Lakes Lift Station Project, Berthoud, CO. Design Engineer responsible for design of a lift station and odor control for the Heron Lakes Development to connect to the Town of Berthoud's WWTF. This project consisted of a site location application, a basis of design report, and the procurement of construction plans and specifications. Design elements included: a duplex submersible pump station in a new wet well, a control building, an activated carbon odor control system, a generator with automatic transfer switch, and a forcemain connecting to an interceptor manhole.

Windy Peak Outdoor Education Laboratory School OWTS, Bailey, Colorado – Engineer responsible for writing and developing the site application to de-rate Windy Peak's existing state permitted groundwater discharge system to a county permitted system. Responsible for designing three new onsite wastewater treatment systems equipped with higher level treatment for the Windy Peak outdoor lab. Design elements included: retrofit of an existing septic tank, design of new septic tanks, three Orenco Ax-Max higher level treatment system, dosing pump system, control system, forcemain, and soil treatment areas.

Chelsea L. Fagan

Project Engineer, Environmental Engineering

Education

M.S., Civil Engineering, Michigan Technological University, Houghton, MI, 2015

B.S., Civil Engineering, Colorado School of Mines, Golden, CO, 2009

Registration

Engineer in Training (EIT); Colorado

Project Experience

City of Ouray Wastewater Master Plan, Ouray, CO: Design engineer for the completion of a new wastewater master plan for the City of Ouray. The Plan evaluated projected flow and load scenarios, existing infrastructure, future regulatory implications, and provided a 10-year capital improvement program. Recommendations from the master planning effort included: inflow and infiltration study, collection system evaluation and master plan, industrial pre-treatment program development, rate study, and a new mechanical treatment plant to replace the lagoon treatment system. As a result of this effort, JVA is currently working with the City on the design of a new mechanical wastewater treatment plant to meet the City's treatment objectives and future capacity requirements.

Meeker Sanitation District WWTF & Collection System Assessment, Meeker, CO: Design engineer conducting a detailed analysis of the District's WWTF and Collection System. The project included televising and analyzing video of over 18 miles of the collection system and evaluating options including costs for repair and replacement. The project also included a comprehensive evaluation of the District's WWTF including major process equipment, concrete and steel structures, H2S corrosion, electrical and mechanical systems. The evaluation investigated alternatives and developed recommendations for improvements.

Crested Butte South Metropolitan District Wastewater Treatment Plant Preliminary Capacity Evaluation, Crested Butte, CO: Design engineer for a preliminary evaluation of the service area current and projected flow and loads, evaluation of the existing facility, and development of near and long term capital As part of this project a new headworks system was evaluated and layout alternatives within the existing footprint for a new IFAS treatment train were considered. The District has limited expansion capability due to site constraints. This project provided the District with an understanding of their maximum facility capacity based on available tank volumes and existing footprint to use in establishing development guidelines for the service area. The final capital improvement plan recommended and prioritized project needs and developed a timeline for a plant expansion.

City of Montrose WWTF Headworks Improvements, Montrose, CO: Design engineer for permitting, design, and construction administration services for new screen and washer compactor as well as grit pumps for the City's WWTF. The project included a detailed evaluation of screening equipment options and review of HVAC issues in the headworks building.

Town of Windsor Wastewater Treatment Plant Biosolids Evaluation and Planning Study, Windsor, CO: Design engineer for the completion of a study evaluating the existing biosolids facility condition and capacity, regulatory assessment for facility upgrades, design calculations to size biosolids treatment and storage upgrades.

Wastewater Treatment Facility Improvements Project, Peetz, CO: Design engineer responsible for the design and development of a USDA Preliminary Engineering report and USDA Environmental Report. It is anticipated that an evaporative lagoon system will appropriately address the regulatory compliance issues that the Town of Peetz currently faces for its wastewater treatment facility.

Town of Crested Butte Water Treatment Plant Improvement Project, Crested Butte, CO: Design engineer for the design of a treatment plant expansion project for the Town's existing membrane filtration water treatment plant. The expansion project featured an increase in the system capacity from 1.25 MGD to 1.66 MGD, redesigned chemical pretreatment system to optimize treatment efficiency and improve system hydraulics, and a building expansion to improve operability and access to process equipment. As part of this effort, funding from DOLA and SRF was facilitated to finance the construction. The project was designed on an expedited schedule and went from the planning stages of a comprehensive performance evaluation to 100% design and permitting in under one year. Chelsea was also the design engineer for construction administration services and the primary engineer observing construction.

John Podeyn

Construction Services Manager, Environmental Engineering

Education
B.S. Construction Management,
Colorado State University, 1998

Project Experience

Ouray WWTF Improvements, Ouray, CO – CMAR Contract - Currently under construction – This project consists of building a new plant with concrete tanks, masonry, new equipment and piping, electrical and controls with site improvements. This will replace the current lagoon system. Review and provide feedback on the contractor GMP. Visit the jobsite 1 -2 times a week for inspections and coordination with the superintendent. Provide inspection reports with photos directing contractor to make any corrections as needed. Review pay applications and SRF compliance documents. Assist with submittal and RFI review.

Parkview WTP Expansion, Leadville, CO – CMAR Contract – Currently Under Construction – This project consists of a masonry building addition providing space for an additional 3rd filter with associated piping and equipment, electrical & controls, and various site improvements. Visit the jobsite 1 -2 times a week for inspections and coordination with the superintendent. Provide inspection reports with photos directing contractor to make any corrections as needed. Assist with submittal and RFI review.

Drake Water Reclamation Facility – Fort Collins, CO. – **Sidestream 'P' Phosphorus Removal Project** - Partnering Contract- Project Manager – Involved with the project from 0% design to Final completion. Assisted the city in equipment selection in visiting installation sites in Europe as the technology and process did not exist in the U.S. at the time. Procured the equipment and rector tank while design was being completed due to long lead times. The project consisted of a new process building, fabrication and installation of 40' reactor tank with associated equipment, process tie ins, pump station from the digester complex, and various site improvements. The project resulted in 98% phosphorus removal. Connections and space in the new building were implemented for future harvesting equipment installation. This project was completed under a previous employer

Drake Water Reclamation Facility – Fort Collins, CO – Cogen System Project – Partnering Contract **-** Project Manager – The purpose of this project was to utilize wasted flared digester gas to generate power for the plant. Involved from 0% design to final completion. Equipment was preselected and procured due to long lead times. This included the methane gas conditioning equipment and the generators. A hot water loop was also included to the generators adding more efficiency to the existing boilers. The gas conditioning equipment and the generators were installed on structural slabs in the open adjacent to the digester complex. This project consisted of very complex electrical and controls, process pipe tie ins, including site and grade improvements. This project was very successful and is a popular tour for other utilities and engineers interested in the technology and the process. This project was completed under a previous employer

Snake River WWTP Utility – Dillon, CO – Headworks Improvements Project – CMAR Contract – Project Manager – This project consisted of replacing two existing screens, screen conveyor improvements, washer compactor, and grit conveyor. Equipment was ordered early through a procurement contract while design was completed. Concrete channel modifications where required for the new screens to fit. Detailed MOP's, and coordination were utilized for equipment replacement keeping the headworks operational during construction. This project was completed under a previous employer

Frisco Sanitation District – Frisco, CO – WWTF Improvements – 4 phases – CMAR Contract – Project Superintendent – This project consisted of 4 phases: AWT & Digester Tank Improvements, Cantex Basin Improvements, New Effluent Outfall and Pump Station, & Additional Redundant UV installation. Removed and replaced media in AWT tanks as well as recoating. Recoated or replaced piping and supports in the digester tank. Converted 100' diameter steel Cantex tank to concrete including new equipment and piping. The effluent outfall was relocated to a different location into Dillon Reservoir by constructing a lined wet lands channel. An effluent pump station was also required due the new location. The final phase of the project was the installation of a second redundant effluent UV system. This project was completed under a previous employer.

Dillon Valley Water District – Dillon, CO – WTP Improvements – CMAR Contract – Project Superintendent – This project consisted of replacing the conventional media filters with a membrane system including improvements to the intake structure. This included a building addition for the new filters along with new process tanks installed in the existing building. The plant needed to have the ability to make water during construction which required careful coordination of shut downs and tie in work. A Coanda Hydroscreen was installed at the intake structure screening any solids before raw water entered the plant. This project was completed under a previous employer.

Swiftwater Solutions
Small Systems Engineering & Operations

PAUL YOUNG
OWNER / PRINCIPAL RESEARCH AND FINANCE SPECIALIST

EDUCATION

Masters of Public Administration
American Military University – Spring 2023

Bachelor of Arts in Environmental Science
University of Denver – 2014

PROFESSIONAL LICENSES/CERTIFICATIONS

- 40 hour HAZWOPER
- U.S. Army Certified Instructor for 12H and 42A Advanced Leadership Courses

PROFESSIONAL EXPERIENCE

Principal Research and Finance Specialist **2020 -Present**
Swiftwater Solutions **Strasburg, CO**

- Developed and implemented systems which include operations, management, administration, accounting, marketing, improving client experience, and ensuring client needs were always at the forefront of all operations.

Site Lead / Instructor / Engineer **2009 - Present**
United States Army Reserves **Aurora, CO**

- Assist engineering officer in construction planning, scheduling, and material estimating
- Assist in the preparation of operation orders, standing operating procedures, and contingency plans; coordinates with staff agencies for engineer operational and tactical support;

Unit Manager **2019 - 2020**
Colorado Department of Public Health and Environment **Glendale, CO**

- Unit manager for the Disease Control and Public Health Response Division. Division contact for organizing and developing internal procedures to comply with the Department's contract monitoring goals.

Program Manager /Community and Economic Development Specialist **2018 - 2019**
Colorado Department of Local Affairs **Denver, CO**

- Program manager for the State Revolving Fund at the Department. Departmental liaison for coordinating State Revolving Fund efforts between the Department of Public Health and Environment and the Colorado Water Resources and Power Development Authority.

Project Manager **2016 - 2018**
Colorado Department of Public Health and Environment **Glendale, CO**

- Project manager for water and wastewater infrastructure improvement projects throughout the state with local governments. Adhered to specific project budgets and ensured all components remained compliant with state and federal regulations.

Consultant/Associate/Technician **2010 - 2016**
TechLaw Inc. **Golden, CO**

- Researched assigned topics such as water quality due to non-point source pollutants, environmental assessments, and data inclusion for listing sites on the National Priorities List, and soil contaminants due to mining.

Swiftwater Solutions
Small Systems Engineering & Operations

JOYCE HUANG, PE, CWP
PRINCIPAL ENGINEER

EDUCATION

Masters of Science in Environmental Engineering – Cum Laude
University of Colorado at Boulder – 2012

Bachelor of Science in Environmental Engineering – Magna Cum Laude
University of Florida – 2009

- Engineering Dean's Scholarship – 2009
- University Scholars – 2009
- Dean's List for the College of Engineering – 2006 to 2009
- Florida Bright Futures Scholarship – 2006 to 2009

PROFESSIONAL LICENSES/CERTIFICATIONS

- Colorado Registered Professional Engineering Certification
- Colorado Class B Wastewater Treatment Operator License
- Colorado Class B Water Treatment Operator License
- Colorado Class II Drinking Water Distribution System Operator License
- Colorado Class II Wastewater Collection System Operator License
- Confined Space Training

PROFESSIONAL EXPERIENCE

Town Engineer — **January 2018 to July 2022**
Town of Telluride — **Telluride, CO**

- Project management for various public works projects. This role includes oversite, permitting, scheduling, budget, and coordination with contractors, staff, and other divisions within Town of Telluride.

Process Application Engineer/Product Manager — **October 2016 to December 2017**
Silver Bullet Water Treatment — **Denver, CO**

- Product Manager Tasks include creating and updating product launch schedules and tasks using Gantt charts, verifying progress and percent completion of tasks, addressing scheduling conflicts and coordinating responsibilities between the various departments involved.

Water Resources Engineer — **October 2012 to October 2016**
ARCADIS — **Raleigh, NC and Denver, CO**

- Engineering collaboration on variety of projects including water distribution and collection systems, pump selection, pipeline design, watershed analysis, storm water/green infrastructure design, water and wastewater treatment and process optimization studies.

Research Assistant/Intern — **August 2011 to December 2011**
Metro Wastewater Reclamation District — **Denver, CO**

- Studied sidestream nitrification performance while using the minimum theoretical SRT which provided steady effluent ammonia concentrations and reduced aeration costs

Environmental Engineering & Technology, Inc. — **Newport News, VA**

- Researched assigned topics such as greenhouse materials, CO2 capture, lime recovery, and magnesium recovery

Swiftwater Solutions
Small Systems Engineering & Operations

AL SMITH, PE, CWP
OWNER / ENGINEER

EDUCATION

Master of Science in Civil Engineering
University of Colorado at Boulder – 2013

- Mortenson Center for Global Engineering: Engineering for Developing Communities Certificate Program

Bachelor of Science in Chemical Engineering
University of Florida – 2009

PROFESSIONAL LICENSES/CERTIFICATIONS

- Colorado Registered Professional Engineering Certification
- Colorado Class A Water Treatment Operator License
- Colorado Class II Drinking Water Distribution System Operator License

PROFESSIONAL EXPERIENCE

Owner / Engineer — **September 2020 to Present**
Swiftwater Solutions, LLC — **Buena Vista, CO**

- Small System and Rural Community Development Engineering
- Water and Wastewater Design and Construction Management

Town Engineer — **January 2020 to Sept 2020**
Town of Buena Vista — **Buena Vista, CO**

- Development Review
- Operator in Responsible Charge
- Water Treatment and Distribution System Operations
- Project Management
- Civil Engineering Design and Construction Management

Water Operations Supervisor — **January 2020 to Sept 2020**
Town of Buena Vista — **Buena Vista, CO**

- Operator in Responsible Charge
- Water Treatment and Distribution System Operations
- Employee Supervision
- Treatment Plant Process Optimization
- Water Treatment Data Analysis

Process Specialist — **October 2015 to Sept 2017**
City of Aurora — **Aurora, CO**

- Treatment Plant Process Optimization
- Water Treatment Data Analysis
- Project Management
- Regulatory Compliance
- Equipment Maintenance
- Plant Startup

Brian Boniface, PLS
Survey Department Manager
Goff Engineering & Surveying, Inc.

Mr. Boniface is the Survey Department Manager for Goff Engineering. He is skilled in all aspects of land surveying and specializes in boundary surveys, construction surveys, and the oil/gas industry. He directly oversees scheduling the field crews, collection of field data and works closely with the design project manager.

EDUCATION

Associates of Applied Science
Land Surveying
Westwood College, 2005

LICENSES

Colorado – PLS # 38422

REFERENCES

Debra Bartel
Worley
970-759-3564

Russell (Rusty) Jones
Sopris Engineering, LLC
970-704-0311

Edicia Rodriguez
Road Coordinator
San Juan Road Committee
505-486-9966

EXPERIENCE

- City of Durango, CO
  - Design topography for 13th Street Stormdrain Design
  - Stake storm drain line and complete as-built data collection
- Town of Pagosa Springs Flood Mapping and Hydraulic Study
  - Coordinate survey data collection for initial hydraulic assessment and site inventory
- Animas Consolidated Ditch
  - Lead field crew and prepare data for topographic survey of cross sections 38, 39, and 40
- Fort Lewis College, Durango, CO
  - Design topography for master storm drainage and rehabilitation plan
- Lake Durango Water Authority
  - Control Survey for Construction
- Mancos Creek Farm Ditch
  - Lead field crew and prepare data for topographic survey of the ditch
- Southern Ute Indian Tribe
  - Waterline Extension Design Topography
  - Topographic Survey and Stake CR 516 and CR 321 Waterlines
  - County Road 319 Water and Gas Line Design Topography
  - Topographic Survey of the Raw Water Reservoir and Inlet
  - Water Dock Station and Clearwell Improvements Design Topography
- West Animas Consolidated Ditch Culvert
  - Lead field crew and prepare data for topographic survey of the ditch and culvert
- Xcel Energy Amos Hydro Plant
  - Tacoma Compliance Topography Survey

Rob Trudeaux, PLS

President-CEO,
Goff Engineering & Surveying, Inc.

Mr. Trudeaux is a firm principal with extensive survey, drafting, and project management experience. He serves as a liaison between the survey field crews, drafting personnel, and the client. Mr. Trudeaux's technical and supervisory skills are an asset to complex design, topographic, ROW, and construction projects. .

EDUCATION

Bachelor of Science
Fort Lewis College, 1992

LICENSES

Colorado – PLS # 38007

AFFILIATIONS

Professional Land Surveyors of Colorado, SW Chapter, Vice-President

REFERENCES

Mr. Matt Andrews, P.E.,
Muller Engineering
(303) 988-4939

Mr. Jeff Perino, P.E.,
970-769-0590

EXPERIENCE

- Animas-La Plata Permanent Operations Facility, Durango, CO
  - Design topography and utility coordination for Design-Build LEED project
- Tractor Supply Store, Durango, CO
  - Design topography and utility coordination
  - Construction staking
- COD Lake Nighthorse Parking Area and Road
  - Design topography
  - Construction staking
- La Plata County Human Services Building – LEED
  - Design topography
  - ALTA/ACSM
- Southern Ute Growth Fund Operations Building Phase II
  - Design topography for building addition
- Fort Lewis College, Durango, CO
  - Student Union Building Design Topography – LEED Gold
  - Berndt Hall Geosciences Building Design Topography LEED Gold
  - Berndt Hall Biology Remodel Design Topography
- County Road 509 Siphon Project
  - Design topography
  - Utility coordination
  - Construction Staking
- County Road 502 CBC Project
  - Design topography for culvert replacement
  - Construction staking
- Animas La Plata Project - Bartlett & West,
  - Easement preparation for waterlines
  - Design topographic survey

GOFF
ENGINEERING + SURVEYING INC

BROWNS HILL
ENGINEERING & CONTROLS

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TED F WILLE

EDUCATION

Black & Veatch Instrumentation & Control systems training, 1992.
Fix Intellution software programming class. May 1996.
B.S. Electrical Engineering, Dec. 1989, University of Wyoming, Laramie, Wyoming.
B.S. Math Education, May 1986, University of Wyoming, Laramie, Wyoming.

ELECTRICAL ENGINEERING EXPERIENCE

Browns Hill Engineering & Controls, LLC, Littleton, Colorado. 2000-Current.
Project Manager/Senior Engineer/Owner
Big Sky Services, Inc., Brighton, Colorado. 1996-2000.
Project Manager/Engineer
Black & Veatch Engineering, Denver, Colorado. 1990-1996.
Staff Engineer

Some Representative Projects

- Town of Yampa WTP and Tank. Design for an upgrade to the existing WTP and a new storage tank for the town.
- Pagosa Area Water & Sanitation District Digester Addition Project. This included the plant design, which included additional power system and controls.
- Winter Park Ranch generator addition project for all their wells and tanks.
- Pueblo West sludge handling addition, included new power system with power monitoring system and associated control system.
- Meridian Ranch Metro District, Falcon Lift Station Project: A new lift station with a complete headworks and multiple pumping scenarios.
- Meridian Metro District Irrigation Pump Station design/build project for a new irrigation pumping station.
- Steamboat Springs Headworks grinder addition: project included new grinder retrofit in existing plant.
- MWRD digester additions and modifications with gas flow monitoring and flare controls.
- MWRD grease building addition design including all electrical and controls.
- MWRD modifications to the cogeneration facilities with power monitoring and 15 KV feeds to double ended 480 volt load center checkout.
- MWRD grease building addition, with power monitor.
- Telluride wastewater treatment plant expansion.
- MWRD entire wastewater treatment plant modification.
- SACWSD chlorination facilities for chlorinating drinking water.
- City of Northglenn WWTP Upgrade. Design for a new administration building and clarifier addition for the existing WWTP.
- Cedaredge, CO WWTP. Design of new WWTP to replace the existing lagoon system.

PROFESSIONAL PAPERS

An Application for Error Squared Control, Presented at the ISA technical conference in Chicago, IL, Sept 1993.

PROFESSIONAL REGISTRATIONS

Professional Engineer 1995, State of Colorado
2009, State of New Mexico

Appendix: Town of Mancos WWTF Figures

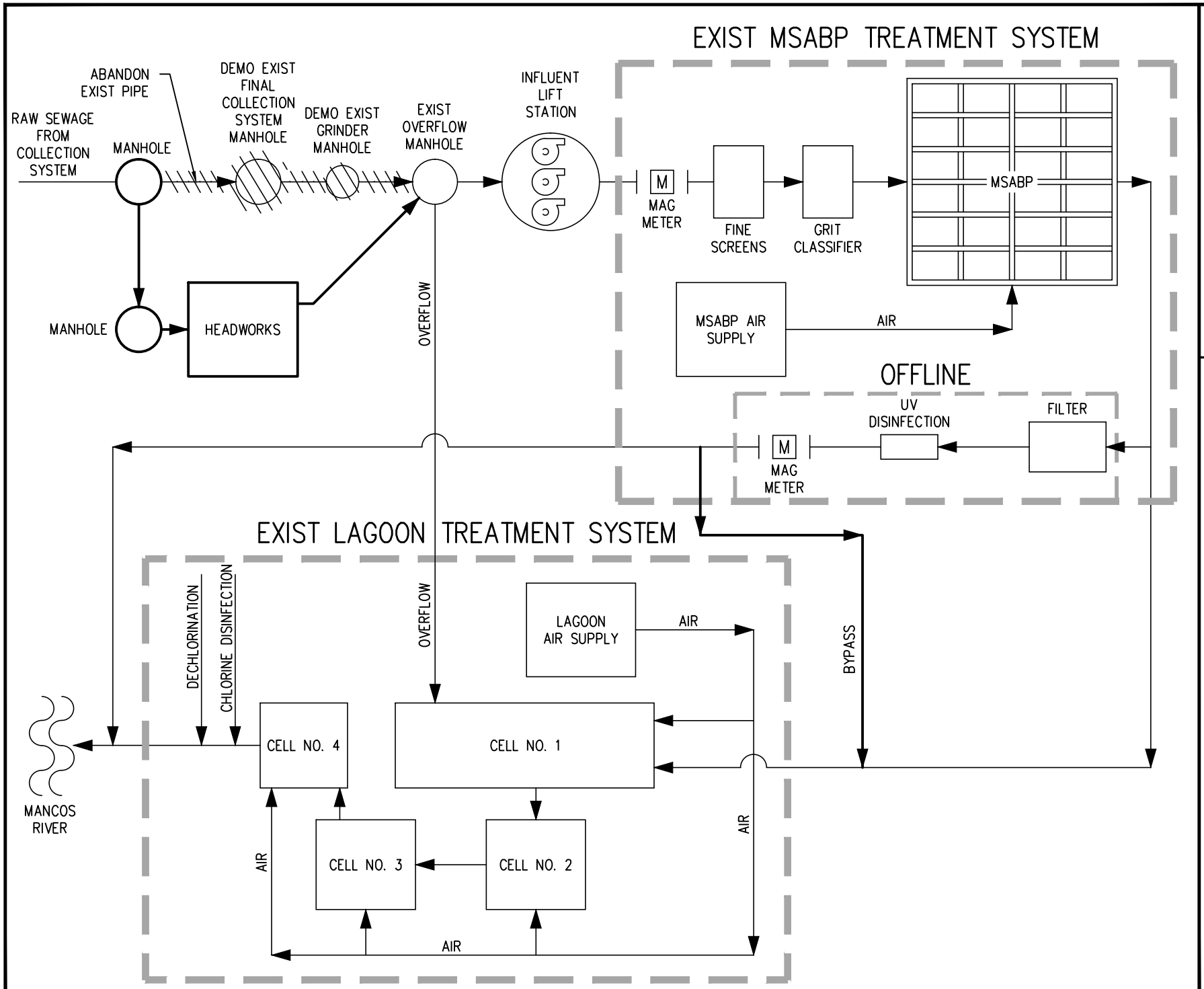

FIGURE 2 - PROCESS FLOW DIAGRAM

TOWN OF MANCOS WWTF

MARCH 2023

JVA, Inc.
1319 Spruce Street
Boulder, CO 80302
303.444.1951
www.jvajva.com
CONSULTING ENGINEERS
Boulder • Fort Collins • Winter Park
Glenwood Springs • Denver

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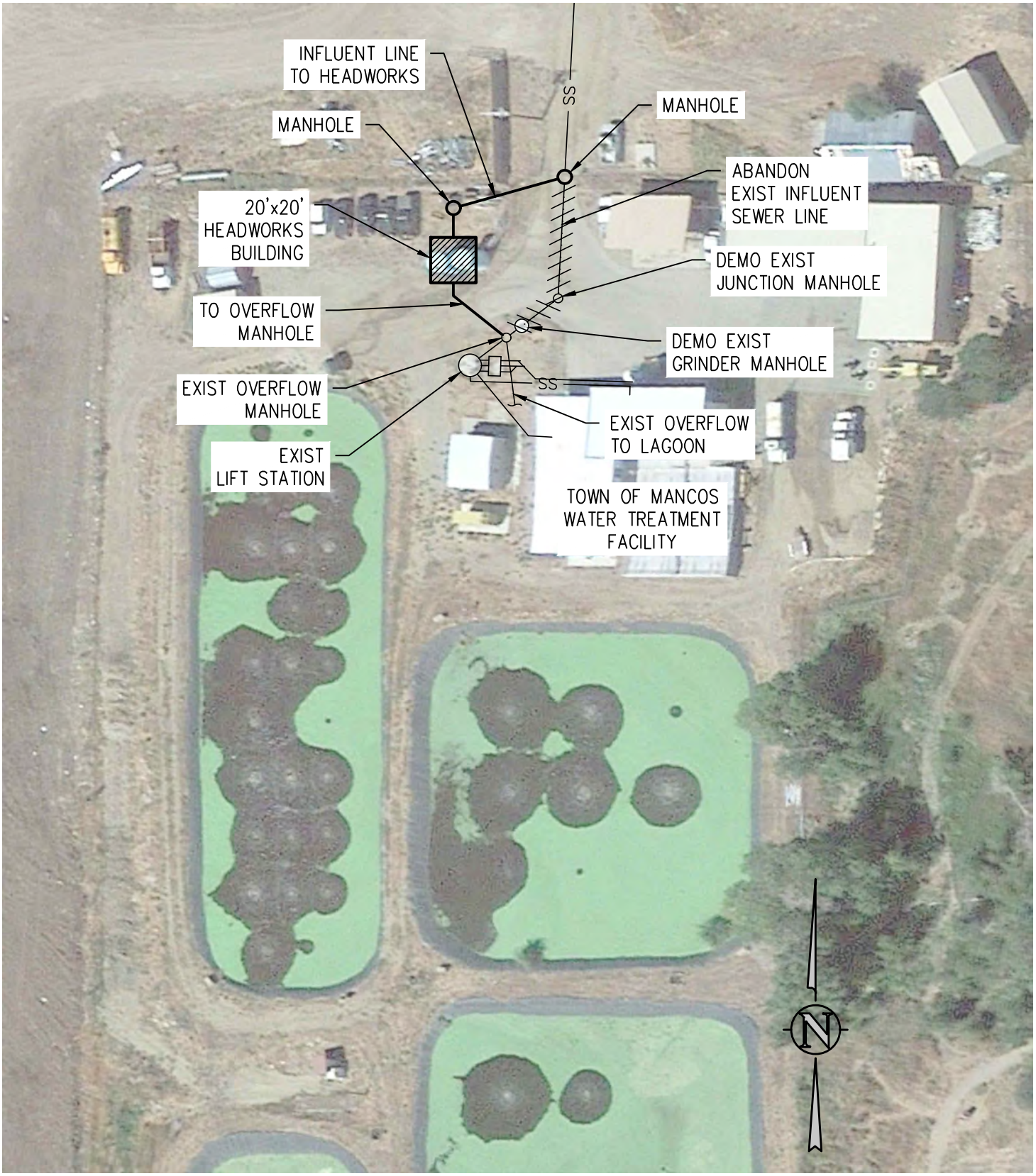

FIGURE 1 - SITE PLAN

TOWN OF MANCOS WWTF

MARCH 2023

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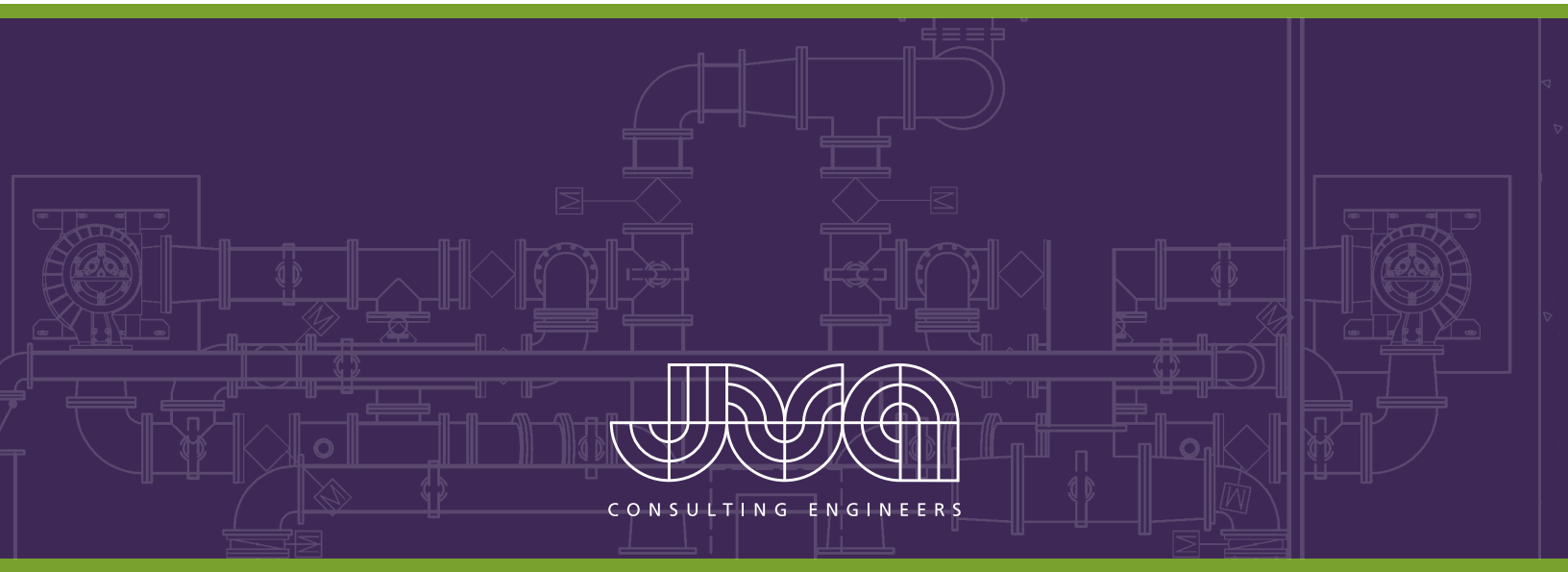

CONSULTING ENGINEERS

PLUMMER

PROFESSIONAL ENGINEERING SERVICES PROPOSAL
TO THE TOWN OF MANCOS

PROPOSAL FOR THE

WASTEWATER TREATMENT FACILITY REPAIR - PHASE I

Town of Mancos

March 10, 2023

TABLE OF CONTENTS

March 10, 2023

A. COVER LETTER

Town of Mancos
Attn: Heather Alvarez, Town Administrator
117 North Main Street
Mancos, Colorado 81328

Re: Wastewater Treatment Facility Repair - Phase 1

Dear Town of Mancos Selection Committee Members:

The Wastewater Treatment Facility Improvements are critical to the Town's ability to meet discharge limits and achieve reliable, long-term plant operations. Plummer has the right combination of local staff and the technical expertise necessary to assist with this important project. For this effort we will provide a seasoned team and bring the following differentiators to get the job done right:

A Collaborative Environment: We love working together and want to foster the same excitement to collaborate with the members of the Town of Mancos and Eaton Engineering. This project requires a holistic view of the existing treatment plant, a cost benefit analysis of treatment processes, and an understanding of different processes and technologies and which would be best for improvements to the wastewater treatment facility. We offer highly collaborative workshops to solicit input from all team member and provide value to the project and its success. Our aim is to educate the Town and Operations Staff on the design options and design decisions. This provides transparency and confidence in the final design with the ultimate goal of long-term system reliability.

Planning, Permitting, and Wastewater Treatment Expertise: Our pairing of local resources with technical expertise will provide strength in helping the Town deliver this project. We have provided similar services for nearly 40 wastewater treatment plants in Colorado for comparable mountainous communities some including the design of small buildings with small footprints.

Project Funding Assistance & Expertise: We have assisted communities similar to Mancos in securing over $55 million in funding in the Rocky Mountain Region for critical capital improvements projects. Our experienced staff provide guidance and funding assistance in securing advantageous funding from many sources including SRF, USDA, EPA, DOLA, Mineral Impact Assistance Fund, and Colorado Water Resource and Power Development Authority.

We look forward to this opportunity to work with you. If you have any questions, comments, please contact us at Patrick O'Brien at pobrien@plummer.com (970) 946-0371 or kfearney@plummer.com (970) 769-7422.

Sincerely,

Patrick O'Brien, PE, PMP
Principal

Kelly Fearney, PE
Client Service/Project Manager

We have reviewed the RFP (and information provided) and do not have any exceptions. We acknowledge receipt of Addendum 1, Addendum 2, and Addendum 3.

B. COMPANY INFORMATION

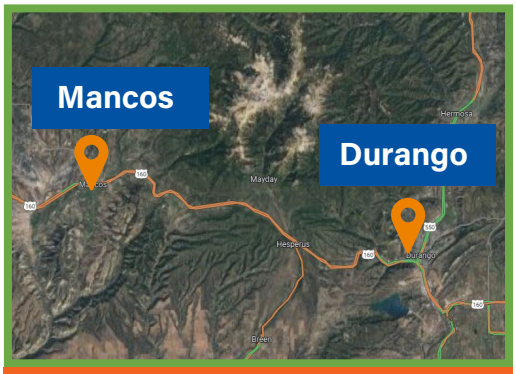
NAME: Plummer Associates, Inc.

ADDRESS: 1485 Florida Road, Suite C206, Durango, Colorado 81301

PHONE: 970.247.0724

PRINCIPALS: Alan Davis | Alan Tucker | Alan Swartz | Brian Beach | Chris Young | Clete Martin | David Gudal | Eddie Wilcut | Ellen McDonald | George Farah | Jeffrey Caffey | John Keane | Mary Portillo | Nick Toussaint | Patrick O'Brien | Robert Adams | Ruben Vasquez | Steve Coonan | Tim Noack

YEAR ESTABLISHED: 1978



Key team members Patrick O'Brien, Kelly Fearney, and Steve Omer have worked as treatment engineers in Southwest Colorado for decades

COMPANY STATUS: Plummer has no plans to sell or merge our company.

FIRM OVERVIEW

Founded over 40 years ago with a vision to uphold environmental stewardship and technical excellence, Plummer is committed to serving our clients with distinction and respect. Today, with more than 200 employees and offices in Colorado, Texas, Oklahoma, and Florida, Plummer continues that commitment. Our goal is to provide the Town of Mancos with outstanding technical expertise combined with local experience and knowledge. A comprehensive list of our services is included on the following pages.

Our distinction comes from our long-standing, technically talented employee-owners and staff who take pride in creating customized, safe, and reliable wastewater treatment solutions.

REGARDING PLUMMER'S DESIGN AND CONSTRUCTION SERVICES FOR A $110 MILLION WASTEWATER TREATMENT PLANT PROJECT

"Together, the Plummer team has helped coordinate all the tasks needed to have this project go as smoothly as possible, and they have saved the city money by being thorough and diligent in their day-to-day work. ***We have been very pleased with their work*** *and we would recommend them to anyone interested in hiring them for a similar project."* -Michael Thane, Public Works Director

PLUMMER SERVICES

CONSTRUCTED WETLANDS

- Feasibility Studies
- Conceptual Designs
- Water Quality Kinetic Modeling
- Water Balance Modeling
- Master Plans
- Pilot Wetland Testing
- Design for Construction
- Construction Management
- Wetland System Operations Assistance
- Water Quality Monitoring, Vegetation Surveys, and Invasive/Nuisance Species Control
- System Performance Evaluations
- Wetland Rehabilitation and Restoration Consulting
- Compensatory Mitigation Planning & Development

CONSTRUCTION MANAGEMENT

- Cost Estimating
- Construction Phase Services
- Full-Time and Part-Time Resident Project Representatives
- Field Observation
- Staff Training
- Stormwater Pollution Prevention Plans (SW3Ps)
- 3rd Party Construction Management
- Constructability Reviews

ELECTRICAL, INSTRUMENTATION & CONTROLS

- Electrical Power Design
- Load Modeling
- Routing & Duct Bank Design
- Generators
- I&C Design
- P&ID Development
- Instrument Specifications
- PLC Design/Programming
- HMI Design/Configuration
- SCADA Systems
- Telemetry Design
- Facility Commissioning
- Operator Assistance & Training

ENVIRONMENTAL

- Environmental Studies
- Environmental Permitting
- Environmental Restoration/Enhancement
- Rare Resources Studies/ Evaluations
- Watershed Protection
- Education

GEOSPATIAL DATA

- Topographic / LiDAR Studies
- Digital Surface Models
- Drone Surveys
- 3D Models
- Orthometric Imagery
- Photogrammetry

PIPELINES

- Planning Services
- Alignment Evaluations
- Pipe Sizing
- Condition Assessments
- Hydraulic Modeling
- Design Services
- Lake & Aerial Crossings
- Inverted Siphons
- Erosion Control
- Horizontal Directional Drilling (HDD)
- Utility Coordination
- Easements and Right-of-Way Identification
- Construction Phasing
- Construction Administration

PUMPING & STORAGE

- Pumping Assessments
- Flow Measurements & Hydraulic Modeling
- Sizing
- Equipment and Pump Selection
- Pit Type Selection
- Design
- Construction
- Project Management

STORMWATER & FLOOD MANAGEMENT

- Flood Management
- Flood Hazard & Mitigation
- Floodplain Analysis & Mapping
- Flood Warning Systems
- Water Quality
- MS4 Permitting
- Erosion Control
- Stormwater Pollution Prevention Plans (SWP3s)
- Stream Restoration
- Planning & Design
- Drainage Design
- Basin Design
- Master Plan Development
- Asset Management
- Advanced GIS

TELECOM

- Planning
- Inside Plant (ISP) Engineering
- Outside Plant (OSP) Engineering

- IT Network Design
- Civil Engineering
- Permitting
- Field Services
- Asset Management

WASTEWATER TREATMENT

- Comprehensive Performance Evaluations
- Facility Master Plans
- Site Selection
- Condition Assessments
- Permitting
- Project Management
- Facility Design
- Process & Equipment Selection
- Process Modeling
- BNR / MBR / SBR / IFAS
- Odor Control
- Tertiary Treatment
- Biosolids Handling
- Electrical / Instrumentation / Controls
- Facility Optimization
- Regulatory Compliance
- Construction Management
- Start-Up Assistance
- Operator Training & Troubleshooting

WATER & ENERGY EFFICIENCY

- Utility Allowance Modeling
- ICI Water Efficiency Surveys
- Sector-Specific Water Use Benchmarking
- Conservation Program Development & Management
- Water Conservation & Drought Contingency Planning

WATER PLANNING

- Water Supply Planning
- Water Reuse Planning (Nonpotable and Potable)
- Master Planning
- Asset Management
- Water Distribution System Modeling
- Wastewater Collection System Modeling

WATER QUALITY MODELING

- Coupled Watershed and Reservoir Modeling
- Reservoir Modeling
- Stream Modeling
- Bay/Estuary Modeling

WATER QUALITY / PERMITTING

- NPDES Permit Compliance & Trainings
- Stormwater Pollution Prevention Plans (SWP3s)
- Stream & Mixing Zone Studies
- Water Quality Modeling
- Water Quality Regulatory Policy Support
- Water Quality Standards Variances & Modifications
- Water Quality Enforcement & Consent Decree Support
- Industrial Pretreatment & Technically Based Local Limits
- Spill Prevention, Control, & Countermeasure (SPCC) Plans
- Water Quality Data Collection, Analysis, & Management

WATER REUSE

- Potable and Nonpotable Reuse
- Direct and Indirect Reuse
- Feasibility Studies
- Water Quality Evaluations
- Process Bench Scale & Pilot Testing
- Process Equipment & Technology Selection
- Process Design
- Pipeline & Pump Station Design
- Wetland Pilot Testing
- Wetland Design
- Wetland System Operations Assistance

WATER TREATMENT

- Studies & Evaluations
- Bench Scale & Pilot Testing
- Comprehensive Performance Evaluations
- Facility Master Plans
- Site Selection
- Risk & Resilience Assessments
- Water Stability & Corrosivity Studies
- Treatment Facility / Process Design
- Taste & Odor
- DBP Reduction
- Equipment & Technology Selection
- Solids Handling / Thickening / Dewatering / Land Application
- Construction Management
- Start-Up Assistance
- Operator Training & Troubleshooting

C. USE OF SUBCONTRACTORS

Plummer will serve as the main point of contact for the Town and is the project lead. We will coordinate all efforts of the team behind the scenes so that Mancos experiences a seamless project delivery. Our team has prior experience and long-standing relationships with our specialty partners which include:

When you contract with Plummer you are contracting with a single firm who will actively manage the project and all partners from day one through a successful closeout

BCER ENGINEERING | TECHNOLOGY | LIFE SAFETY

BCER is a full-service mechanical, electrical, and plumbing (MEP) engineering firm serving the commercial, governmental, institutional, and educational markets. Todd Brand will serve as the lead for BCER with **25 years of experience providing mechanical/HVAC for Rocky Mountain Region** projects including the CSU Mountain Campus WWTP; Jellystone WWTP; Montezuma Water Company WTP Expansion; and Firestone WTP with Plummer.

CD ENGINEERING INC.

CD ENGINEERING, INC. provides structural engineering with Principal Dave Marsh as the key contact. Dave has **over 25 years of structural engineering expertise**. He manages structural, geotechnical, and hydraulic engineering in support of water resources, water treatment, and general civil engineering projects. His expertise includes the management of multi-discipline projects and analysis/design of concrete, masonry, steel, aluminum, and wood structures for treatment facilities. He has provided structural services to Plummer on many projects including the Village of Taos Ski Valley WWTP; CSU Mountain Campus WWTP; Bayfield WTP; Firestone WTP; Montezuma Water Company WTP Expansion; and Hatcher WTP.

Tom Savory Architect

TOM SAVORY, Architect has **over 30 years of experience providing architectural services** and has served as the Principal Architect on over 250 projects ranging from small additions to multi-million-dollar facilities with multiple buildings. His recent work with Plummer includes a 20,000 square foot metal building for the Town of Firestone's St. Vrain WTP as well as municipal water and wastewater treatment plants in southwestern Colorado and northern New Mexico. He has worked with Plummer on the Village of Taos Ski Valley WWTP; CSU Mountain Campus WWTP; Hatcher WTP in Pagosa Springs; and Montezuma Water Company WTP.

TRAUTNER GEOTECH

TRAUTNER GEOTECH LLC provides detailed and comprehensive geotechnical engineering evaluation including testing and engineering analysis for commercial/industrial and municipal projects.

GOFF ENGINEERING + SURVEYING INC

GOFF ENGINEERING AND SURVEYING, INC. is a multi-disciplinary consulting firm located in Durango specializing in surveying and mapping. Surveying services include, but are not limited to: boundary surveys, topographical mapping, site planning, aerial mapping, utility surveys, and ALTA/ACSM land title surveys.

D. MINIMUM MANDATORY QUALIFICATIONS

We are providing not only one but two highly-qualified project managers who meet the minimum mandatory qualifications as noted in section 2.9 of the RFP and are available and excited to assist the Town of Mancos with this project.

KELLY FEARNEY, PE - CLIENT/PROJECT MANAGER

- Kelly is a Colorado Licensed Professional Engineer
- She has 16 years of experience with wastewater treatment facility design and construction
- She has completed more than three similar WWTP design projects in the last 10 years for clients including Elbert Water Company, the Village of Taos Ski Valley, Durango Riverside Resort, and Young Life.

STEVE OMER, PE - CO-PROJECT MANAGER / LEAD ENGINEER

- Steve is a Colorado Licensed Professional Engineer and licensed Class A Wastewater Operator
- He has 20 years of experience with wastewater treatment facility design and construction
- He has completed many similar WWTP design projects in the last 10 years for clients including Crested Butte, Village of Taos Ski Valley, Telluride. Philmont Scout Ranch, and CSU Mountain Campus.

#1 - COMPANY AND PERSONNEL EXPERIENCE

85%
REPEAT BUSINESS

~ 96%
REPEAT BUSINESS IN WATER ENGINEERING

CUSTOMER SERVICE PHILOSOPHY

We aim to not only meet expectations with regard to system performance, safety, and reliability but to surpass our clients' expectations with how a project is delivered, if the entire project team desires to work together in the future, and if the project produces technically excellent results. Our project teams are not happy unless our clients are happy. To us, the client is not only the Town Manager/Administrator and Public Works Director, but also the Operations staff who live and breath our designs day-by-day. Success in client satisfaction is demonstrated through our repeat business from our water/ wastewater engineering clients.

VALUE ENGINEERING

- **Level 1, Comprehensive Document Review:** We review each design sheet and specification and review the quality of project documents. This effort will be performed by professional engineers who have more than 10 years' experience in the repair and design of wastewater treatment facilities.
- **Level 2, Constructability Review:** We review documents (plans and specifications) from a contractor's perspective and from a construction activity management viewpoint. We will evaluate the opinion of probable construction cost, material selection, construction safety, material availability, necessary staging, necessary experience, equipment size, labor skills and construction difficulty. The constructability review will be performed by senior construction managers with more than 10 years' experience in construction of wastewater facilities.
- **Level 3, Value Engineering Review:** We will perform a systematic review of documents (plans, specifications, calculations, design survey, etc.), evaluating methods for reducing construction cost without compromising quality or project objectives. We will review material selection, construction methods, construction schedule, sequence of construction, permit conditions, critical success project elements, and quality. The value engineering review will be performed by senior project managers and/or senior construction managers.

We will review the project with you at key steps to gain your input and approval. We will complete our internal QA/QC before we meet with you, so you can focus on the big picture.

EACH PERSON

Each person is responsible for maintaining the quality of our services and is expected to **carefully complete** each assignment.

CLIENT/PROJECT MANAGER

Client/Project Manager Kelly Fearney has direct responsibility for providing deliverables that meet our quality requirements. Upon notice to proceed, Kelly's first step will be to establish the Quality Control Plan (QCP) for the project. The QCP identifies deliverables, reviews, and scheduled review dates at the beginning of the project. Kelly will make sure that the entire team knows the expectations for the project and our plan to meet or exceed those expectations.

CO-PM / LEAD ENGINEER

Steve Omer will support Kelly in making sure that deliverables meet our quality requirements. He will also make sure that the selected processes and equipment work together as intended by identifying conflicts and/or opportunities. Based on his experience and knowledge of WWTP headworks and process improvements, he will help customize this project for the Town.

PROJECT QA/QC

Mark Dahm will be our Senior QA/QC Specialist. Since he is not part of the production team, he will offer an independent perspective on the quality of our deliverables. Mark will oversee our QA/QC process and will **hold Kelly, Steve, and the project team accountable** for complying with the QCP.

Our QA/QC process helps us meet your expectations: a project that is on-time and on-budget with a constructable, functional design; accurate OPCCs; and minimal change orders.

SIMILAR PROJECTS COMPLETED BY KEY TEAM MEMBERS

CLIENT	PROJECT NAME	CDPHE	PROJECT DETAILS
Camp Santa Maria	Camp Santa Maria Wastewater Treatment Plant	X	New WWTP in CO Mountains, existing plant in operation during construction
Town of Crested Butte	Crested Butte Wastewater Treatment Plant Upgrade	X	WWTP expansion from 0.6 to 0.75 MGD, included redundancy and EI&C design
City of Lubbock	Lubbock Wastewater Treatment Plant		Provided planning, permitting, design, and construction for 3 MGD facility
City of Round Rock	Brushy Creek WWTP Controls Replacement		10 MGD facility expansion, $110 Million design and construction project
Colorado State University	CSU Mountain Campus Wastewater Treatment Plant	X	Same project team, alternative delivery, WWTP in Colorado mountains
Elbert Creek Water Co.	Elbert Creek Wastewater Treatment Plant Improvements	X	Retrofit process modernization, I&C upgrades, performance evaluation
Sun Communities	Jellystone Park of Larkspur Wastewater Treatment Plant	X	Alternative delivery, permitting, design, and construction; CDPHE design criteria
Pagosa Area WSD	PAWSD Wastewater Treatment Plant	X	Decommission lagoon WWTP, provided planning, permitting, design, construction
Pagosa Springs	Pagosa Springs Wastewater Treatment Plant Improvements	X	Design replaced lagoons with ICFAS system, future nutrient requirements
Town of Nederland	Wastewater Treatment Plant Improvements	X	Hybrid SBR WWTP, $4.4M SRF Loan, ACEC award-winning design project
City of Pottsboro	Pottsboro Wastewater Treatment Plant		SRF funding requirements, expansion of WWTP from 0.35 to 0.65 MGD
City of Lubbock	Lubbock Northwest Water Reclamation Facility		Planning, permitting, design and construction of 3 MGD MBR facility
Town of Georgetown	Georgetown Wastewater Treatment Plant Improvements	X	WWTP for mountainous community, $9.2M in ARRA grants/SRF loans
Village of Taos Ski Valley	VTSV Wastewater Treatment Plant Expansion		Expanded capacity by 2.5 times, assisted with securing $8.3M USDA Loan

Projects in Colorado

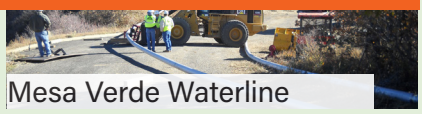
Experts at Alternative Project Delivery

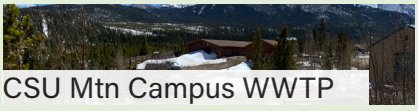
OUR ALTERNATIVE DELIVERY PROJECTS HIGHLIGHT OUR UNDERSTANDING OF DELIVERY CHALLENGES SUCH AS:

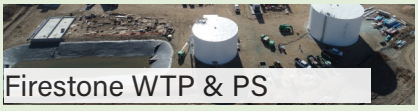
- Capturing advantageous project funding
- Timely material and equipment delivery
- Avoiding costly delays
- Land use agreements

We have completed 40+ alternative delivery projects with expedited schedules


Jellystone Larkspur WWTP


Mesa Verde Waterline


CSU Mtn Campus WWTP


Firestone WTP & PS


Elbert Creek WWTP


UTRWD Stonehill Pipeline

PROJECT TEAM

MANCOS COLORADO

PRINCIPAL-IN-CHARGE
Patrick O'Brien, PE, PMP

QA/QC
Mark Dahm, PE

Kelly and Steve have experience with similar small WWTPs in Colorado

CLIENT SERVICE/ PROJECT MANAGER
Kelly Fearney, PE

CO-PM / LEAD ENGINEER
Steve Omer, PE

PERMITTING
Kristin Arnold

SENIOR ENGINEER
Sandra Dudley, PhD, PE

PROJECT ENGINEER
Julian Paiz, EI

ELECTRICAL, I&C
Nick Toussaint, PE, PMP
Andrew Gudal, EI

Located in Durango
Located in Denver

SPECIALTY SUBS

BCER Engineering *(Mechanical)*
CD Engineering, Inc. *(Structural)*
Tom Savory *(Architect)*
Trautner Geotech, LLC *(Geotech)*
Goff Engineering and Surveying *(Survey)*

PATRICK O'BRIEN, PE, PMP

PRINCIPAL-IN-CHARGE

28 YEARS OF EXPERIENCE

As Plummer's Mountain West Area Leader, Patrick is committed to making sure that team deliverables meet the project requirements and the Town's expectations. He has worked on similar wastewater treatment projects in Colorado since 1998 including headwork upgrades, buildings with small footprints, and operator-friendly designs.

- *Town of Crested Butte WWTP Upgrade*
- *CSU Mountain Campus WWTP*
- *Village of Taos Ski Valley WWTP Upgrade*

KELLY FEARNEY, PE

CLIENT SERVICE/PM

16 YEARS OF EXPERIENCE

Because this is such an important project for both the Town and our team, we have selected Kelly, our strongest project manager and an experienced designer, to manage this project. Kelly has worked on many similar wastewater treatment plants in mountainous communities in Colorado and understands the key issues to consider in the selection and design of upgrades that are best for you.

- *Elbert Water Co. WWTP Improvements*
- *Village of Taos Ski Valley WWTP Upgrade*
- *Durango Riverside Resort WWTP*

STEVE OMER, PE
CO-PM / LEAD ENGINEER
20 YEARS OF EXPERIENCE

Steve is a Project Manager and Class A Wastewater Operator with experience in facility design and optimization, regulatory compliance and permitting, construction management, and client coordination. His experience as an operator and engineer will contribute to his ability to a develop design that makes sense and is easy to operate.

- *Town of Crested Butte WWTP Upgrade*
- *Town of Telluride WWTP Improvements*
- *Village of Taos Ski Valley WWTP Upgrade*

MARK DAHM, PE
SENIOR QA/QC
36 YEARS OF EXPERIENCE

Mark brings technical experience in wastewater treatment and process design, regulatory compliance and permitting, troubleshooting, cost analysis in support of client decision-making, and construction. He will apply his decades of technical expertise to this project to increase the overall value received by the Town.

- *Town of Crested Butte WWTP Upgrade*
- *Town of Telluride WWTP Improvements*
- *Village of Taos Ski Valley WWTP Upgrade*

KRISTIN ARNOLD
WATER QUALITY/PERMITTING
7 YEARS OF EXPERIENCE

Kristin's experience is in applying for and obtaining permits (municipal and industrial), and performing water quality modeling to determine effluent quality limits for permits. She helped develop a model to simulate impacts of nutrients from all major WWTPs in the Dallas-Fort Worth area totaling 800 MGD in permitted flow.

- *Black Hawk CCSD WWTP Cooling Alternatives Analysis & Wastewater Model*
- *Upper Trinity River Water Quality Compact Nutrient Modeling*

NICK TOUSSAINT, PE, PMP EI&C PRINCIPAL
38 YEARS OF EXPERIENCE

Nick has planned and addressed thousands of SCADA and electrical systems in service worldwide. He provides complete services from initial concept and master planning through design, implementation, start-up, and commissioning. His "hand-on" experience helps him assist owners and integrators in solving difficult control systems problems.

- *Crested Butte WWTP Electrical Upgrade*
- *VTSV WWTP SCADA Upgrade*
- *Boulder WWTP SCADA System Upgrades*

SANDRA DUDLEY, PHD, PE SENIOR ENGINEER
38 YEARS OF EXPERIENCE

Sandra's background as a utility executive, state regulatory director, and consulting engineer gives her a unique perspective to support the Town on technical, practical, budgetary, and treatment issues. She is particularly successful with relatively low-cost nutrient removal using plant modification and process optimization.

- *Town of Bennett WWTP Expansion*
- *Johnstown Central WWTP Expansion*
- *Mountain View WWTP Expansion*

JULIAN PAIZ, EI
STAFF ENGINEER / RPR
4 YEARS OF EXPERIENCE

Julian is experienced in wastewater engineering and holds a Master of Science degree in environmental engineering. He served as lead process design engineer and resident project representative for a WWTP process modernization project in Durango and has served as process design engineer on a number of water and wastewater facilities in Colorado.

- *Elbert Water Co. WWTP Improvements*
- *Town of Ignacio WWTP Feasibility Study*
- *Town of Telluride WWTP Improvements*

MOUNTAIN CAMPUS WASTEWATER TREATMENT PLANT

Colorado State University

This design/build project included providing an MBR wastewater treatment facility for the Colorado State University Mountain Campus situated in Bellvue, Colorado. The campus is a 1,600-acre site for student learning, conferences, and retreats. The wastewater treatment plant include was designed with fine screens, nitrogen removal and alternative disinfection.

Plummer initially provided design and permitting services but construction came to a halt due to the Cameron Peak Fire.

Plummer later provided construction phase services.

Key Personnel:
Patrick O'Brien, Mark Dahm, Steve Omer, Nick Toussaint

Reference
Susanne Cordery, Environmental Engineer for Colorado State University
16321 Pingree Park Road, Bellvue, CO 80512
970.491.0117
susanne.cordery@colostate.edu

WASTEWATER TREATMENT PLANT UPGRADE

Village of Taos Ski Valley

With influent wastewater flow and loading during holidays exceeding the mountain community's existing WWTP capacity; and faced with the need to expand capacity by 2.5 times on a site limited by land - Plummer provided a focused and site-specific solution. Our team provided an innovative application of MBR technology for the expansion and retrofit.

Design included retrofitting the existing headworks and reusing the existing influent equalization tank; the facility was completed within a small footprint similar to Mancos.

During construction a temporary MBR was installed to treat flows

$8.6M project with construction in 12 months

Key Personnel:
Patrick O'Brien, Kelly Fearney, Mark Dahm, Steve Omer

Reference
Mark Fratrick, Prior VTSV Administrator
Village of Taos Ski Valley, NM
505.259.4633

WASTEWATER TREATMENT PLANT UPGRADE

Town of Crested Butte

Plummer utilized existing infrastructure and provided creative solutions to upgrade this plant and take it from 0.6 MGD to 0.75 MGD. The plant includes a 3-train oxidation ditch with redundancy along with a complete replacement of the electrical, instrumentation, and controls systems. The existing generator was also reconfigured to provide emergency power supply to the existing headworks MCC and ATAD MCC.

CDPHE Design Criteria Adherence. A small footprint similar to Mancos.

Utilization of existing infrastructure and creative ways to increase plant capacity for mountain community.

Key Personnel:
Patrick O'Brien, Mark Dahm, Steve Omer, Nick Toussaint

Reference
Shea Earley, Wastewater Supervisor, Town of Crested Butte, 507 Maroon Avenue
Crested Butte, CO 81224
970.596.7912 searley@crestedbutte-co.gov

WASTEWATER TREATMENT FACILITY IMPROVEMENTS

Elbert Creek Water Company

Plummer designed improvements to this 0.24 MGD facility. The retrofit process modernization project included new aeration systems for the activated sludge and aerobic digestion processes, the replacement of all major equipment, and facility-wide process control and monitoring instrumentation. Major design components included a secondary clarifier, electrical improvements, stabilized sludge drying and disposal, facility air handling, disinfection, a process air system, and I&C including the installation of a PLC.

Plummer previously provided a CPE and prioritized recommendations.

Plummer later provided construction phase services.

Key Personnel:
Patrick O'Brien, Kelly Fearney, Mark Dahm, Julian Paiz

Reference
Logan Hartle, WW Operator, The Glacier Club, Durango 970.382.6750 lhartle@theglacierclub.com

WATER TREATMENT PLANT EXPANSION

Montezuma Water Company

This facility expansion from 4 MGD to 6 MGD includes a new raw water pump station and conveyance piping, an Actiflo pretreatment followed by media filtration treatment train, chlorine dioxide pre-oxidation and pretreatment chemical systems, a clearwell, chlorine disinfection, and a corrosion control system.

Extremely collaborative effort; we engaged with operators early on.

This project demonstrates our ability to stay on schedule and produce high-quality deliverables.

Plummer previously provided a feasibility study. Upon the completion of the study, we were selected to provide the design.

Key Personnel:
Patrick O'Brien, Kelly Fearney, Mark Dahm, Steve Omer, Nick Toussaint, Julian Paiz

Reference
Steve Bowman, MWC Manager 970.882.2226 steve@montezumawater.org

PROJECT FUNDING

FUNDING ASSISTANCE AND EXPERTISE

Plummer has assisted communities similar to Mancos in securing over $65 million in funding in the Rocky Mountain Region for critical capital improvements projects. Our experienced staff provide guidance and funding assistance in securing advantageous project funding from many sources including SRF, USDA, EPA, DOLA, Mineral Impact Assistance Fund, and Colorado Water Resource and Power Development Authority. Similar local projects are included below.

REGIONAL PROJECTS WHERE PLUMMER PROVIDED FUNDING ASSISTANCE

PROJECT	AMOUNT	FUNDING TYPE
Bayfield Water Storage Tank	$615,000	EMIAF Grant
Bayfield Waterline Replacement (2016)	$350,000	DOLA Grant
Bayfield Waterline Replacement (2020)	$4 Million	CDPHE SRF Grant/Loan
City of Cortez WTP Improvements	$525,000	CWRPDA/CDPHE SRF Loan
Hatcher WTP Improvements	$7.13 Million	CDPHE SRF Loan
Highlands Lagoon Elimination/WWTP Improvements	$10.25 Million	ARRA Loan/Grant
Montezuma Water Company WTP Improvements	$18 Million	USDA Loan
San Juan WTP - UV Disinfection (our work was successful but PAWSD declined the loan)	$565,000	USDA Loan
Town of Nederland WWTP Improvements	$4.4 Million	CDPHE SRF Loan
Town of Georgetown WTP & WWTP Improvements	$9.2 Million	ARRA Grants/Loans
Town of Georgetown WTP Reservoir	$1.0 Million	CWCB Grant/Loan
Town of Dillon Water Storage Tank	$320,000	CDPHE Natural Disaster Grant
Village of Taos Ski Valley WWTP Improvements	$8.3 Million	USDA Loan

OUR TEAM KNOWS THE IN'S AND OUT'S OF DELIVERING PROJECTS THAT MEET USDA AND SRF FUNDING REQUIREMENTS

#2 - PROJECT APPROACH / SCOPE OF WORK

PROJECT UNDERSTANDING

The Town of Manco's WWTF was upgraded in 2012; this included a lift station, 1 mm drum screens, grit classifier, Aquarius Multi-Stage Activated Biological Process (MSABP), disk filter, and ultraviolet (UV) disinfection system. The plant has struggled to operate with this treatment train in compliance with its discharge permit due to a multitude of challenges.

The Town has prioritized its operational difficulties and its needs for progress toward solutions. In **Phase 1** of efforts to alleviate the ongoing challenges, The Town desires to contract an engineering consultant to **design a new automated, self-cleaning screening process and new grit removal equipment** for the facility. **Plummer will manage this scope of work through CPDHE approval and construction**. This will allow removal of the Muffin Monster® and expected performance improvement of the existing 2 mm drum screens, which will remain in place. Additional project work in Phase 1 includes **evaluation of the 2 mm drum screens, review of the MSABP aeration system, cost estimation of temporarily plugging aeration basin ports to reduce short-circuiting, and a cost benefit analysis** of whether to maintain and repair the MSABP or change to a sequencing batch reactor (SBR) secondary treatment process.

Phase 1 has an overall **objective of working toward long-term, consistent compliance with discharge permit requirements**. Phase 1 includes several independent objectives, all of which are aimed at improving the reliability and ease of operation of the wastewater treatment facility, consistent with the overall objective:

1. **Design, permitting and construction of new automated screening and grit removal systems, upstream of the influent lift station.**
2. **Evaluation of the impact of changing the drum screens from 1mm to 2mm openings.**
3. **Evaluation of the existing aeration system control associated with the MSAB process and recommendations for improvements or repairs.**
4. **Evaluation of the option to plug ports between the MSABP basins for potential reduction of short-circuiting.**
5. **Comparison of cost benefit analyses for 1) maintaining and repairing the existing MSAB process and 2) converting the facility to use SBR technology, with a recommendation for option 1) or 2).**

PROJECT APPROACH

The operation of the existing wastewater treatment facility has been a challenge for the Town. The systemic issues associated with the operation are a combination of the lack of unit processes (e.g., 6mm screening and grit removal) prior to the 2mm screening and secondary treatment process performance.

We understand the need for multiple phases and the combination of continued evaluation in parallel with the design of a headworks to improve the performance of the existing downstream processes with an ultimate goal of an operable facility that is cost effective and meets the permit limits.

We recognize the need to work with the Town and the Owner's Advisor to select headworks equipment and design the facilities that meet the schedule. To meet this expectation, a highly collaborative environment between all team members will be required. Our goal is to foster this environment, it will improve participation, thereby resulting in a project that meets the desired objective.

Our work plan incorporates the prescriptive requirements of the project using a series of workshops to ensure collaboration and effectiveness of communication. Subsequent effort during the design phases will be more efficient, therefore, the design submitted to the Town for review will be consistent with expectations and design review meetings will be more effective. We will address comments and complete the Bid-Ready documents.

We expect the construction phase to begin with submittal reviews followed by the procurement of long lead time items; upon receipt of the needed materials and equipment, ground breaking can commence and the facility improvements completed in a fashion that minimize the impact to the operation of the existing facilities.

Our scope, schedule, and fee estimate represent our understanding of the project requirements, and our team has the expertise to deliver. We welcome the opportunity to discuss any aspect of our proposal – our desire is to furnish value to the Town and meet the Town's short and long-term goals.

WASTEWATER TREATMENT FACILITY REPAIR AND EVALUATION

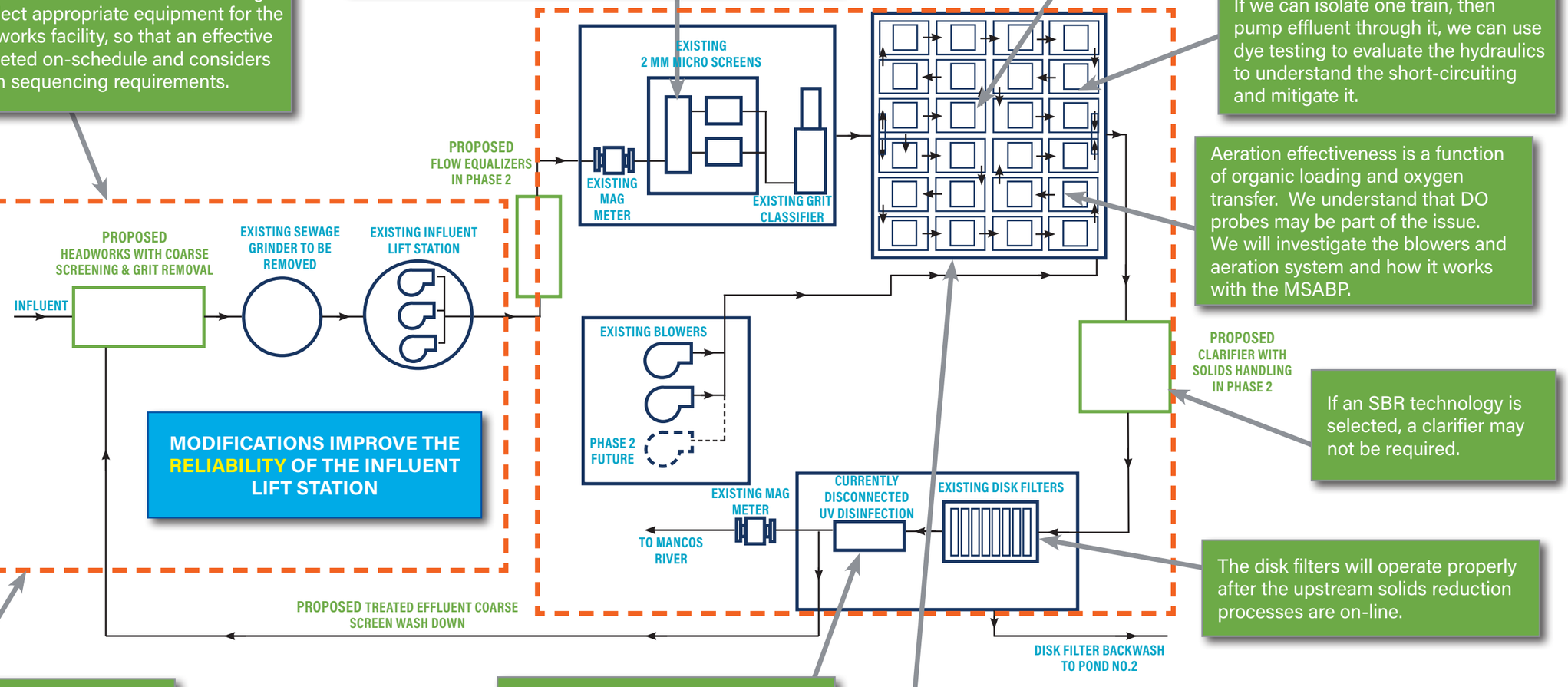
2mm screening is not an effective primary screening technique. Typically, the screens are overloaded with suspended solids and are not able to provide the function intended. Once the 6mm screen and grit removal system are on-line, the 2mm screening system will operate more effectively.

Understanding the process flow is challenging. To assist the Town with an analysis of the flow to reduce short-circuiting, we suggest a collaborative effort that will be a combination of engineering analysis and empirical testing.

The Plummer Team will collaborate with the Town and Owner's Advisor to determine the right location and select appropriate equipment for the proposed headworks facility, so that an effective design is completed on-schedule and considers the construction sequencing requirements.

If we can isolate one train, then pump effluent through it, we can use dye testing to evaluate the hydraulics to understand the short-circuiting and mitigate it.

Aeration effectiveness is a function of organic loading and oxygen transfer. We understand that DO probes may be part of the issue. We will investigate the blowers and aeration system and how it works with the MSABP.



If an SBR technology is selected, a clarifier may not be required.

The disk filters will operate properly after the upstream solids reduction processes are on-line.

CDPHE allows for submittal of the 60% design package with the Process Design Report. Plummer will use this option to gain timely approval of the design.

Once effective solids reduction and management of the upstream processes is on-line, the UV system will operate properly.

SBR processes (batch or continuous) are well understood and can be modeled reasonably well. Also, SBR processes can be understood by operations staff and managed accordingly. The MSABP is not well understood, is proprietary, and accurate modeling would be challenging. Solids management will always be an issue with the MSABP.

EXISTING WASTEWATER TREATMENT FACILITY

Example of a pre-fabricated building for the VTSV WWTF

Determining the location of the proposed headworks will be a collaborative effort. It will need to be hydraulically functional and operationally accessible.

Existing Muffin Monster to be removed. Existing influent bypass to remain. Existing overflow vault to remain. Reconfiguration may be required.

Work with Town staff to determine the most effective influent configuration during construction.

Existing lift station to remain

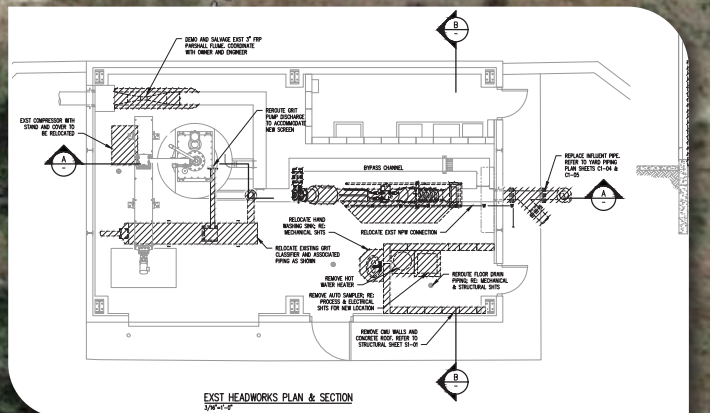
Existing drum screens (consider re-purposing in the proposed facility) followed by grit classifier, which is not being used.

Collaborate with Town staff (to prepare for) any future redundancy requirements of the existing lift station.

Coordinate system configuration and routing of effluent for washdown with the Town.

Proposed configuration needs to account for the desired future equalization.

Space and hydraulic analysis will be performed to allow for gravity flow from the terminal manhole, through the new headworks, to the existing lift station.



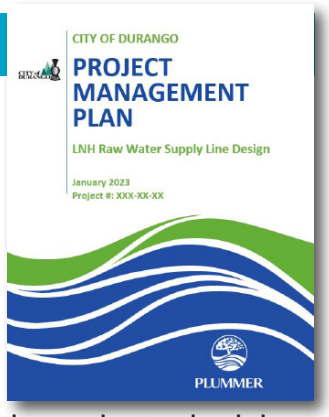
Plummer designed improvements to similar headworks with a small footprint for the Village of Taos Ski Valley WWTF.

The following work plan is based upon our understanding of the project, the objective, and our project approach; assumptions, constraints, and exclusions will be defined during the negotiation process. The work plan discusses the critical aspects and identifies deliverables; the project schedule complements the work plan and includes the phase level work breakdown structure.

PROJECT WORK PLAN

We will coordinate with the Town's administrative and operations staff along with the Owner's Advisor to develop design parameters for the proposed improvements. We will evaluate each option based on performance, reliability, space and constructability constraints, capital costs, and operational considerations.

PROJECT INITIATION PHASE



Project Management Plan: A draft Project Management Plan will be developed upon receiving Notice to Proceed. The draft Project Management Plan will include: the scope, budget, schedule, work breakdown structure (project team structure and responsibilities), expectations of the Town and the Owner's Advisor, and stakeholder management and quality assurance/quality control.

Kick-off Meeting: We will conduct a kick-off meeting to review the draft Project Management Plan and provide Town staff and the Owner's Advisor with the opportunity to provide input to finalize the project schedule, task priorities, and identify the lines of communication.

Workshop 1: Workshop 1 will follow immediately after the kick-off meeting, items to be addressed include:

- Listen to Town staff ideas and concerns about existing operations and staff ideas to address the issue(s).
- Discuss the project approach, items critical to the successful execution of the project, and related potential issues.
- Discuss potential constraints, problems, and issues that may impact the project, and review solutions.
- Identify key factors for the alternatives (decision) analysis matrix.
- Review State of Colorado Design Criteria for Domestic Wastewater Treatment Works and select parameters for an evaluation matrix of options;
- Perform a site visit of the wastewater treatment facility.

We will email meeting agendas and supporting documents before the meeting and email meeting notes within one week after the meeting concludes.

PROJECT MANAGEMENT PHASE

Progress Meetings: We will hold bi-weekly progress meetings. Email correspondence will be within three business days of the call and we will update the issues log and action items.

Project Management: The weekly/monthly project management tasks include managing the project resources, budget, and schedule, and ensuring that effective communication is maintained with the Town, Plummer team members, and subconsultants. Invoicing will be completed monthly; the invoice submittal will include a project status report.

Quality Management: We plan to complete an internal quality review process during each phase of the project and for every deliverable. This includes deliverables provided by our subconsultants.

PRELIMINARY TREATMENT ANALYSIS PHASE

Preliminary Treatment Analysis Task: After Workshop 1, we will review options for 6 mm automated, self-cleaning screens with wash, compaction, and bagging units. The screens will be followed by grit removal and the existing 2 mm screen, located downstream of the existing influent lift station.

Draft Technical Memorandum: Plummer will prepare the draft technical memorandum documenting the results of the self-cleaning screen and grit removal alternatives analysis and provide a recommendation.

Workshop 2: Workshop 2 will present the results of the preliminary treatment analysis. The intent of the workshop is to reach consensus on the design of the preliminary treatment improvements for the automated, self-cleaning coarse screen and grit removal. We will email workshop minutes and action items within one week after the meeting concludes.

Final Technical Memorandum: After workshop 2, we will prepare conceptual level documents for the selected preliminary treatment improvements; activities will include:

- Conceptual level engineering analysis and design,
- Outline technical specifications,
- Conceptual level drawings,
- Conceptual level construction staging/storage plan,
- Conceptual level construction sequencing plan,
- AACE Class IV opinion of probable cost.

Deliverables: Draft and final technical memorandum.

SECONDARY TREATMENT EVALUATION PHASE

The Secondary Treatment Evaluation Phase begins after Workshop 1 and will proceed concurrently with the Preliminary Treatment Analysis Phase. Draft and final copies of a Technical Memorandum and OPCC's addressing the follow elements will be prepared and submitted to the Town:

- Review design criteria including influent flow and loading, and effluent criteria based on existing permits;
- Efficacy of the 2 mm drum screens for TSS and BOD reduction;

- Evaluation of MSABP aeration system and recommendations for improvement, with OPCC;
- Evaluation of treatment tank port-plugging and path forward followed by clarification, with OPCC;
- Evaluation of SBR option for secondary treatment, with OPCC;
- Comparison of MSABP repairs with SBR for secondary treatment, including OPCC's;
- Recommended path forward for secondary treatment, with OPCC; and
- Value engineering options with estimated cost savings.

Workshop 3: Workshop 3 will review the draft technical memoranda and OPCCs. After receiving comments and input from the Town and Owner's Advisor, the technical report will be finalized and submitted.

Deliverables: We will prepare the draft and final technical memorandum documenting the analyses and conclusions.

SURVEY, GEOTECHNICAL AND SUBSURFACE UTILITY INVESTIGATIONS AND REPORTS PHASE

The scope of services associated with this phase includes the statutory requirements associated with subsurface utility evaluations (SUE; Colorado Senate Bill 18-167 and ASCE 38). The work included in this phase is outlined below:

Our team provides quality Level A potholing

- Coordinate with the Town on the boundary of the topographic survey and subsurface utility evaluations (SUE),
- Review archived Record Documents (as-builts), and other information related to existing or proposed infrastructure within the project area,
- Coordinate with surveying, geotechnical, and utility locating subconsultants,
- Complete Level C and Level B Utility Locates (prior to potholing),
- Complete a geotechnical field investigation and report,
- Complete topographic and feature surveys,
- Set control and limits of construction boundaries,
- Complete Level A potholing and observation,
- Update a feature survey and geotechnical report, and
- Finalize ASCE 38-compliant survey mapping and SUE documents.

Deliverables: Survey mapping, geotechnical report, ASCE 38-compliant SUE report.

30% DESIGN PHASE

(30% Design): After the utility locating, geotechnical investigation, and topographic and feature surveys are complete, we will hold a workshop with Town staff to review the wastewater treatment plant improvements. We will email workshop minutes and action items within one week after the meeting concludes.

Plummer provides workshops and review meetings to discuss issues that may arise during design and construction. Our experienced staff has the knowledge and hands-on experience to resolve issues related to wastewater treatment facilities.

The 30% Design Phase will be based upon the direction received at Workshops 1, 2 and 3, the weekly progress Teams conference calls, and the results of the survey, geotechnical, and SUE investigations and will include the following activities:

- Engineering analysis and design of automated, self-cleaning coarse screening and grit removal,
- Drawings,
- Construction staging/storage plan,
- Construction sequencing plan,
- AACE Class IV opinion of probable cost,
- Outline technical specifications (Divisions 1 through 49),
- Project Manual (Division 0), and a
- Site Application Amendment and Engineering Report.

Deliverables: 30% Design Package. The elements of the design review package include drawings, construction staging/storage plan, construction sequencing plan, an AACE Class IV Opinion of Probable Cost, outline technical specifications, and project manual.

Design Review Meeting (30%): Plummer will conduct one workshop and one 30% design review meeting. We will email the meeting agenda and supporting documents before the meeting and email meeting minutes within one week after the meeting concludes.

60% DESIGN PHASE

60% Design Phase: This phase will be based upon comments received from the 30% design review meeting and the weekly progress Teams conference calls, and will include the following activities:

- Engineering analysis and design,
- Drawings,
- Construction staging/storage plan,
- Construction sequencing plan,

- AACE Class III opinion of probable cost,
- Technical specifications (Divisions 1 through 49),
- Project Manual (Division 0), and a
- CDPHE Basis of Design Report.

Deliverables: 60% Design Package. The elements of the design review package include drawings, a construction staging/storage plan, a construction sequencing plan, an AACE Class III Opinion of Probable Cost, technical specifications, project manual, and the CDPHE Basis of Design Report.

Design Review Meeting (60%): Plummer will conduct one 60% design review meeting. We will email the meeting agenda and supporting documents before the meeting and email meeting minutes within one week after the meeting concludes.

CDPHE Review and Approval: Plummer will submit the 60% Design Package to CDPHE for review, and we will answer questions necessary to receive approval.

90% DESIGN PHASE

The 90% Design Phase will be based upon the direction received at the 60% design review meeting and the weekly progress Teams conference calls, and will include the following activities and design phase elements:

- Engineering analysis and design,
- Drawings,
- Construction sequencing plan (to be integrated into contract documents),
- AACE Class II opinion of probable cost,
- Technical specifications (Divisions 1 through 49), and a
- Project Manual (Division 0).

Deliverables: 90% Design Package. The elements of the design review package include drawings, a construction sequencing plan, an AACE Class III Opinion of Probable Cost, technical specifications, and project manual.

Design Review Meeting (90%): Plummer will conduct one 90% design review meeting. We will email the meeting agenda and supporting documents before the meeting and email meeting minutes within one week after the meeting concludes.

BID-READY CONTRACT DOCUMENTS PHASE

The Bid-Ready Contract Documents Phase will be based upon the direction received at the 90% design review meeting and the weekly progress Teams conference calls, and will finalize the following Contract Document deliverables:

- Project manual (Division 0),
- Technical specifications (Division 1 through 49),
- Contract drawings, and

- Updated AACE Class II opinion of probable cost.

BID PHASE

Plummer will assist the Town during the Bid Phase, expected services include (and can be expanded or reduced based upon the direction of the Town):

- Assistance with advertisement of the project,
- Management of the plan holders list and transmittal of official project information to plan holders,
- Compilation of questions and provide responses in addenda
- Assistance with an on-site pre-bid meeting,
- Evaluation of bids and preparation of the recommendation of award,
- Preparation of notice of award, and
- Preparation of conformed construction documents.

CONSTRUCTION PHASE

Plummer will assist the Town during the Construction Phase, expected services include (and can be expanded or reduced, based upon the direction of the Town):

- Project management,
- Assistance with an on-site pre-construction meeting,
- Attendance at progress meetings,
- Office engineering, to include:
  - Submittal reviews,
  - Responses to requests for information (RFIs), work change directives (WCDs), and requests for change order (RFCOs),
  - Preparation of field orders (FOs),
  - Review of applications for payment,
  - Interpretations of the contract documents and coordination with the Town
- Six site visits (full time can also be provided if desired)
- Two days for start-up, testing, and commissioning of the facility improvements,
- Substantial and final completion punch list walk-throughs and documentation,
- Project closeout documentation, and
- Warranty period services.

PROJECT ASSUMPTIONS AND CONSTRAINTS

The following list of assumptions and constraints was used to develop the proposal:

1. No easement acquisition (permanent and temporary) is required.
2. Town will provide historic and record (as-built) drawings.
3. Water surface elevations used in the hydraulic grade line will be developed from the information provided by the Town.
4. The Town will provide flow data and hydraulic loading information (current and projected future).
5. The Town will provide documents developed by Brad Eaton.
6. The Town will provide all prior correspondence with CDPHE.
7. Town to provide influent flow data and influent loading characteristics. If additional parameters are needed, the Town will provide sampling collection and pay for laboratory analysis.
8. Effluent quality requirements will be based on existing permit limits. Evaluation of future permit limits is recommended and can be provided for an additional fee.
9. Evaluation of secondary treatment processes will be based on typical treatment system sizing. Modeling is recommended and can be provided for an additional fee.
10. The Town will review and provide comments to design drawings, specifications, and the Draft Technical Memoranda within one week of receipt of each.
11. CDPHE review and approval processes are limited to submission of documentation required for amendment of the existing site location application to reflect the headworks modification.
12. The Town will provide our staff and subconsultants access to the facilities.
13. Construction documents and bid phase services assume delivery using conventional design-bid-build. Plummer can advise on alternative delivery methods and/or benefits of equipment pre-procurement.
14. Meeting of design and bid schedule assumes timely review by CDPHE. Plummer assumes two rounds of CDPHE responses formally or via email. Permit fee to be paid by Town.
15. Any building department approvals will be completed by the Contractor.

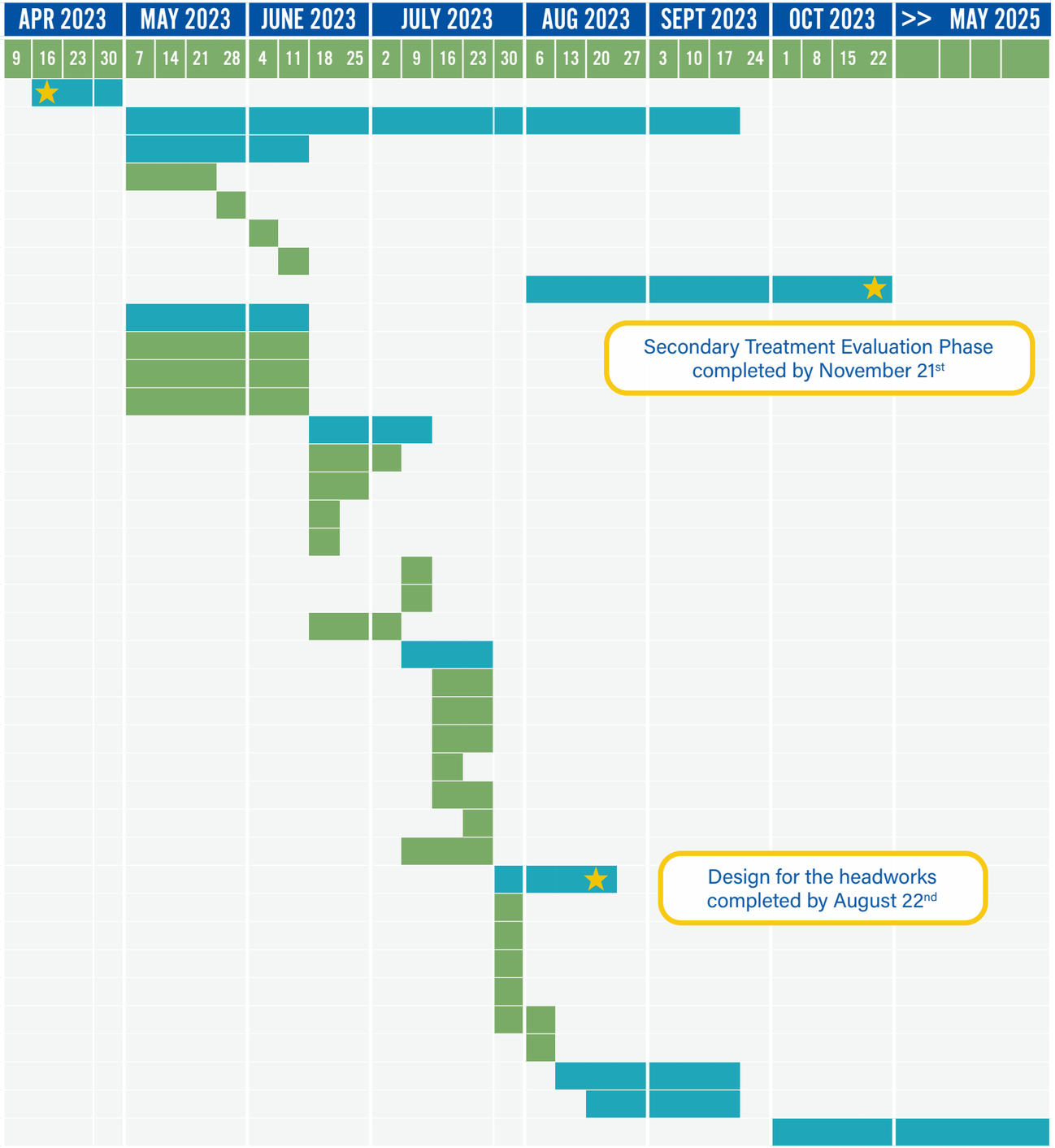
PROJECT EXCLUSIONS

The following items are excluded from the scope of work:

1. Conceptual, preliminary, or final design for secondary or other downstream processes.
2. Any work associated with CDPHE discharge permit negotiations or permit violations.
3. Costs associated with any permits related to the design or construction.
4. Any environmental or cultural delineations.
5. Any assistance with procuring or managing the project funds.
6. Collecting samples and laboratory costs associated with evaluations.

#3 - SCHEDULE

MANCOS PHASE 1 - WWTP IMPROVEMENTS	4/17/2023	5/12/2025
PHASES & TASKS	**START**	**END**
Project Initiation Phase	**4/17/2023**	**5/1/2023**
Project Management Phase	**5/1/2023**	**9/18/2023**
Preliminary Treatment Analysis Phase	**5/1/2023**	**6/12/2023**
1 - Preliminary Treatment Analysis	5/1/2023	5/22/2023
2 - Draft TM	5/22/2023	5/29/2023
3 - Workshop 2	6/4/2023	6/4/2023
4 - Final TM	6/5/2023	6/12/2023
Secondary Treatment Evaluation Phase	**7/31/2023**	**11/21/2023**
Survey, Geotech, & SUE Investigations & Reports Phase	**5/1/2023**	**6/12/2023**
1 - Survey	**5/1/2023**	6/12/2023
2 - Geotechnical Investigation and Report	**5/1/2023**	6/12/2023
3 - SUE Investigation and Report	**5/1/2023**	6/12/2023
30% Preliminary Treatment Design Phase	**6/12/2023**	**7/13/2023**
1 - Engineering Analysis & Design	**6/12/2023**	7/3/2023
2 - Drawings	**6/12/2023**	6/26/2023
3 - Outline Specifications	**6/12/2023**	6/19/2023
4 - Construction Staging/Storage & Sequencing	**6/12/2023**	6/19/2023
5 - OPCC	**7/3/2023**	7/13/2023
6 - Design Review Meeting	**7/13/2023**	7/13/2023
7 - CDPHE Site Location Application Mod and Engineering Report	**6/12/2023**	7/3/2023
60% Preliminary Treatment Design Phase	**7/3/2023**	**7/27/2023**
1 - Engineering Analysis & Design	**7/13/2023**	**7/27/2023**
2 - Drawings	**7/13/2023**	**7/27/2023**
3 - Div 1-49 Specifications	**7/13/2023**	**7/27/2023**
4 - Project Manual (Div 0)	**7/13/2023**	7/20/2023
5 - OPCC	**7/13/2023**	**7/27/2023**
6 - Design Review Meeting	**7/27/2023**	**7/27/2023**
7 - Basis of Design Report and Submission to CDPHE	**7/3/2023**	**7/27/2023**
90% Preliminary Treatment Design Phase	**7/27/2023**	**8/22/2023**
1 - Engineering Analysis & Design	**7/27/2023**	8/3/2023
2 - Drawings	**7/27/2023**	8/3/2023
3 - Div 1-49 Specifications	**7/27/2023**	8/3/2023
4 - Project Manual (Div 0)	**7/27/2023**	8/3/2023
5 - OPCC	**7/27/2023**	8/10/2023
6 - Design Review Meeting	**8/10/2023**	8/10/2023
Bid-Ready Contract Documents Phase	**8/10/2023**	**9/21/2023**
Bid Phase	**8/17/2023**	**9/18/2023**
Preliminary Treatment Construction Services	**9/25/2023**	**5/12/2025**



#4 - COST AND WORK HOURS

2023 HOURLY FEE

Staff Description	Staff Code	2023 Rate
Admin Staff	A1 – A2	$90.00
Admin Staff III	A3	$95.00
Senior Admin Staff	A4	$110.00
Designer/Technician	C1-C2	$115.00
Designer/Technician III	C3	$125.00
Senior Designer/Technician	C4	$145.00
Construction Manager in Training *(CMIT)*	CM1	$115.00
Construction Manager in Training II	CM2	$140.00
Construction Manager in Training III	CM3	$145.00
Construction Manager IV	CM4	$150.00
Construction Manager V	CM5	$190.00
Construction Manager	CM6	$230.00
Senior Construction Manager	CM7	$255.00
Principal Construction Manager	CM8	$275.00
Resident Project Rep. I	RR1	$90.00
Resident Project Rep. II	RR2	$120.00
Resident Project Rep. III	RR3	$140.00
Lead Resident Project Rep.	RR4	$145.00
Field Tech I	LS1	$90.00
Field Tech II	LS2	$105.00
Survey Specialist I	LS3	$115.00
Survey Specialist II	LS4	$125.00
Survey Analyst	LS5	$145.00
Chief of Parties	LS6	$165.00
Engineer/Scientist Intern	ES0	$75.00
Engineer-in-Training/Scientist-in-Training	ES1	$125.00
Engineer-in-Training/Scientist-in-Training II	ES2	$135.00
Engineer-in-Training/Scientist-in-Training III	ES3	$150.00
Project Engineer/Scientist	ES4	$160.00
Senior Project Engineer/Scientist	ES5	$180.00
Project Manager	ES6	$225.00
Senior Project Manager	ES7	$245.00
Principal I	ES8	$310.00
Principal II	ES9	$325.00
Electrical Engineer in Training I	EE1	$125.00
Electrical Engineer in Training II	EE2	$130.00
Electrical Engineer in Training III	EE3	$145.00
Electrical Specialist	EE4	$155.00
Programmer	EE5	$185.00
Programmer II	EE6	$210.00
Senior Electrical Engineer	EE7	$285.00

- Billing rates may be adjusted by up to 4 percent annually (at the beginning of each calendar year) during the term of this agreement.
- A multiplier of 1.15 will be applied to all direct expenses.
- A technology charge will be billed at $5 per labor hour.

FEE

MANCOS PHASE 1 - WWTF IMPROVEMENTS					
PHASE	HOURS	LABOR	DIRECT COSTS	SUBS	TOTAL
PROJECT INITIATION PHASE	59	$11,270			$11,270
PROJECT MANAGEMENT PHASE	91	$20,085	$1,000		$21,085
PRELIMINARY TREATMENT ANALYSIS PHASE	73	$12,555			$12,555
SECONDARY TREATMENT EVALUATION PHASE	173	$28,715			$28,715
SURVEY, GEOTECH, SUE INVESTIGATIONS AND REPORTS PHASE	14	$2,270		$28,000	$30,270
30% PRELIMINARY TREATMENT DESIGN PHASE	140	$22,640			$22,640
60% PRELIMINARY TREATMENT DESIGN PHASE	218	$35,885		$40,000	$75,885
90% PRELIMINARY TREATMENT DESIGN PHASE	117	$19,920			$19,920
BID-READY CONTRACT DOCUMENTS PHASE	73	$12,270			$12,270
BID PHASE	38	$6,530			$6,530
PRELIMINARY TREATMENT CONSTRUCTION SERVICES	265	$45,018		$10,000	$55,018
TOTAL	**1,261**	**$217,158**	**$1,000**	**$78,000**	**$296,158**

A detailed fee estimate with a breakdown by task and team member is included the Appendix.

APPENDIX

- Detailed Fee
- Village of Taos Ski Valley WWTF Headworks Sample
- Town of Crested Butte WWTF Headworks Sample

Project Planning - Plummer

From: 4/17/2023 To: 4/17/2023

Project: 3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements PIC: OBrien, Patrick

Client: 3598 Town of Mancos PM: Omer, Steve

WBS Budget	Bgt Hrs.	Bgt Labor	Bgt ODC	Budget CNS	Total Budget
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**1,261.00**	**217,158.28**	**1,000.00**	**78,000.00**	**296,158.28**
01 Project Initiation Phase	59.00	11,270.00	0.00	0.00	11,270.00
01 Project Management Plan	26.00	4,770.00	0.00	0.00	4,770.00
02 Kick-off Meeting	19.00	3,740.00	0.00	0.00	3,740.00
03 Workshop 1	14.00	2,760.00	0.00	0.00	2,760.00
02 Project Management Phase	91.00	20,085.00	1,000.00	0.00	21,085.00
01 Progress Meetings	35.00	6,225.00	0.00	0.00	6,225.00
02 Project Management	20.00	3,600.00	1,000.00	0.00	4,600.00
03 Quality Management	36.00	10,260.00	0.00	0.00	10,260.00
03 Preliminary Treatment Analysis Phase	73.00	12,555.00	0.00	0.00	12,555.00
01 Preliminary Treatment Analysis	21.00	3,475.00	0.00	0.00	3,475.00
02 Draft TM	26.00	4,410.00	0.00	0.00	4,410.00
03 Workshop 2	14.00	2,710.00	0.00	0.00	2,710.00
04 Final TM	12.00	1,960.00	0.00	0.00	1,960.00
04 Secondary Treatment Evaluation Phase	173.00	28,715.00	0.00	0.00	28,715.00
01 Secondary Treatment Evaluation	104.00	16,665.00	0.00	0.00	16,665.00
02 Draft TM	25.00	4,045.00	0.00	0.00	4,045.00
03 Workshop 3	28.00	5,520.00	0.00	0.00	5,520.00
04 Final TM	16.00	2,485.00	0.00	0.00	2,485.00
05 Survey, Geotechnical, and SUE Investigations and Reports Phase	14.00	2,270.00	0.00	28,000.00	30,270.00
01 Survey	6.00	950.00	0.00	8,000.00	8,950.00
02 Geotechnical Investigation and Report	4.00	660.00	0.00	10,000.00	10,660.00
03 SUE Investigation and Report	4.00	660.00	0.00	10,000.00	10,660.00
06 30% Preliminary Treatment Design Phase	140.00	22,640.00	0.00	0.00	22,640.00
02 Engineering Analysis & Design	30.00	4,900.00	0.00	0.00	4,900.00
03 Drawings	48.00	7,000.00	0.00	0.00	7,000.00
04 Outline Specifications	7.00	1,135.00	0.00	0.00	1,135.00

05 Construction Staging/Storage & Sequencing	5.00	780.00	0.00	0.00	780.00
06 OPCC	13.00	2,320.00	0.00	0.00	2,320.00
07 Design Review Meeting	14.00	2,710.00	0.00	0.00	2,710.00
08 CDPHE Site Location Application Mod and Engineering Report	23.00	3,795.00	0.00	0.00	3,795.00
07 60% Preliminary Treatment Design Phase	218.00	35,885.00	0.00	40,000.00	75,885.00
01 Engineering Analysis & Design	26.00	4,365.00	0.00	40,000.00	44,365.00
02 Drawings	92.00	13,420.00	0.00	0.00	13,420.00
03 Div 1-49 Specifications	32.00	5,130.00	0.00	0.00	5,130.00
04 Project Manual (Div 0)	12.00	3,100.00	0.00	0.00	3,100.00
05 OPCC	8.00	1,395.00	0.00	0.00	1,395.00
06 Design Review Meeting	16.00	3,200.00	0.00	0.00	3,200.00
07 Basis of Design Report and Submission to CDPHE	32.00	5,275.00	0.00	0.00	5,275.00
08 90% Preliminary Treatment Design Phase	117.00	19,920.00	0.00	0.00	19,920.00
01 Engineering Analysis & Design	15.00	2,490.00	0.00	0.00	2,490.00
02 Drawings	40.00	5,800.00	0.00	0.00	5,800.00
03 Div 1-49 Specifications	11.00	1,645.00	0.00	0.00	1,645.00
04 Project Manual (Div 0)	2.00	360.00	0.00	0.00	360.00
06 OPCC	15.00	3,145.00	0.00	0.00	3,145.00
07 Design Review Meeeting	34.00	6,480.00	0.00	0.00	6,480.00
09 Bid-Ready Contract Documents Phase	73.00	12,270.00	0.00	0.00	12,270.00
01 Incorporate CDPHE Comments	12.00	2,095.00	0.00	0.00	2,095.00
02 Project Manual (Div 0)	5.00	1,010.00	0.00	0.00	1,010.00
03 Div 1-49 Specifications	23.00	3,685.00	0.00	0.00	3,685.00
04 Contract Drawings	21.00	3,165.00	0.00	0.00	3,165.00
05 AACE Class II OPCC	12.00	2,315.00	0.00	0.00	2,315.00
10 Bid Phase	38.00	6,530.00	0.00	0.00	6,530.00
01 Advertisement	5.00	995.00	0.00	0.00	995.00
02 Plan holders list and transmittals, pre-bid management and meeting	12.00	2,220.00	0.00	0.00	2,220.00
03 Evaluation of Bids and Recommendation	10.00	1,630.00	0.00	0.00	1,630.00
04 Notice of Award and Prep of Confirmed Construction Docs	11.00	1,685.00	0.00	0.00	1,685.00
11 Preliminary Treatment Construction Services	265.00	45,018.28	0.00	10,000.00	55,018.28

01 Project Management	20.00	3,686.52	0.00	0.00	3,686.52
02 Pre-Construction Meeting Coordination and Leadership	20.00	3,600.00	0.00	0.00	3,600.00
03 Progress meeting attendance	29.00	5,085.60	0.00	0.00	5,085.60
04 Office Engineering such as submittal reviews, RFIs, FOs, payment applications	92.00	14,560.84	0.00	10,000.00	24,560.84
05 Site Observations	16.00	2,995.14	0.00	0.00	2,995.14
06 Observation & documentation of startup, testing, commissioning	20.00	3,244.82	0.00	0.00	3,244.82
07 Substantial and final completion punch list walkthroughs and documentation	16.00	2,745.68	0.00	0.00	2,745.68
08 As-built drawings and project closeout documentation	36.00	5,595.28	0.00	0.00	5,595.28
09 Warranty services	16.00	3,504.40	0.00	0.00	3,504.40

Allocated ODC	Alloc Amount
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**1,000.00**
02 Project Management Phase	1,000.00

Allocated CNS	Alloc Amount
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**78,000.00**
05 Survey, Geotechnical, and SUE Investigations and Reports Phase	28,000.00
01 Survey	8,000.00
02 Geotechnical Investigation and Report	10,000.00
03 SUE Investigation and Report	10,000.00
07 60% Preliminary Treatment Design Phase	40,000.00
01 Engineering Analysis & Design	40,000.00
11 Preliminary Treatment Construction Services	10,000.00
04 Office Engineering such as submittal reviews, RFIs, FOs, payment applications	10,000.00

Scheduled Labor	Sched Hrs	Sched Amount
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**1,261.00**	**217,158.28**
01 Project Initiation Phase	59.00	11,270.00
01 Project Management Plan	26.00	4,770.00
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*24.00*	*4,320.00*
02 Kick-off Meeting	19.00	3,740.00

Dudley, Sandra	*4.00*	*980.00*
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*7.00*	*1,260.00*
Paiz, Julian	*4.00*	*600.00*
03 Workshop 1	14.00	2,760.00
Dudley, Sandra	*3.00*	*735.00*
Fearney, Kelly	*3.00*	*675.00*
Omer, Steve	*5.00*	*900.00*
Paiz, Julian	*3.00*	*450.00*
02 Project Management Phase	91.00	20,085.00
01 Progress Meetings	35.00	6,225.00
Fearney, Kelly	*5.00*	*1,125.00*
Omer, Steve	*20.00*	*3,600.00*
Paiz, Julian	*10.00*	*1,500.00*
02 Project Management	20.00	3,600.00
Omer, Steve	*20.00*	*3,600.00*
03 Quality Management	36.00	10,260.00
Dahm, Mark	*18.00*	*4,410.00*
OBrien, Patrick	*18.00*	*5,850.00*
03 Preliminary Treatment Analysis Phase	73.00	12,555.00
01 Preliminary Treatment Analysis	21.00	3,475.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*16.00*	*2,400.00*
02 Draft TM	26.00	4,410.00
Contreras, Brenda	*2.00*	*220.00*
Dahm, Mark	*2.00*	*490.00*
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*16.00*	*2,400.00*

03 Workshop 2	14.00	2,710.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*4.00*	*720.00*
Paiz, Julian	*4.00*	*600.00*
04 Final TM	12.00	1,960.00
Contreras, Brenda	*1.00*	*110.00*
Dudley, Sandra	*1.00*	*245.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*8.00*	*1,200.00*
04 Secondary Treatment Evaluation Phase	173.00	28,715.00
01 Secondary Treatment Evaluation	104.00	16,665.00
Arnold, Kristin	*16.00*	*2,560.00*
Dickman, Brian	*24.00*	*3,480.00*
Dudley, Sandra	*7.00*	*1,715.00*
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*7.00*	*1,260.00*
Paiz, Julian	*48.00*	*7,200.00*
02 Draft TM	25.00	4,045.00
Arnold, Kristin	*4.00*	*640.00*
Contreras, Brenda	*1.00*	*110.00*
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*16.00*	*2,400.00*
03 Workshop 3	28.00	5,520.00
Dudley, Sandra	*6.00*	*1,470.00*
Fearney, Kelly	*6.00*	*1,350.00*
Omer, Steve	*10.00*	*1,800.00*
Paiz, Julian	*6.00*	*900.00*
04 Final TM	16.00	2,485.00

Dickman, Brian	*4.00*	*580.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*10.00*	*1,500.00*
05 Survey, Geotechnical, and SUE Investigations and Reports Phase	14.00	2,270.00
01 Survey	6.00	950.00
Dickman, Brian	*2.00*	*290.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*2.00*	*300.00*
02 Geotechnical Investigation and Report	4.00	660.00
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*2.00*	*300.00*
03 SUE Investigation and Report	4.00	660.00
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*2.00*	*300.00*
06 30% Preliminary Treatment Design Phase	140.00	22,640.00
02 Engineering Analysis & Design	30.00	4,900.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*24.00*	*3,600.00*
03 Drawings	48.00	7,000.00
Dickman, Brian	*40.00*	*5,800.00*
Paiz, Julian	*8.00*	*1,200.00*
04 Outline Specifications	7.00	1,135.00
Contreras, Brenda	*1.00*	*110.00*
Dudley, Sandra	*1.00*	*245.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*4.00*	*600.00*
05 Construction Staging/Storage & Sequencing	5.00	780.00
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*4.00*	*600.00*

06 OPCC	13.00	2,320.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*8.00*	*1,200.00*
07 Design Review Meeting	14.00	2,710.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*4.00*	*720.00*
Paiz, Julian	*4.00*	*600.00*
08 CDPHE Site Location Application Mod and Engineering Report	23.00	3,795.00
Arnold, Kristin	*2.00*	*320.00*
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*16.00*	*2,400.00*
07 60% Preliminary Treatment Design Phase	218.00	35,885.00
01 Engineering Analysis & Design	26.00	4,365.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Gudal, Andrew	*4.00*	*580.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*16.00*	*2,400.00*
Toussaint, Nick	*1.00*	*310.00*
02 Drawings	92.00	13,420.00
Dickman, Brian	*60.00*	*8,700.00*
Gudal, Andrew	*16.00*	*2,320.00*
Paiz, Julian	*16.00*	*2,400.00*
03 Div 1-49 Specifications	32.00	5,130.00
Contreras, Brenda	*2.00*	*220.00*
Dudley, Sandra	*2.00*	*490.00*
Gudal, Andrew	*4.00*	*580.00*

Omer, Steve	*8.00*	*1,440.00*
Paiz, Julian	*16.00*	*2,400.00*
04 Project Manual (Div 0)	12.00	3,100.00
Fearney, Kelly	*8.00*	*1,800.00*
OBrien, Patrick	*4.00*	*1,300.00*
05 OPCC	8.00	1,395.00
Dudley, Sandra	*1.00*	*245.00*
Fearney, Kelly	*1.00*	*225.00*
Gudal, Andrew	*1.00*	*145.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*4.00*	*600.00*
06 Design Review Meeting	16.00	3,200.00
Dudley, Sandra	*4.00*	*980.00*
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*4.00*	*720.00*
Paiz, Julian	*4.00*	*600.00*
07 Basis of Design Report and Submission to CDPHE	32.00	5,275.00
Contreras, Brenda	*1.00*	*110.00*
Dudley, Sandra	*4.00*	*980.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*24.00*	*3,600.00*
08 90% Preliminary Treatment Design Phase	117.00	19,920.00
01 Engineering Analysis & Design	15.00	2,490.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Gudal, Andrew	*5.00*	*725.00*
Paiz, Julian	*7.00*	*1,050.00*
02 Drawings	40.00	5,800.00
Dickman, Brian	*40.00*	*5,800.00*
03 Div 1-49 Specifications	11.00	1,645.00
Contreras, Brenda	*2.00*	*220.00*

Dudley, Sandra	*1.00*	*245.00*
Gudal, Andrew	*4.00*	*580.00*
Paiz, Julian	*4.00*	*600.00*
04 Project Manual (Div 0)	2.00	360.00
Omer, Steve	*2.00*	*360.00*
06 OPCC	15.00	3,145.00
Dudley, Sandra	*8.00*	*1,960.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*4.00*	*600.00*
07 Design Review Meeeting	34.00	6,480.00
Arnold, Kristin	*6.00*	*960.00*
Dudley, Sandra	*6.00*	*1,470.00*
Fearney, Kelly	*6.00*	*1,350.00*
Omer, Steve	*10.00*	*1,800.00*
Paiz, Julian	*6.00*	*900.00*
09 Bid-Ready Contract Documents Phase	73.00	12,270.00
01 Incorporate CDPHE Comments	12.00	2,095.00
Dudley, Sandra	*2.00*	*490.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*1.00*	*180.00*
Paiz, Julian	*8.00*	*1,200.00*
02 Project Manual (Div 0)	5.00	1,010.00
Contreras, Brenda	*1.00*	*110.00*
Fearney, Kelly	*4.00*	*900.00*
03 Div 1-49 Specifications	23.00	3,685.00
Contreras, Brenda	*2.00*	*220.00*
Dudley, Sandra	*1.00*	*245.00*
Gudal, Andrew	*4.00*	*580.00*
Omer, Steve	*8.00*	*1,440.00*
Paiz, Julian	*8.00*	*1,200.00*
04 Contract Drawings	21.00	3,165.00

Dickman, Brian	*16.00*	*2,320.00*
Dudley, Sandra	*1.00*	*245.00*
Paiz, Julian	*4.00*	*600.00*
05 AACE Class II OPCC	12.00	2,315.00
Arnold, Kristin	*4.00*	*640.00*
Dudley, Sandra	*4.00*	*980.00*
Fearney, Kelly	*1.00*	*225.00*
Gudal, Andrew	*2.00*	*290.00*
Omer, Steve	*1.00*	*180.00*
10 Bid Phase	38.00	6,530.00
01 Advertisement	5.00	995.00
Dudley, Sandra	*1.00*	*245.00*
Fearney, Kelly	*2.00*	*450.00*
Paiz, Julian	*2.00*	*300.00*
02 Plan holders list and transmittals, pre-bid management and meeting	12.00	2,220.00
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*4.00*	*720.00*
Paiz, Julian	*4.00*	*600.00*
03 Evaluation of Bids and Recommendation	10.00	1,630.00
Contreras, Brenda	*2.00*	*220.00*
Fearney, Kelly	*2.00*	*450.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*4.00*	*600.00*
04 Notice of Award and Prep of Confirmed Construction Docs	11.00	1,685.00
Contreras, Brenda	*2.00*	*220.00*
Dickman, Brian	*4.00*	*580.00*
Fearney, Kelly	*1.00*	*225.00*
Omer, Steve	*2.00*	*360.00*
Paiz, Julian	*2.00*	*300.00*
11 Preliminary Treatment Construction Services	265.00	45,018.28
01 Project Management	20.00	3,686.52
Omer, Steve	*20.00*	*3,686.52*

02 Pre-Construction Meeting Coordination and Leadership	20.00	3,600.00
Fearney, Kelly	*4.00*	*900.00*
Omer, Steve	*10.00*	*1,800.00*
Paiz, Julian	*6.00*	*900.00*
03 Progress meeting attendance	29.00	5,085.60
Omer, Steve	*18.00*	*3,369.60*
Paiz, Julian	*11.00*	*1,716.00*
04 Office Engineering such as submittal reviews, RFIs, FOs, payment applications	92.00	14,560.84
Gudal, Andrew	*8.00*	*1,183.16*
Omer, Steve	*16.00*	*2,937.68*
Paiz, Julian	*68.00*	*10,440.00*
05 Site Observations	16.00	2,995.14
Omer, Steve	*16.00*	*2,995.14*
06 Observation & documentation of startup, testing, commissioning	20.00	3,244.82
Omer, Steve	*4.00*	*748.82*
Paiz, Julian	*16.00*	*2,496.00*
07 Substantial and final completion punch list walkthroughs and documentation	16.00	2,745.68
Omer, Steve	*8.00*	*1,497.68*
Paiz, Julian	*8.00*	*1,248.00*
08 As-built drawings and project closeout documentation	36.00	5,595.28
Dickman, Brian	*20.00*	*3,016.09*
Gudal, Andrew	*8.00*	*1,206.40*
Omer, Steve	*4.00*	*748.79*
Paiz, Julian	*4.00*	*624.00*
09 Warranty services	16.00	3,504.40
Fearney, Kelly	*8.00*	*1,946.88*
Omer, Steve	*8.00*	*1,557.52*

Scheduled ODC	**Sched Amount**
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**1,000.00**
02 Project Management Phase	1,000.00
02 Project Management	1,000.00
Generic	*1,000.00*

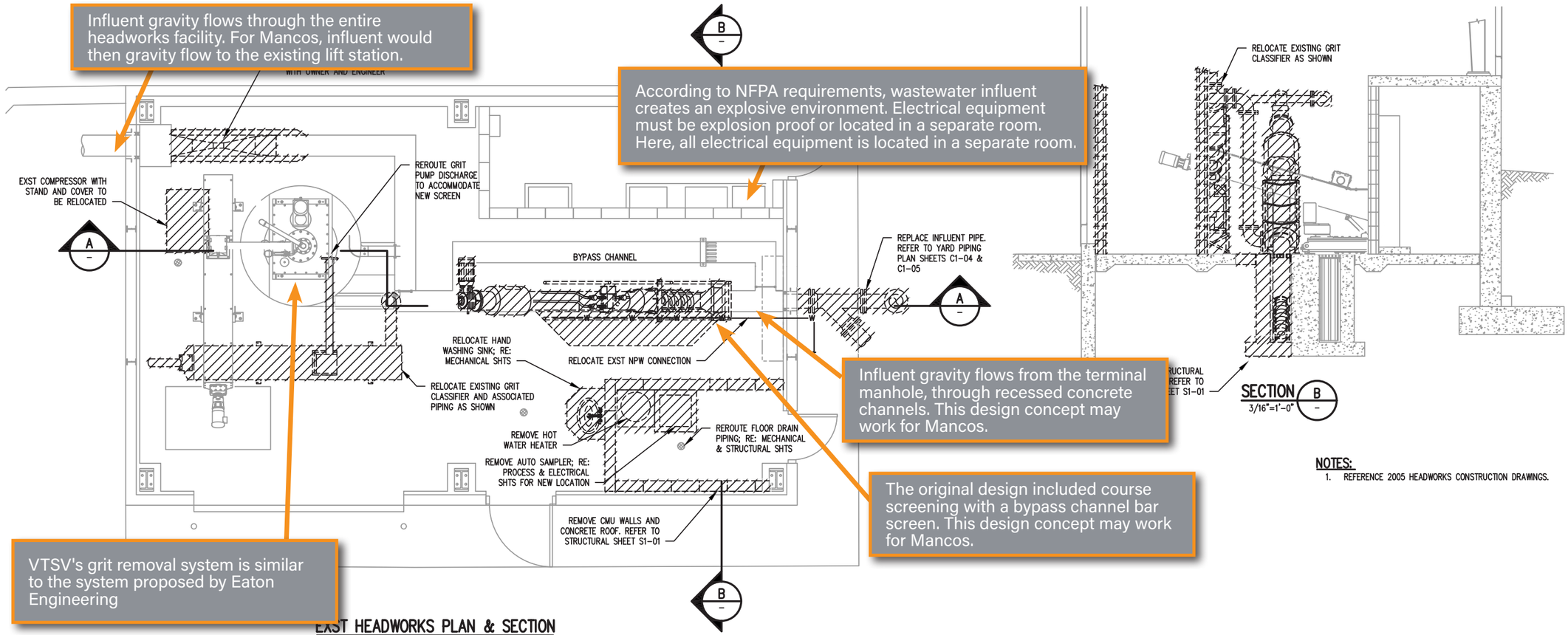
Project Planning - Plummer

From: 4/17/2023 To: 4/17/2023

Scheduled CNS	Sched Amount
3598-001-01 Mancos WWTF Improvements-Mancos Phase 1 WWTP Improvements	**78,000.00**
05 Survey, Geotechnical, and SUE Investigations and Reports Phase	28,000.00
01 Survey	8,000.00
Goff Engineering & Surveying, Inc.	*8,000.00*
02 Geotechnical Investigation and Report	10,000.00
Trautner Geotech, LLC	*10,000.00*
03 SUE Investigation and Report	10,000.00
T2 Utility Engineers	*10,000.00*
07 60% Preliminary Treatment Design Phase	40,000.00
01 Engineering Analysis & Design	40,000.00
BCER Engineering, Inc.	*20,000.00*
CD Engineering, Inc.	*20,000.00*
11 Preliminary Treatment Construction Services	10,000.00
04 Office Engineering such as submittal reviews, RFIs, FOs, payment applications	10,000.00
BCER Engineering, Inc.	*5,000.00*
CD Engineering, Inc.	*5,000.00*

Influent gravity flows through the entire headworks facility. For Mancos, influent would then gravity flow to the existing lift station.

According to NFPA requirements, wastewater influent creates an explosive environment. Electrical equipment must be explosion proof or located in a separate room. Here, all electrical equipment is located in a separate room.



Influent gravity flows from the terminal manhole, through recessed concrete channels. This design concept may work for Mancos.

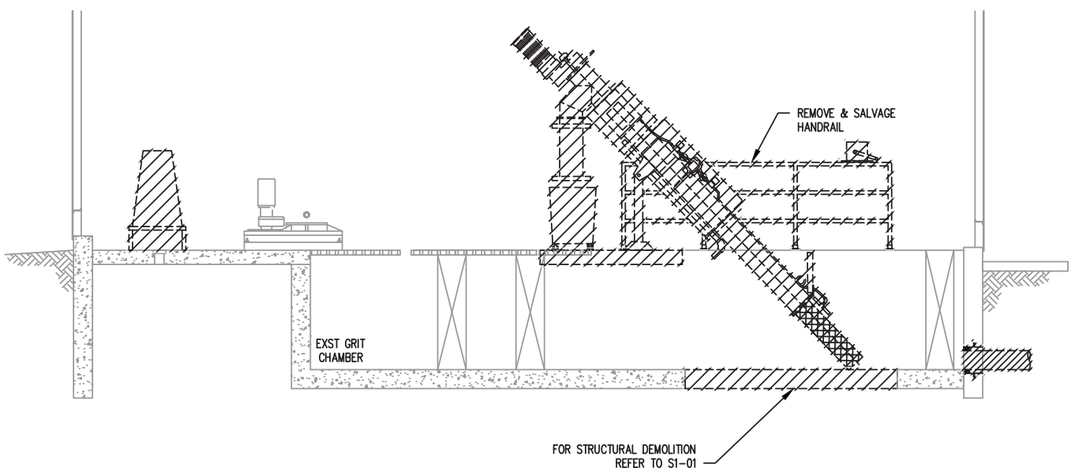
The original design included course screening with a bypass channel bar screen. This design concept may work for Mancos.

NOTES:

1. REFERENCE 2005 HEADWORKS CONSTRUCTION DRAWINGS.

VTSV's grit removal system is similar to the system proposed by Eaton Engineering

EXST HEADWORKS PLAN & SECTION
3/16"=1'-0"



SECTION A
3/16"=1'-0"

OVERVIEW: The Village of Taos Ski Valley's WWTP was upgraded to meet more stringent effluent limits and to increase capacity. The headworks was upgraded with a fine screen, a requirement for the downstream proposed MBR process.

REV. No.	DATE	DESCRIPTION
1	9/26/2017	NMED REVIEW SET (NOT FOR CONSTRUCTION)

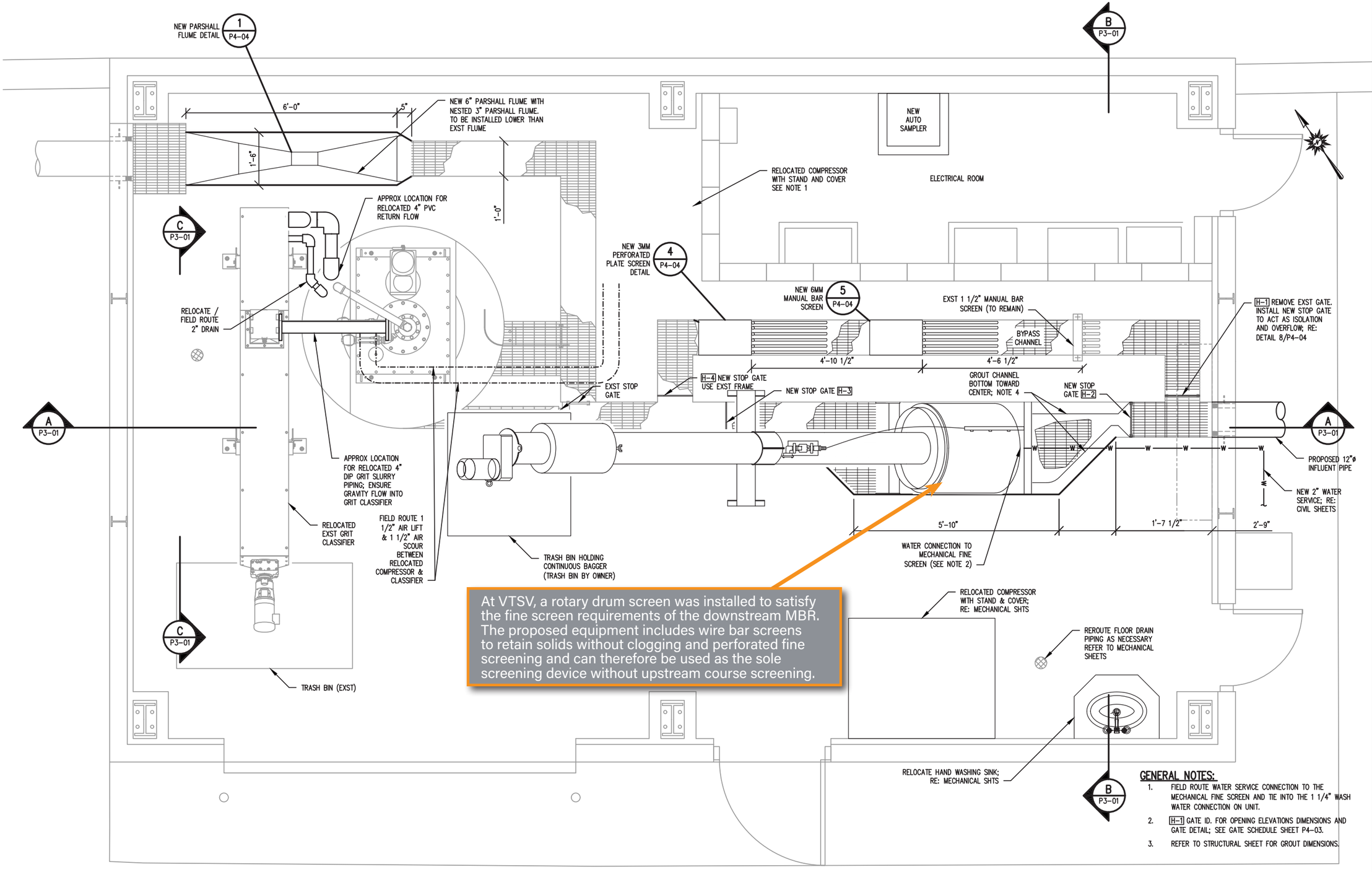
VILLAGE OF TAOS SKI VALLEY
WASTEWATER TREATMENT PLANT EXPANSION

EXISTING HEADWORKS DEMO PLAN & SECTIONS

PROJECT No.:	VTSV-16-0220
DATE:	12/21/2017
DESIGNED BY:	XXX
DRAWN BY:	XXX
CHECKED BY:	MAD

P1-01

0 1 IF THIS BAR DOES NOT MEASURE 1" DRAWING IS NOT TO LABELED SCALE



At VTSV, a rotary drum screen was installed to satisfy the fine screen requirements of the downstream MBR. The proposed equipment includes wire bar screens to retain solids without clogging and perforated fine screening and can therefore be used as the sole screening device without upstream course screening.

GENERAL NOTES:

1. FIELD ROUTE WATER SERVICE CONNECTION TO THE MECHANICAL FINE SCREEN AND TIE INTO THE 1 1/4" WASH WATER CONNECTION ON UNIT.
2. H-1 GATE ID. FOR OPENING ELEVATIONS DIMENSIONS AND GATE DETAIL; SEE GATE SCHEDULE SHEET P4-03.
3. REFER TO STRUCTURAL SHEET FOR GROUT DIMENSIONS.

EXST HEADWORKS PLAN & SECTION

3/8"=1'-0"

REV. No.	DATE	DESCRIPTION
1	9/26/2017	NMED REVIEW SET (NOT FOR CONSTRUCTION)

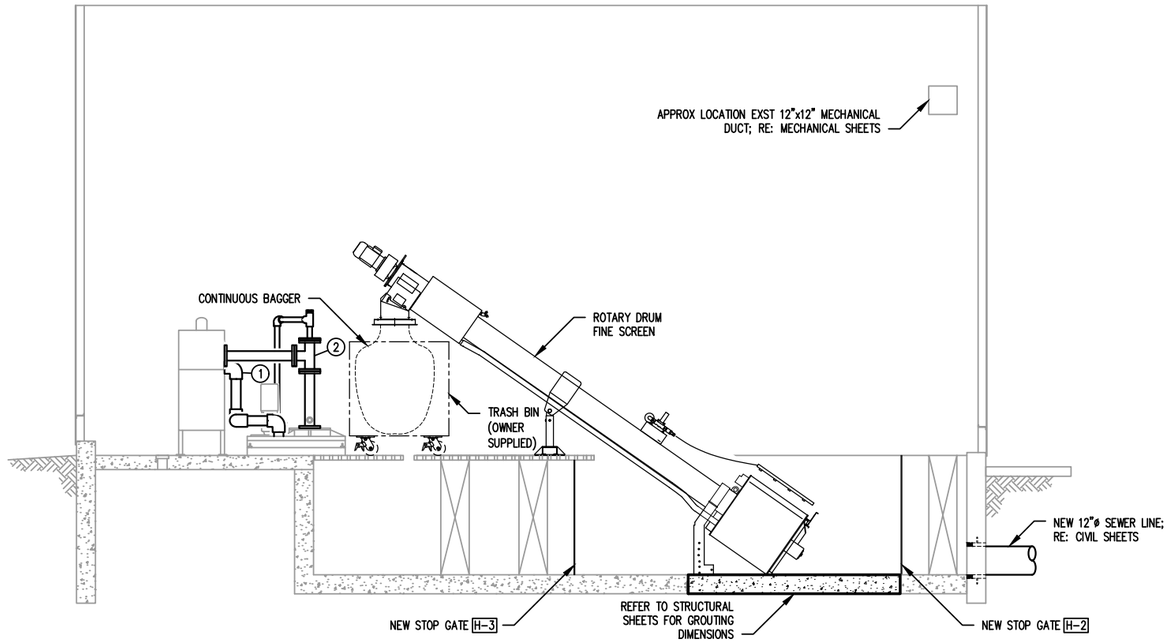
VILLAGE OF TAOS SKI VALLEY
WASTEWATER TREATMENT PLANT EXPANSION

HEADWORKS IMPROVEMENTS PLAN

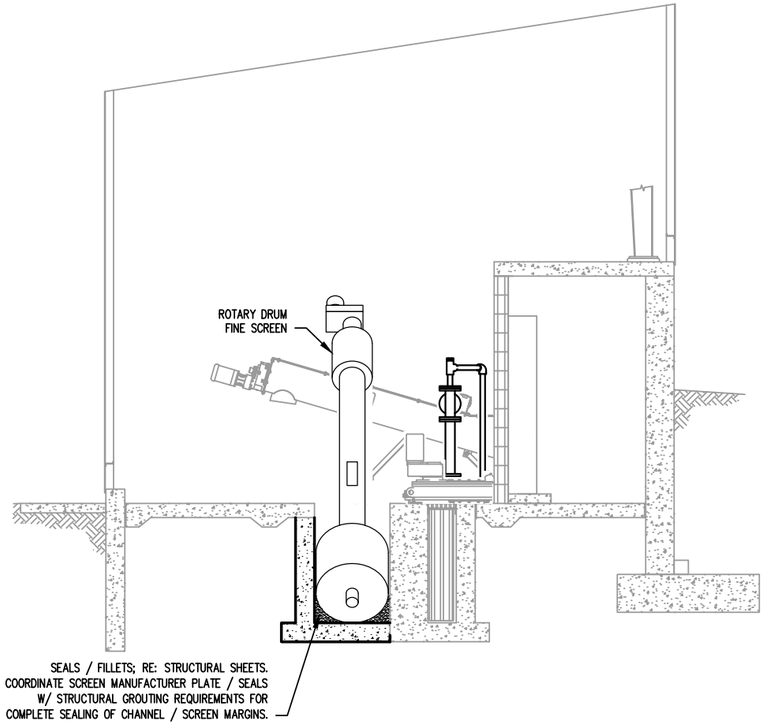
PROJECT No.: VTSV-16-0220
DATE: 1/2/2018
DESIGNED BY: KV
DRAWN BY: KPR
CHECKED BY: MAD

P1-02

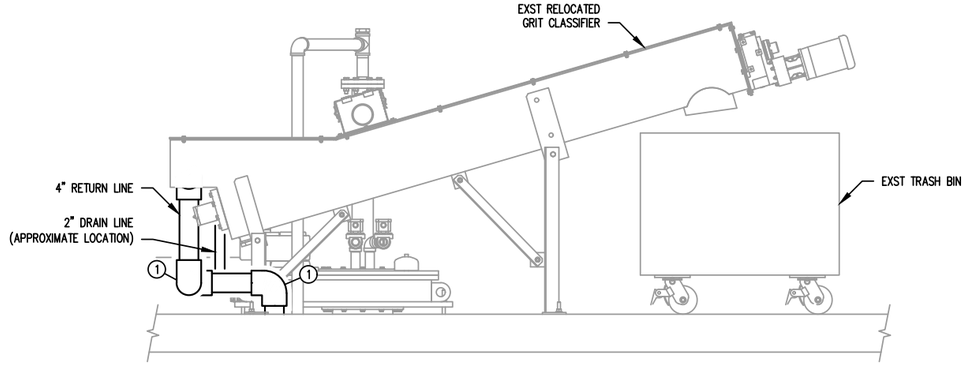
0 1 IF THIS BAR DOES NOT MEASURE 1" DRAWING IS NOT TO LABELED SCALE



SECTION A
3/16"=1'-0" P1-02



SECTION B
3/16"=1'-0" P1-02



SECTION C
3/8"=1'-0" P1-02

EQUIPMENT NOTES:

1. 4" PVC 90° BEND
2. 4" RELOCATED EXISTING TEE

GENERAL NOTES:

1. REFER TO STRUCTURAL SHEETS FOR CHANNEL RETROFIT DIMENSIONS.

REV. No.	DATE	DESCRIPTION
1	9/26/2017	NMED REVIEW SET (NOT FOR CONSTRUCTION)

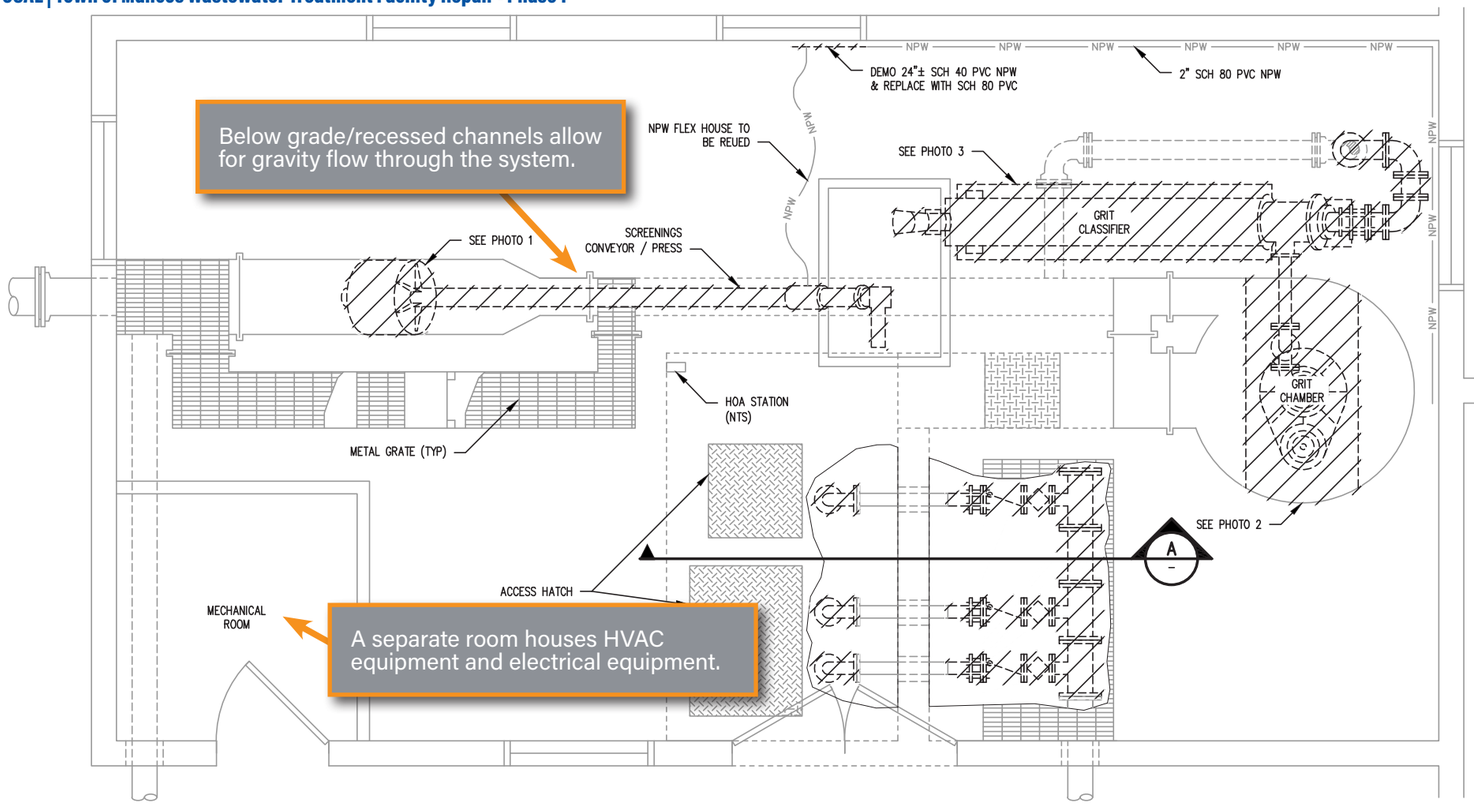
VILLAGE OF TAOS SKI VALLEY
WASTEWATER TREATMENT PLANT EXPANSION

HEADWORKS SECTIONS

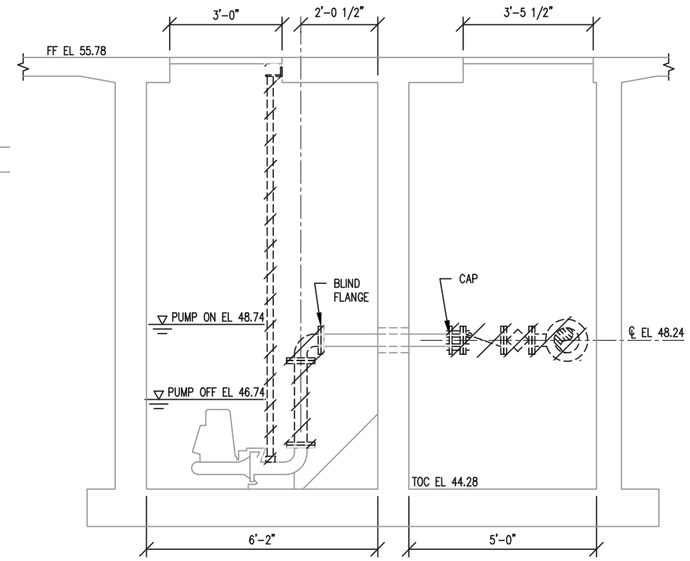
PROJECT No.: VTSV-16-0220
DATE: 1/2/2018
DESIGNED BY: XXX
DRAWN BY: XXX
CHECKED BY: MAD

P3-01

0 1 IF THIS BAR DOES NOT MEASURE 1" DRAWING IS NOT TO LABELED SCALE



EXISTING HEADWORKS DEMOLITION PLAN
1/4"=1'-0"



SECTION A
1/4"=1'-0"

NOTES:
1. CONTRACTOR TO REMOVE AND DISPOSE OF EXST GRIT CHAMBER EQUIPMENT, PIPING, AND GRIT CLASSIFIER AS SHOWN.
2. CONTRACTOR TO DEMO AND REPLACE ALL INFLUENT PUMPS GUIDE RAILS.
3. REFER TO SPEC SECTION

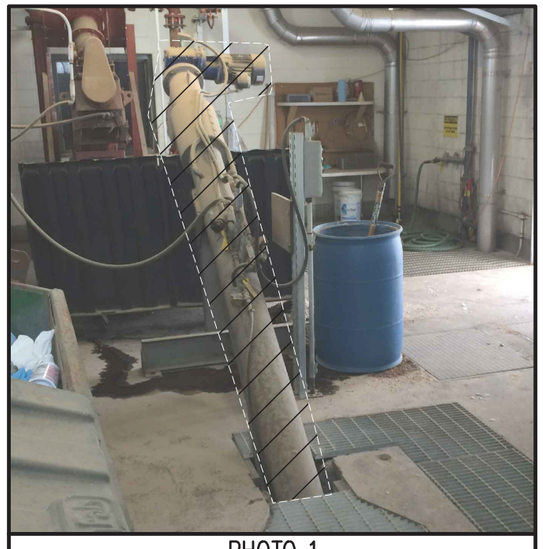


PHOTO 1

① DEMO EXISTING MECHANICAL SCREEN. SALVAGE ELECTRICAL & CONTROL PANEL TO BE REUSED WITH NEW SCREEN.

PHOTO 2

② DEMO EXISTING GRIT SYSTEM INCLUDING DRIVE, GEARBOX, PUMP, GROUT FILLET, IN SUMP PIPING, EQUIPMENT IN BASIN, AND GRIT CLASSIFIER.

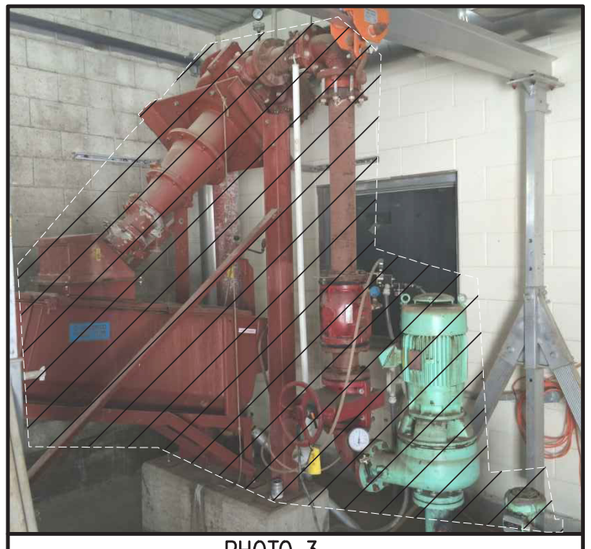


PHOTO 3

③ DEMO GRIT REMOVAL SYSTEM INCLUDING GRIT CLASSIFIER, GRIT HYDRO CYCLONE, GRIT PUMP, CONCRETE OVER BASIN, & GRIT EQUIPMENT IN BASIN AS NEEDED TO INSTALL NEW GRIT SYSTEM.

OVERVIEW: At the Town of Crested Butte, the existing screening and grit removal equipment was demolished and replaced.

AS CONSTRUCTED RECORD DRAWINGS

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT THE EXACT LOCATION, TYPE OF COMPONENT OR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS AND OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE DRAWINGS.

0 1
IF THIS BAR DOES NOT MEASURE 1" DRAWING IS NOT TO LABELED SCALE

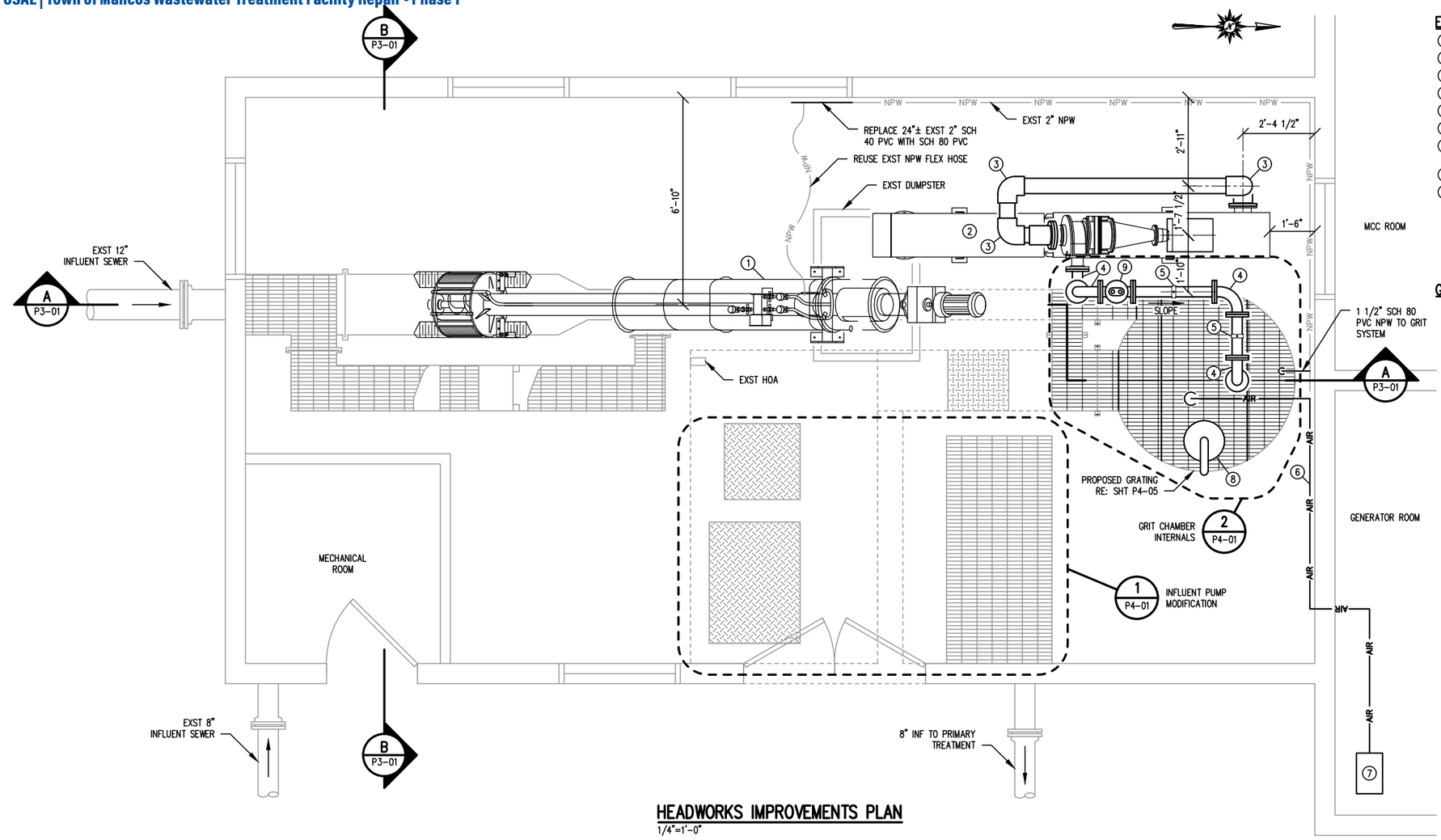
REV. No.	DATE	DESCRIPTION
1	1/23/2017	CONSTRUCTION SET
	3/2019	AS CONSTRUCTED RECORD DRAWINGS

TOWN OF CRESTED BUTTE
WASTEWATER TREATMENT PLANT UPGRADES

HEADWORKS DEMO PLAN

PROJECT No.: CBTE-16-0204
DATE: 2/9/2017
DESIGNED BY: KEE, RWF
DRAWN BY: SAJ
CHECKED BY: RWF

P1-01



HEADWORKS IMPROVEMENTS PLAN
1/4"=1'-0"

EQUIPMENT NOTES:
1. PROPOSED MECHANICAL FINE SCREEN (LAKESIDE)
2. PROPOSED GRIT CLASSIFIER
3. 6" 90° BEND
4. 4" LR 90° BEND
5. PIPE HANGER RE: DETAIL 5/P4-03
6. 2" GALV AIR LINE TO GRIT CHAMBER
7. NEW REGENERATIVE BLOWER BY GRIT SYSTEM MFR; LOCATED IN GENERATOR ROOM, COORDINATE WITH OWNER FOR LOCATION.
8. NEW VORTEXING GRIT CHAMBER EQUIPMENT PER SPEC SECTION 11320
9. TEE W/ BLIND FLANGE & ARV; RE: DETAIL 5/P4-04

GENERAL NOTES:
1. DRAWING AND DIMENSIONS ARE BASED INFORMATION FROM RBD INC. DRAWINGS DATED MAY 1998. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND REPORT DISCREPANCIES TO ENGINEER PRIOR TO CONSTRUCTION.

REV. No.	DATE	DESCRIPTION
1	1/23/2017	CONSTRUCTION SET
2	3/2019	AS CONSTRUCTED RECORD DRAWINGS

TOWN OF CRESTED BUTTE
WASTEWATER TREATMENT PLANT UPGRADES

HEADWORKS PROCESS PLAN

PROJECT No.:	CBTE-16-0204
DATE:	2/23/2017
DESIGNED BY:	KEE, RWF
DRAWN BY:	SAJ
CHECKED BY:	RWF

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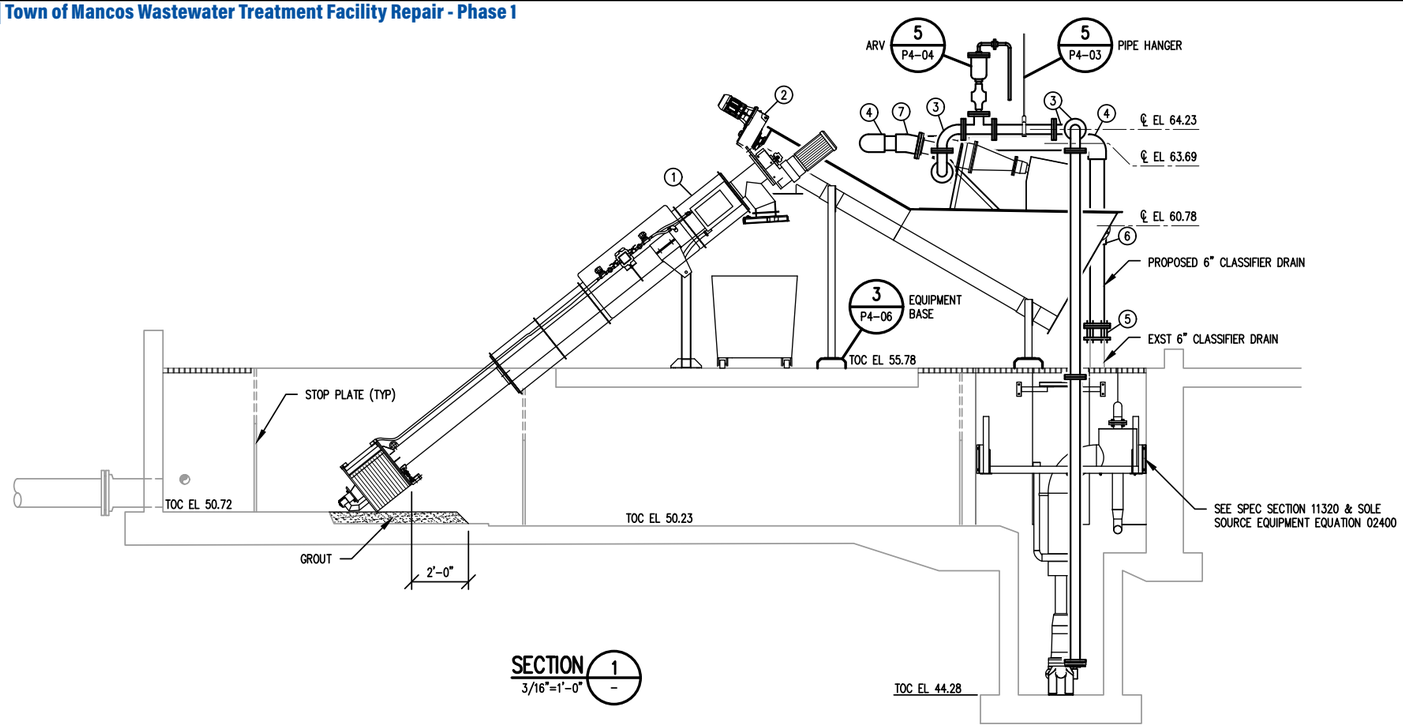
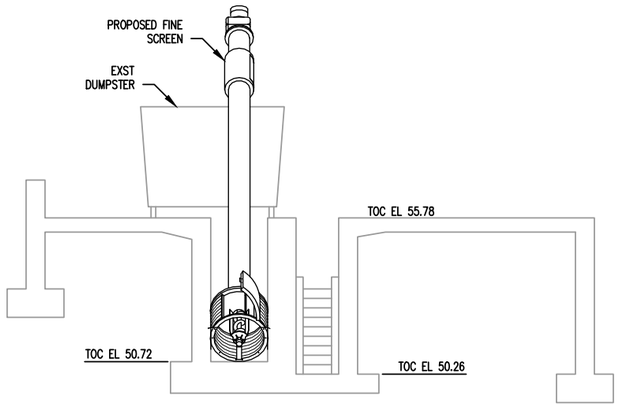
P1-02



SECTION 1
3/16"=1'-0"



SECTION 2
3/16"=1'-0"

GENERAL NOTES:

1. DRAWING AND DIMENSIONS ARE BASED INFORMATION FROM RBD INC. DRAWINGS DATED MAY 1998. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND REPORT DISCREPANCIES TO ENGINEER PRIOR TO CONSTRUCTION.

EQUIPMENT NOTES:

1. PROPOSED FINE SCREEN
2. PROPOSED GRIT CLASSIFIER
3. 4" DIP LR 90° BEND
4. 6" 90° BEND
5. 6" FCA
6. 6" TEE
7. 6" 11.25° BEND

REV. No.	DATE	DESCRIPTION
1	3/2017	CONSTRUCTION SET
	3/2019	AS CONSTRUCTED RECORD DRAWINGS

TOWN OF CRESTED BUTTE
WASTEWATER TREATMENT PLANT UPGRADES

HEADWORKS SECTIONS

PROJECT No.:	CBTE-16-0204
DATE:	3/21/2017
DESIGNED BY:	KEE, RWF
DRAWN BY:	KPR
CHECKED BY:	RWF

P3-01

AS CONSTRUCTED RECORD DRAWINGS

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STAFF REPORT

To: Honorable Mayor and Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: Comprehensive Plan Chapters 5 & 6

Recommendation
None – requesting Board feedback

Background/Discussion
The Planning Commission has been working on updating our Comprehensive Plan using data from the 2020 census. They have also been reviewing the goals for each chapter to remove items that have been accomplished and add new items as necessary.

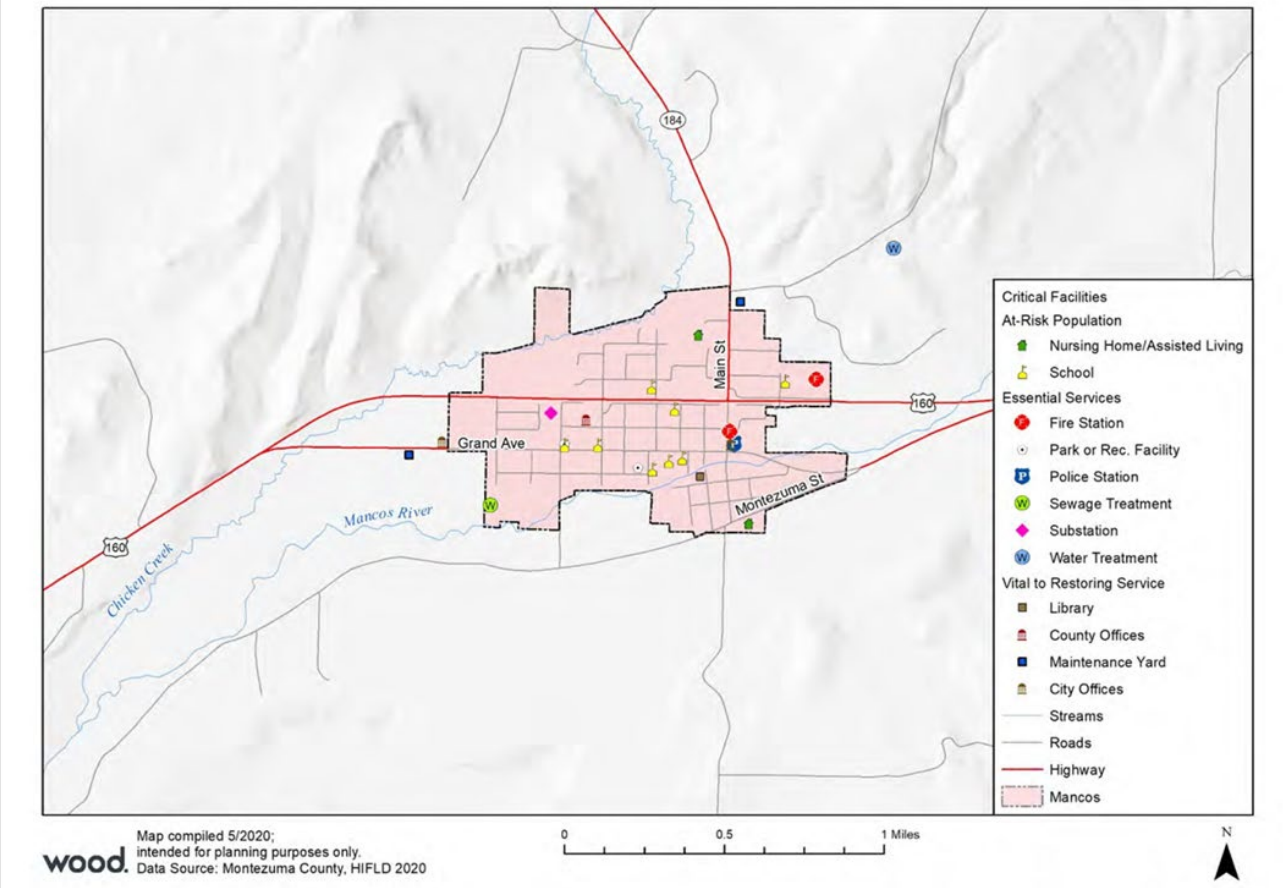
I will be providing these chapters to the Board for review and feedback as they are finalized by the Commission. You have already reviewed Chapters 2 – 4. Any changes will be included in the final draft.

Attached are Chapters 5 & 6 for your review.

Once the project is complete, the Board of Trustees will receive a final completed copy of the plan for recommendation to the Planning Commission. The Planning Commission will review and adopt final, completed draft at a duly noticed public hearing per C.R.S. Chapter 31 Article 23.

Attachments
Comprehensive Plan Chapters 5 & 6

5.0 Infrastructure and Services



5.1 Infrastructure Regional Context, Data and Trends

5.1.1 Water

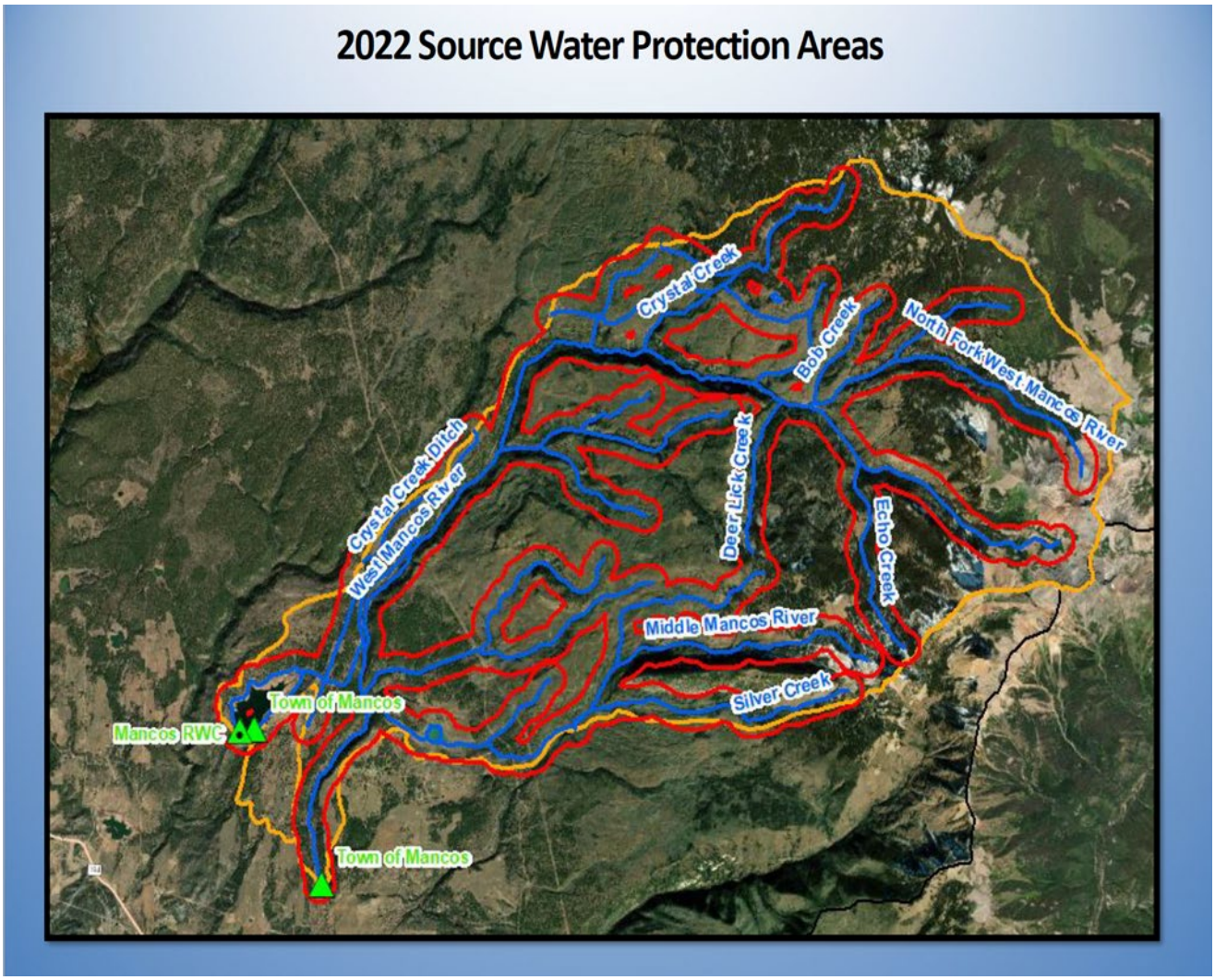
The Town of Mancos gets its potable water from the West Mancos River. In 2022 the Town began updating its Source Water Protection Plan. The Plan assessed current water quality and quantity conditions within five miles upstream of the Town's water intakes at Jackson Gulch and the West Mancos River (Mancos Source Water Protection Area), and recommended actions for the Town to take in order to protect and enhance water quality.

The study showed that the West Mancos River is in relatively good hydrologic condition within the Mancos Source Water Protection Area. Currently, the stream meets the state's water quality standards for providing habitat for cold water aquatic plant and animal species. Activities identified as having the potential to diminish water quality within the Mancos Source Water Protection Area include transportation, livestock grazing, mining, oil and gas development, timber harvesting, forest fires, and high impact recreational activities.

The Town of Mancos' point of diversion along the West Mancos River consists of a head gate that diverts water into two settling ponds. The intake and settling ponds are situated on a private ranch where cattle graze during the spring and summer months. Distribution

pipes transmit raw water from the ponds to the Town's water treatment plant approximately one mile down-gradient.

As of 2022, the Town has water rights to 1.6 cubic feet per second, or 1,034,107 gallons per day in the West Mancos River. The Town stores water in the Jackson Gulch Reservoir for occasional use when turbidity in the Mancos River is high. For the purpose of irrigation, the Town has rights along the Mancos River near Cottonwood Park.



5.1.2 Utilities

The Town of Mancos provides water and sewer service to residents and businesses within the Town's limits. Utility services not provided directly by the Town of Mancos are made available through franchise agreements with utility service providers. Franchise agreements allow utility providers such as cable, telephone, gas and electric companies to use Town rights-of-way to distribute their services to customers within Town limits.

Water Treatment

The majority of the Town's water system is generally in good condition. Relatively recent upgrades have been constructed at the Water Treatment Plant including a new storage tank. Several of the higher priority improvement projects have already been budgeted and identified. Currently, the Town has 330,000 gallons of storage for treated

water and has secured funding for an additional 450,000-gallon storage tank in order to meet the current and future needs of the Town over the next 40 years. The new tank will be installed in 2023.

The Town's existing water treatment plant can treat approximately 700,000 gallons per day (gpd). Thus, the current treatment plant can treat enough water to satisfy the average daily usage for up to 2050 people plus fire flow. The last Preliminary Engineering Report: Mancos Water System Improvements in 2009 makes recommendations based on the population of Mancos growing at a rate of 2.5 percent annually, which is higher than the Town's actual growth rate of 1.9% over the last decade. Using the 2.5 percent growth rate, the current plant should be adequate to meet average demand until 2028. During peak usage days, usually in the summer when irrigation and tourism use is high, the maximum average daily use is 480 gpd per capita. The existing water treatment plant can supply the maximum average daily demand of 645,000 gallons but cannot supply the additional 270,000 gallons recommended for fire flow during peak days.

Consumer behavior also plays an important role in water conservation. The Town can encourage water conservation through a graduated water rate structure by increasing the rate charged per unit as usage goes up. The Town can also consider adopting more restrictive land use codes in order to encourage water-wise landscaping.

Wastewater

The majority of the Town's wastewater system is generally in good condition. The Town has recently upgraded the Wastewater Treatment Plant and is in the process of placing the facility on-line and decommissioning the lagoon system. The wastewater treatment plant currently treats 80,000 gallons per day (gpd) of effluent. As the lagoon system is inadequate for treating that level of wastewater, the Town of Mancos is in the process of making capital improvements to the wastewater infrastructure. The new plant will be able to treat 200,000 gpd that will be capable of serving 3252 people which is more than adequate for treating effluent for the Town over the next 20 years at the current growth rate of 1.9 percent annually, or at the more rapid growth rate of 2.5 percent annually. The Town is moving ahead with a new Multi-Stage Activated Biological Process (MSABP) plant that is designed to handle 200,000 gpd of water and 584 pounds of biological oxygen demand per day. The new plant's treatment technology will take up a significantly smaller site footprint, allowing room for expansion if necessary.

The Town's original sewer collection system is composed of vitrified clay pipe embedded in rocky soils. The estimated useful life for vitrified clay pipe is 100 years, and the age of the sewer mains south of Highway 160 is approximately 60 years. While the vitrified clay pipes should have a few good decades left in them, the joints connecting pipe sections have been known to have issues. The sewer mains north of Highway 160 are approximately 30 years old, except for a few segments replaced in 2008. A majority of the newer collection lines are sufficient in diameter to handle an increase in flow from future projected growth. Depending on where growth occurs, the older lines north of Highway 160 and east of Highway 184, and the lines south of Grand Avenue will need to be replaced with larger diameter pipes in order to accommodate growth.

5.1.3 Stormwater Drainage

The Town's Stormwater System is relatively sparse which is not uncommon for smaller towns. Stormwater is generally conveyed through the street and storm sewer system and directly discharges to the Mancos River or Chicken Creek. Contamination of surface water runoff can degrade the water quality of the Mancos River. Polluted runoff occurs when contaminants are conveyed to water bodies via rainwater, snow melt or irrigation practices without being filtered first. Impervious surfaces such as paved roads, rooftops and parking lots reduce the ability for surface water to percolate and filter into the groundwater table. In order to reduce contamination from runoff, the Town can manage stormwater through land use regulations for new development and infrastructure improvements.

With the exception of a small portion of Grand Avenue and Main Street, drainage systems on the south side of the Town of Mancos are either primitive or non-existent. As the majority of south Mancos has gravel streets, and therefore no curb and gutter, runoff tends to pool at intersections and driveways. Some of the streets are crowned to provide a drier driving surface, but most areas have insufficient drainage ditches to effectively direct run- off to the Mancos River. The Town will develop a Stormwater Master Plan to address current needs and future land use. It will be integrated into the Master Paving Plan.

5.1.4 Streets

Of the Town-owned streets, approximately 80% are gravel. With a few exceptions, the Town's roads are in fair to good condition. It is understood that the Town is carefully considering whether to pave some or all of these streets and understands that some local residents are resistant to this change. The gravel streets can continue to perform with continued maintenance and therefore paving the gravel streets is a choice rather than a necessity. While historical costs to maintain the gravel streets was not available and the projected cost to maintain paved roads has several variables that would need to be determined for a true lifecycle analysis, it is estimated that the cost of maintaining paved streets would be comparable to maintaining gravel streets. The significant difference is the initial capital cost to pave a street. It should be noted that the necessary equipment, expertise, and staff time differ between paved streets and gravel streets and investment in all three areas will likely be necessary regardless of the alternative selected. These considerations, as well as many other considerations will be captured in a Master Pavement Plan.

5.1.5 Buildings

The Town has 3 primary buildings (excluding water and wastewater system buildings) including Town Hall/Marshall's Office, the Community Center, and Public Works. All buildings are showing signs of normal wear and tear but are performing well, considering their respective ages.

The Town's administrative offices and council chamber are held in the Town Hall, a 9,586 square foot building. The building underwent a major remodel in 2002 which included an addition to house the council chamber, as well as adding features in compliance with ADA standards to increase the building's accessibility.

The Mancos Community Center is a 4,356 square foot building that had historically been home to an auto dealership and garage as far back as 1913 (The RGS Story: Volume VIII). The building was extensively remodeled in 2004 with assistance from the Department of Local Affairs and USDA Rural Development. The Community Center has a commercial grade kitchen, ADA accessible rest rooms, a banquet room and a foyer, and is available for use by community members and organizations for regular and special events.

In 2010 the Town was granted a total of $31,780 in federal funding by the Governor's Energy Office to cover the full costs of replacing the existing conventional lighting with high efficiency lighting systems, upgrading the climate controls, and improving the weatherization of the Mancos Town Hall and the Community Center. Based on an energy audit of the two buildings which used energy usage data from 2008, these efficiency measures will save the town an average of $4,414 per year on gas and electrical bills.

5.2 Services Regional Context, Data and Trends

5.2.1 Health Care

Traditional and alternative health and wellness services are available through several private and non-profit providers. The Mancos Valley Health Center is located in Mancos and offers primary care outpatient services. The nearest in-patient and emergency provider is Southwest Memorial Hospital, located approximately 20 minutes from Mancos, in Cortez. Mercy Regional Medical Center in Durango, another in-patient and emergency provider, is approximately 35 minutes from Mancos. Both Mercy and Southwest Memorial also provide out-patient, wellness and primary care services to their patients. Long-term in-patient care is available in Town through Valley Inn Nursing Home. Montezuma County Public Health offers immunizations, public health education, blood pressure monitoring, nutritional supplementation for pregnant women and case management for patients with long-term chronic illnesses. Mental health care is available through Axis Health Systems in Cortez and Durango.

5.2.2 Social Services

Social services in Mancos are administered by Montezuma County. The County provides local services for seniors at the Mancos Senior Center, located in the Mancos Masonic Lodge. Senior services include meal delivery, public transportation, dental care, educational programs concerning issues affecting seniors, social programs and health insurance assistance.

5.2.3 Public Safety and Emergency Response

The Mancos Marshal's Office provides up-to-date professional law enforcement to all citizens in the Mancos community, including crime prevention and detection services, criminal apprehension and prosecution of perpetrators, public safety education, traffic safety, and municipal code enforcement. The Marshal's Office also coordinates with the Montezuma County Office of Emergency Services regarding emergencies arising from man-made and natural disasters and pandemics. Construction of a new town facility Marshal Office in 2023 ensures that Town residents and the Marshal’s Service will have access to the most updated law enforcement capacities.

The Mancos Valley Fire Protection District (MVPD) provides emergency response to situations affecting life and property. The MVPD is funded in part by a mill levy on

properties within the district and is manned by volunteer fire fighters and Emergency Medical Technicians. The MVPD offers fire protection and emergency response.

5.2.4 Education

The Mancos School District Re-6 provides quality public education to elementary, middle and high school students within the District's region. The total enrollment for the 2022-23 school year was 515 students. The District has completed major upgrades to its facilities in recent years, including the addition of a preforming arts complex and sports fields. Future growth of Mancos will impact the class sizes and put pressure on the facilities themselves. The Town is working closely with the district to help manage current and future growth. As predicted, the upgrades performed have increased enrollment 25% from out of the district.

In 2022, the Mancos School District launched its career pathways programs to support local workforce development. Students enrolled are offered the opportunity to earn certifications and college credit in fields such as business and entrepreneurship, welding, culinary arts, drone aviation, healthcare and teacher education.

The Four Corners Region has options for higher education and workforce development. Southwest Colorado Community College, a campus of Pueblo Community College, is located approximately 10 miles west of Town. Southwest Colorado Community College offers a number of post-secondary educational opportunities including associate degrees and certificate programs. Fort Lewis College is a public liberal arts college approximately 30 miles from Mancos in Durango, CO. Fort Lewis offers Bachelors of Arts and Science degrees, as well as certificate programs. In addition to the classroom experience, many colleges and universities offer accredited undergraduate and graduate degree programs online.

5.2.5 Public Library

In the summer of 2009 the Mancos Public Library opened the doors to its new, state of the art LEED certified building at 211 W. First Street. The Library offers books, audio and movie recordings available for checkout to library members. Meeting room space, computer access, periodicals, databases and reference materials are also available. Additionally, the Library hosts a variety of workshops and reading programs, including the Tech Connect series and Storytime. The Mancos Public Library District is funded in part by a mill levy on properties within the Library District. Additional funding comes from grants and donations from individuals and organizations such as the Friends of the Mancos Library.

5.2.6 Communication

Local access to state-of-the-art information technology is a priority for the Town of Mancos. High speed, high-capacity communication systems are critical for businesses, institutions and individuals that wish to utilize the latest technology. Thus, the Town has been participating with other area governments on a regional fiber-optic installation upgrade. Once installed, the fiber-optic backbone will give the community's businesses, institutions and residents similar communication advantages to those in larger, more centralized metropolitan areas.

5.2.7 Administration

Each department within the Town of Mancos has a director who oversees the administration of their department, and in turn, is overseen by the Town Administrator.

The Town Administrator is the chief operating and administrative officer and is responsible for overseeing the daily operations of Town in an efficient manner. The Administrator makes recommendations to the Town Board of Trustees on public policy, personnel, operations and administrative decisions. The Administrator prepares the annual operating budget which guides program expenditures throughout the fiscal year, and makes recommendations for the planning of long-term capital improvements. Town administrative positions are appointed and work at the pleasure of the Town Board of Trustees.

The Public Works Director oversees the operation and maintenance of the Town's roads, alleys, water and sewer distribution systems. The Town's Plant Operator oversees the operations and maintenance of the Town's drinking water treatment plant and wastewater treatment plant and ensures compliance with state and federal water quality standards.

The Building Department includes the land use code administrator and the building inspector, who together review building permit applications and ensure that all construction activities are in compliance with all applicable codes.

The Town Marshal's Office provides law enforcement and safety services in accordance with local, state, and federal laws, regulations and initiatives.

The Town Clerk and Treasurer's Department is responsible for keeping records of all public meetings and official Town documents in compliance with Colorado Record Retention Policy and Colorado Sunshine laws. The Clerk and Treasurer's Department processes all licenses, fines and citations. Additionally, this department processes all payments and receipts; participates in annual audits and annual budget preparation; and coordinates all financial reporting required by granting agencies, state regulators, and insurance providers.

In addition to routine operations, staff and special committees often participate in the facilitation of community special events.

Finally, the Community and Economic Development department works closely with local anchor institutions, community non-profits, and regional economic development partners to enhance economic opportunities in the Town and plan for future job growth and workforce development needs.

5.3 Goals, Objectives and Actions

5.3.1 GROWTH AND PUBLIC FACILITIES AND SERVICES GOAL: PROVIDE SAFE, EFFICIENT AND AFFORDABLE UTILITIES and SERVICES TO MANCOS RESIDENTS

Constraints and Issues

- The costs of upgrading, operating and maintaining quality public infrastructure and services to accommodate growth.

Objective #1: Require new development to cover its fair share of growth's impacts

Actions

- Regularly review and update impact fees to maintain quality public facilities and infrastructure in order to minimize the burden to existing Town residents and businesses.
- Regularly review and update service fees and fine schedules in order to ensure that the Town can meet the demand for a high level of quality services.
- Review and revise the Mancos Land Use Code to require that new developments provide the resources necessary to adequately cover the costs of upgrading, extending, operating and maintaining public facilities as a result of the increases in demand resulting from new development.
- Develop a phased street pavement plan for the Town's unpaved roads that recommends several options, estimates their costs, and identifies potential sources of funding.
- Move county and Town maintenance shops to facilities outside of residential districts.

Objective #2: Encourage quality, cost-effective services that enhance the lives of Mancos residents

Actions

- Promote coordination and cooperation among all area law enforcement and emergency response agencies.
- Provide responsive, high-quality services to all residents.
- Support cost-effective upgrades in telecommunications infrastructure that connects to the Mancos community.

5.3.2 RAW WATER GOAL: SUPPLY SUFFICIENT AMOUNTS OF SAFE, HIGH QUALITY WATER TO MEET THE NEEDS OF TOWN RESIDENTS

Constraints and Issues

- High impact activities within the Mancos Source Water Protection Area.

Objective #1: Strengthen and protect Mancos' raw water supply and delivery system

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Actions

- Seek cooperative relationships with other water agencies, local, state and federal, as well as law enforcement agencies, to protect, enhance and provide physical security for the Town's water delivery system.
- Adopt the Mancos Source Water Protection Ordinance and create the necessary intergovernmental agreements with Montezuma County, the US Forest Service and other appropriate state, local and federal agencies to ensure that the Ordinance is effectively enforced.
- Discourage land use activities around the Town's raw water storage facilities that have a foreseeable risk of contaminating water in these facilities.
- Protect all water rights owned by the Town.
- Investigate options to acquire additional water rights through lease or purchase.
- Participate in regional watershed stakeholder groups.
- Implement recommendations outlined in the Mancos Source Water Protection Plan.
- Work in collaboration with the County, United States Forest Service and the Mancos Fire Protection District on fire prevention measures in the Mancos watershed.

Objective #2: Promote the use of non-potable water systems where economically and physically viable to maximize the use of the Town's water rights and minimize the impact on the water treatment plant

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Actions

- Develop non-potable water system plan that explores the feasibility of a phased and community-wide non-potable distribution system to reduce the demand of treated water and the impact on the water treatment plant.

5.3.3 TREATED WATER GOAL: SUPPLY SUFFICIENT AMOUNTS OF SAFE, HIGH QUALITY DRINKING WATER TO MEET THE NEEDS OF TOWN RESIDENTS

Constraints and Issues

- Old and inadequately designed distribution system.
- Increases in drinking water standards can create unfunded mandates for treatment.
- Inadequate storage capacity to meet the needs of Town during a fire emergency.

Objective #1: Protect and improve the Town's drinking water distribution system

Actions

- Create capital improvement plan that addresses needs for the water distribution system and is updated at least every 5 years.
- Replace old meters with new remotely read meters.
- Replace water mains that are approaching or have outlived their expected life span.
- Replace old water mains that are too small to meet projected growth.
- Replace water valves that are approaching or have outlived their expected life span.
- Regularly implement preventative valve maintenance on all mains and hydrants.
- Ensure that adequate carrying capacity is provided on water distribution extensions.

Objective #2: Protect and improve the Town's drinking water quality

Actions

- Create and regularly update a capital improvement plan that projects the needs and estimated costs for water system improvements and increases in regulatory drinking water quality standards in order to plan for the financing of necessary improvements.

Objective #3: Protect and improve the Town's drinking water quantity

Actions

- Ensure that the Town's water system has adequate storage for domestic use and fire flow protection.
- Continue to monitor water user fees to promote water conservation.
- Develop incentives to encourage water conservation.

5.3.4 WASTEWATER GOAL: PROMOTE HIGH WATER QUALITY DOWNSTREAM OF TOWN

Constraints and Issues

- Old and inadequately designed collection system.
- Increasingly stringent effluent discharge standards can create new mandates for wastewater treatment.

Objective: Provide adequate and cost-effective wastewater facilities to accommodate the build-out of the Town's growth management where appropriate

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Actions

- Create and regularly update a capital improvement plan that projects the needs and estimated costs for wastewater system improvements and increases in regulatory effluent discharge standards in order to plan for the financing of necessary improvements.
- Ensure that adequate carrying capacity is provided on wastewater collection extensions.
- Create and enforce an industrial pre-treatment program to reduce harmful pollutants from entering the wastewater treatment system.
- Continue efforts to identify, reduce and remove inflow and infiltration sources within the existing wastewater system.
- Replace mains that are approaching or have outlived their useful lifespan.
- Install manholes at more frequent and appropriate intervals in order to improve maintenance access.

5.3.5 STORMWATER GOAL: PROVIDE A DRAINAGE SYSTEM THAT KEEPS ROAD AND SIDEWALK SURFACES DRY AND IMPROVES THE WATER QUALITY IN STREAMS AND CREEKS

Constraints and Issues

- Lack of Town-wide stormwater management system.
- Increasing water quality regulations for stormwater discharge.
- Undirected surface runoff and low porosity of soils.

Objective #1: Reduce the impact of surface water flows on traveled ways

Actions

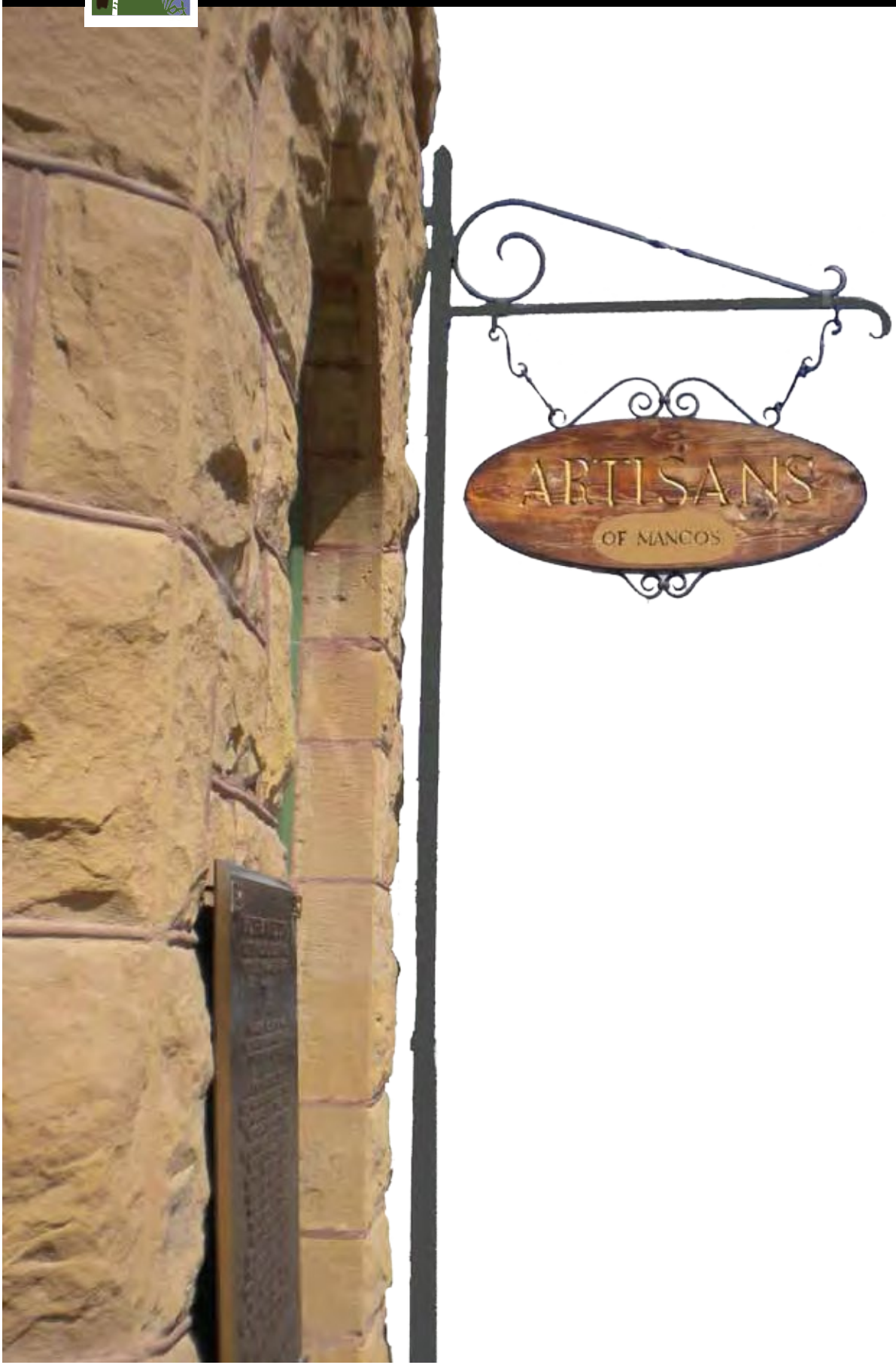
- Create ditches on both sides of all streets and install drainage pans where appropriate.
- Create capital improvements plan that addresses needs for stormwater drainage improvements and is updated at least every 5 years.
- Develop a stormwater master plan that includes an assessment of surface runoff, recommends drainage system designs, and identifies sources of funding to implement the plan.

Objective #2: Reduce pollution of water bodies from surface runoff

Actions

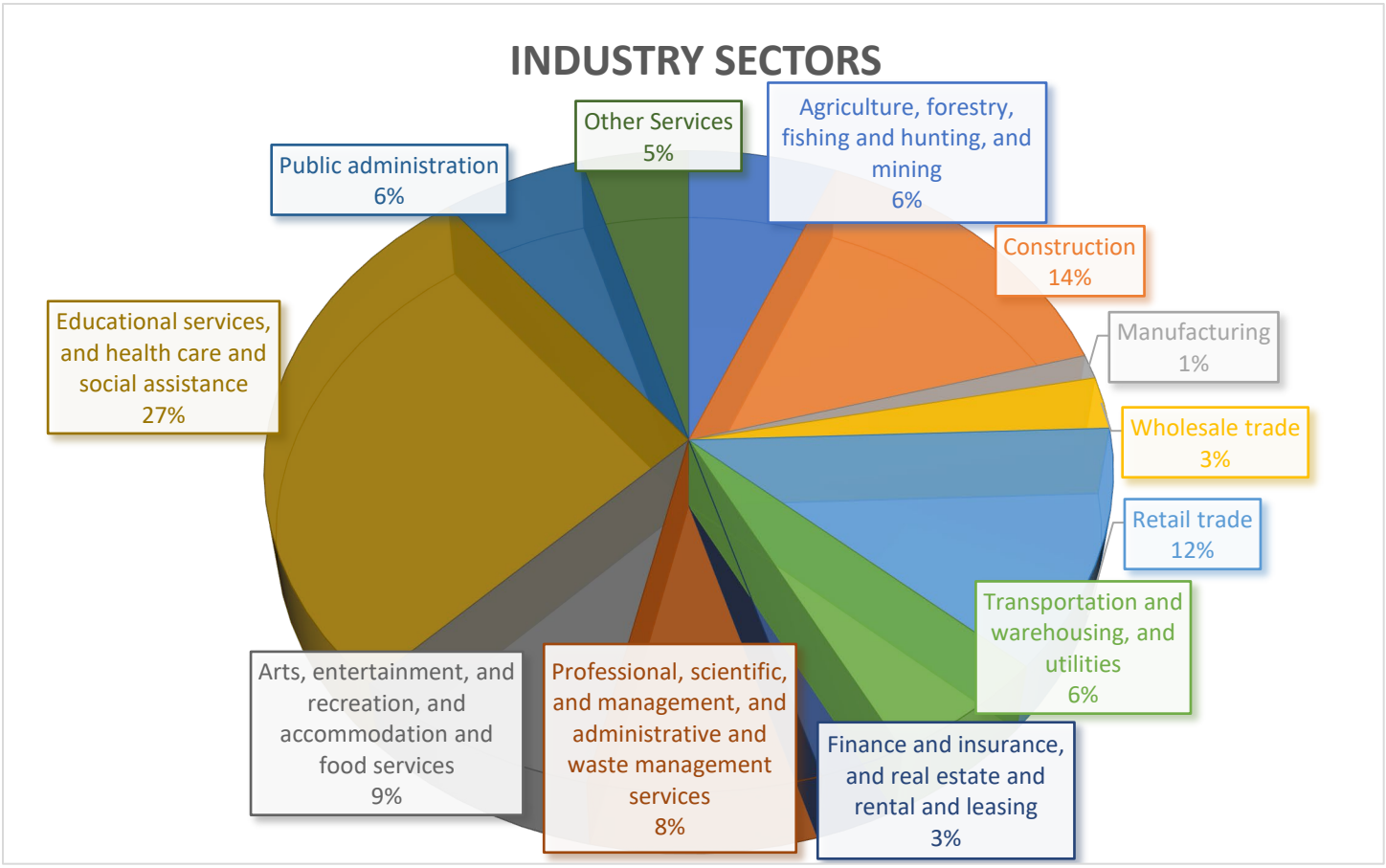
- Adopt a riparian setback overlay zone in the land use code to protect vegetation that stabilizes banks and filters out harmful contaminants along water bodies.
- Require new planned unit developments to submit an impervious cover analysis that assesses water quality impacts as part of their approval process.
- Encourage cluster developments through mechanisms like zoning or density bonuses in order to reduce impervious surfaces and increase open spaces and groundwater infiltration.
- Where feasible, incorporate landscaped filter strips between impervious surfaces in order to provide areas for water to filter into the ground.

6.0 Community and Economic Development



6.1. Regional Context, Data and Trends

The Town of Mancos has a committed Community and Economic Development Department. The primary focus of this resource is to create and retain jobs which will increase the quality of life for the Town's residents. Mancos has a variety of businesses for a community its size. A majority of enterprises in Mancos are locally owned, including art galleries, restaurants, health care facilities, lodging amenities, cottage industries, mom-and-pop retailers, and entertainment establishments. Mancos businesses still serve the surrounding Valley's agricultural and ranching communities that helped build the Town over a century ago, as well as its residents and visitors to the region's archaeological, natural, and cultural attractions. In recent years an active artists' community has evolved and gained national and international attention through the development of the Mancos Creative Arts District. 88% of respondents to the 2022 Mancos Community Survey rate local job creation with livable wages as most important over the next 10 years. Historically, Mancos' two primary economic drivers were agriculture and tourism. The agricultural, cottage and creative industries complement each other by contributing to the Town's western small-town appeal. The area's rural setting, proximity to a variety of natural landscapes, cultural heritage and western small-town character are assets which many local businesses depend on, but the local economy is beginning to change as the below chart demonstrates.



Source: 2020 US Bureau of Census, American Community Survey

Census data indicate the most common employment sectors for those who live in Mancos are now health care and social assistance, construction, and then retail trade. The highest paying industries in Mancos by median earnings, are wholesale trade, other services except public administration, transportation, warehousing, and utilities. According to the 2020 Census, from 2019 to 2020, employment in Mancos, CO declined at a rate of −8.5%, from 753 employees to 689 employees. Unemployment rates are slightly higher than county and state rates.

Another economic driver important to the community is commuter income. Mancos' proximity to employment based near Durango and Cortez, as well as its relative affordability compared to the cost of living in both cities, make it an attractive option for those wanting to own property and are willing to commute 30 minutes or more to work, According to the most recent census data, using averages, employees in Mancos, CO have a shorter commute time (26.3 minutes) than the normal US worker (26.9 minutes). Additionally, 0.954% of the workforce in Mancos, CO have "super commutes" in excess of 90 minutes. According to the Mancos Community Survey in 2021, 57.9% of respondents indicated they travel to work by private car. Census data estimates that approximately 5% of Mancos residents worked from home.

The U.S. Census Bureau estimates that in 2020 there were 3,707 wage and salary workers commuting out of Montezuma County for work, aiding in the transitioning of the town into a “bedroom community”. This change has implications on the cost of housing, with higher demand increasing costs that put once affordable home ownership and rentals out of reach for some residents. The growth also places enhanced demands on the Town and its services. Mancos residents working outside the community contribute to the local economy by spending the income they earn outside of Town locally, but there are opportunities to utilize data to understand the amount of money being spent by commuters in the areas in which they work and increase the targeted recruitment of new businesses in the Town to meet those consumer needs, helping to bring in revenues critical to keep up with the increased service demands of the Town’s residents both old and new.

6.2 Workforce Development

According to the International Economic Development Council, one of the main complaints of local businesses in the country today is the lack of a trained workforce. It is a focus for the Town to commit resources to an eco-system of partnerships and connect businesses to these networks to meet their needs. The Town of Mancos is within a 30-minute drive from a variety of educational and technical training institutions. Fort Lewis College offers baccalaureate and master’s degrees in a variety of disciplines. Pueblo Community College offers a number of associate degrees and vocational training in areas that include health care, mechanics, computer science, building weatherization, solar energy, and business administration. Pueblo Community College can tailor trainings and certifications based on employer needs. Increasingly, a number of accredited higher education institutions are offering degree courses online, that will add to the overall livability of rural communities that historically have suffered from a technological gap in comparison with urban communities. The local school district is also seeking opportunities to help support students to earn certifications and earn college credits in a variety of career development areas. Workforce training and education is

available regionally to help meet the needs of current and future populations.

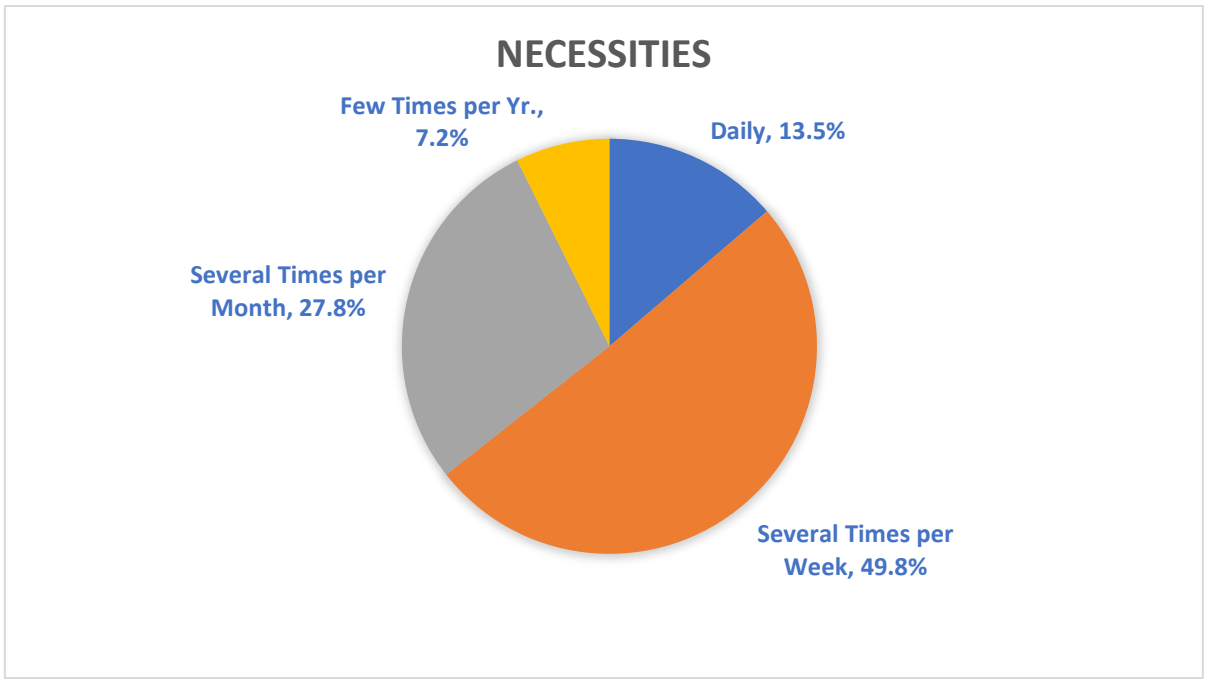
6.3 Economic Development and Sense of Place

The residents of the Mancos Valley strongly adhere to a buy-local-first mentality. In the most recent Community Survey, development of local jobs with livable wages ranked 2nd overall in priorities for the next 10 years. In the same survey, the top three economic development projects selected in order of preference from highest to lowest were aiding locally owned businesses (retention and expansion), make the town attractive to outside businesses to relocate (recruitment), and revitalize the downtown business district on Grand Avenue. In 2022 the Town received a grant from the Department of Local Affairs (DOLA) and partnered with the local business in the downtown corridor to update their facades, a project that proved to be successful and popular.

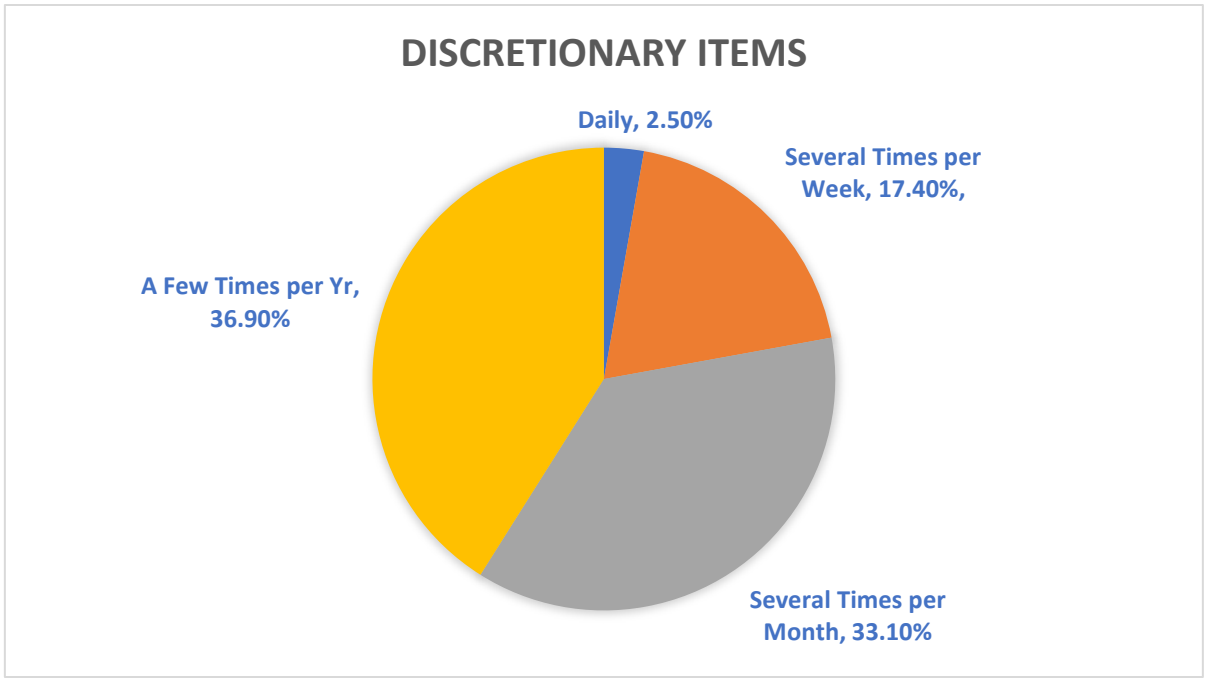
Through the efforts of the Community and Economic Development department in the coming years, the Town will work with local partners. Resources include Region 9 Economic Development District, the Small Business Development Center (SBDC) at Ft. Lewis College, the Mancos Valley Chamber of Commerce, and the Mancos Creative Arts District to provide the tools and technical assistance that local businesses request. The town will also work with economic development organizations that have the expertise to help develop the data necessary to both understand the context of what new businesses the regional population would support and how to best target those for sectors utilizing an entrepreneur-led economic development philosophy.

The availability of locally produced goods and locally supplied services are vital components of a vibrant local economy. Niche manufacturers - local small-scale producers of goods sold wholesale or on-site - provide skilled job opportunities and add to the diversity of products available for purchase in Town such as: hand-crafted food and beverages, household items, outdoor recreation, creative industries and apparel. Cottage industries which are operated from within residences allow residents to work at home, as well as enable consumers to purchase goods and services. While these types of local businesses are vital to provide goods and services to local residents, it is also important for the Town to focus on support for businesses that export their products to bring new money into the community which will increase the overall economic resilience by diversifying the economic base.

According to the 2022 Mancos Community Survey, 49.8% of the 237 respondents indicated they shop for necessities (gas, food or beverages) several times per week. In the same survey, 17.4% said they shop for discretionary (nonessential items) weekly. In both circumstances, there are opportunities to grow existing and new businesses.



Source: Mancos Community Survey 2022



Source: Mancos Community Survey 2022

6.4 Community and Economic Attributes

The Mancos community values its rich cultural and historic character. Registered historic buildings including the Mancos Opera House which was recently renovated to address ADA accessibility, the Bauer Bank Building, Mancos High School Building and the Mancos Common Press (Mancos Times Building) offer a unique downtown experience and act as cornerstones for the developing creative industries on Main Street and Grand Avenue. The Town recognizes that the numerous galleries, shops and performing arts venues are a part of the Town's economic development and seeks opportunities to partner with historic building owners and non-profits to increase awareness and promote the business offerings. It is important to support and enhance the downtown area to create a sense of place that will continue to encourage creativity and attract local and out of town visitors.

Historic Mancos High School building circa 1920

The Mancos community hosts a number of special events throughout the year. Celebrations such as festivals, gallery walks, farmers' markets, and concerts attract visitors and bring together residents from around the region. These special events provide opportunities for the community to showcase the qualities that make it unique, as well as provide amusement, entertainment, and opportunities to reconnect with friends and neighbors.

Events have direct impact on the local economy and add to the overall interest and quality of life of the community, which in turn makes Mancos a desirable place to live.

The Town frequently partners with local non-profits to utilize parks, streets, and the community center to host these events. Examples include Mancos Days, Burro Fest and Grand Summer Nights Gallery Walks. The renovation of the Mancos Opera House opens new opportunities to host performance arts and films.

6.5 Mancos Economic Development Partners

The Mancos Valley Chamber of Commerce plays an important role in the local business community by promoting its members and helping to develop and host events. The Chamber also plays a critical role in partnership with the Town to communicate with businesses about their needs to bring training and technical assistance. The Town directs a percentage of the local sales tax to the Chamber in recognition of their efforts to bring events and economic development to the Town.

The Mancos Creative District (MCD) represents the substantial number of artists that live and do business in the local community. Artist sells their work in the galleries that line the main business corridor and there are many experiential opportunities for residents and visitors to take classes. The Town partners with MCD to help understand the needs of the artist community, partners on public art installations and directs a percentage of the local sales tax to the organization in recognition of the impact it has on the overall economic vitality of the community and the downtown businesses. Planning is on-going to provide the Town with a Public Art program which will guide visitors to different art installations in Town and the surrounding valley once completed.

Region 9 Economic Development District of Southwest Colorado, Inc. (Region 9 EDD) works cooperatively with the private and public sectors to enhance the economic conditions in the area and improve economic prosperity. Region 9 EDD offers a revolving loan program for "gap" financing to assist small business retention, expansion, and job creation. They also offer a micro-enterprise loan program for loans up to $100,000 for qualifying small businesses with five or fewer employees. Region 9 EDD administers the Colorado Enterprise Zone Tax Credit program; publishes the Comprehensive Economic Development Strategy (CEDS) to assist local communities with regional economic development strategic planning and technical assistance; and helps to administer different State and Federal programs. Region 9 EDD often partners with community organizations, governments, and the private sector to assist in the development of special projects that result in job creation/retention and the economic expansion of the community or enterprise. They provide regional support and resources addressing broadband, housing and transportation development in Mancos and the surrounding area.

The Southwest Colorado Small Business Development Center (SBDC) offers confidential, objective services to help businesses succeed. The SBDC, located at Fort Lewis College in Durango, provides assistance to all existing small businesses and others who need help in developing their ideas. The territory served by this location includes Archuleta County, Dolores County, La Plata County, Montezuma County, San Juan County, Southern Ute Indian Tribe, and Ute Mountain Ute Indian Tribe.

6.6 Goals, Objectives and Actions

6.6.1 DOWNTOWN GOAL: ASSURE AN ATTRACTIVE and FINANCIALLY STRONG DOWNTOWN DISTRICT

Constraints and Issues

- Under-utilization of the central business district.
- Lack of an organized effort to expand business activity in the Downtown.
- State-owned highway bisects the Downtown Business District which complicates local control.

Objective #1: Assist in the development of a "Main Street" program for the Downtown District

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Actions

- Work with the Department of Local Affairs to become a "Main Street" community.
- Organize "Main Street" businesses and other Downtown stakeholders to develop a "Main Street" marketing and improvements plan.

Objective #2: Improve the overall vitality of the Downtown Commercial Core

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Actions

- Identify potential paths, trail routes and bicycle lanes that link Downtown to Town Parks, neighborhoods, Mancos State Park, Mesa Verde and public lands.
- Develop a wayfinding plan that includes potential sources of funding for signage.
- Identify, design and construct streetscape improvements that would make Downtown a more pedestrian friendly and desirable place to visit and shop.
- Identify retail and office businesses that would complement and diversify the existing business mix in Downtown.
- Continue to support special events that take place Downtown.
- Work with property owners to designate their properties as historic landmarks.
- Work with the State Historic Fund and other preservation organizations to help provide technical and financial assistance to property owners to restore, rehabilitate, renovate and preserve historic buildings in Downtown.
- Collaborate with the artist community in the development of aesthetic enhancements for the downtown which may include, but are not limited to: decorative benches, landscaping, sculpture installations, murals and mosaics, as well as displays of historic wagons and place-markers.

6.6.2 LOCAL BUSINESS DEVELOPMENT GOAL: PROMOTE CONDITIONS FOR A VIBRANT, SUSTAINABLE BUSINESS COMMUNITY

Constraints and Issues

- Need for increased awareness of local business opportunities.

Objective: Pursue an aggressive business development posture by collaborating with the business community

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Actions

- Encourage frequent meetings between the Board of Trustees, the Mancos Valley Chamber of Commerce and other economic development entities to discuss issues and seek opportunities to partner towards achieving common goals.
- Work with the Small Business Development Center, Region 9 Economic Development District and Economic Development Area Partnerships to attract businesses and industry.
- Actively participate with adjacent communities and area attractions in order to help support the economic vitality of the region as a whole.
- Establish a marketing plan to broaden the customer base of existing local businesses.
- Maintain and enhance an efficient, timely and predictable development review and building permit process.
- Create a point of contact to centralize the dissemination of information for businesses and patrons.
- Consider the use of incentives, special districts, authorities and other appropriate mechanisms to promote and develop economic resources for the Town.
- Brand and market the Town’s image through internet, newsletters, press releases and other media.
- Encourage the recruitment of businesses that support the Town’s economic base and create primary jobs for Town residents.
- Promote the tax credit and other benefits available to companies who do business in Mancos through the Enterprise Zone program.
- Examine revenue sharing potential with neighboring communities.
- Support Mancos' creative industries through increasing and promoting opportunities and events that showcase local creative endeavors.
- Conduct a risk assessment that analyzes the impacts of climate change on the local economy.

6.6.3 RETAIL BUSINESSES GOAL: SUPPORT A THRIVING, DIVERSE RETAIL SECTOR THAT MEETS THE RETAIL NEEDS OF RESIDENTS AND VISITORS

Constraints and Issues

- Retail leakage, i.e. the loss of potential sales revenue due to purchases made outside of the community.

Objective: Retain and expand local businesses, and attract retail establishments to increase revenues and create local jobs

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Actions

- Designate sufficient land area on the Future Land Use Plan to accommodate commercial uses that complement and strengthen the Town's retail market.
- Promote available commercial sites by creating and maintaining a "commercial sites" availability map and database that contains detailed information on vacant commercial sites for potential businesses.
- Promote Mancos' Enterprise Zone to businesses to encourage development in the older and core commercial areas of Town.
- Designate land use areas to accommodate businesses in the retail categories that are experiencing the largest leakage.
- Participate in "buy local" campaigns.
- Conduct a "leakage" impact analysis.

STAFF REPORT

To: Honorable Mayor and Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: Town of Mancos Financial Policies

Recommendation
Adopt the updated Town of Mancos Financial Policies

Background/Discussion
The Town of Mancos adopted financial policies in 2005. They were revised in 2009 and 2013. We have discussed updates to these policies several times in 2023, including the February 8, 2023 workshop and February 22, 2023 Board meeting.

Attached is the final version based on our research and discussions. I have not heard back from our auditor, but I am confident in the language included in the investment policy section.

I also assure the Board that when this item is added to a work plan (possibly 2024), we will issue an RFP and work with a qualified financial advisor.

Attachments
Updated Town of Mancos Financial Policies

Town of Mancos

Fiscal Policies

Town of Mancos, Colorado

~~September 2013~~April 2023

Town of Mancos
Fiscal Policies

PURPOSE

The purpose of the Town of Mancos Fiscal Policies is to set guidelines for the management of the fiscal affairs of the Town. The policies will commit the Town to calculating specific information about the Town's current fiscal condition, past and future trends, and provide guidelines for making fiscal decisions and assure that the Town of Mancos continues to pursue a financially prudent, yet progressive, course. These policies may be amended at any time by Board of Trustees.

INTRODUCTION

The Town of Mancos is an organization charged with providing a wide range of services (i.e. elections, water, sewer, drainage, streets, planning, engineering, law enforcement, parks, recreation, etc.). Revenues to support these services are created within and from the community. The Town's Fiscal Policies have been written in order to help the Town of Mancos provide services in a prudent yet progressive manner, within the bounds of available revenues.

General Policies

Policy 1
The Town of Mancos (hereafter "Town") and its elected representatives, staff, and contracted professionals shall abide by the policies set forth in this document. This document shall serve as a general guiding document when dealing with matters concerning fiscal policy, budgeting, and financial planning.

Policy 2
The Town shall maintain an accurate~~annually~~ inventory all of its Capital facilities and equipment, estimating their remaining useful life and replacement cost. This shall include, but is not limited to, streets, drainage facilities, buildings, parks, water system, alleys, sidewalks and curbs, office equipment, heavy equipment, vehicles and traffic devices. Staff shall review and update annually.

Policy 3
As a provider of public services, the Town will seek to provide only public services which citizens require or support.

Policy 4
The Town will take positive steps to improve the productivity of its programs and employees, and seek ways to eliminate duplicating functions within the Town government.

Policy 5
Although the Town will finance projects on a pay-as-you-go basis, the Board may conclude, based on a study of the economy and other matters, that the most equitable way of financing a project that benefits the entire community will be debt financing in order to provide the services in a timely manner.

Policy 6
During the annual budget process, the Town will reassess services and service levels. The Board may seek citizen input by surveys, citizen forms and similar methods for this evaluation.

Debt Policies

Policy 7
The Town will not use long-term debt to finance operations. Long-term borrowing will be confined to capital improvements or similar projects with an extended life which should not be financed from current revenues.

Policy 8
Debt payments shall not extend beyond the estimated useful life of the project being financed. The Town will keep the average maturity of general obligation bonds at or below twenty (20) years.

Policy 9
The Town will maintain good communications with bond rating agencies concerning its financial condition.

Policy 10
Total general obligation debt will not exceed three percent (3%) of the actual value of the taxable property within the Town. Total enterprise fund debt will not exceed (5%) of the actual value of the taxable property within the Town.

Policy 11
The Town will utilize lease purchasing only in the case of financial need or when lease rates are so economical that it makes good financial sense to match cash flows with the useful life of the item being purchased. Leasing shall require the specific approval of the Board of Trustees. If lease purchasing is approved by the Board, the useful life of the item must be equal to or greater than the length of the lease. Debt service cost should be noted.

Revenue Policies

Policy 12
The Town will try to maintain a diversified revenue system to protect it from short-run fluctuations in any one revenue source.

Policy 13
State and Federal funds may be utilized by the Town, but only when the Town can be assured that the total costs and requirements of accepting funds are known and judged not to adversely impact the Town's funds.

Policy 14
The Board of Trustees policy is that utility user charges will be established so that the operating revenues are at least equal to the direct and indirect operation costs. Indirect costs will include the cost of annual depreciation of capital assets and administrative costs.

~~Policy 15~~
~~The Town will set fees for recreational services at a level to support the minimum costs associated with providing youth and adult recreation activities. The Board may adjust these fees as they see necessary for the betterment of the recreation department and the community.~~

Policy 15~~6~~
The Town will annually review all fees for licenses, permits, fines and other miscellaneous charges. The Board of Trustees may, as necessary after considering inflation, processing time, expenses to the Town, and any other factors pertinent to the specific item, increase these fees.

Policy 16~~7~~
Non-sufficient funds checks will be assessed a collection charge. The amount of collection charge may be reviewed and changes as deemed necessary by the Town Clerk/Treasurer with the approval of the Town Administrator. At a minimum, the charge shall cover the costs incurred by the Town.

Policy 17~~8~~
The Town will project revenues for the next five (5) years and will update this projection annually. Each existing and potential revenue source will be re-examined annually.

Policy 18~~9~~
Revenue projections will include estimated operating costs of future improvements that are included in the Capital Improvement Program Budget.

Policy 19~~20~~
Utility capital revenues will not be used to pay for operating expenses. They will be used solely for utility improvements and system expansion. The Town reserves the right to utilize such funds in a flexible but responsible manner.

Operating Budget Policies

Policy 201
The Town will maintain a budgetary control system to help it adhere to the budget. The Town Staff will prepare monthly status reports and quarterly financial reports comparing actual revenues and expenditures to budgeted amounts. Quarterly reports to the Board will be used to develop performance measures to be included in the annual operating budget, where practical.

Policy 212
The Town will provide for adequate maintenance of capital plant and equipment for their orderly replacement. Fixed assets will be acquired and disposed of only upon proper authorization and will be adequately safeguarded and insured. Please see attached Capital Assets Policy.

Policy 223
The Town will strive to pay prevailing market rates of pay to its employees. Prevailing market rate is defined to include both salary and fringe benefits.

Policy 234
The Town should not incur an operating deficit. Revenues and beginning fund balance should always be greater than expenditures.

Policy 245
The Town will pay for all operational expenditures with current revenues and available Fund Balances.

Administrative Transfer Fee

Policy 256
The Administrative Transfer Fee is a payment from the Enterprise Funds to the General Fund for services provided by the General Fund for services provided by the General Fund. The amount of each year's transfer fee will be based on the estimated General Fund expenditures that are Enterprise Fund related.

Policy 267
The Town Enterprise Funds may, in the future, be required to pay the General Fund a franchise fee for the utilization of public streets and rights of way. The fee would be a percent of the operating budget year projected revenues.

Reserve Policies

Policy 27~~8~~

The Town shall establish reserve funds to pay for needs caused by unforeseen events. The reserve shall exist to address the following four events:

1. CATASTROPHIC RESERVES – to provide limited emergency funds in the event of natural or man-made disasters;

2. OPERATIONAL RESERVES – to provide additional funds for limited unexpected service needs;

3. LIQUIDITY RESERVES – to provide limited funds to smooth fluctuations in revenues caused by changes in economic conditions. A minimum of three percent (3%) of the general fund operating budget shall be held in such reserve;

4. AMENDMENT ONE – to provide the required three percent (3%) of one year's budget as required by Amendment One. This reserve may overlap with item #3.

To accomplish the above goals, a minimum reserve shall be set aside in each fund as follows:

	Minimum Reserve	Suggested Reserve
General Fund	3%	10%
Water Fund	3%	10%
Sewer Fund	3%	10%
Conservation Trust Fund	No requirement	5%

It should be noted, that the above reserves are for operational purposes and do not include the minimum eight percent (8%) set-aside for Capital Improvements, as indicated in Policy #34.

Capital Improvements

Policy 2~~89~~
The Town will make all capital improvements in accordance with an adopted five-year capital improvement program and an annual capital improvement budget. This document may be updated from time to time, as the need arises.

Policy 29~~30~~
The Town will develop a multi-year plan for capital improvements and update it annually.

Policy 30~~1~~
The Town will enact an annual capital budget based upon the Capital Improvements Program. This capital budget will be coordinated with the operating budget. The Town of Mancos will require that project costs be submitted with capital projects requests. "Full Life" costs including operating, maintenance, and demolition, if any, should be listed.

Policy 31~~2~~
The Town will project its equipment replacement and maintenance needs for the next several years and will update this projection each year. From this projection, a maintenance and replacement schedule will be developed and followed.

Policy 32~~3~~
The Town will maintain all its assets at a level adequate to protect the Town's capital investment and to minimize future maintenance and replacement costs.

Policy 33~~4~~
The Town will set aside a minimum of eight percent (8%) of annual revenues in each fund for future capital improvements. A separate Capital Improvement Fund has been set up for the purpose of providing adequate and sustainable funding for the program. Set asides from the Water and Sewer Enterprise Funds may only be used for capital improvements pertaining to water and sewer systems.

Investment Policies

Policy 34~~5~~

I. Overview

The following Investment Policy addresses the methods, procedures and practices which must be exercised to ensure effective and judicious fiscal and investment management of the Town's funds. This Investment Policy shall apply to the investment management of all financial assets and funds under control of the Town, except for the retirement and pension funds of the Town. All cash, except for certain restricted funds, shall be pooled for investment purposes. The investment income derived from the pooled investment account shall be allocated to the General Fund and to those Town accounts that have contributed to the pooled funds based on the proportion of their respective average balances relative to the total pooled balance.

This Investment Policy complies with the various regulatory requirements under which the Town operates.

II. Investment Objectives

All funds which are held for future disbursement shall be deposited and invested by the Town in accordance with Colorado State Statutes, and any ordinances and resolutions enacted by the Town Board in a manner to accomplish the following objectives:

a. Safety. Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, the Town of Mancos will diversify its investments by investing funds among a variety of securities with independent returns.

b. Liquidity. The investment portfolio will remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

c. Return on Investments. The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints for safety and liquidity needs.

III. Delegation of Authority

Under Section 4-2-10 of the Code of the Town of Mancos, Colorado, the Town Treasurer shall have the authority to conduct investment transactions. The Town Treasurer has the responsibility of administering this investment policy. Other members of the Town's finance staff may be appointed to assist the Treasurer in the cash management, treasury or investment function. The Town's external auditors will periodically review the compliance of the cash, treasury, and investment management practices with this Investment Policy.

The Treasurer may engage the support services of outside professionals, so long as it can be demonstrated that these services produce a net financial advantage and necessary financial protection of the Town's resources. Such services may include engagement of financial advisors in conjunction with debt issuance, portfolio management support, special legal representation, third party custodial services, and appraisal of independent rating services.

IV. Prudence

The standard of prudence to be used for managing the Town's assets is the "prudent person standard" which states, "fiduciaries […] shall exercise the judgment and care, under the circumstances then prevailing, which [a person] of prudence, discretion, and intelligence exercise in the management of the property of another, not in regard to speculation but in regard to the permanent disposition of funds, considering the probable income as well as the probable safety of capital." (C.R.S. § 15-1-304, Standard for Investments).

The Town's overall investment program shall be designed and managed with a degree of professionalism that is worthy of the public trust. Mancos shall recognize that no investment is totally riskless and that the investment activities of Mancos are a matter of public record. Accordingly, Mancos recognizes that occasional measured losses may occur in a diversified portfolio and shall be considered within the context of the overall portfolio's return, provided that adequate diversification has been implemented and that the sale of a security is in the best

long-term interest of the Town.

The Town's Treasurer or other authorized investment personnel acting in accordance with written procedures and this Investment Policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided that the deviations from expectations are reported in a timely fashion to Mancos's Town Manager and appropriate action is taken to control adverse developments.

V. Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall adhere to the Town's Code of Ethics and shall not engage in personal business activity that could conflict with proper execution of the investment program, or that could impair their ability to make impartial investment decisions. Employees and investment officials shall disclose to the Town Manager any material financial interest in financial institutions that conduct business with the Town, and they shall further disclose any large personal financial/investment positions that could be related to the performance of the Town's portfolio. Employees and officers shall subordinate their personal investment transactions to those of the Town particularly with regard to the timing of purchases and sales. The Town's current Code of Ethics is on file in the Town Clerk's office.

VI. Eligible Investments and Transactions

All investments will be made in accordance with the Colorado Revised Statutes, as amended: C.R.S. § 11-10.5-101, et seq., Public Deposit Protection Act; C.R.S. § 11-47-101, et seq., Savings and Loan Association Public Deposit Protection Act; C.R.S. § 24-75-601, et seq., Funds-Legal Investments; C.R.S. § 24-75-603, Depositories, and C.R.S. § 24-75-702, Local governments-authority to pool surplus funds. Any revisions or extensions of these sections of the Colorado Revised Statutes will be assumed to be part of this Investment Policy immediately upon the effective date thereof.

The Town Board has further defined the following types of securities and transactions as eligible for use by the Town:

a. U.S. Treasury Obligations including Treasury Bills, Treasury Notes, Treasury Bonds and Treasury Strips with maturities not exceeding five years from the date of trade settlement.

b. Federal Instrumentality Securities including debentures, discount notes, callable securities, step-up securities and stripped principal or coupons with maturities not exceeding five years from the date of trade settlement issued by the following only: Federal National Mortgage Association (FNMA), Federal Farm Credit Banks (FFCB), Federal Home Loan Banks (FHLB), and Federal Home Loan Mortgage Corporation (FHLMC). To be approved, Federal Instrumentality Securities must be rated AAA by either Moody's or Standard & Poor's. The Town will not invest in any of the subordinated debentures issued by the federal instrumentality issuers.

c. Prime Commercial Paper issued by U.S. companies and denominated in U.S. currency with a maturity not exceeding 270 days from the date of purchase. Commercial Paper shall be rated in its highest rating category at the time of purchase by at least two Nationally Recognized

Statistical Rating Organizations (NRSROs), and by all NRSROs that rate the obligations. If the commercial paper issuer has senior debt outstanding, the senior debt must be rated not less than A+, A1 or the equivalent by at least two NRSROs, and by all NRSROs that rate the debt. The aggregate amount of securities purchased from any one Commercial Paper issuer shall not exceed 20% of the Town's portfolio.

Any issuer whose short-term ratings are placed on negative watch list by any of the rating agencies will be put on "Hold" status. Issuers on "Hold" status will be ineligible for purchase until a final decision on ratings is made.

d. Eligible Bankers Acceptances with an original maximum maturity not exceeding 90 days, issued by FDIC insured domestic banks or branches of foreign banks domiciled in the U.S. and operating under U.S. banking laws with a minimum of $250,000 combined capital and surplus. Banker's Acceptances shall be rated at least A1, P-1 or the equivalent at the time of purchase by at least two NRSROs and rated not less by all NRSROs that rate the instrument. If the issuing bank has senior debt outstanding, it shall be rated at the time of purchase AA, Aa2 or the equivalent by at the time of purchase by at least two NRSROs and rated not less by all NRSROs that rate the bank. The aggregate amount of Bankers Acceptances issued by any one bank shall not exceed 20% of the Town's portfolio.

e. Repurchase Agreements with a defined termination date of 180 days or less collateralized by U.S. Treasury and Federal Instrumentality securities listed in items a and b above with a maturity not exceeding 10 years. Title must transfer to the Town of Mancos or the Town must have a perfected security interest. For the purpose of this section, the term "collateral" shall mean "purchased securities" under the terms of the Town's approved Master Repurchase Agreement. The purchased securities shall have a minimum market value including accrued interest of 102 percent of the dollar value of the transaction. Collateral shall be held in the Town's custodial bank as safekeeping agent, and the market value of the collateral securities shall be marked-to-the-market daily.

Repurchase Agreements shall be entered into only with dealers who have executed a Master Repurchase Agreement with the Town and who are recognized as Primary Dealers by the Federal Reserve Bank of New York or have a Primary Dealer within their holding company structure. Approved counterparties to repurchase agreements shall have at least a short-term debt rating of A-1 or the equivalent and a long-term debt rating of A or the equivalent from one or more NRSROs that regularly rate such obligations.

f. Local Government Investment Pools authorized under CRS 24-75-702 that: 1) are "no-load" (i.e., no commission or fee shall be charged on purchases or sales of shares); 2) have a constant net asset value per share of $1.00; 3) limit assets of the fund to those authorized by State Statute; 4) have a maximum stated maturity and weighted average maturity in accordance with Rule 2a-7 of the Investment Company Act of 1940; and 5) have a rating of AAAm by Standard & Poor's, AAA by Moody's or AAA/V-1+ by Fitch.

g. Non-Negotiable Certificates of Deposit in FDIC insured state or national banks or savings banks that are eligible public depositories in Colorado as defined in CRS 11-10.5-103 and that meet the criteria set forth in the section of this Investment Policy, "Selection of Banks."

Certificates of Deposit exceeding the FDIC insured amount shall be collateralized in accordance with the Colorado Public Deposit Protection Act.

h. Money Market Mutual Funds registered under the Investment Company Act of 1940 that: 1) are "no-load" (i.e. no commission or fee shall be charged on purchases or sales of shares); 2) have a constant net asset value per share of $1.00; 3) have a maximum stated maturity and weighted average maturity in accordance with Rule 2a-7 of the Investment Company Act of 1940; and 4) are rated either AAAm by Standard & Poor's, AAA by Moody's or AAA/V-1+ by Fitch.

i. Negotiable Certificates of Deposit authorized under CRS 24-75-601.1 with an opinion provided by the Colorado Division of Securities, it is legal to invest public funds in negotiable CDs at any FDIC insured bank up to the $250,000 with maturities no longer than five years from date of settlement and that meet the criteria set forth in the section of this Investment Policy, "Selection of Banks." Negotiable Certificates of Deposit exceeding the FDIC insured amount shall be collateralized in accordance with the Colorado Public Deposit Protection Act.

j. Municipal Securities of state or local governments with a maturity not exceeding five years from the date of trade settlement. General obligation and revenue obligation securities of this state or any political subdivision of this state must be rated at the time of purchase at least "A" or its equivalent by at least two NRSROs. General obligation and revenue obligation securities of any other state or political subdivision of any other state must be rated at the time of purchase at least "AA" or its equivalent by at least two NRSROs.

The Town may, from time-to-time issue bonds, the proceeds of which must be invested to meet specific cash flow requirements. In such circumstances and notwithstanding the paragraph immediately above, the reinvestment of debt issuance or related reserve funds may, upon the advice of Bond Counsel or financial advisors, deviate from the provisions of this Investment Policy with the written approval of the Treasurer.

VII. Environmental, Social and Governance (ESG)

Investment of funds should be guided by the following environmental, social, and governance (ESG) investment goals. Investments should be made in compliance with these goals to the extent that such investments achieve substantially equivalent safety, liquidity and return when compared to similar investments permitted by Colorado Revised Statutes and the Investment Policy. Investments are encouraged in companies that have a positive impact on the environment, human rights, and fair workplace practice and that support equality of rights, regardless of sex, race, religion, age, disability, or sexual orientation. Investments are discouraged in entities that receive a significant portion of their revenues from the manufacturer of tobacco products, firearms, or weapons not used in our national defense.

VIII. Investment Diversification

The Town shall diversify its investments to avoid incurring unreasonable risks inherent in over investing in specific instruments, individual financial institutions, or maturities. The asset allocation in the portfolio should, however, be flexible depending upon the outlook for the economy, the securities market, and the Town's anticipated cash flow needs.

A minimum of 50% of the investable assets of the Town will be maintained in U.S. Treasury Obligations, Federal Instrumentality Securities, Repurchase Agreements and Local Government Investment Pools.

IX. Investment Maturity and Liquidity

Investments shall be limited to maturities not exceeding five years from the date of trade settlement. The weighted average maturity of the total portfolio shall at no time exceed twenty-four months, and the Town shall maintain at least 10% of its total investment portfolio in instruments maturing in 90 days or less.

For purposes of calculating the portfolio's weighted average maturity, in the case of callable securities, the first call date shall be used as the maturity date for investment purposes in this section if, in the opinion of the Treasurer, there is little doubt that the security will be called prior to maturity. If, in the opinion of the Treasurer, the callable security will go full term to maturity, then that date will be used as the final maturity. In all cases for accounting purposes, however, the final maturity date of the callable securities shall be used as the maturity of the security in order to disclose the maximum maturity liability in the Town's financial reports.

X. Selection of Broker/Dealers

The Treasurer shall maintain a list of broker/dealers approved to conduct security transactions with the Town. To be eligible, a firm must meet at least one of the following criteria:

a. Be recognized as a Primary Dealer by the Federal Reserve Bank of New York, or have a Primary Dealer within its holding company structure; or

b. Report voluntarily to the Federal Reserve Bank of New York; or

c. Qualify under Securities and Exchange Commission (SEC) Rule 15c3-1 (Uniform Net Capital Rule).

Broker/dealers will be selected by the Treasurer on the basis of their expertise in public cash management and their ability to provide service to the Town's account. Each authorized broker/dealer shall be required to submit and annually update a Town approved Broker/Dealer Information Request Form which includes the firm's most recent financial statements and proof of state registration. The Treasurer shall maintain a file of the most recent Broker/Dealer Information Forms submitted by each firm approved for investment purposes. Broker/Dealers shall also confirm in writing that they have received and reviewed a copy of this Investment Policy.

XI. Selection of Banks

To be eligible for designation to provide depository and other banking services, or for a bank's certificates of deposit to be eligible for purchase, a bank must be a member of the Federal Deposit Insurance Corporation and must qualify as an eligible public depository in Colorado as defined in CRS 11-10.5-103.

Additionally, the bank must meet a minimum requirement of 3 ½ stars under the Bauer Financial bank star rating system.

XII. Safekeeping and Custody

a. All fixed term investment securities purchased under this policy shall be held by the Investment Officer or in third-party safekeeping by a custodial institution eligible under CRS 24-75-601. The custodian shall issue a safekeeping receipt listing the specific instrument, rate, maturity, and other pertinent information.

b. Deposit-type securities (such as certificates of deposit) shall be collateralized as required by PDPA for any amount exceeding FDIC or FSLIC coverage. Other investments requiring collateral including repurchase agreements will be secured by the actual security held in safekeeping by a third-party custodian. At a minimum all collateral shall meet the Level 2 category as defined by the Governmental Accounting Standards Board (GASB).

c. Money market instruments such as SEC registered money market mutual funds qualified under CRS 24-75-601 and state pools under CRS 24-75-701 shall be collateralized as required by law.

XIII. Performance Benchmarks

The Town's investment portfolio shall be designed to attain a market rate of return throughout budgetary and economic cycles, taking into account prevailing market conditions, risk constraints for eligible securities and cash flow requirements.

The performance of the portfolio shall be compared to the average yield on the U.S. Treasury security that most closely corresponds to the weighted average maturity of the portfolio. All fees involved with managing the portfolio should be included in the computation of the portfolio's rate of return.

The Treasurer shall present to the Town Board, at least annually, a review of the Town's portfolio, to include the portfolio's total return and the established investment objectives and goals.

XIV. Reporting

At least annually, the Treasurer shall prepare and submit to the Town Board a report listing the investments held by the Town and the market value of those investments. The report shall include a summary of investment earnings and performance results during the period.

~~The Town will make cash-flow analysis of all funds on a regular basis. Disbursement, collection and deposit of all funds will be scheduled to insure maximum cash availability. The accounting system will provide monthly information concerning cash position and investment performance. Investment performance shall be reviewed by the Town Administrator, who shall schedule investments such that there is as little idle cash as practical.~~

As permitted by law, the Town will make use of pooled cash to invest under the prudent investor rule. The criteria for selection investments and their order of priority are:

1. Safety
2. Liquidity
3. Yield
4. Benefit to Mancos Citizens

It shall be the Town Clerk/Treasurer's responsibility to invest funds with approval of the Town Administrator. They shall evaluate all investment opportunities with respect to this policy. Investments will be made as allowed by State statutes.

Policy 367
The Town will review arrangements with financial institutions on a continuing basis at a specified time of the year, to ensure proper and maximum utilization of funds.

Accounting Policies

Policy 378
The Town will review its accounting system on an annual basis and make recommendations for the improvement or adjustment of the system.

Policy 389
An annual audit will be performed by an independent certified public accounting firm, which will issue general purpose financial statements and bond representations.

Policy 3940
Full disclosure will be provided in the annual financial statements and bond representations.

Policy 401
Petty cash not to exceed $100 is kept on hand in the office for small purchases that need to be made when circumstances are such that following the normal purchasing procedure can not reasonably be done. All cash given out is documented by a receipt signed by the receiver**.** All supporting receipts are returned to the Town Clerk/Treasurer upon purchase, including any change. When cash on hand gets low, the Town Clerk/Treasurer prepares a check for the proper amount, and cashes the check at the bank. The cash is placed in the petty cash box.

Policy 412
Dolores State Bank, the current holder of Town operating accounts, requires personal identifying information, such as a driver's license or social security number, of the individual making the deposit on behalf of the Town. Due to this requirement, the Town of Mancos will not accept cash payments for marijuana related business transactions.

Attachment #1:
Capital Assets Policy

I. Introduction

The purpose of the Capital Assets Policy is to present a uniform method of maintaining and updating the Town's capital asset records. Principles and processes incorporated into this policy are in accordance with generally accepted accounting principles (GAAP) and state law.

This policy encompasses all capital assets of the Town: land, land improvements, buildings, building improvements, infrastructure, water rights, machinery and equipment, vehicles, and public artwork. Capital assets are further distinguished as capital assets and non-capital assets.

Capital assets are those capital assets that meet the capitalization threshold as identified in Section II. State law requires the Town to maintain a current listing of capital assets, available for inspection at any time, and requires that an annual physical inventory is conducted. GAAP requires proper accounting for the acquisition and disposal of capital assets. Proper record keeping of the Town's capital assets also provides a management tool for budget and rate setting decisions.

Non-capital assets fall below the capitalization threshold and may include furniture, small tools and equipment (hand mowers, trimmers, etc.), and various telecommunications and computer equipment. Although not required, it may be important for departments to maintain inventories of non-capital capital assets for many reasons, including theft prevention and conducting condition assessments.

II. Capitalization Threshold

The current criteria requiring the capitalization of a capital asset is a cost or fair market value of $5,000 or more and a useful life of five year or more.

III. Property Record Basis

The initial physical inventory and formal property record of capitalized capital assets was prepared by Johnson & Holscher as of April, 2010. Since then, additions and deletions to the Town's capital assets have been maintained by Town staff.

IV. Duties and Responsibilities

All Town departments have a role in the successful maintenance of the Town's capital asset records.

The Town Clerk/Treasurer and Town Administrator shall be responsible for the oversight of all duties and functions related to the capital asset management system, including:

A. Update and maintain detailed records of all capital assets of the Town.
B. Oversee annual physical inventories.
C. Generate capital asset reports as required or requested.

Other Town Departments have the following responsibilities:

A. Custodianship of assets for the department.

B. Complete annual physical inventory of capital assets within the department.
C. On a timely basis, report to the Town Clerk/Treasurer all changes, transfers, surpluses, relevant alterations, acquisitions, and dispositions of capital assets (including lost or stolen items).

V. Acquisition of Capital Assets

The purchase of capital assets is subject to the provisions of the Town's Purchasing Policy. All costs associated with the purchase of the asset shall be charged to a capital account within the Town's accounting system. Ancillary costs (shipping, installation, design, etc.) shall be included in the capitalized cost of the asset.

Donated assets shall be capitalized at the estimated fair value of the asset at the time of the donation. Staff shall determine the fair value of the asset based on the best information available, which may include original cost, age of the item, assessment of current condition, etc. Departments shall notify the Town Clerk/Treasurer within two business days of the acquisition of any donated assets.

VI. Annual Physical Inventory

The Town Clerk/Treasurer shall provide the various departments with the most recent list of capitalized assets assigned to their respective departments/divisions. Each department shall conduct an inventory to confirm the accuracy of the report and note all changes and discrepancies to the list. Departments shall return the completed inventories, complete with all notations, to the Finance Department in a timely manner (typically within two weeks).

VII. Disposition of Capital Assets

Capital assets may be disposed of in a number of ways, including: trade-in, sale, donation, scrapped, destroyed, etc. Departments are responsible to notify the Town Clerk/Treasurer in writing of all dispositions in a timely manner (typically within two business days).

When it is determined that a capital asset or any other commodity of the Town needs to be replaced or is no longer used by the department, the following order of disposition options shall be followed unless an option is determined to be unreasonable or impractical:

A. Through email or other means of communication, make the asset available to all other departments in the Town for use within their operations.
B. If purchasing a new or similar asset, attempt to trade-in the old asset.
C. Through advertising with CML or other government organizations (via newsletters, list serves, or other means of communication), attempt to sell the asset to another government entity.
D. Attempt to sell the asset to a commercial business or to the public through advertising, public auction, bidding process, or other means of communication.
E. Items with an estimated value less than $5,000 may be donated to other government entities or other charitable organizations with the approval of the Town Administrator or designee. Items with an estimated value greater than $5,000 may be donated to other government entities or other charitable organizations with the approval of the Board of Trustees.
F. Through email or other means of communication, make the asset available to all employees. Any sale to employees shall require the submission of sealed bids, giving employees a minimum of one week to submit bids. To maintain the appearance of

fairness, it may be appropriate for an employee outside the selling department to collect and open the bids. At minimum, the bid opening shall be witnessed by an employee not submitting a bid. Submitters shall be notified of the bid opening time and place and may attend the bid opening if they so desire. The employee with the winning bid shall have two business days to provide payment to the Town for the asset. After two business days, the next highest bidder shall be considered the winning bid.

G. The asset shall be properly trashed or destroyed.

Attachment #2:
Purchasing Policy

A. PURPOSE

The purpose of this policy is to establish procedures to maximize the value of public funds spent for purchasing goods or services. This process allows the establishment of safeguards for maintaining a system of quality and integrity.

B. GENERAL GUIDELINES

All purchases of materials and supplies shall be made in accordance with the following guidelines:

1) The Town Treasurer is responsible for monitoring purchases, for establishing purchasing systems, and for providing assistance to departments making purchases.

2) All purchases must be made with funds that have been appropriated by the Town Board for the intended purpose. To the greatest extent possible, purchases shall be made in accordance with funds budgeted for that purpose.

3) The Town Board and/or Town Administrator may, from time to time, restrict any or all budgeted purchases if there is a shortage of available cash.

4) Vendor quotations for materials, equipment, services, and supplies may be rejected on the basis of inferior quality or unacceptable delivery time.

5) Quotes may be provided by vendors verbally, but must be followed by written confirmation. Documentation of all written quotations shall be forwarded to the Town Treasurer, where a master file of quotations will be maintained.

6) In general, quotations or bids should be awarded to the lowest qualified, responsive bidder or vendor. *Lowest qualified bidder* means the bidder with the lowest price and the highest qualifications, based on the following criteria: (1) the ability, capacity and skill of the bidder to perform the contract or furnish the supplies required; (2) whether the bidder can perform the contract or furnish the supplies promptly or within the time specified, without delay or interference; (3) the character, integrity, reputation, judgment, experience and efficiency of the bidder; (4) the quality of performance on previous contracts; (5) previous and existing compliance by the bidder with all laws and ordinances relating to the contract or service; (6) sufficiency of financial resources and ability of the bidder to perform the contract or furnish the supplies; (7) the ability of the bidder to provide future maintenance and service; and (8) the response to the invitation for bids. *Responsive bidder* means a person or firm that has submitted a bid which conforms in all material respects to the invitation for bids.

7) Having received a low quotation or bid, department heads are enabled to negotiate the price further with the vendor, if necessary, to bring purchases into the range of the approved budget.

8) Purchase of quantities of materials and supplies shall not be broken down with the intent of applying a less restrictive purchasing procedure.

9) It shall be the policy of the Town of Mancos to seek a minimum of three written quotes wherever possible. These can be provided in fax or email form from the potential vendor. If reasonable attempts are made by the department head to obtain quotes from vendors and is unable to obtain three quotes due to the unresponsiveness of vendors contacted or the lack of potential vendors for the product or service, this requirement may be waived by the Town Administrator, in consultation with the appropriate department head.

10) All commonly used materials, supplies and equipment will be standardized as much as possible for better prices through quantity (bulk) purchase of fewer varieties of material and to increase proficiency in the Town evaluation of product performance. Selection of specific products that have been rated high in product performance evaluations may be classified as best buy.

C. AUTHORIZATION LEVELS AND REQUIRED PROCUREMENT PROCEDURES

In order to fully implement a Town of Mancos purchasing policy that will provide sufficient standardization and accountability, as well as to ensure a sufficient degree of operational flexibility to the Town's various departments, the following levels of authorization and procedures are hereby established:

Amount	**Required Procedures**
Less than $5~~1~~,000	Purchase of budgeted items shall be approved by the appropriate department head or the Town Administrator. Items shall be purchased at their discretion, with a goal of cost containment.
$5~~1~~,001-$15,000	Purchase of budgeted items shall be approved by the department head, Town Clerk/Treasurer and Town Administrator. A minimum of three (3) written quotes shall be provided.
$15,001-$2~~1~~5,000	Purchase of budgeted goods or items shall be approved by the department head, Town Clerk/Treasurer, Town Administrator and Board of Trustees. A minimum of three (3) written quotes shall be provided.
$2~~1~~5,001 and over	Budgeted project, service or item will be advertised for public bids through a formal requisition process. This may take the form of an RFP, RFSQ, or similar process.
Non-Budgeted Purchases: *Any non-budgeted purchase over $1,000 shall receive prior approval from the department head, Town Clerk/Treasurer, Town Administrator and the Board of Trustees and a minimum of three (3) written quotes shall be provided. Any non-budgeted purchase exceeding $15,000 shall*	

receive approval from the aforementioned individuals and shall be advertised for public bids.

D. STATE PURCHASE PROGRAM

The Town of Mancos is eligible to purchase various commodities under the Colorado State Purchasing program. Contracts and price agreements that have been awarded to the State are acceptable as satisfying bid and quotation requirements of the Town of Mancos.

E. COOPERATIVE PURCHASE

The Town of Mancos may participate in joint bidding with other governmental agencies and the Rocky Mountain E-Purchasing System if it is deemed in the best interest of the Town to do so.

F. SOLE SOURCE PURCHASE

A sole source purchase may be made without receiving requests for bids or quotations if it has been determined that only one vendor is capable of meeting all specifications and purchase requirements. Written justification for waiving the competitive bid process shall be provided by the department head. A staff report will be submitted to the Board at the next regular Board meeting to ensure they are apprised of expenditures.

G. EMERGENCY PURCHASE

Emergency conditions requiring purchases are defined as situations in which health, welfare and/or safety of employees or the public are endangered. This includes, but is not limited to, the immediate repair of property or vehicles as necessary under circumstances described above. Emergency purchases of capital equipment/services shall be pre-approved by the Town Administrator. A staff report will be submitted to the Board at the next regular Board meeting to ensure they are apprised of expenditures.

H. ~~CREDIT~~ PURCHASING CARD PURCHASES

~~The Town has two credit cards. They are in the possession of the Town Administrator and the Town Treasurer. When a card is needed, the department head shall receive prior authorization from one of the card holders. Employees may take a card while traveling on official Town business if approved by the Town Administrator. Its use shall be in accordance with Town travel policies.~~ Purchasing cardholders are issued a card associated with a specific department and make purchases on behalf of the Town of Mancos. Cardholders must **not** lend or share their purchasing card. They must keep their purchasing card secure and the card number confidential. The cardholder is responsible for obtaining itemized receipts with detail for the monthly cost allocation process and turning them in to the Finance Department. Receipts for expenses incurred during traveling while on Town business must be accompanied by an approved Travel & Training Form. Receipts must also be accompanied with a reason why the purchase is a reasonable business expense (if it isn't obvious). Upon termination of employment, the cardholder will return their Purchasing Card to the Town and immediately discontinue all use of the account.

I. LOCAL QUALIFIED MANCOS BUSINESS (LQMB) PREFERENCE POLICY

A Local Qualified Mancos Business (LQMB) is defined as a person, partnership, corporation, limited liability company or joint venture which is authorized to transact business in Colorado and whose principal business address is located within the 81328 zip code, and which is approved to provide goods and services to the Town of Mancos based upon a determination by the Town staff member making the purchasing decision that the LQMB meets standards of business competence, reputation, financial ability, product/service availability and product/service quality.

a) By reason of its business location, an advantage in consideration for award of a project or bid may be granted to a LQMB. The LQMB shall receive a 10% preference over all non-LQMB bidders, or a $500.00 reduction in bid price when comparing it against other bids, whichever is less. In no event shall the LQMB preference exceed the amount of $500.00.

b) The Town of Mancos reserves the right to reject any and all bids, to waive any informalities and minor irregularities in bids, and to accept the bid deemed, in the opinion of staff, to be in the best interest of the Town of Mancos.

c) It is the policy of the Town of Mancos to solicit bids from local suppliers whenever and wherever such competitive local sources exist, and where no sacrifice or loss in price, availability or quality would result.

d) This local preference policy is subject to all applicable federal or state laws and regulations, and shall not apply to the extent it conflicts with any state statute or federal law regulation.

e) It is expressly understood and provided that enforcement of the terms and conditions of the local preference policy is limited to the Town of Mancos, that nothing contained in these policies shall give or allow any claim or right of action to any other person or entity on such policy, and that it is the express intention of the Town of Mancos that any person or entity other than the Town of Mancos receiving any service or benefit under the policy shall be deemed to be an incidental beneficiary only.

J. OUTSIDE FUNDING

In the case of goods and services procured with aid from any grant funding source and/or other federal or State of Colorado funds, the Town's procurement and local preference policies shall defer to the procurement rules of the grantor or funding entity.

K. CONFLICT OF INTEREST

Board members and staff shall disclose at the earliest stage possible any personal or private interest in any purchase or award of contract proposed before the Board of Trustees. Board members may not vote on these matters and shall refrain from attempting to influence the other members of the Board of Trustees in voting on the matter. Staff and Board Members shall comply with applicable state law concerning conflict of interest and disclosure requirements, including C.R.S. 24-18-10 et seq., C.R.S. 31-4-404, C.R.S. 24-18-201, C.R.S. 18-4-301, C.R.S. 18-4-401, and C.R.S. 18-8-308 and any related protocols of the Town Board of Trustees.

L. SURPLUS SUPPLIES AND EQUIPMENT

The Town Treasurer shall work with the appropriate department head to oversee and administer the disposition of surplus inventory, including supplies and equipment that has been identified as no longer used or has become worn out. The Town Administrator, in conjunction with the Town Treasurer, may cause from time to time, any surplus supplies or equipment to be destroyed or sold after advertisement to the highest bidder, and the proceeds of the sale deposited into the appropriate fund of the Town.

M. EMPLOYEE REIMBURSEMENTS

Employees may be reimbursed for out of pocket expenses ~~under $50.00 from the Town's Petty Cash Fund by providing an approved "Request for Reimbursement," which shall~~

~~include a copy of the receipt. Over $50.00, the employee will be reimbursed~~ via check with an approved "Request for Reimbursement." Generally, employees should not payout of pocket for expenses, but should utilize Town accounts established with vendors for supplies and services wherever possible.

Adopted 8/24/05, Revised 1/14/09, Revised 9/11/2013, Revised 4/12/2023

STAFF REPORT

To: Honorable Mayor & Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: 1st Quarter Work Plan and Financial Update

Recommendation
None – for your information

Background/Discussion
Attached is the 1st quarter 2023 work plan with status updates. Also attached are the first quarter 2023 financials.

Resource Impact
N/A

Attachments
1st Quarter 2023 Work Plan
1st Quarter 2023 Financials

2023 Work Plans

Town of Mancos

January 2023

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Introduction

The intent of this document is to help town staff and elected officials to implement and monitor their work throughout the year. While projects and priorities can change throughout the year, this document serves as a guide to communicate with each other and the public about the work that the Town of Mancos will be engaged in during the year.

The items in the annual Work Plan are derived from two basic sources. First, projects and initiatives that are priorities of the Board of Trustees, which are gathered from the annual budget process and the annual Board of Trustees strategic planning retreat, are included. These projects are community needs and typically reflect either upgrades to public infrastructure or other community-stated priorities. Secondly, items in this work plan originate from staff. Department Heads plan their work for the coming year based on identified needs within their departments.

Quarterly updates to this work plan will be provided to the Board of Trustees in regular meetings.

Department/Division: Administration, Clerk and Treasurer

Director/Supervisor: Heather Alvarez, Town Administrator and Jamie Higgins, Town Clerk/Treasurer

Department Mission: To provide superior customer service and support to the community, the Board, department heads, and commissions to make Mancos the best-managed town in the nation.

Services:

- Interfacing with Boards and Committees
- Implements policies set by elected officials, including implementation of adopted plans
- Direct interaction with the public
- Providing information to citizens ("how do I?")
- Solving complaints
- Provides purchasing assistance to all departments
- Serves as Planning and Zoning Administrator
- Grant writing, implantation and reporting
- Fiscal management (budgeting, grants processing, utility billing, accounts payable and accounts receivable, interfaces with vendors,
- Serves as Human Resources (processes payroll, develops policies, etc.)
- Management of municipal code (including recodification)
- Provides support to Mancos Municipal Court
- Serves as internal IT, along with vendor

2023 Objectives/Goals:

1. Continue implementation of initiatives and policies of town Boards and Committees: Comprehensive Plan, Master Trails Plan, Economic Development Strategy, and other Plans. Within each of these plans are several projects that the town is working on.
2. Support department heads in achieving their initiatives by providing efficient administrative support (purchasing, project and program management, budgeting, technology, human resources, grant writing, etc.).
3. Continue efforts to support sustainable residential and commercial growth in town, including a more vibrant downtown.
4. Continue efforts to provide affordable, workforce housing within a three mile radius of town limits.
5. Continue an organizational culture of teamwork, high customer service, and innovation.
6. Continue to represent the town in a positive manner with local and regional external organizations (e.g. Chamber of Commerce, CDOT, Montezuma County and neighboring communities, CML, Region 9, TPR, etc.).
7. Continue to work with all departments on fiscal management and grants management for key initiatives.

Departmental Values:

- Public health and safety
- Maintains customer satisfaction (customers are: citizens, staff, and Boards and Committees)

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023:

Description	Detail	Timeline	1st Qtr
New Water Tank/Fiber/IT Room	Replace old water tank, run fiber infrastructure to water plant, update current room to include HVAC, security measures, room for growth	**December 2023**	**In process**
Hazardous Tree Program	In conjunction with Tree Board & Code Enforcement, enforce hazardous tree program	**Annual**	**Ongoing**
Town Beautification	Downtown flower barrels and baskets; public art program	**Annual**	**In process**
2024 Budget Process	Prepare proposed budget in collaboration with department heads and board members	**May/June 2023:** Board retreat **Dec 2023:** finalize budget	**Not started**
Continue planning with partners on Path to Mesa Verde Project	Planning phase in process.	**Planning phase ongoing.**	**Ongoing**
Offer two mini-grant agency contribution cycles for 2023 funding.	First cycle has been awarded for Jan. 1 funds. Next cycle is June 1 funds with application deadline of April 15.	**June 2023**	**In process – second round due 4/15**
Town Hall/MMO Expansion	Property purchased. Research options for remodel	**December 2023**	**Applying for funding**
Grand Ave. Sidewalk Replacement	Potential partnership with CDOT to replace sidewalks along Grand Ave.	**Multi year project**	**Applying for funding**
IBC/Construction Standards Update	Publish RFP, retain consultant and upgrade to a more current version of IBC & Town construction standards	**December 2023**	**Pending**
Wastewater Treatment Plant	Implement changes to ensure WWTP operates as intended and meets all discharge requirements	**Multi year project**	**In process – RFP responses being reviewed**
Attainable Housing	Continue to research and implement land use updates. Acquire land for workforce housing development.	**Annual**	**Ongoing**

Other Activities or Information about the Department's Work in 2023:

- Staff will continue regular activities such as preparing packets, minutes and agendas for meetings of the Board of Trustees, P and Z, and Tree Board, serving as planning and zoning administrator, collecting utility payments, staffing municipal court and processing cases, processing licenses, addressing community complaints, providing IT support, coordinating benefits, human resources

management, records retention and management, front office staffing, processing accounts receivable and accounts payables, and assistance in coordinating initiatives with departments.

- Staff will attend important trainings and conferences to improve job skills and knowledge.
- Staff will continue to seek options to increase financial sustainability including applying for grants, exploring new revenue sources, and controlling expenditures.
- Staff will continue to keep the Board of Trustees and the public up to date on projects and programs including: quarterly financial reports and quarterly work plan updates.
- Schedule events in the parks and community center
- Maintenance of community center

2023 Community & Economic Development Workplan

Director/Supervisor: Heather Alvarez, Town Administrator in collaboration with Jason Armstrong, Community & Economic Development Coordinator

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023:

Description	Detail	Timeline	1st Qtr
Economic Development Incentives	Draft and finalize incentives for new business development within Town limits	**March 2023**	**Complete**
Update/consolidate Business and Land Use Applications	Take existing applications and consolidate into a more streamlined process. Create a development flow-chart for both business and land use development, along with any other TA documents.	**March 2023**	**Not started**
Develop a Community Prospectus for the Town	Develop a digital community prospectus that markets the Town to potential new businesses in conjunction with the Chamber	**July 2023**	**Pending**
Address retail opportunities and leakage	Using fiscal health and retail studies, conduct a "leakage" profile, develop a specific plan for new and existing businesses	**December 2023**	**In process**
Develop a Business Expansion and Retention Plan for the Town	Develop 3-5 year plan for this project to continue to support entrepreneurs.	**December 2023**	**Not started**
Existing Business Support	Reach out to existing businesses at least quarterly, collaborate with Mancos Chamber on networking and training opportunities	**Quarterly**	**In process**
Broadband and Other Infrastructure	Research and apply for grants to implement current broadband plan for ToM. Continue to seek other grants to address infrastructure needs.	**Ongoing**	**In process**
Affordable Housing	Continue to research and implement land use updates. Acquire land for workforce housing development through grants.	**Ongoing**	**Ongoing**
Community Development	Engage youth, non-profits, educational institutions and other interest groups to increase engagement and understanding of local government, develop local leadership, and be a contributing	**Ongoing**	**In process**

	partner to the overall health and vitality of the Town and the region. Support with grant research and development as needed.		
Economic Development Microwebsite	Continue marketing and communications with current and prospective businesses. Ensure all forms and TA are easy to access.	**Ongoing**	**Complete**

Department/Division: Parks

Director/Supervisor: Terry Jennings, Public Works Director

Department Mission: To provide safe and well-maintained parks and open spaces for families, visitors and the community.

Services:

- Regular park checks
- Maintenance of parks and other areas (160 intersections, Creekside walkway, S. Mesa Pedestrian Bridge)-mowing, trimming, bathrooms, trash removal, weed removal, etc.
- Maintenance of downtown planters (planting, watering, weeding)
- Upgrading equipment and buildings in parks
- Turf maintenance (top seeding, aerating, filling and leveling, etc.)
- Snow removal
- Interface with vendors (e.g. tree maintenance, irrigation system installer, etc.)

2023 Objectives/Goals:

1. Continue turf maintenance in Boyle Park and Cottonwood Park throughout the year.
2. Work with Administration Department on town beautification with eye-appealing flower planters downtown and public art project.

Departmental Values:

- Taking pride
- Being approachable and friendly to public
- Community appreciation
- Hard work
- Community feedback
- A sense of accomplishment
- Great town staff/teamwork

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023

Description	Detail	Timeline	1st Qtr
Boyle Park Improvements	Begin Boyle Park Improvements based on Parks & Trails Master Plan	**Multi year project**	**Not started**
Skate Park Planning	Hire consultant to assist with planning upgrades to Mancos Skate Park	**December 2023**	**Not started**
Fire Mitigation	Mitigate brush and trees in Town parks	**Annual**	**Ongoing**
Weed Control	At all town owned locations: Boyle Park, Cottonwood Park, Pioneer Plaza, Northside Playground, Creekside, Pedestrian Bridge, Hwy 160 intersections, all new pocket parks	**Annual**	**Not started**
Mancos Conservancy District River Concept	Utilize river plan from MCD to upgrade river locations for better public access	**Multi year project**	**Not started**

Other Activities or Information about the Department's Work in 2023:

- Basic maintenance such as weeding, trash removal from the parks, watering, etc.
- The Community Center continues to hold events and classes. Staff manages rentals of the space to private parties and groups.

- Continue to seek and apply for grants and other assistance to fund trails creation and maintenance, park improvements, and other initiatives.
- Staff will attend training on parks management and turf/grass maintenance best practices.
- Prepare for stakeholder meetings beginning in 2024 to update Park IPM document.

Department/Division: Marshal's Office

Director/Supervisor: Justen Goodall, Town Marshal

Department Mission: The Mancos Marshal's Office provides effective and efficient law enforcement and ancillary services to our residents, schools, businesses, and visitors. We recognize the need to partner with all members of our community as we provide for the public's safety and we will always practice the principals of community policing to assist us in this endeavor.

Services:

- Traffic control
- Responding to calls for service
- Welfare checks
- VIN inspections
- Animal control
- Enforcement of Municipal Code and Uniform Traffic Code
- Community service
- Investigate crimes
- Agency assistance (Colorado State Patrol, Sherriff's Office, etc.)
- Registration of sex offenders

2023 Objectives/Goals:

1. Meet all POST (Peace Officer Standards and Training) requirements in core areas (firearms, arrest control and driving) and continue other trainings to better the officers and the town.
2. Continue emergency planning and preparedness efforts.
3. Continue to be involved in the Mancos community. Attend events, do business checks, and continue community policing.
4. Continue involvement with Mancos schools. Work closely with the school on emergency response and crime prevention issues.
5. All staff will read and understand revised Mancos Marshal's Office policies.

Departmental Values:

- Integrity
- Honesty
- Loyalty
- Consistency
- Problem-solving
- Self-initiation
- Reliability
- Care about the community
- Community-invested
- Excellent communication skill

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023:

Description	Detail	Timeline	1st Qtr
New Vehicle Purchase	Purchase new vehicle per 5 year replacement schedule.	**December 2023**	**In process**
Increased code enforcement.	Increase enforcement of municipal codes.	**Ongoing.**	**Ongoing**
Town Hall/MMO Expansion	Property purchased. Research options for remodel	**December 2023**	**Applying for funding**

Town Hall Meetings	Hold quarterly Town Hall meetings	**Annual**	**Not started**
Firearms Replacement	Purchase rifles/scopes per 5 year replacement schedule. Year 1 of 3	**December 2023**	**Not started**
Outdoor Shooting Range	Research locations and policies for outdoor shooting range for staff training requirements	**December 2023**	**Not started**

Other Activities or Information about the Department's Work in 2023:

- Staff will continue regular activities such as traffic stops, patrols, addressing community complaints, and business checks.
- Staff plans to attend various trainings in 2023, some of which will be partially reimbursed through Colorado P.O.S.T. and/or other local law enforcement organizations.
- Marshal will continue to serve on Boards and Commissions such as Child Protective Services (CPT), Southwest Colorado Law Enforcement Training Association (SWCLETA), Multi-Disciplinary Teams (MDT), and membership in Colorado Association of Chiefs of Police.
- Continue code enforcement efforts, including outreach, assistance programs and writing notices of violations if required.

Department/Division: Public Works-Sewer and Water Treatment

Director/Supervisor: Terry Jennings, Public Works Director

Department Mission: To provide safe drinking water and properly disinfected wastewater treatment to keep citizens healthy.

Services:

- Water and wastewater management (water treatment and wastewater treatment)
- Maintain infrastructure for emergency responders
- Interface with developers and vendors
- Project management
- Respond to citizen concerns and provide great customer service

2023 Objectives/Goals:

1. Staff to attend trainings and seek licenses in Water treatment and distribution and Wastewater Collection and Treatment.
2. Continue grease trap inspection program.
3. Continue operations at WTP and WWTP to meet CDPHE standards
4. Continue to write down standard operating procedures and catalogue with the town.
5. Get MSABP system at WWTP to continuously run with low backwash and within permit.
6. Complete a visual inspection of the town's water tanks every three months per state rules.
7. Continue public information campaign about the wastewater system.

Division/Department Values:

- Knowledge
- Reliable staff
- Friendly customer service
- Recognize when there is a problem
- Ability to make decisions
- Reliable upper management in PW
- Self-starters
- Ethical
- Teamwork
- Transparency

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023:

Description	Detail	Timeline	1st Qtr
Wastewater Treatment Facility	Continue to explore options to ensure continuous operation.	**Ongoing and priority**	**In process – RFP responses being reviewed**
Old Water Tank/Water Plant/Fiberoptic Upgrades	Replace old water tank, run fiber infrastructure to water plant, update current room to include HVAC, security measures, room for growth	**December 2023**	**In process**
Stormwater Master Plan	Publish RFP and design stormwater master plan	**December 2023**	**Applying for funding**
Extend Utility Line	Extend utility line north on Hwy 184 to allow annexation of properties into Town limits	**December 2023**	**In process**

Raw Water Transmission Line	Begin design/engineering to replace raw water transmission line from headgate to WTP	**December 2023**	**Not started**
Fire Mitigation	Mitigate brush and trees at Water & Wastewater Plants	**Ongoing**	**Not started**

Other Activities or Information about the Department's Work in 2023:

- Staff training to become fully certified as ORC for water and wastewater plant operations.
- Staff will continue regular activities such as water and effluent monitoring and testing, making repairs as needed, and providing reports to the State.
- Continuing education for all public works staff to ensure current certifications.

Department/Division: Public Works/Streets Division

Director/Supervisor: Terry Jennings, Public Works Director

Department Mission: To maintain a well-flowing sewer collection system and water supply to all system services as well as keeping all roadways passable.

Services:

- Water and wastewater management (water distribution, install taps, read water meters, etc.)
- Maintain infrastructure for emergency responders
- Maintain safe roads and alleys
- Perform vehicle maintenance
- Perform building maintenance
- Assist other departments (e.g. special events, street closures, tree plantings, etc.)
- Interface with developers and vendors
- Project management
- Respond to citizen concerns and provide great customer service

2023 Objectives/Goals:

1. Ensure proper operation of water main valves through preventive maintenance.
2. Continue efforts to ensure that town utilities are properly mapped in GIS and current paper records are kept for planning purposes.
3. Enhance road maintenance, including training on road maintenance procedures, added gravel, and development of long term road maintenance plan.
4. Staff to attend trainings and seek licenses in water treatment and distribution and wastewater collection and treatment.
5. Continue to write down standard operating procedures for various aspects of streets maintenance, including sewer collection and water distribution and catalogue with the town.

Division/Department Values :

- Knowledge
- Reliable staff
- Friendly customer service
- Recognize when there is a problem
- Ability to make decisions
- Reliable upper management in PW
- Self-starters
- Ethical
- Teamwork
- Transparent

Major projects, planned purchases or service contracts to be Started and/or Completed in 2023:

Description	Detail	Timeline	1st Qtr
Backflow Prevention program inspections and compliance	Continue program development through 2023 per state regulations	**Annually each year**	**Ongoing**
Old Water Tank/Water Plant/Fiberoptic Upgrades	Replace old water tank, run fiber infrastructure to water plant, update current room to include HVAC, security measures, room for growth	**December 2023**	**In process**
Valve Replacement	Per 5 year capital plan, replace 2 valves per year	**Annually each year**	**Will do valve replacement as we replace**

			water lines
Snow Removal	Conduct public education regarding snow removal	**Ongoing**	**Ongoing**
Town Wide Cleanup	Host one or two town wide cleanups	**Annually each year**	**Pending – public outreach ongoing**
Mesa St. Upgrades	Run water line to pedestrian bridge, pave Mesa St. for parking lot	**December 2023**	**Not started**
Snow Plow Attachment	Research and purchase a snow plow attachment for Public Works Truck	**December 2023**	**complete**
Equipment Replacement	Research possible equipment replacement per 5 year replacement schedule, if possibility presents itself	**December 2023**	**Complete**
Grand Ave. Sidewalk Replacement	Potential partnership with CDOT to replace sidewalks along Grand Ave.	**Multi year project**	**Applying for funding**

Other Activities or Information about the Department's Work in 2023:

- Staff will continue to focus on Water Distribution System and Sewer Collection maintenance, including preventive maintenance such as flushing valves and cleaning sewer lines to prevent clogs.
- Staff will continue regular activities such as street sweeping, vehicle and equipment repairs and maintenance, assistance with town events for street closures, paint curbs and stripe parking lots, and checking and flushing hydrants.
- Staff will focus on road maintenance and regular maintenance of unpaved roads and paved roads. Staff will seek street grading trainings.
- Staff installs new water and sewer taps.

General Fund 1st Quarter 2023										
Account Name	**2023 Budget**	**2023 Actual**	**2022 Budget**	**2022 Actual**	**2021 Budget**	**2021 Actual**	**2020 Budget**	**2020 Actual**	**2019 Budget**	**2019 Actual**
Taxes	**$ 1,422,680**	**$ 356,414**	**$ 1,392,650**	**$ 1,624,743**	**$ 905,619**	**$ 1,622,588**	**$ 972,391**	**$ 1,425,274**	**$ 901,172**	**$ 1,222,787**
Licenses & Permits	**$ 187,200**	**$ 28,815**	**$ 247,200**	**$ 197,054**	**$ 236,000**	**$ 271,309**	**$ 223,000**	**$ 282,579**	**$ 222,210**	**$ 268,188**
Public Safety	**$ 7,500**	**$ 984**	**$ 6,000**	**$ 10,018**	**$ 18,000**	**$ 4,450**	**$ 15,500**	**$ 11,207**	**$ 21,300**	**$ 6,348**
Miscellaneous Revenue	**$ 799,725**	**$ 28,333**	**$ 462,230**	**$ 896,123**	**$ 1,269,275**	**$ 1,504,535**	**$ 1,201,775**	**$ 131,957**	**$ 1,135,800**	**$ 335,094**
Parks & Recreation	**$ 2,500**	**$ 649**	**$ 1,300**	**$ 3,693**	**$ 1,000**	**$ 2,671**	**$ 1,500**	**$ 1,771**	**$ 700**	**$ 2,192**
Interfund Transfers	**$ 175,000**	**$ -**	**$ 165,000**	**$ -**	**$ 216,828**	**$ 156,828**	**$ 205,660**	**$ 205,000**	**$ 193,862**	**$ 143,862**
TOTAL REVENUE	**$ 2,594,605**	**$ 415,194**	**$ 2,274,380**	**$ 2,731,630**	**$ 2,646,722**	**$ 3,562,381**	**$ 2,619,826**	**$ 2,057,789**	**$ 2,475,044**	**$ 1,978,471**
Supplies	$ 5,766	$ -	$ 2,000	$ 1,836	$ 2,000	$ 822	$ 2,000	$ 1,434	$ 14,600	$ 14,207
Services	$ 56,200	$ 23,348	$ 54,500	$ 66,126	$ 94,500	$ 79,774	$ 84,500	$ 153,940	$ 98,500	$ 84,703
Legislative	**$ 61,966**	**$ 23,348**	**$ 56,500**	**$ 67,962**	**$ 96,500**	**$ 80,596**	**$ 86,500**	**$ 155,374**	**$ 113,100**	**$ 98,911**
Supplies			$ 800	$ 115	$ 800	$ 482	$ 800	$ 574	$ 800	$ 1,147
Services			$ 15,200	$ 29,545	$ 23,200	$ 15,973	$ 33,200	$ 25,747	$ 62,200	$ 30,277
Planning & Zoning			**$ 16,000**	**$ 29,660**	**$ 24,000**	**$ 16,455**	**$ 34,000**	**$ 26,321**	**$ 63,000**	**$ 31,424**
Personnel	$ 625,600	$ 98,850	$ 365,838	$ 425,228	$ 266,242	$ 291,644	$ 251,800	$ 247,116	$ 208,995	$ 226,614
Supplies	$ 812,175	$ 33,319	$ 908,495	$ 540,786	$ 50,495	$ 35,353	$ 53,495	$ 32,587	$ 42,195	$ 148,076
Services	$ 144,100	$ 61,311	$ 117,900	$ 150,260	$ 88,400	$ 90,780	$ 86,600	$ 98,008	$ 70,700	$ 69,979
Capital	$ 900,000	$ 275	$ 512,000	$ 52,752	$ -	$ 26,310	$ -	$ -	$ -	$ 22,251
Administration	**$ 2,481,875**	**$ 193,755**	**$ 1,904,233**	**$ 1,169,026**	**$ 405,137**	**$ 444,087**	**$ 391,895**	**$ 377,711**	**$ 321,890**	**$ 466,920**
Personnel	$ 437,000	$ 107,290	$ 413,500	$ 428,151	$ 383,875	$ 360,995	$ 380,130	$ 351,292	$ 389,450	$ 319,638
Supplies	$ 55,475	$ 8,621	$ 54,475	$ 37,574	$ 50,975	$ 33,736	$ 54,975	$ 46,535	$ 58,275	$ 43,907
Services	$ 105,500	$ 69,190	$ 102,500	$ 90,769	$ 107,500	$ 92,149	$ 88,000	$ 102,737	$ 62,685	$ 88,075
Capital	$ 460,000	$ -	$ 245,000	$ 227,593	$ -	$ 308,438	$ 108,000	$ 92,697	$ -	$ -
Debt Service	$ -	$ -	$ -	$ -	$ 16,964	$ 4,242	$ 16,964	$ 21,205	$ 16,964	$ 16,964
Public Safety	**$ 1,057,975**	**$ 185,102**	**$ 815,475**	**$ 784,086**	**$ 559,314**	**$ 799,560**	**$ 648,069**	**$ 614,466**	**$ 527,374**	**$ 468,584**
Personnel	$ 251,816	$ 53,706	$ 240,000	$ 210,847	$ 168,965	$ 195,464	$ 164,600	$ 146,207	$ 165,062	$ 144,193
Supplies	$ 25,775	$ 1,499	$ 22,975	$ 20,783	$ 16,400	$ 17,805	$ 15,200	$ 12,018	$ 9,383	$ 14,344
Public Works Administration	**$ 277,591**	**$ 55,205**	**$ 262,975**	**$ 231,630**	**$ 185,365**	**$ 213,269**	**$ 179,800**	**$ 158,225**	**$ 174,445**	**$ 158,538**

General Fund 1st Quarter 2023										
Account Name	**2023 Budget**	**2023 Actual**	**2022 Budget**	**2022 Actual**	**2021 Budget**	**2021 Actual**	**2020 Budget**	**2020 Actual**	**2019 Budget**	**2019 Actual**
Supplies	$ 83,000	$ 24,033	$ 78,900	$ 68,851	$ 57,400	$ 62,194	$ 89,100	$ 48,069	$ 44,700	$ 55,140
Services	$ 3,000	$ 3,088	$ 3,100	$ 773	$ 3,100	$ 5,587	$ 3,100	$ 1,217	$ 3,500	$ 1,415
Capital	$ 98,000	$ 58,773	$ 150,000	$ 702,294	$ 1,550,000	$ 1,655,056	$ 1,380,000	$ 19,620	$ 1,550,000	$ 175,640
Streets	**$ 184,000**	**$ 85,895**	**$ 232,000**	**$ 771,919**	**$ 1,610,500**	**$ 1,722,837**	**$ 1,472,200**	**$ 68,906**	**$ 1,598,200**	**$ 232,195**
Personnel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 65,677	$ 4,181
Supplies	$ 39,975	$ 2,384	$ 26,475	$ 26,778	$ 25,975	$ 19,682	$ 25,475	$ 27,616	$ 32,525	$ 30,563
Services	$ 14,165	$ 774	$ 14,165	$ 12,122	$ 14,165	$ 12,087	$ 10,665	$ 14,320	$ 9,815	$ 8,365
Capital	$ -	$ 5,389	$ -	$ 34,766	$ 40,000	$ 4,076	$ 40,000	$ -	$ 65,000	$ 123,027
Debt Service	$ -	$ 2,242	$ -	$ -	$ 5,200	$ 2,603	$ 5,200	$ 6,499	$ 5,200	$ 5,199
Parks & Recreation	**$ 54,140**	**$ 10,789**	**$ 40,640**	**$ 73,667**	**$ 85,340**	**$ 38,448**	**$ 81,340**	**$ 48,435**	**$ 178,217**	**$ 171,336**
TOTAL EXPENDITURES	**$ 4,117,547**	**$ 554,094**	**$ 3,327,823**	**$ 3,127,949**	**$ 2,966,156**	**$ 3,315,252**	**$ 2,893,804**	**$ 1,449,438**	**$ 2,976,226**	**$ 1,627,906**
REVENUE - EXPENDITURES	**$ (1,522,942)**	**$ (138,899)**	**$ (1,053,443)**	**$ (396,319)**	**$ (319,434)**	**$ 247,129**	**$ (273,978)**	**$ 608,351**	**$ (501,182)**	**$ 350,565**
	2023	**2023**	**2022**	**2022**	**2021**	**2021**	**2020**	**2020**	**2019**	**2019**
Beginning Fund Balance	**$ 2,574,493**	**$ 2,574,493**	**$ 2,970,812**	**$ 2,970,812**	**$ 2,723,683**	**$ 2,723,683**	**$ 2,115,332**	**$ 2,115,332**	**$ 1,764,767**	**$ 1,764,767**
Revenue - Expenditures	**$ (1,522,942)**	**$ (138,899)**	**$ (1,053,443)**	**$ (396,319)**	**$ (319,434)**	**$ 247,129**	**$ (273,978)**	**$ 608,351**	**$ (501,182)**	**$ 350,565**
Ending Fund Balance	**$ 1,051,551**	**$ 2,435,594**	**$ 1,917,369**	**$ 2,574,493**	**$ 2,404,249**	**$ 2,970,812**	**$ 1,841,354**	**$ 2,723,683**	**$ 1,263,585**	**$ 2,115,332**
	Budget	Unaudited	Budget	Unaudited	Budget	Actual	Budget	Actual	Budget	Actual

Conservation Trust Fund 1st Qtr 2023										
Account Name	2023 Budget	2023 Actual	2022 Budget	2022 Actual	2021 Budget	2021 Actual	2020 Budget	2020 Actual	2019 Budget	2019 Actual
LOTTERY FUND	$ 15,000	$ -	$ 15,000	$ 19,641	$ 15,200	$ 12,890	$ 13,200	$ 14,675	$ 13,200	$ 16,153
MISC REVENUE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INTEREST/INVESTMENTS	$ 30	$ -	$ 30	$ 43	$ 30	$ 29	$ 30	$ 21	$ 30	$ 31
Revenue	**$ 15,030**	**$ -**	**$ 15,030**	**$ 19,684**	**$ 15,230**	**$ 12,918**	**$ 13,230**	**$ 14,696**	**$ 13,230**	**$ 16,184**
Personnel	$ 9,700	$ 2,796	$ -	$ 7,215	$ 10,120	$ -	$ 10,795	$ -	$ 10,795	$ 5,319
Supplies	$ 5,000	$ -	$ 5,000	$ 4,066	$ 5,000	$ 5,574	$ 5,000	$ 3,412	$ 7,000	$ 3,969
Capital	$ -	$ -	$ 33,000	$ -	$ 10,000	$ 7,443	$ -	$ 6,625	$ -	$ -
Expenditures	**$ 14,700**	**$ 2,796**	**$ 38,000**	**$ 11,280**	**$ 25,120**	**$ 13,017**	**$ 15,795**	**$ 10,037**	**$ 17,795**	**$ 9,289**
REVENUE - EXPENDITURES	**$ 330**	**$ (2,796)**	**$ (22,970)**	**$ 8,404**	**$ (9,890)**	**$ (98)**	**$ (2,565)**	**$ 4,659**	**$ (4,565)**	**$ 6,896**
	2023	**2023**	**2022**	**2022**	**2021**	**2021**	**2020**	**2020**	**2019**	**2019**
Beginning Fund Balance	**$ 48,834**	**$ 48,834**	**$ 40,430**	**$ 40,430**	**$ 40,528**	**$ 40,528**	**$ 35,870**	**$ 35,870**	**$ 28,974**	**$ 28,974**
Revenue - Expenditures	**$ 330**	**$ (2,796)**	**$ (22,970)**	**$ 8,404**	**$ (9,890)**	**$ (98)**	**$ (2,565)**	**$ 4,659**	**$ (4,565)**	**$ 6,896**
Ending Fund Balance	**$ 49,164**	**$ 46,038**	**$ 17,460**	**$ 48,834**	**$ 30,638**	**$ 40,430**	**$ 33,305**	**$ 40,528**	**$ 24,409**	**$ 35,870**
	Budget	Unaudited	Budget	Unaudited	Budget	Actual	Budget	Actual	Budget	Actual

Water Fund 1st Quarter 2023										
Account Name	2023 Budget	2023 Actual	2022 Budget	2022 Actual	2021 Budget	2021 Actual	2020 Budget	2020 Actual	2019 Budget	2019 Actual
Revenue	**$ 1,907,316**	**$ 120,769**	**$ 1,646,300**	**$ 1,965,411**	**$ 1,676,423**	**$ 812,149**	**$ 438,126**	**$ 467,108**	**$ 590,610**	**$ 502,828**
Personnel	$ 94,204	$ 21,593	$ 87,700	$ 93,502	$ 86,923	$ 104,554	$ 87,168	$ 82,048	$ 95,150	$ 82,721
Supplies	$ 14,305	$ 1,471	$ 6,105	$ 13,144	$ 6,775	$ 7,439	$ 6,775	$ 7,997	$ 6,775	$ 3,869
Services	$ 78,500	$ 41,175	$ 84,500	$ 58,144	$ 73,400	$ 58,255	$ 66,700	$ 57,793	$ 53,900	$ 59,572
Interfund Transfer	$ 100,000	$ -	$ 105,000	$ -	$ 156,828	$ 156,828	$ 155,660	$ 155,000	$ 143,862	$ 143,862
Debt Service	$ 86,980	$ -	$ 23,716	$ 53,539	$ 23,716	$ 156,312	$ 23,716	$ 148,471	$ 23,716	$ 135,374
Capital	$ -	$ -	$ -	$ -	$ 90,000	$ -	$ 60,000	$ -	$ 1,000,000	$ 27,940
Water Administration	**$ 373,989**	**$ 64,239**	**$ 307,021**	**$ 218,330**	**$ 437,642**	**$ 483,389**	**$ 400,019**	**$ 451,308**	**$ 1,323,403**	**$ 453,337**
Supplies	$ 47,700	$ 16,142	$ 40,200	$ 71,452	$ 45,200	$ 49,373	$ 45,200	$ 34,535	$ 37,600	$ 50,496
Services	$ 1,000	$ 1,728	$ 1,000	$ 1,316	$ 1,000	$ 1,611	$ 1,000	$ 455	$ 1,000	$ -
Capital	$ 1,410,816	$ 95,027	$ 1,200,000	$ 1,087,929	$ 1,780,000	$ -	$ -	$ -	$ -	$ -
Water Plant	**$ 1,459,516**	**$ 112,896**	**$ 1,241,200**	**$ 1,160,697**	**$ 1,826,200**	**$ 50,984**	**$ 46,200**	**$ 34,990**	**$ 38,600**	**$ 50,496**
Supplies	$ 23,550	$ 7,534	$ 18,350	$ 30,232	$ 18,300	$ 16,328	$ 15,300	$ 21,711	$ 15,300	$ 11,452
Services	$ 6,500	$ -	$ 6,500	$ 5,225	$ 6,500	$ 4,942	$ 6,500	$ 10,614	$ 2,500	$ 1,633
Capital	$ 95,000	$ -	$ 90,000	$ -	$ -	$ -	$ 26,500	$ -	$ 210,000	$ 2,346
Water Distribution	**$ 125,050**	**$ 7,534**	**$ 114,850**	**$ 35,457**	**$ 24,800**	**$ 21,271**	**$ 48,300**	**$ 32,325**	**$ 227,800**	**$ 28,516**
WATER EXPENDITURES	**$ 1,958,555**	**$ 184,670**	**$ 1,663,071**	**$ 1,414,484**	**$ 2,288,642**	**$ 555,644**	**$ 494,519**	**$ 518,623**	**$ 1,589,803**	**$ 532,349**
REVENUE - EXPENDITURES	**$ (51,239)**	**$ (63,901)**	**$ (16,771)**	**$ 550,927**	**$ (612,219)**	**$ 256,505**	**$ (56,393)**	**$ (51,516)**	**$ (999,193)**	**$ (29,522)**
	2023	**2023**	**2022**	**2022**	**2021**	**2021**	**2020**	**2020**	**2019**	**2019**
Beginning Fund Balance	**$ 2,733,211**	**$ 2,733,211**	**$ 2,182,284**	**$ 2,182,284**	**$ 1,925,779**	**$1,925,779**	**$1,977,295**	**$1,977,295**	**$ 2,006,817**	**$ 2,006,817**
Revenue - Expenditures	**$ (51,239)**	**$ (63,901)**	**$ (16,771)**	**$ 550,927**	**$ (612,219)**	**$ 256,505**	**$ (56,393)**	**$ (51,516)**	**$ (999,193)**	**$ (29,522)**
Ending Fund Balance	**$ 2,681,972**	**$ 2,669,310**	**$ 2,165,513**	**$ 2,733,211**	**$ 1,313,560**	**$2,182,284**	**$1,920,902**	**$1,925,779**	**$ 1,007,624**	**$ 1,977,295**
	Budget	Unaudited	Budget	Unaudited	Budget	Actual	Budget	Actual	Budget	Actual

Sewer Fund 1st Qtr 2023										
Account Name			2022 Budget	2022 Actual	2021 Budget	2021 Actual	2020 Budget	2020 Actual	2019 Budget	2019 Actual
Revenue	**$ 421,000**	**$ 87,098**	**$ 360,800**	**$ 1,409,289**	**$ 314,746**	**$ 324,087**	**$ 314,626**	**$ 270,665**	**$ 310,286**	**$ 321,981**
Personnel	$ 94,204	$ 21,574	$ 87,700	$ 93,502	$ 86,923	$ 104,552	$ 87,168	$ 82,048	$ 95,150	$ 82,752
Supplies	$ 7,305	$ 2,256	$ 7,305	$ 3,263	$ 8,475	$ 1,284	$ 7,175	$ 6,035	$ 7,175	$ 5,209
Services	$ 44,410	$ 29,721	$ 42,910	$ 32,119	$ 29,410	$ 31,469	$ 26,710	$ 66,163	$ 68,210	$ 62,909
Interfund Transfer	$ 75,000	$ -	$ 60,000	$ -	$ 60,000	$ -	$ 50,000	$ 50,000	$ 50,000	$ -
Debt Service	$ 53,000	$ 1,000	$ 53,000	$ 58,189	$ 53,000	$ 200,038	$ 53,000	$ 201,138	$ 53,000	$ 199,914
Capital	$ -	$ -	$ -	$ -	$ -	$ 52,898	$ -	$ 66	$ -	$ -
Sewer Administration	**$ 273,919**	**$ 54,551**	**$ 250,915**	**$ 187,074**	**$ 237,808**	**$ 390,241**	**$ 224,053**	**$ 405,450**	**$ 273,535**	**$ 350,784**
Supplies	$ 106,300	$ 39,758	$ 75,500	$ 116,477	$ 69,500	$ 92,487	$ 71,500	$ 121,403	$ 70,850	$ 69,068
Services	$ 10,000	$ 5,273	$ 4,000	$ 6,601	$ 4,000	$ 16,205	$ 4,000	$ 19,497	$ 4,000	$ 4,881
Capital	$ -	$ 4,192	$ -	$ 31,124	$ 20,000	$ -	$ 11,000	$ -	$ -	$ -
Sewer Plant	**$ 116,300**	**$ 49,223**	**$ 79,500**	**$ 154,202**	**$ 93,500**	**$ 108,692**	**$ 86,500**	**$ 140,900**	**$ 74,850**	**$ 73,949**
Supplies	$ 5,000	$ -	$ 5,000	$ 2,467	$ 8,000	$ 16,232	$ 4,000	$ 1,257	$ 4,000	$ 2,319
Services	$ 3,500	$ -	$ 3,500	$ 6,624	$ 3,500	$ 5,977	$ 3,500	$ 1,356	$ 2,000	$ 50
Capital	$ 105,000	$ -	$ -	$ -	$ -	$ -	$ 16,500	$ -	$ -	$ 2,346
Sewer Collection	**$ 8,500**	**$ -**	**$ 8,500**	**$ 9,090**	**$ 11,500**	**$ 22,210**	**$ 7,500**	**$ 2,612**	**$ 6,000**	**$ 2,369**
SEWER EXPENDITURES	**$ 398,719**	**$ 103,775**	**$ 338,915**	**$ 350,366**	**$ 342,808**	**$ 521,143**	**$ 318,053**	**$ 548,962**	**$ 354,385**	**$ 427,102**
REVENUE - EXPENDITURES	**$ 22,281**	**$ (16,676)**	**$ 21,885**	**$ 1,058,923**	**$ (28,062)**	**$ (197,056)**	**$ (3,427)**	**$ (278,297)**	**$ (44,099)**	**$ (105,121)**
	2023	**2023**	**2022**	**2022**	**2021**	**2021**	**2020**	**2020**	**2019**	**2019**
Beginning Fund Balance	**$3,375,472**	**$3,375,472**	**$2,316,549**	**$ 2,316,549**	**$2,513,606**	**$2,513,606**	**$2,791,903**	**$2,791,903**	**$ 2,954,508**	**$ 2,897,024**
Revenue - Expenditures	**$ 22,281**	**$ (16,676)**	**$ 21,885**	**$ 1,058,923**	**$ (28,062)**	**$ (197,056)**	**$ (3,427)**	**$ (278,297)**	**$ (44,099)**	**$ (105,121)**
Ending Fund Balance	**$3,397,753**	**$3,358,796**	**$2,338,434**	**$ 3,375,472**	**$2,485,544**	**$2,316,549**	**$2,788,476**	**$2,513,606**	**$ 2,910,409**	**$ 2,791,903**
	Budget	Unaudited	Budget	Unaudited	Budget	Actual	Budget	Actual	Budget	Actual

2023 Capital Improvements Budget

Items that have a useful life of 5 years or more and cost $5,000 or more

Project	2023	Priority	Fund Source	Dept
Conservation Trust Fund				
Annual Totals	**-**			
General Fund				
New Building Remodel (2)	400,000	2	C-GF	Public Safety
New Vehicle	60,000	1	C-GF	Public Safety
Fiber Installation (2)	900,000	1	C-GF	Admin
Snow Plow Attachment	10,000	2	C-GF	Streets
Equipment Replacement	18,000	1	C-GF	Streets
Mesa Street Paving	80,000	3	C-GF	Streets
Annual Totals	**1,468,000**			
Enterprise Fund				
Public Works: Water and Wastewater				
Stormwater Master Plan	60,000	3	C-Ent	Water
Water Tank Replacement (1)	1,410,816	1	C-Ent	Water
Extend Utility Line Hwy 184	90,000	1	C-Ent	Water/Sewer
Raw Water Transmission Line	50,000	2	C-Ent	Water
Annual Totals	**1,610,816**			
TOTAL-All Departments	**3,078,816**			
CTF: Conservation Trust Fund	**-**			
C-GF: Capital Fund-General Fund	**1,468,000**			
C-Ent: Capital Fund-Enterprise Fund	**1,610,816**			

2023 Projects List

Items highlighted in yellow are capital projects **NOT** included in the budget

Item	GL#	Status	Department/Division	Est. Cost 2021	Fund	Status	Notes
			Total CTF	**#REF!**			
Hazardous tree program/street trees	1044228		Admin	$ 5,000	GF		
Town Beautification	1044205		Admin	$ 5,000	GF		Flowers
Town Beautification	1044205		Admin	$ 3,000	GF		Public Art
Town Hall Deep Clean/Paint	1044299		Admin	$ 5,000	GF		When MMO moves to new bldg
Computer Replacement	1044242		Admin	$ 6,000	GF		Per equipment replacement schedule
Fiber Infrastructure	1044701		Admin	$ 900,000	GF		Phase 3 Water Plant Project
Mancos Valley Chamber	1041350		Legislative	$ 6,500	GF		Chamber Operating do we continue?
Boyle Park Porta Johns	1065300		Parks	$ 3,000	GF		Boyle Winter
Weed Control	1065300		Parks and Rec	$ 10,000	GF		$6,500 Bee Happy/$3,500 Advantage Klawn
Town-wide Cleanup	1060291		Streets	$ 13,000	GF		2x per year, yard waste 1 x/month May - Sept
Sidewalk Cost Share	1061232		Streets	$ 7,500	GF		10 sidewalks @ $750 each
Snow Plow Attachment	1061250		Streets	$ 10,000	GF		
Mesa St. Paving	1061700		Streets	$ 80,000	GF		
Equipment Replacement	1061700		Streets	$ 18,000	GF		Backhoe Lease
ADA Sidewalk Intersections	1061700		Streets	TBD	GF		work with CDOT
New Building Remodel	1054700		Public Safety	$ 400,000	GF		Placeholder, grant dependent
Outdoor Shooting Range	1054250		Public Safety	$ 2,000	GF		Airport Property, Staff use only
Firearms	1054250		Public Safety	$ 5,000	GF		Rifles/Scopes - year 1 of 3
New MMO Vehicle	1054700		Public Safety	$ 60,000	GF		per equipment replacement schedule
Agency Contributions	1041345		Legislative	$ 12,000	GF		
		$ -	**Total GF**	**$ 1,551,000**		**$ -**	
Water Tank/Fiber Project	5173700		Water	$ 1,410,816	Ent		Phase 2 - Tank Replacement
Raw Water Transmission Line	5174700		Water	$ 50,000	Ent		Per SGM EOPC - Engineering Only
Intern Share with Mancos Conservation Dist.	5171340/5276340		Water/Sewer	$30,000	Ent		Intern split between water and sewer
Hwy 184 Line Extension	5174700/5278700		Water	$90,000	ent		split between water/sewer
Main Street Water/Sewer Main Repl.	Split		Water/Sewer	TBD	Ent		Not incl in budget
Stormwater Master Plan	5171700		Water	$ 60,000	Ent		
			Total Ent	**$ 1,640,816**		**$ -**	

2023 SALES TAX REVENUES BY BUSINESS CATEGORY								
(1)	Funds received by Town in:							
Business Category	January	February	March	April	May	June		
Lodging	$ 2,761.16	$ 2,177.69						
Retail - Necessities	$ 45,220.82	34,121.81						
Utilities	$ 10,210.93	11,021.71						
Food & Beverage	$ 13,579.16	15,094.38						
Art	$ 1,700.01	257.81						
Services - all other (2)	$ 12,264.92	9,179.47						
Finance, Ins., Real Estate	$ 942.36	797.32						
Wholesale Trade	$ 4,256.47	2,365.11						
Ag, Const. & Manufacturing	$ 4,163.55	2,401.25						
TOTAL	**$ 95,099.38**	**$ 77,416.55**	**$ -**	**$ -**	**$ -**	**$ -**		
Business Category	July	August	September	October	November	December	Year-to-date	Percent
Lodging							$ 4,938.85	3%
Retail - Necessities							$ 79,342.63	46%
Utilities							$ 21,232.64	12%
Food & Beverage							$ 28,673.54	17%
Art							$ 1,957.82	1%
Services - all other (2)							$ 21,444.39	12%
Finance, Ins., Real Estate							$ 1,739.68	1%
Wholesale Trade							$ 6,621.58	4%
Ag, Const. & Manufacturing							$ 6,564.80	4%
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 172,515.93**	**100%**
(1) Month represents timing of receipt from the State of Colorado (approx. 2 month lag from sales month).								
(2) Marijuana has been moved to Services - all other due to the fact that we do not have 3 or more stores in Town limits.								
Month	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
January	$ 31,664.38	$ 40,791.86	$ 47,522.92	$ 60,598.07	$ 69,879.95	$ 67,562.99	$ 109,560.24	$ 102,249.64
February	$ 34,766.90	$ 33,955.94	$ 43,783.08	$ 51,808.31	$ 49,184.69	$ 76,409.03	$ 98,332.86	$ 84,557.62
March	$ 29,541.70	$ 33,892.44	$ 41,692.79	$ 55,070.82	$ 48,452.25	$ 65,584.59	$ 86,569.02	$ 87,446.61
April	$ 33,950.38	$ 39,833.71	$ 59,406.37	$ 57,838.37	$ 80,925.34	$ 51,887.54	$ 106,466.10	$ 105,631.41
May	$ 31,319.61	$ 47,794.98	$ 52,562.18	$ 69,023.57	$ 64,905.41	$ 82,385.49	$ 107,951.64	$ 90,412.70
June	$ 42,490.26	$ 47,290.69	$ 60,448.26	$ 77,127.80	$ 74,095.61	$ 91,522.97	$ 115,348.92	$ 105,271.37
July	$ 47,602.24	$ 51,078.50	$ 72,827.14	$ 79,050.11	$ 84,869.00	$ 113,210.97	$ 112,021.52	$ 114,071.14
August	$ 44,891.55	$ 62,351.53	$ 69,750.24	$ 75,082.26	$ 88,381.43	$ 109,611.60	$ 134,037.74	$ 112,765.44
September	$ 46,709.21	$ 56,388.35	$ 75,054.51	$ 69,407.67	$ 83,582.66	$ 105,635.11	$ 116,393.27	$ 101,068.96
October	$ 50,950.27	$ 56,792.03	$ 68,694.08	$ 90,679.17	$ 87,369.54	$ 112,028.95	$ 123,745.81	$ 120,384.17
November	$ 36,241.26	$ 52,062.56	$ 73,084.42	$ 75,937.37	$ 77,547.37	$ 112,476.83	$ 105,940.58	$ 96,253.93
December	$ 35,369.62	$ 44,984.17	$ 58,949.19	$ 63,767.48	$ 67,281.73	$ 95,266.01	$ 100,396.50	$ 93,218.06
	$ 465,497.38	**$ 567,216.76**	**$ 723,775.18**	**$ 825,391.00**	**$ 876,474.98**	**$ 1,083,582.08**	**$ 1,316,764.20**	**$ 1,213,331.05**

STAFF REPORT

To: Honorable Mayor & Board of Trustees
From: Heather Alvarez, Town Administrator
Date: April 12, 2023
Re: Attainable Housing Collaboration Request

Recommendation
Depending on Board discussion - Authorize the Town Administrator to work with Trustee Janice Bryan with regard to attainable housing opportunities in town limits

Background/Discussion
As the Board is aware, attainable and workforce housing are an important priority for the Board and citizens of Mancos.

Community and Economic Development Director Jason Armstrong and I are working on several projects toward this goal, including updates to our land use code and workflow and procedure drafting and implementation. These are short-term projects that are necessary to ensure the Town meets our long-term goals for the Board and Community.

The breadth and scope of housing in Colorado is extremely large and growing by the day. New legislation, grant opportunities, housing summits and research opportunities are extensive. We are requesting the Board appoint a Trustee liaison for staff to assist us with this project and to bring information back to the Board as necessary.

I did send an email to the Board in March, and Janice Bryan has offered to serve as the liaison. She will be attending a housing summit starting on April 16 in Nathrop.

Staff is requesting that the Board discuss this amongst yourselves and appoint a liaison as you see fit.

Resource Impact
TBD

Attachments
None